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UPCOMING MEDICAL MEETINGS

SCAI 2012 Scientific Sessions
May 9-12 '12; Las Vegas, NV USA
www.scai.org/SCAI2012

46th Annual Meeting of the AEPC (Association of European Pediatric Cardiology)
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Pediatric Heart Failure Summit
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23rd Annual Conference of the Western Society of Pediatric Cardiology
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CARDIOSTIM 2012 - Cardiac Electrophysiology & Cardiac Techniques
June 13-16, 2012; Nice, France
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Ten Innovative Concepts for the Pediatric Cardiology Clinical Service

By Anthony C. Chang, MD, MBA, MPH; Joyce Morell, MBA; Michael A. Rebolledo, MD, MBA

Introduction

The current clinical and socioeconomic imbroglio presents a myriad of daunting challenges for the pediatric cardiologist in the outpatient setting, but concomitantly offers a cascade of unprecedented opportunities.[1] An overarching strategy of creating and maintaining new market forces as delineated in *Blue Ocean Strategy* (see Figure 1) are reflected in the following ten innovative practice concepts that will add value for any pediatric cardiology or subspecialty practice. In short, all of these strategies are germane to "create an uncontested market space."[2]

Red Ocean and Blue Ocean Strategy

Red Ocean Strategy	Blue Ocean Strategy
Compete in existing market space	Create uncontested market space
Beat the competition	Make the competition irrelevant
Exploit existing demand	Create and capture new demand
Make the value/cost trade-off	Break the value/cost trade-off
Align the whole system of a company's activities with its strategic choice of differentiation or low cost	Align the whole system of a company's activities in pursuit of differentiation *and* low cost

Figure 1. (From Kim WC et al. Blue Ocean Strategy. Harvard Business Review 2004; 82(10): 76-84).

The following are ten innovative business and technological ideas in the pediatric cardiologist outpatient practice:

1. **Technological Infrastructure**

The average pediatric cardiology outpatient service has a heterogeneous mix of physicians with different job skills. This presents a special demand on scheduling clinics and coverage, especially with requests of varying priorities within the group. Recent availability of scheduling software can neutralize the hardship of this burden with rule-based, real-time workflow management. Examples of such software include: *Physician Scheduler*® for Cardiology (www.physicianscheduler.com), *DOCSScheduler* (www.docsscheduler.net), and *Lightening Bolt NSight*® *Scheduler* (www.lightning-bolt.com). The electronic schedule can be displayed via a large flat

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screen in a strategic location to minimize confusion often seen in front offices regarding coverage and schedule. In addition, certain patient flow software (such as the *CareAware Capacity Management*™ system in the Cerner system) can track patient wait and in-room times to allow both staff and physicians to be more cognizant of behaviors that increase unnecessary delays.

2. Innovative Design

Our group recently had an opportunity to design our outpatient area from shell space. A design concept used often in the intensive care setting is the central pod design: patient rooms are clustered around a central nursing/support area. This hospital design concept was adopted for the outpatient area with 3-4 medical assistants in a central core area (with the office manager's administrative office immediately adjacent) and the 9 patient rooms clustered around this central core area. This design, albeit one originally designed for award-winning intensive care units, has facilitated patient flow in our outpatient setting.

3. Medical Scribe

The use of a medical scribe as a physician extender, especially with the current travails of tedious electronic medical record documentation, can increase not only physician productivity but also both physician and patient satisfaction.[3] The use of a scribe also allows the physician to maximize eye contact with the patient and family during the entire visit as scribes procure data and document conversations. Our physicians typically electronically sign off the notes at the end of the clinic session so there is no longer the oft dreaded end-of-the-day dictation marathon. In addition, there is also consistency in documentation style and content. As we have extended the medical scribe support to the inpatient service, the notes flow back and forth between clinic visits and in-hospital admissions with fluidity and accuracy. Whether this medical scribe strategy increases patient and family satisfaction is currently under investigation at our institution.

4. Staff Empowerment

The five main elements of the business concept *kaizen* (Japanese for improvement) philosophy involve teamwork, personal discipline, improved morale, quality circles, and suggestions for improvement. In the spirit of Toyota's kaizen, the clinic staff all participates in both an annual retreat and monthly debrief sessions to elucidate their suggestions for incremental improvement of their own work sector. The clinic staff is also encouraged to make suggestions outside of these group discussions as the true kaizen philosophy is a daily application to humanize the work environment and improve the service quality. Finally, the staff in the business office is also empowered to discuss specific issues that pertain to billing and finances with the physicians directly, as to attain a total transparent process in the business paradigm.

5. Electronic Communication

The Joint Commission has made improving effectiveness of communication amongst health caregivers high priority in its 2011 National Patient Safety Goals. An innovative, easy-to-use, web-based, HIPPA-compliant electronic communication system can vastly improve communication and referrals between primary care and subspecialist physicians. One such system in Orange County is the *eConsult* system (www.hfpoc.org/econsult) via Access OC for uninsured pediatric patients; this system obviates the use of anachronistic methodologies such as faxes and phone calls. A more sophisticated referral and education artificial intelligence project is being developed to further enhance the referral experience and expediency. In addition, physician-to-physician contact can be also facilitated with an electronic communication tool such as *Vivmed Connect* (www.vivmed.com). *Vivmed Connect* is a secure, HIPPA-compliant application that allows its users to communicate with other medical professional in real-time or asynchronously via a panoply of electronic means (text, mobile, concierge, etc) and is both smart-phone and web accessible.

6. Digital Disconnection

While it is helpful to have the aforementioned electronic support infrastructure in the clinical environment, the examination room could be preserved as a patient/family sanctuary free of digital distractions. Not having computers and other distractions in the examination room would result in a patient-centric environment, and add favorably to the overall patient/family experience. The support of the above-mentioned medical scribe further liberates the physician from the burden of electronic medical record. Whether this radical departure from present convention of the full array of computer equipment in the patient room truly improves the physician-patient relationship is currently under study at our institution.

7. Multidisciplinary Collaboration

There is a myriad of potential patients in other multidisciplinary subspecialty clinics who need cardiology support, such as neuromuscular disease, pulmonary hypertension, or metabolic disease clinics in which there is a relatively high proportion of cardiac involvement and morbidity. The presence of a pediatric cardiologist not only adds to the overall patient and family experience, but also assures that follow-up plans are implemented and followed. New referrals can also be made during this clinic and this initial introduction allows the patient and family to be acquainted with the cardiologist prior to the actual cardiology visit. For patients who are already being followed by the pediatric cardiologist, feedback to the other subspecialists in the multidisciplinary clinic is also readily made during the visit.

8. Point-of-Service Subspecialist Support

The triad of deficiencies of the primary care-to-subspecialist relationship entails:
1) inadequate communication;
2) suboptimal clinical service; and
3) lack of continuing medical education.

A "mobile" cardiologist practice (the *iSpecialist program*), with medical assistant/nurse, echocardiography technician, and office administrator, can be "embedded" within the pediatrician's office for a half or whole day. The triad of deficiencies is mostly eliminated by this on-site strategy of delivering outpatient service as there are no longer issues with access, feedback, and education. The electronic documentation of the patient referral (with results of the ECG and echocardiogram) is also deposited in the pediatricians' electronic record prior to the group departure. Any follow-up visits are at the pediatric cardiologists' offices (several strategically located throughout the county) in order to maintain maximal referral slots for new patients at the pediatricians' offices.

9. Unique Services

In Jim Collins' *Good to Great*, the trenchant business author discusses the importance of the middle common area of the intersecting triad of: doing what you can be best (or the only or few) in the world at, doing what you are deeply passionate about, and doing what drives the economic engine (see Figure 2). If one applies this philosophy to pediatric cardiology, there are areas in pediatric cardiology that could potentially fill this intersecting area that reflect new paradigms in diagnosis and/or treatment. An example in our heart program is the institution of a new pediatric oncocardiology service that involves a closer partnership with the long term effects oncology service.[4] This would not only fulfill a patient service need, but also distinguishes the program and adds to the clinical portfolio of services.

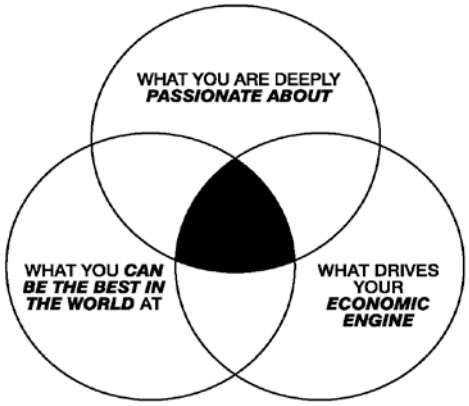

Figure 2. (From Collins J. Good to Great. HarperCollins Publishers Inc., New York, 2001).

10. Community Involvement

Current health care crises include obesity and other community issues such as sudden death in athletes and attention deficit disorder drug utilization. While it is understandable to eschew these clinical areas, an alternative strategy is to take on these challenges in a requisite public health arena. These efforts can be done in conjunction with the county board of education, local American Academy of Pediatrics and American Heart Association chapters, and department of health. These *esprit de corps* efforts contribute significantly to community heart health awareness and also provide the cardiologists an opportunity to develop a strong presence and become a continual resource in the community. An example of such a community collaboration is the *Be the Beat* effort http://bethebeat.heart.org) in Orange County in a promotion for CPR training for school-age children as a direct result of collaboration between pediatric cardiologists and the county department of education.

Conclusion

This compendium of ten business and technological innovative measures can add substantial efficiency and productivity to the present conundrums of outpatient pediatric cardiology service in both an academic and private practice setting. While these strategies require additional manpower and resources for implementation, these can be scaled up and deliver incremental but substantial short and long-term dividends. Which of the aforementioned ten new concepts could be implemented (and in what priority and order) is best customized to the exigencies of the individual pediatric cardiology program or practice. Once a new initiative is decided, however, those programs with a penchant for overabundant analysis can create a situation of early loss of momentum and logistical paralysis. To avert failure, perhaps the better strategy involves a "serial entrepreneurship" mentality- navigating uncertainty while minimizing risk with a spirit of perseverance.[5]

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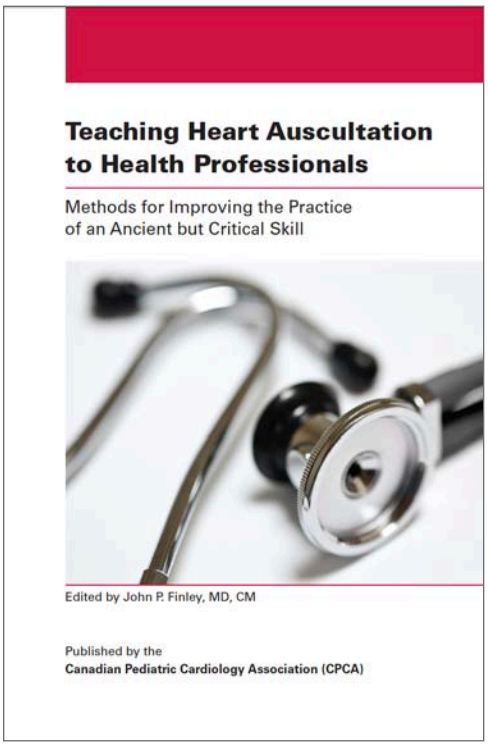
Book Review - *Teaching Heart Auscultation to Health Professionals: Methods for Improving the Practice of an Ancient but Critical Skill*

~ Edited by John Finley, MD, CM; Published by the Canadian Pediatric Cardiology Association

By John W. Moore, MD, MPH

As pediatric cardiologists, many of us are called upon to consult on patients referred with "heart murmurs." In the cardiology clinic at Rady Children's Hospital San Diego, such patients represent at least one third of the new patient referrals. In addition, each patient receives a screening ECG and many also have chest x-rays taken. The burden of these patients is so significant in our practice that we have established a weekly "murmur clinic" which is "double-booked," in order to handle the volume of these referrals in a timely manner.



In addition, to our duties as consultants who must definitely screen patients with possibly pathological murmurs, many of us are charged with teaching auscultation to medical students, pediatric residents, as well as cardiology fellows. In San Diego we do this by using individual patients and the traditional methods of describing and graphing the timing of their heart sounds and murmurs, and perhaps by making some fairly feeble attempts to mimic them. In addition, one of our faculty members gives an annual brief lecture series about auscultation and heart murmurs, which includes use of auditory examples and quizzes.

"In this text, Dr. Finley has tapped the expertise of a multi-disciplinary group of authors including a musician and an audiologist. Furthermore, he outlines a curriculum for teaching medical students cardiac auscultation, and he provides references and identifies resources for implementing the curriculum."

It is fair to say that many of us do not focus on auscultation as a methodology in our world of high technology, intervention, surgery and intensive care. In fact, many of us actually regard, use of the stethoscope as only a necessary prerequisite to more definitive patient evaluation using ultrasound. The consequences are that our students have not been adequately trained to distinguish between pathological and non-pathological sounds, and far too many patients are referred. We submit them to additional testing, much of which is unnecessary, and there is a high burden of cost all around.

Teaching Heart Auscultation to Health Professionals is a call to action with respect to teaching auscultation. This thoughtful monogram outlines our current antiquated and failing educational approaches, and provides a road map to modernize and improve them. This is not a text about heart sounds or murmurs per say, but rather a teachers' guide, outlining all of the modern teaching methods and resources.

In this text, Dr. Finley has tapped the expertise of a multi-disciplinary group of authors including a musician and an audiologist. Furthermore, he outlines a curriculum for teaching medical students cardiac auscultation, and he provides references and identifies resources for implementing the curriculum. In one of the most useful chapters, Finley provides a listing of recordings, books with recordings, websites and hardware to use as teaching aids.

In a time of scarce health care resources, we can expect that excellent auscultation skills and interpretation by all practitioners will improve patient care and help to control costs. This monogram provides a useful reference for redesigning, updating and improving our current educational programs to make them more appropriate for the modern era.

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Teaching Heart Auscultation to Health Professionals:
Methods for Improving the Practice of an Ancient but Critical Skill

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For more information, contact john.finley@iwk.nshealth.ca or www.bookstore.dal.ca

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Letter To The Editor - May 2012

By Michael Slack, MD, FACC, FSCAI

Dear *Congenital Cardiology Today*:

I enjoyed the comprehensive article titled "Expanding the Role of Percutaneous Pulmonary Valve Implantation" in the North American and International April 2012 editions of *Congenital Cardiology Today*. www.congenitalcardiologytoday.com/index_files/CCT-APR12-NA.pdf and www.congenitalcardiologytoday.com/index_files/CCT-APR12-INT.pdf. The authors are to be commended for bringing many important issues to light as we all begin to integrate this "game changer" new technology into our practices. I do have a couple of important comments that I believe are cogent to this discussion. First, the article does contain a factual error that requires correction. On page 6, in the second paragraph (just after reference # 30), the authors incorrectly state that the Sapien™ valve from Edwards Life Sciences was approved by the FDA through a "Humanitarian Device Exemption (HDE)" approval process. In fact, the device was approved through the full PMA process,[1] and not as an HDE/HUD device as stated in the article. This new percutaneous aortic valve is indicated for the treatment of acquired senile calcific aortic valve stenosis in patients who are deemed inoperable as defined by strict objective scoring criteria. These two FDA device approval pathways are significantly different in both their evidence requirements and with respect to their usage restrictions post-approval.

Secondly, the authors state, without apparent cautionary note, that the off-label use of the Melody Percutaneous Pulmonary valve device, which was approved as an HDE/HUD device, may benefit a select group of high-risk patients who are not candidates for traditional surgical valve replacement. I think it is important to remind the readers that the FDA generally discourages ad hoc off-label use of devices given a HUD designation because the approval process does not include proof of efficacy for any specific indication. Although safety and "probable benefit" are the evidence thresholds required for this type of approval, efficacy is clearly not. It is very important for all potential implanters to initiate full local IRB review and oversight prior to any planned off-label usage of any HUD/HDE devices as delineated in the Information Sheet Guidance published by the FDA.[2] Furthermore, the concept of patients being too "high-risk" for surgery further compounds this often subjective determination in the world of congenital heart disease where we don't have well defined objective scoring systems like the STS & Euro scores. We should all be reminded to proceed with extreme caution and that the FDA can (and most definitely has) rescinded the HDE/HUD approval of transcatheter devices whose "off-label" use spiraled out of control (see PFO Occluder devices history). It would be very unfortunate for such a thing to happen to HDE/HUD approved percutaneous pulmonary valves.

"The authors are to be commended for bringing many important issues to light as we all begin to integrate this "game changer" new technology into our practices. I do have a couple of important comments that I believe are cogent to this discussion."

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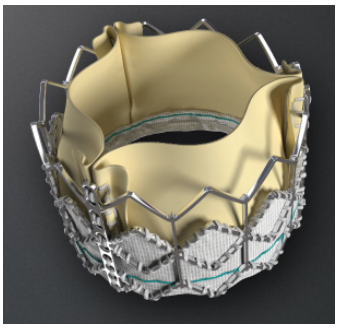
Letters to the Editor

Congenital Cardiology Today welcomes and encourages Letters to the Editor. If you have comments or topics you would like to address, please send an email to: LTE@CCT.bz, and let us know if you would like your comment published or not. Those wishing to have their LTE published will be sent a preproduction draft to review.

Strong Two-Year Outcomes Reported for High-Risk Transcatheter Patients



Edwards Lifesciences Corporation, the global leader in the science of heart valves and hemodynamic monitoring, reported that longer-term results (≥ 2 years) from the high-risk Cohort A of The PARTNER Trial -- a randomized comparison of patients treated with either surgical aortic valve replacement or the Edwards SAPIEN transcatheter heart valve -- were published March 26th in *The New England Journal of Medicine*. The data were concurrently presented at the American College of Cardiology's (ACC) 61st Annual Scientific Session in Chicago.

At two years, all-cause mortality for patients treated with Edwards' SAPIEN transcatheter aortic valve replacement (TAVR) was 33.9%, which is statistically equivalent to open-heart surgical aortic valve replacement (AVR) at 35.0%. The authors concluded: "This 2-year follow-up of patients in the PARTNER trial supports the use of TAVR as an alternative to surgery in selected high-risk patients with aortic stenosis. The two treatments were similar with respect to mortality, reduction in cardiac symptoms and improved valve hemodynamics." The presentation also included available data out to 36 months, which trended similarly.

"We are pleased that the growing body of longer-term evidence supports the Edwards SAPIEN transcatheter valve as an important therapy for high-risk patients," said Michael A. Mussallem, Edwards' Chairman and CEO. "Consistent with previous studies, The PARTNER Trial also demonstrated that, even though seriously ill patients with aortic stenosis face dismal outcomes, many do not receive life-saving surgery because of other medical risks, age or preference. This underscores the value of an alternative therapeutic option for these high-risk patients."

The authors noted that earlier results raised concerns that TAVR was responsible for increased early and, possibly, late strokes. However, over the reported follow-up period from The PARTNER Trial, the available data published today showed there was no significant difference in the risk of stroke between TAVR and surgery patients.
Predictors of mortality for the overall trial cohort, as well as for each of the randomized groups, were also analyzed. The study authors noted that there was a new and important observation of an association of paravalvular regurgitation after TAVR with late mortality, possibly related to factors including the ratio of the transcatheter-valve size to the patient's native valve size. According to the authors, "Recently, the routine use of three-dimensional imaging techniques has improved annulus sizing, resulting in better selection of properly sized valves."

The PARTNER Trial is the first randomized, controlled trial of a transcatheter aortic valve and the only trial that has follow-up data on all

patients for at least two years. Cohort A of the trial enrolled between May 2007 and Sept. 2009 and studied 699 patients with severe, symptomatic aortic stenosis deemed at high risk for traditional open-heart surgery. Patients were evaluated by a multi-disciplinary heart team and were evenly randomized to receive either traditional open-heart surgery or the Edwards SAPIEN valve with transfemoral or transapical delivery. The study represented the initial experience with TAVR at most sites, and the use of first-generation delivery systems. The PARTNER Trial achieved its primary endpoint, concluding that survival of patients treated with the Edwards SAPIEN valve at one year was equivalent to those treated with surgery.

The two-year data from the inoperable Cohort B of The PARTNER Trial were also published today in The New England Journal of Medicine. These data were previously presented in November 2011 at the Transcatheter Cardiovascular Therapeutics (TCT) Scientific Symposium.

Also, the Edwards SAPIEN transcatheter heart valve received United States Food and Drug Administration (FDA) approval for the treatment of certain inoperable patients in November 2011; it is currently an investigational device for the treatment of high-risk patients in the U.S. and is awaiting approval. Following primary endpoint analysis, Edwards submitted one-year data from Cohort A of The PARTNER Trial to the FDA in April 2011.

Edwards Lifesciences is the global leader in the science of heart valves and hemodynamic monitoring. Driven by a passion to help patients, the company partners with clinicians to develop innovative technologies in the areas of structural heart disease and critical care monitoring that enable them to save and enhance lives. Additional company information can be found at www.edwards.com.

Invasive Heart Test Being Dramatically Overused, Stanford Study Shows

An invasive heart test used routinely to measure heart function is being dramatically overused, especially among patients who recently underwent similar, more effective tests, according to a new study from the Stanford University School of Medicine.

"This adds both risk to the patient and significant extra cost," said first author of the study Ronald Witteles, MD, Assistant Professor of Cardiovascular Medicine and Program Director of Stanford's Internal Medicine Residency Training Program, who called the rates of unnecessary use "shockingly high."

The procedure, called left ventriculography or left ventriculogram, was developed 50 years ago to assess how well the heart functions by using a measurement method called "ejection fraction" — the percentage of blood that gets squeezed out with each heartbeat. The investigators found that it is routinely performed as an add-on procedure during a coronary angiogram, a separate heart-imaging test, at an extra cost of $300.

Over the years, several less-invasive and often superior methods of measuring ejection fraction have emerged, such as echocardiograms and nuclear cardiac imaging, making the use of left ventriculography questionable at times, the study states.

The study appears online this month in the *American Heart Journal*.

Several years ago when Witteles was a cardiac fellow, he and his colleagues noticed a great deal of variation in whether cardiologists would order the procedure, often in similar patient cases, he said. This seemingly arbitrary use of left ventriculography led to the idea for this study.

Researchers first set out to determine exactly how often the procedure was conducted. They examined a national database of about 96,000 patients enrolled in Aetna health benefits plans in 2007 who underwent a coronary angiogram during that year. The data showed left ventriculography was performed 81.8% of the time whenever an angiogram was done — a surprisingly high rate, Witteles said.

Next, they wanted to determine how high that figure was in a population of patients for whom it would almost never be medically justified to perform the procedure. So they looked at those patients who had very recently — within the 30 days prior to having a coronary angiogram — undergone another imaging study that would have given practitioners the same, and usually better-quality, information. (They excluded patients who had intervening diagnoses of new problems during those 30 days, such as heart failure, heart attack or shock.) Among the remaining 37,000 patients, the researchers found that not only did the majority still get the unnecessary left ventriculography procedure, but the rate actually jumped to 88%.

"If a patient recently had an echocardiogram or a nuclear study, it didn't make them less likely to have the left ventriculography procedure — it made them more likely," Witteles said. "That is impossible to explain from a medical justification standpoint."

"It is extremely unusual, in these types of cases, to need another assessment. The only logical conclusion is that a practice pattern is being defined in which tests beget more tests, whether they're necessary or not. It would be bad enough if the figure stayed at 81%, but our findings showed that it went up."

Even more concerning than the added costs are the medical risks from performing an unnecessary procedure. For left ventriculography, this can include side effects from injecting contrast dye (which can be particularly harmful for patients with kidney dysfunction or diabetes), increased radiation exposure and an increased risk of abnormal heart rhythms and stroke.

During a coronary angiogram, a catheter is threaded through the blood vessels to the heart, contrast dye is inserted and X-rays are taken. The add-on left ventriculography procedure involves moving the catheter across the aortic valve of the heart and inserting another dose of contrast dye. This allows visualization of the left ventricle and its contractions.

"The biggest downside is that the catheter goes across the valve into the heart," Witteles said. "There's always a risk of dislodging a blood clot, causing a stroke. The procedure only takes five minutes, but it increases the risk of arrhythmias. And then there is the added cost. But the real big-picture issue is how often an unnecessary, invasive test is being routinely ordered."

Other Stanford co-authors include senior author Paul Heidenreich, MD, Associate Professor of Cardiovascular Medicine; Joshua Knowles, MD, PhD, Instructor in Cardiovascular Medicine; and Marco Perez, MD, Instructor in Electrophysiology.

This was an investigator-initiated study proposed to Aetna, which provided access to its national patient database. Knowles was supported by an American Heart Association fellowship grant, and Heidenreich was supported by a grant from the U.S. Department of Veterans Affairs.

Information about Stanford's Department of Medicine, which also supported the work, is available at http://medicine.stanford.edu.

SCAI Monthly Column: Help SCAI Improve Quality of Care, One Cath Lab at a Time

SCAI is inviting YOU to join the interventional cardiology community in tackling continuous quality improvement with the recent launch of its *Pediatric Quality Improvement Toolkit* (*SCAI QIT*) at *PICS-ACS* in April and *at SCAI* 2012 in May.

Adapted from the original *SCAI-QIT* by *Pediatric SCAI-QIT* Chair Henri Justino, MD, FSCAI, this new tool specific to pediatric interventionalists is based on four modules focusing on achieving quality improvement:

- Radiation Program Best Practices
- Procedure Checklists
- Procedural Quality
- Defining Quality in the Cath Lab

The beauty of *SCAI-QIT* is that it is flexible and can be customized for each user. Even better, you will lead the way at your own institution, using its practical tools to document your strengths, identify opportunities for improvement, and prepare for government-mandated "Pay-for-Quality" initiatives.

The Pediatric SCAI-QIT initiative is FREE and SCAI will be also be hosting a webinar this summer for those unable to attend *PICS-ACS* or *SCAI 2012*. To get updates on this webinar and to enlist as a Quality Champion at your facility simply visit www.SCAI.org/PediatricQIT.

Educated Patients Lead to Better Care – Introduce Your Patients to SecondsCount.org

It's been demonstrated that informed and educated patients tend to stay healthier, seek help when they need it, and have fewer complications and return trips to the hospital. They understand how their habits and behavior affect their health, and, as a consequence, they make better choices. Many patients turn to the Internet for information, but we all know that many websites feature inaccurate, outdated, or misinterpreted information on the latest studies and the standard of care. That's why SCAI has created SecondsCount.org.

This site is a comprehensive, education resource on heart health for patients and their families. This includes recently expanded content for our youngest heart patients, overseen by *SecondsCount.org* Associate Editor-in-Chief Dennis Kim, MD, PhD, FSCAI, a pediatric interventional cardiologist at Sibley Heart Center Cardiology/Children's Healthcare of Atlanta.

> ***"Please send your images or AVI files, with a bit of background info to us at egrammer@scai.org."***

Featuring pediatric heart patient stories, and separate sections on children and heart disease, congenital heart disease, and adult congenital heart disease this site is a must-referral for your patients. Be sure to prescribe *SecondsCount.org* as part of your patient care!

Call for Unique CHD Angiogram Submissions

SCAI hosts a special interest page specific to interventional therapies for Congenital Heart Disease at www.SCAI.org/CHD and we need your help!

As part of this project being spearheaded by Makram R. Ebeid, MD, FSCAI, and Russel Hirsch, MD, FSCAI, SCAI is currently building a comprehensive library of angiograms of unique lesions (single ventricle, heterotaxy, pulmonary atresia, etc.). Have an interesting angiogram that might be a valuable resource for our community? Please send your images or AVI files, with a bit of background info to us at egrammer@scai.org.

Remember to remove any personal identifiers. We'll be recognizing the very best images in an Interesting *Image of the Week* feature on the site.

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