Dear AVIR Members,

It is my pleasure to update you on what has been happening in the forefront and behind the scenes with AVIR. As you know, the board of directors and I have been on a campaign to reignite AVIR membership with awareness through a grassroots strategy. We reached out to over twelve thousand Radiology Technologists that work in the business of interventional radiology throughout the United States and offered them a trial membership and some free education. We offered the free education in the form of recorded presentations from our annual meeting this past year so that the new members can appreciate the quality of the lectures we provide in that forum. We are about a month into the campaign and we have roughly two hundred and fifty clinical technologists working in IR or cathlabs as well as leaders, supervisors, and managers on board as guest members. We are pleased with the outcome thus far but with more than twelve thousand of us out there, I am setting the bar much higher. We need to, as members and professionals, continue to get the word out about who we are and why we are here.

The board of directors continues to work hard at each specific task at hand: Rob Sheridan has continued his fiscal responsibilities from last year almost seamlessly, while we ramp up our newly appointed Secretary Treasurer, Amanda Popovitch. Amanda has hit the ground running, she is already assisting with the planning process of the 2014 Annual Meeting in San Diego and will be attending the site visit later this month with the team. Our Director at Large Crystal has been working tirelessly on local activity, reaching out to chapter heads and offering our assistance in any ways necessary. Dave Nicholson, our Annual Meeting Chair, has taken on a lot of responsibilities for us on top of the tedious task of planning our 2014 annual meeting agenda. Dave and Crystal will be attending RSNA on our behalf this year in an effort to reach out to the wider radiology community. Our Media Chair, Jared has been keeping a close eye on not only our website but all our social media activity, keeping it up to date, functional, and most importantly, operational. And of course you would not even be reading this if it wasn’t for our Publication Chair, Dave Douthett. Thanks for keeping us all in line Dave. I would also like to recognize our Immediate Past President Tony, and our Associate Representative Dana for all your input and participation in all these above mentioned tasks. As we come into the middle of the term, our management team led by Bruce has been invaluable these past few months in helping AVIR to transition into a viable and stable fiscal environment. We are now better positioned for growth and success then we have been in several years. We are measurably gaining momentum and growing. I am privileged to be working with such an amazing team of professionals dedicated to what they do and what we stand for.

Our members, I look to you now for where you want to go from here. We have posted twenty online credits for you and
we offer more than that in education and community in the four days we bring you all together for our annual meeting. We have provided numerous forums for you to voice your thoughts and concerns and even for us to educate each other in the virtual community. So as President I ask, what would you like to see next? What can AVIR do for you on the local level? How do we get you all involved in your communities? We are the voice of our profession so its time to work on our professional scope together. Have you all reviewed the practice standards listed on the ARRT website? They asked for our opinion a few months ago, did you respond? If we don't control this someone else will do it for us. I've heard too often in my twenty years in the business that our profession is under rated and no one cares, well my colleagues, it is my experience that this needs to come from within. If we don't care then why should anyone else? Lets start caring collectively, lets get AVIR on the map, and lets get our voices heard. Your opinions do matter and they need to be out there. There are many ways we can impact our profession in a positive way if we all put our heads together so I am tasking us this year to do just that. Who's in? Email us with your thoughts.

Simulation Training in IR- Its come a long way…

Simulation training is not new to our field. In fact for several years, vendors have been claiming that the technology is realistic enough that it will be an extremely valuable tool for training our future interventional staff. From personal and physician feedback, I would have trepidations fully supporting that claim, however; recently simulators have undergone vast improvements in technological capabilities, dare I say breaking through the technology limitations.

MGH has recently purchased a simulator that supports all endovascular service training programs across the institution. With the advances with the technology, the tacit learning has reached a new height. As real catheters, wires and various endovascular devices are deployed; the simulators today provide a high quality 2D display of a simulated fluoro image with 3D anatomy. Changing angles, injecting contrast and deploying stents are simulations with significant improvement with today's simulators. As simulators are being introduced as part of training curriculums for radiology residents, training modules are broadly available for a host of different procedures with variable complexities. The technology curve has reached a place that truly has a huge value with training in terms if the learning curves and errors that can now be worked-out on a simulator, rather than on patients.

These realistic simulators enhance training on several fronts: with the diffusion of our specialty, volume of specific complex procedures has diminished for many IR trainees as surgeons, cardiologist and now interventional nephrologists and pulmonologist all compete for the same patient in many institutions. Simulation with repetitive practice of hand eye coordination and experienced based know how can now be obtained prior to treating patients. This ability to avoid harm to patients while acquiring realistic skills in a repetitive, short time-line is vital to ensure patient safety. The aviation industry has utilized simulators effectively for many years now, and avoids countless human harm in doing so; isn't it time medicine embraces and capitalizes on the available simulation technology to ensure the same safe training practices!

The AVIR is currently investigating a simulation session for our members at our next annual meeting that would allow members to sign-up for sessions where they could simulate cases, become acclimated to the advancing simulation technology while practicing catheter and wire techniques with members, expert vendors and AVIR friends. Please take a moment and let us if you are interested in a simulation session.

Respectfully,
Rob Sheridan, Director IR, MGH
Vice President, AVIR
Ahmad Almori wrote to dispel common myths about the management and diagnosis of vascular malformations and said that dispelling these myths can “only help in the management of this challenging disorder.” Vascular anomalies can be broadly classified into vascular tumours (e.g., infantile haemangioma) and vascular malformations. The two main categories of vascular malformations are slow-flow (venous, lymphatic and capillary malformations) or fastflow (arteriovenous malformations and fistulas). The interventional management of vascular malformations is the primary minimally-invasive therapy which largely replaced the surgical approach. The use of accurate terminology to describe this heterogenous, occasionally overlapping group of disorders is crucial for proper management and research. Unfortunately, despite the major improvement in the clinical, genetic and therapeutic management of vascular anomalies, myths and misconceptions about the diagnosis and management of these anomalies continue to be surprisingly pervasive with frequent serious consequences. Dispelling some of these common myths can only help the management of this challenging disorder.

**Myth 1. Modern medical practice uses proper terminology for vascular anomalies**

Partially correct! The common use of inappropriate terms such as “lymphangioma”, “cystic hygroma”, “cavernoma” or “cavernous haemangioma”, does not attest to this statement. Vascular malformations are not tumours. Old, imprecise tumourdenoting terms (such as the suffix “oma”) should be avoided. “Lymphangioma” and “cystic hygroma” should be replaced by the proper name “lymphatic malformation.” Similarly, the use of “cavernoma” or “cavernous haemangioma” to refer to venous malformations is inappropriate.

**Myth 2. Interventional radiology management of vascular anomalies is the only justified practice**

Managing patients with vascular anomalies usually requires the collaboration of several experienced specialties, including interventional radiology. The unidisciplinary approach is hardly justified in modern medicine.

**Myth 3. Interventional radiologists are well-trained to manage vascular anomalies**

This is correct for only a handful of institutions. A reasonably large volume of patients with vascular anomalies is essential to consolidate such experience. In reality, the current high-intensity interventional radiology fellowship training cannot provide a comprehensive knowledge base and the practical skills necessary for managing these diseases in a one-year period. I advocate further specific training and retraining in this field beyond the fellowship and institutional experience limits.

**Myth 4. Surgical management of vascular anomalies is an antiquated practice**

Imprecise! For some vascular anomalies, successful management can be primarily achieved surgically. In addition, combined interventional radiological-surgical approach is particularly helpful for large vascular anomalies requiring eventual debulking and for cosmesis and solid components of vascular anomalies.

**Myth 5. Magnetic resonance angiography (MRA) and magnetic resonance venography (MRV) are standard parts of the protocol for imaging vascular anomalies**

Difficult to prove! One of the common mistakes in imaging vascular anomalies is studying local blood vessels with MRA and MRV without standard cross-sectional sequences. For the vast majority of the vascular anomalies, MRA and MRV provide little, if any additional information. Contrary to the common belief, MRA and MRV studies are not essential for the diagnosis of arteriovenous malformations, which can be imaged by standard cross-sectional sequences. Nevertheless, the 3D data can be helpful in characterising and planning the management of some fastflow anomalies.

**Myth 6. Contrast enhancement is essential to differentiate venous from lymphatic malformation**

Most of the time, contrast enhancement is not needed for this particular purpose. The classic T2 magnetic resonance imaging (MRI) signal of venous malformations is anamorphous mass of very thin septations (malformed venous walls) containing stagnant blood and clots without
solid components. Blood stagnation very commonly causes fluid-fluid level. Enhancement of venous malformations is patchy and heterogeneous while only septal enhancement is typically seen in lymphatic malformations. Nevertheless, with characteristic T2 features, enhanced sequences are not essential for diagnosis.

**Myth 7. Lymphaticovenous malformations are commonly noted on imaging**

This myth is expressed far too often. For isolated, non-syndromic slow flow malformations, the common use of “lymphaticovenous malformation” is incorrect. These malformations are composed predominantly of one anomalous vascular lineage and the diagnosis is simply either “venous” or “lymphatic” malformations.

**Myth 8. “Klippel-Trenaunay-Weber syndrome” is a proper diagnosis**

False! Klippel-Trenaunay syndrome and Parkes Weber syndrome are completely different clinical entities. In fact, there is no such eponym as “Klippel-Trenaunay-Weber syndrome”! Parkes Weber syndrome is characterised by a limb overgrowth with capillary stain and hypervascularity of the soft tissue. In Klippel-Trenaunay syndrome, limb overgrowth is composed of extrafascial fatty thickening, ectatic marginal venous system and lymphatic malformations.

**Myth 9. Arteriovenous malformations can be precisely diagnosed with angiography**

This is true—to a point. Fast flow, early venous filling and even arteriovenous shunting are not a sine qua non of arteriovenous malformation. Benign hypervascular masses (eg. hepatic infantile hemangioma) and extensive capillary malformations demonstrate marked hypervascularity, overgrowth and early venous filling without discreta arteriovenous shunting. Arteriovenous malformations by definition are primary lesions with no solid mass component.

**Myth 10. “Liver hemangioma” and “vertebral hemangioma” are benign tumours**

The so called “liver hemangioma” and “vertebral hemangioma” are not tumours, as the suffix “oma” suggests. These two entities are peculiar slow-flow venous lesions, not tumours.

Ahmad Alomari is an associate professor at Harvard Medical School, Boston Children’s Hospital, Boston USA.

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**Membership! Why be a member?**

By Amanda Popovitch

Did you miss our annual meeting in New Orleans and want to get FREE credits from some of the lectures presented? Ever wonder what’s going on in your local chapter or chapters around the country? How about savings on your registration for next year’s meeting in San Diego? YOU will all these benefits and more if you join TODAY! AVIR offers many levels of membership from student to active to even International. Not sure you would like to fully commit? No problem. Sign in as a guest and recieve 5 free credits from lectures presented in New Orleans. It’s as easy as 1,2,3. Click, search, join and be on your way to furthering your career as an Interventional Radiographer!
## AVIR Meetings Schedule for 2013

<table>
<thead>
<tr>
<th>MEETING</th>
<th>ACYRN</th>
<th>WEB SITE/ PHONE</th>
<th>LOCATION</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The VEINS Chicago 2013</td>
<td>theveins.org</td>
<td>Chicago, IL</td>
<td>September 20-22, 2013</td>
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</tr>
<tr>
<td>Cardiovascular and Interventional Radiological Society of Europe</td>
<td>CIRSE</td>
<td>cirse.org</td>
<td>Barcelona, Spain</td>
<td>September 14-18, 2013</td>
</tr>
<tr>
<td>Lower Extremity Arterial Revascularization</td>
<td>SIR</td>
<td>sirweb.org/meetings</td>
<td>Chicago, IL</td>
<td>September 26-28, 2013</td>
</tr>
<tr>
<td>AHRA Fall Conference</td>
<td>AHRA</td>
<td>ahraonline.org</td>
<td>Baltimore, MD</td>
<td>October 1-3, 2013</td>
</tr>
<tr>
<td>2013 Cardiometabolic Health Congress</td>
<td>cardiometabolichealth.org</td>
<td>Sheraton Hotel, Boston, MA</td>
<td>October 2-5</td>
<td></td>
</tr>
<tr>
<td>Cardiovascular Disease Management: A Case-Based Approach</td>
<td><a href="mailto:rlaw@promedicacme.com">rlaw@promedicacme.com</a></td>
<td>Arizona Biltmore, Phoenix, AZ</td>
<td>October 4-5</td>
<td></td>
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<tr>
<td>VIVA 2013</td>
<td>VIVA</td>
<td>vivapwd.com</td>
<td>Wynn, Las Vegas</td>
<td>October 8-11, 2013</td>
</tr>
<tr>
<td>Synergy 2013, A Multidisciplinary Approach to Intervention Oncology</td>
<td>SYNERGY</td>
<td>synergiemiami.org</td>
<td>Eden Roc Hotel, Miami Beach, FL</td>
<td>October 18-20, 2013</td>
</tr>
<tr>
<td>Controversies in Dialysis Access</td>
<td>CIDA</td>
<td>dialysiscontroversies.org</td>
<td>Westin St Francis, San Francisco, CA</td>
<td>October 24-26</td>
</tr>
<tr>
<td>Endovascular Therapies 2013</td>
<td>endovasculartherapies.com</td>
<td>Pinehurst, NC</td>
<td>October 25-27, 2013</td>
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</tr>
<tr>
<td>Transcather Cardiovascular Therapeutics</td>
<td>TCT</td>
<td>tctconference.com</td>
<td>Moscone Center, San Francisco, CA</td>
<td>October 27-Nov 1, 2013</td>
</tr>
<tr>
<td>Va Assoc. of Int. Radiographers 10th Annual Meeting</td>
<td>Va AVIR</td>
<td><a href="mailto:twilliamson@mcvh-vcu.edu">twilliamson@mcvh-vcu.edu</a></td>
<td>Great Wolf Lodge, Williamsburg, VA</td>
<td>November 8-9, 2013</td>
</tr>
<tr>
<td>Radiological Society of North America</td>
<td>RSNA</td>
<td>rsna.org</td>
<td>Chicago, IL</td>
<td>Dec 1- Dec 6, 2013</td>
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<tr>
<td>26th Annual International Symposium on Endovascular Therapy</td>
<td>ISET</td>
<td>ISET.ORG</td>
<td>Fontainebleau Miami Beach, FL</td>
<td>January 18-22, 2014</td>
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<tr>
<td>Society of Interventional Radiology 39th Annual Scientific Meeting</td>
<td>SIR</td>
<td>sirmeeting.org</td>
<td>San Diego, CA</td>
<td>March 22-27, 2014</td>
</tr>
<tr>
<td>Lower Extremity Arterial Revascularization</td>
<td>SIR</td>
<td>sirweb.org/meetings</td>
<td>Chicago, IL</td>
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<td>rsna.org</td>
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<td>Nov 27 - Dec 2, 2013</td>
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### Newsletter Advertising rates:

**Size Options:**
- Full Page
- Fractional (Black and white only)

**Dimensions:**
- Full Page (bleed): 8.75”x11.25”
- Full Page (no bleed): 7.5”x10”
- 1/2 Page Vertical: 3.5”x10”
- 1/2 Page Horizontal: 7.5”x4.75”
- 1/4 Page Vertical: 3.75”x4.75”
- 1/8 page black/white ad: 2¼ x 3¼

**Ad Rates:**
- Full Page (bleed): $2,000.00
- Full Page (no bleed): $2,000.00
- Classified Ad: 1 column inch: $125.00
- 1/2 Page Vertical: $800.00
- 1/2 Page Horizontal: $800.00
- 1/4 Page Vertical: $425.00
- 1/8 page black/white ad: $225.00

**Mechanical Specifications**

- **Dimensions:** Trim Size: 8.5”x11”
- **Live Area:** should be kept 1/4” from trim on all sides including gutter. Bleed extends 1/8” beyond trim on all sides.

**File Submission**

- Digital files should be provided in high resolution PDF format, including crop marks and bleed if applicable. Although not recommended, we will accept the following formats: .eps, .tiff, or Adobe InDesign native files with all support links and fonts. The following file formats are not accepted: Corel, Microsoft Word, Powerpoint or Publisher documents.
- All images must be 300dpi and in CMYK or Grayscale color format. All fonts should be embedded or in outlines where applicable. Artwork should be submitted at 100% scale.
- Please contact AVIR for ad submission due dates. Full payment must accompany ad order.
2013 Summer Chapter Updates

By Crystal Hanson, AVIR

Baltimore Chapter
Contact: Sharon Misler RT(R)(CV) FAVIR
Email: angiosm@aol.com
is retired and could not forward me to a new contact

Boston Chapter
Contact: Robert Sheridan RT(R)(CV)
Contact: Amanda Popovich
Contact: Kimberly Mahoney
Email: msheridan@partners.org,
Amanda.Popovitch@childrens.harvard.edu,
KMAHONEY18@partners.org

Buckeye State Chapter (Ohio) ➔ No Updates
Contact: Jamie Hiott RT(R)(CV)(M)(CT)(VI)
Email: jshioot@gmail.com

Connecticut Northeast Chapter of AVIR
Contact: Meredith Gaiter-Brown BSN, RT(R)(CV)(MR)(M)
Email: mrcvm@aol.com
I miss having the meetings, but ASRT has taken a huge bite out of our conferences. But I would like to have one more before my co chair Bobbie retires. But it is a huge financial risk, most hotels want deposit and definitive head counts.

Great Lakes Michigan Chapter ➔ No Updates
Contact: Michelle Denomme
Email: mdnomme@beaumonthospitals.com

Lone Star State Chapter ➔ No Updates
Contact: Alan Seeley RT(R)(VI)
Email: aseeley@petersonrmc.com or aseeley61@windstream.net

Los Angeles Chapter ➔ No Updates
Contact: Jeane Rhoten RT(R)(CV)
Email: jrslife@aol.com

Miami Chapter (South Florida)
Contact: Roberto Telleria, RT R CV CT
Email: AVIR.MIAMI.RT@GMAIL.COM

From Roberto Telleria, RT - Miami Chapter President. The Maimi chapter has had two meetings, we plan to continue to have them monthly starting back up in September. The local admin decided to leave July and August as vacation months.

In the most recent meeting which was in June, we elected John Dale RT from cleveland clinic (south Florida site) as our VP and Erick Porto RT as our Secretary/Treasurer. We look forward to our September meeting and getting more hospitals involved.

NY Capital Region Chapter ➔ No Updates
Contact: Heather Fairchild, RT(R)(VI)
Email: FairchH@mail.amc.edu

New York City Chapter
Contact: Andrew Amorossa RT(R)
Email: amorosso43@gmail.com
To be honest, at this moment- we have nothing, but we are planning a registry review in the fall. Followups to come.

Northern California Chapter ➔ No Updates
Contact: Darlene Crockett RT(CV)
Email: maildarlene@juno.com

North Carolina Chapter of AVIR
Contact: Diane Koenigshofer MPH, BSRT-R(CV), FAVIR
Email: dianek@nc.rr.com
The NCAVIR is tentatively planning a Winter meeting in February to most likely be held in the Raleigh/Durham/Chapel Hill area. Nothing definite at this time.

North Texas Chapter ➔ No Updates
Contact: Sven Phillips RT(R)(VI)
Email: sven427@yahoo.com

Orange County California Chapter (OCAVIR)
Contact: Brett Thiebolt (R)
Email: thieboltbh@stjoe.org
At this time there is nothing scheduled other than our quarterly Angio Club meeting which is a case presentation for the physicians, residents and RT’s. It is open to all OC hospitals as well as LA. I currently do not have the next date.

continued on next page
Seattle Chapter
Contact: Leona Benson RT (R)(CV) FAVIR
Email: seattleavir@hotmail.com
www.seattleavir.com

Unfortunately no activity in Seattle. We want to do a meeting but have not found the time.

South Carolina (SCAVIR)
Contact: John Furtek RT (R)
Email: jfurtek@comcast.net
www.scavir.org

This is a one day conference in Troy MI, that might be of interest to AVIR Members in the area. It will cover a wide variety of subjects that should be of interest

South Coast, Lakewood, CA ➔ No Updates
Contact: Joseph Carfagno
email: irmaster@msn.com

Tampa, Florida ➔ No Updates
Contact: Christopher Sheridan RT (R) (VI)
Email: christopher.sheridan@moffitt.org ➔ email doesn’t work, can’t locate him.

Virginia Chapter VAAVIR
Contact: Rita Howard RT(R)(CV) rhoward709@aol.com
Contact: Christopher Shaver RT (R) christophershaver@msn.com

We are currently planning the AVIR Virginia chapter annual symposium at the Great Wolf Lodge in Williamsburg, Virginia. We have all 8 of the speakers, location and a date of November 9, 2013 secured. I am looking for some support on advertising the event on the AVIR website and an update list of current members so that I can send out an event reminder.

And last but not least…from the Badger State….

Wisconsin Chapter
Contact: Jen Eklund.
Email: daisymay1210@yahoo.com

We are having our 8 credit symposium in the spring. No definite plans yet. We also try to put on a few 1 or 2 credit lectures in the fall. I will let you know as soon as we have things pulled together.

Check out our Website and get FIVE FREE CE Credits

Sign in as a Guest Member to participate in this promotion and get to know us

AVIR Members have access to 12 A Plus Credits each year through Directed Readings on our website

AVIR Members are invited to our Annual Meeting where an atmosphere of community is accompanied by education and workshops.

AVIR Members have access to Quarterly Webinars on topics relevant to our professional growth.
We Welcome You to Join Us
At Our 24th Annual Scientific Meeting
March 22-27 2014 - In San Diego California

What You Could Be doing in San Diego:
- Educate - More Than Twenty CE Credits on Topics Relevant to You.
- Simulate - Schedule Yourself in a Simulation Course.
- Collaborate - With our ARIN Colleagues at our combined session on Sunday.
- Participate - Join the AVIR Team - Apply for a position or open a local chapter.
- Appreciate - Say Thank You to our Sponsors by visiting their displays.
- Acclimate - Set some time aside to check out this amazing city.
- Assimilate - Network at our Social Function and Lets get to Know Each Other.

The AVIR Annual Scientific Meeting is scheduled for March 22 to March 27. San Diego is a perfect venue for the convention. SIR sessions will be conducted in the San Diego Convention Center. The exhibit hall for the vendors and sponsors is easily accessed upon entering the Convention Center. The ARNA an AVIR sessions will be held at the Marriott San Diego Hotel and Marina. This hotel is in prime location next to the San Diego Convention Center and Seaport Village. The close proximity will make it very convenient for attendees and speakers alike. The AVIR and ARNA joint sessions on Sunday will be conducted in the Convention Center.

San Diego is known for its mild climate, beautiful beaches, and many world-class attractions. The hotel and Convention Center are on the harbor are bordered by excellent restaurants and many tourism opportunities. The San Diego transit system is easy to navigate and is accessible directly across from the hotel. San Diego is also known for the ideal weather year-round. The temperature during the day is usually 65 to 70 degrees and drops to 55 in the evening.

The Gaslamp District is two blocks away and is known for it's dining and entertainment. Shoppers can enjoy the famous Horton Plaza visit to Seaport Village especially shops. Balboa Park houses the nation's largest cultural complexes and a large concentration of museums. Also in the area are the San Diego Zoo and Sea World.

Speakers are beginning to be lined up, and the combined day should prove to be very interesting. Thank you for your continued support of the AVIR and we look forward to sharing a very educational experience with you in San Diego.

The web site is updated with the current agenda to date. Plus, great news, registration is NOW OPEN. Please check it out and sign up.

https://avir.site-ym.com/?AnnualMeeting
ATTENTION all AVIR members!!! While we all don’t want to think about the winter months approaching, membership renewal is just around the corner and will be here before you know it. AVIR offers many levels of membership including students and international. We, the AVIR will be offering even more exciting reasons to renew from more free CEU’s to discounted registration at the Annual Conference in sunny San Diego to fun facts and articles on our social media sites. Don’t forget to renew in January!

Membership Announcement
By Amanda Popovitch

Please
JOIN the AVIR

Soi-rée (swah-RAY) n. An Evening Party
Come indulge your palate with local fine wine and San Diego’s culinary excellence!!!!

Sunday, March 23rd
At 7:30 P. M.
San Diego Wine and Culinary Center
200 Harbor Drive, San Diego, CA
Medical Technology Manufacturers Surpass $1 Billion Payment to IRS for Device Tax

by MITA, AdvaMed & MDMA

Washington, D.C. – The Medical Imaging & Technology Alliance (MITA), the Advanced Medical Technology Association (AdvaMed) and the Medical Device Manufacturers Association (MDMA) today announced that medical device manufacturers have now paid an estimated $1 billion to the Internal Revenue Service for the medical device excise tax. In reaching this threshold, the device tax has denied device manufacturers the resources that would have otherwise been available to invest in research and development (R &D), capital investments and to support good-paying jobs across America.

“The $1 billion threshold is frightening as every dollar spent paying for this medical device tax threatens medical innovation and American jobs,” said Gail Rodriguez, Executive Director of MITA. “MITA is pleased to see bipartisan support for repeal of the tax building in both the House and the Senate, but Congress cannot wait any longer to repeal this burdensome tax and protect jobs and essential R &D funding.”

“Repealing the device tax has strong bipartisan support and is the first step to corporate tax reform. Medical technology companies across the country are struggling to remain competitive and this tax makes their effort to grow, innovate and invest in the future that much harder,” said Stephen J. Ubl, President and CEO of AdvaMed.

“Each day that goes by with the medical device tax in effect is a major roadblock for patient care, job creation and innovation,” said Mark Leahey, President and CEO of MDMA. “This issue is a shining example where there is overwhelming bipartisan support in both chambers of Congress to right a wrong, and MDMA continues to work with all stakeholders to get repeal of this onerous policy across the finish line.”

Under the 2.3 percent tax, device manufacturers are required to pay an estimated average of $194 million per month in medical device tax payments (with a payment of approximately $97 million due semimonthly). This tax threatens a medical device industry that helps employ 2 million nationwide, generates approximately $25 billion in payroll, pays out salaries that are 40 percent higher than the national average ($558,000 vs. $42,000) and invests nearly $10 billion in R &D annually.

Bipartisan majorities in the House of Representatives and Senate have supported repeal of the device tax. In March, a bipartisan coalition of 79 Senators voted to adopt an amendment to the Fiscal Year 2014 Senate Budget Resolution to repeal the medical device tax. In the House, Reps. Erik Paulsen (R-MN) and Ron Kind (D-WI) introduced the “Protect Medical Innovation Act,” garnering a bipartisan group that has grown to 253 co-sponsors, including 34 Democrats, since introduction.

Top 10 Reasons to Take the VI or CI Exam

10. You Love to Take Exams
9. Peer Pressure
8 To Impress Your Boss
7. Your Job Description Says You Must
6. Study Concepts You May Not Fully Understand
5. Be Recognized as an Expert
4. Taken Seriously When You Make a Suggestion
3. Professional Development
2. Pay Raise/Promotion
1. Personal Satisfaction
Association of Vascular and Interventional Radiographers
Board of Directors Candidate Application

To be eligible to run for elected office, candidate must have served on an AVIR committee for at least one year and must have kept his/her membership current.

Candidates are sought for the following elected positions on the AVIR Board: (check only one)
__ President-Elect (1 year) to President (1 year) to Immediate Past President (1 year): 3-year term
__ Secretary / Treasurer (1-year term)
__ Director-at-Large (1-year term)

Name______________________________________________________________
First  Middle  Last  Suffix (Jr., Sr. etc)  Credentials

Home Address________________________________________________________________________
Street Address, RR#, Apt. #, etc

City                                                                                          State                                       Zip Code

Place of Employment__________________________________________________________________

Work Address________________________________________________________________________
Dept./ Mail Code  Street Address, PO Box, etc

City                                                                                          State                                       Zip Code

Phone ______________________________________________________________________________
Home   Work   Ext.

Fax ________________________________________________________________________________
Home Work

Email address ________________________________________________________________________
Home Work

Education completed/Registration/Licensure/Advance Certification:
___RT(R)     ___CV
___Baccalaureate degree (BA, BS, etc.)       ___Master’s degree (MA, MS, etc.)
___Other (please list other credentials)       ___Associate degree

Present Position / Title _______________________________________________________________

Former positions held (include dates)____________________________________________________

Number of years in CV / Interventional Radiology __________________________________________

Percentage of time spent in CV/Interventional Radiology__________________________________%
Current professional activities/organizations:

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<tr>
<th>Chapter/Local</th>
<th>State/Regional</th>
<th>National</th>
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Past professional activities/organizations

Other activities/organizations/honors/offices held

AVIR Committee Service

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<th>Year(s) of Service</th>
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Please explain, in 200 words or less, why you are interested and qualified for the office you are seeking. Give reasons for your candidacy. Also describe future goals and/or your vision for the AVIR. (Please submit typed response on a separate sheet of paper)

Candidate Declaration:

I am an Active member of the AVIR. If elected, I agree to serve the term of my office, fulfill the duties of the office in accordance with the AVIR Bylaws and Policies and Procedures, and attend all required meetings.

Signature ___________________________ Date ______________

Please complete this form and mail with your professional resume/curriculum vitae and a passport-type photo to:

AVIR
Suite 600
2201 Cooperative Way
Herndon, VA 20171

Questions or concerns? Please contact the AVIR office: Phone: 703.234.4055
Fax: 703.435.4390
Email: info@avir.org
On the rise: Healthcare spending to equal one-fifth of GDP by 2022

Evan Godt
Sep 19, 2013

Healthcare spending in the U.S. will grow at an average annual rate of 5.8 percent from 2012 through 2022, which is 1.0 percentage point faster than projected gross domestic product (GDP) growth, according to an article published online ahead of print in Health Affairs.

At that rate, healthcare’s share of GDP by 2022 will rise to 19.9 percent, up from 17.9 percent in 2011.

The projections are based on data from the Centers for Medicare & Medicaid Services (CMS) Office of the Actuary, and the article was written by a group of CMS economists and actuaries.

“Annual national health spending growth is projected to remain near 4 percent through 2013, primarily as a result of the recent recession and modest recovery,” wrote lead author Gigi A. Cuckler and colleagues. Beginning in 2014, however, spending growth will accelerate thanks to implementation of provisions of the Affordable Care Act designed to expand coverage.

“By 2022 the Affordable Care Act is projected to reduce the number of uninsured people by thirty million, add approximately 0.1 percentage point to average annual health spending growth over the full projection period, and increase cumulative health spending by $621 billion,” the authors continued.

In addition to the healthcare policy reforms, an improving economy and an aging population will also drive spending increases.

Medicaid and private health insurance spending is estimated to increase 12.2 percent and 7.7 percent, respectively.

Projected prescription drug spending is expected to grow at an average annual rate of 6.5 percent for 2015-22; annual growth in physician and clinical services is estimated to be 5.5 percent for 2015-18 and 6.6 percent for 2019-22.

New coverage and reduced cost sharing will cause out-of-pocket spending to decline 1.5 percent in 2014.

The projections in the report incorporate two major changes from previous estimates of healthcare spending. It incorporates the June 2012 U.S. Supreme Court ruling that Medicaid eligibility expansion is optional for the states, and the estimates also presume that scheduled Medicare physician payment rate reduction under the Sustainable Growth Rate formula do not occur.

FDA recognizes voluntary standards for medical devices

Beth Walsh
Aug 11, 2013

Following several reports, including one from The ECRI Institute, a patient safety organization, the Food & Drug Administration (FDA) has recognized voluntary interoperability standards for medical devices in a notice published in the Federal Register on Aug. 6.

Medical device and health IT interoperability failures are one of the most significant health technology hazards, according to The ECRI Institute’s report. And, a study from West Health Institute found that improved medical device interoperability, when combined with the adoption of commonly accepted interoperability standards, could save the U.S. more than $30 billion in healthcare costs annually.

In the Federal Register notice, FDA recognized 25 standards that can be divided into the following three categories:

- IT network risk management applications;
What’s new in 2013?

- Point-of-care and personal device communication health informatics; and
- Security systems for industrial communication networks.

The agency’s blog, FDA Voice, published comments from Bakul Patel, senior policy adviser to the director of the Center for Devices and Radiological Health at FDA. “As medical devices become increasingly connected to other medical devices, hospital information systems and electronic health records, there is a growing expectation that they will be interoperable—and that the data they transmit will be secure,” Patel wrote. “Making sure devices are interoperable requires the creation, validation and recognition of standards that help manufacturers develop products that are harmonious and can ‘plug and play’.”

Chuck Parker, executive director of Continua Health Alliance, a global non-profit industry alliance of technology, medical device and healthcare industry leaders and service providers committed to personal connected health, said FDA’s recognition of the standards is “a significant step forward for interoperability,” in a statement.

Subtracted CTA offers alternative to 3D DSA for ID’ing aneurysms

Evan Godt
Sep 17, 2013

Subtracted 320-detector row volumetric CT angiography (CTA), which allows bone-free visualization, is superior to nonsubtracted volumetric CTA for the detection of cerebral aneurysms and should be considered as the first-line imaging technique for evaluating suspected aneurysms, according to a study published online in Radiology.

Subtracted CTA showed 99.2 percent of aneurysms, and its accuracy was not significantly different from 3D DSA.

Subtracted CTA was not without its own limitations, however. Chen and colleagues noted that the technique has a difficult time identifying microaneurysms, missing two in this trial. Subtracted CTA also cannot display atherosclerotic plaque or aneurysmal calcification. And while eliminating bone tissue from images helps in the diagnosis of cerebral aneurysms, knowing the relationship of the aneurysm to bone structures is important for therapy.

“The aneurysms missed at nonsubtracted volumetric CT angiography were generally located in the internal carotid artery,” wrote Chen and colleagues. “Detection of cerebral aneurysms adjacent to bone tissue was still challenging at nonsubtracted volumetric CT angiography because of the presence of overlying bone structures.”

Subtracted CTA was comparable to 3D rotational DSA, which is currently considered the gold standard despite its invasiveness, complexity and relatively high costs, explained Wenhua Chen, MD, of the Third Affiliated Hospital of Suzhou University, Changzhou, China.

“Subtracted volumetric CT angiography could replace invasive digital subtraction angiography as the first-line imaging technique for noninvasive evaluation of suspected cerebral aneurysms because of its high diagnostic sensitivity,” they wrote.

Findings were based on evaluation of 282 consecutive patients who underwent CTA for a suspected cerebral aneurysm between February 2011 and October 2012. All patients also received 3D rotational DSA, which was used as the reference standard.

A total of 239 cerebral aneurysms were detected in 198 patients on the basis of 3D DSA. While nonsubtracted CTA was able to show more than 96 percent of the aneurysms, it missed those that were close to bone tissue.

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“[S]ubtracted 320–detector row volumetric CT angiography is excellent for the detection of cerebral aneurysms and might be considered as a first-line imaging technique for the noninvasive evaluation of cerebral aneurysms because of its high diagnostic accuracy in some circumstances; however, it may still result in some missed microaneurysms,” summed the authors.
The Prescription for Patient Engagement
Lisa Fratt
Jul 15, 2013

Patient engagement has been dubbed the blockbuster drug of the 21st century. Proponents point to studies suggesting it improves care, saves lives and cuts costs. Data are so persuasive that policymakers have addressed patient engagement in Meaningful Use measures and the Affordable Care Act via quality metrics in accountable care organizations (ACOs) and medical homes. Yet, the prescription for patient engagement entails far more than pill popping. Patient engagement reframes medicine and requires providers and patients step into new roles. Is your practice up to the challenge?

The time is ripe.

The definition of patient engagement continues to evolve; the fundamental concept focuses on patients’ empowerment and direct involvement in their healthcare. There are myriad IT, management and infrastructure ways practices can launch the patient engagement process. While there is no one-size-fits-all solution, most providers can identify approaches that dovetail with their needs and goals. The first step may be making the case.

With countless challenges facing healthcare, why has patient engagement burst onto the agenda now? It ties together two primary needs—improving quality and decreasing cost. “The level of technical brilliance isn’t producing the kind of outcomes that we expect,” explains Jessie Gruman, president, Center for Advancing Health (CFAH). Many behaviors that contribute to health outcomes, such as smoking cessation, diet, exercise and medication adherence, take place outside of the physician’s office. Patients control them.

A provider’s technology, knowledge and experience are for naught, continues Gruman, unless the patient follows through.

The growing consensus that patient engagement drives success spurred policymakers into action. Consider:

• Multiple stage 2 Meaningful Use measures address patient engagement, including provision of patient-specific education resources and use of a patient portal.

• ACOs will be measured by patient engagement strategies such as physician communication, access to specialists, health promotion and education and shared decision-making.

However, patient engagement transcends health information, says Kate Berry, CEO of the National eHealth Collaborative (NeHC). “Success requires leveraging health IT tools to help patients better manage chronic conditions and monitor their health.”

She cautions providers against falling into the trap of a tech-centered approach to patient engagement. “A lot of providers are deploying the next whiz-bang technology—the personal health record, the patient portal, believing ‘if we offer it, the patients will come.’”

It’s not that easy. Technology sans strategy or culture change may set the stage for failure. Providers need to understand the whys and hows of patient engagement and how to encourage it to create a new culture between providers, families and the care team, says Berry.

Patient engagement strategies may go against the cultural grain of some providers or it may impact efficiency or earnings. A physician may believe he or she is not paid to explain test results to patients, notes Berry. “We all want to do what’s best for patients. But sometimes that’s not best for the department,” says Alexander J. Towbin, MD, director of radiology informatics at Cincinnati Children’s Hospital Medical Center (CCHMC).

What’s more, patients themselves can be a barrier. Patients may be reluctant to question a provider, with age, culture and background affecting patient-physician communication. Patient-education materials are often written at a reading level beyond most U.S. adults, hindering knowledge and engagement.

The motivation to spur change among providers and patients may be on the uptick. Although current reimbursement models and financial incentives may deter patient engagement, both public and private plans are shifting to performance-based models that will encourage providers to boost their focus on outcomes. In addition, as patients pay a greater portion of the costs of care, their approach to responsibility for care will change.
Beware the Barriers
RAND Corporation has identified 3 barriers to shared decision-making
1. Overworked physicians
2. Insufficient provider training
3. Clinical information systems that fail to adequately track patients
Progress on the patient engagement front may be hindered by a lack of understanding. Patient engagement has rapidly ascended into healthcare hegemony, and it’s a sharp turn from the status

ICD-10: Time to Board the Train
Beth Walsh
Jul 17, 2013
The Department of Health and Human Services has insisted it will not budge on its October 1, 2014, implementation date for ICD-10. Nevertheless, surveys indicate painstakingly slow progress among hospitals and health systems. Experts stress it’s time to get rolling.
According to a survey of 120 hospitals with 400 or fewer beds surveyed by Health Revenue Assurance Holdings, approximately half are not following official Centers for Medicare & Medicaid Services (CMS) timelines on preparing for the ICD-10 transition. Twenty percent of these smaller hospitals have not begun any ICD-10 training or education. Forty-seven percent have not begun documentation improvement education for their medical staff and 31 percent do not plan to dual code prior to the implementation date.
The 2013 ICD-10 readiness survey conducted by Workgroup for Electronic Data Interchange (WEDI) also indicates slow progress among healthcare stakeholders, including providers, vendors and health plans. The survey, conducted by Nachimson Advisors, was voluntary and likely "represents a more advanced group than the general population, so the results should be interpreted carefully," according to Stanley Nachimson, of Nachimson Advisors and former CMS lead on HIPAA regulatory development and implementation.

Behind schedule
Unfortunately, this more advanced group isn’t meeting recommended implementation timeline milestones either. Findings indicate approximately 40 percent of hospitals have completed their ICD-10 impact assessment and 40 percent said their completion date is unknown. When asked for their expected date to begin external testing with health plans and trading partners, half said unknown and 33 percent expect to begin sometime in 2014. That means many providers will have less than nine months for external testing and may not have considered the need for extensive testing, Nachimson said. That abbreviated timeframe might not allow for enough testing “to prevent major disruptions upon compliance.”
There has been minor progress in vendor solution development, according to the survey findings. About 20 percent of the plans surveyed said their ICD-10 services and software are now available to customers and about one-third will be ready in 2013.
About half of health plans had completed their formal impact assessment gap analysis and another quarter said they were nearing completion. About three-quarters plan to start internal testing of fully functional ICD-10 processing sometime in 2013. Start dates for external testing were split—with half saying they will begin prior to January 1, 2014. That means half of health plans will have nine months or less to test with trading partners.

Prepare for change
Jim Daley, WEDI chairman, cites issues that arose during the transition to version 5010 electronic administrative transactions last year because people didn’t adequately test. Version 5010 primarily presented formatting changes with some content changes. “With ICD-10, the content within them is changing very significantly,” he says. “If we had a small amount of problems with 5010, just think of the potential magnitude of problems with ICD-10 with diagnosis and procedure codes changing so dramatically.”
Daley recommended developing baseline metrics now, so, upon implementation, providers can look for changes and determine whether they are predictable changes or issues that needs some remediation.
Nachimson recommended measuring factors such as how long it takes to get a claim out the door after a visit, the
distribution of codes by specialty and accounts receivable days to “get a sense of what’s going to happen after October 1, 2014.” One change is certain: claims with ICD-9 codes submitted after that date will be returned to providers as unprocessable and not paid.

By knowing every point that diagnosis and procedure codes or some derivation are used, Daley says, providers can put appropriate training in place so people understand how to use new processes or codes.

**Start now**

The October 1, 2014, implementation date “is firm. The time to transition is now,” says Denesecia Green of the Centers for Medicare & Medicaid Services’ Office of E-Health Standards and Services. “We are asking everyone from now until the end of year to start internal testing to ensure that you have all pieces in place,” Green urged during a recent webinar presented by the agency.

She also advised providers that ICD-10 can’t be executed on the 4010 platform. “You have to convert to multiple state rules to offer these services beyond state lines are affecting the greater use of telehealth for patients, Kesto wrote. “These rigid, outdated rules simply do not reflect the benefits that could be derived through new innovations like telehealth. As a result, it places barriers between patients and the high-quality care that could be delivered across state lines.”

As such, to save money and provide better service, the letter encouraged lawmakers to streamline medical licensure guidelines to open the doors to greater use of telehealth. He suggested that Congress focus on Medicare by revising policies so providers can treat their patients across state lines using telehealth so long as they are licensed to practice in one state.

**Legislator encourages rule changes to enable telehealth**

Laura Pedulli  
Aug 20, 2013

Telehealth is one answer to controlling healthcare costs and improving access to healthcare, but it does not receive the attention it deserves, Mich. State Rep. Klint Kesto and registered nurse Sheryl Stone wrote in an editorial to the Kalamazoo Gazette.

“With the widespread availability of high-speed broadband networks, our country is now uniquely positioned to make much needed progress in this area by adopting telehealth technologies to provide patients with access to medical professionals even at great distances,” according to the letter.

While telehealth initiatives are off the ground at many leading healthcare organizations, “antiquated laws” that require providers to obtain multiple state licenses and adhere

**Steerable needle robot**

Source: Joe Howell / Vanderbilt

Researchers at Vanderbilt University in Nashville, Tenn., are working on an image-guided process for removing clots after intracerebral hemorrhage. However, rather than rely on an expert surgeon to conduct the challenging procedure, the researchers are leveraging the steady hand of a robot.

The technique, described in an article published in IEEE Transactions on Biomedical Engineering, uses a CT scan for guidance and utilizes steerable needles about the size of those used in biopsies to actually remove the clot.

Check out the video below for a more in-depth look at how the system works:

Robot uses steerable needles to treat brain clots
Hybrid operating rooms (ORs) promise to deliver multiple benefits. The ability to shift from a diagnostic or interventional procedure to a surgical one may trim procedure and recovery times. The rooms open the door to novel transcatheter therapies, and help organizations support subspecialist surgeons and interventionalists. Given these pluses, it’s no surprise that the hybrid OR market is booming and is expected to see an average growth rate of 15 percent annually through 2016, according to Millennium Research Group. However, hybrid ORs represent a hefty investment and require meticulous planning.

Construction of a hybrid room is not for the faint-of-heart, evidenced by price tags ranging from $3.5 million to $5 million, according to Ashley Ford, research consultant for The Advisory Board, Technology Insights, in Washington, D.C. Some hybrid construction projects top the $5 million mark. St. Joseph Hospital (SJH) Heart and Vascular Center in Orange, Calif., opened its $5.5 million room in 2010 after a four-year planning process.

The jaw-dropping price tag is far from the only pain point associated with a hybrid suite. Success hinges on previously unseen levels of collaboration among an array of specialists in interventional radiology; cardiac, vascular and neurovascular surgery and cardiac catheterization. Buried in among decisions about high-value imaging and display systems are mundane details, such as types of electrical outlets and equipment carts. However, the most significant challenge is not identifying, purchasing and installing equipment, says Renee Mazeroll, RN, MSN, executive director of the Heart and Vascular Center at SJH. The bigger question is, “How do you operationalize the room so that it is efficient [and profitable],” she says.

Many hybrid suites have not realized the high utilization they expected, with usage of the room peaking at a mere three to four times a week. In contrast, the hybrid suite at SJH is booked solid and averages 2.5 patients per day. The center’s hybrid volume is approximately two-thirds vascular and one-third cardiac procedures.

While utilization can be measured, other metrics are more complex. University of Virginia Health System (UVA) in Charlottesville, has not measured return on investment for its hybrid room, which opened in January 2011. “The room gives capacity for the program. It is not going to bring patients in by itself. It is a link in the chain of handling new directions in cardiac surgery,” says Scott Lim, MD, co-director the UVA Cardiac Valve Center.

Catholic Health in Buffalo, N.Y., applies a different spin to its pro forma. The health system launched a pair of hybrid ORs at Mercy Hospital in June 2011 and plans to open three more across its system by the end of 2012. “It made sense from an economic standpoint. We were at capacity and unable to accommodate all of the surgeons and interventionalists who wanted to work here. It’s easier to justify a multi-purpose room than a single-purpose room,” says John S. Sperrazza, CNMT, vice president of imaging services at Catholic Health.

### Anatomy of a Hybrid OR

By Editor in Chief

Hybrid operating rooms (ORs) promise to deliver multiple benefits. The ability to shift from a diagnostic or interventional procedure to a surgical one may trim procedure and recovery times. The rooms open the door to novel transcatheter therapies, and help organizations support subspecialist surgeons and interventionalists. Given these pluses, it’s no surprise that the hybrid OR market is booming and is expected to see an average growth rate of 15 percent annually through 2016, according to Millennium Research Group. However, hybrid ORs represent a hefty investment and require meticulous planning.

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### Average Hybrid or Investment Cost

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<thead>
<tr>
<th>Expense Line Item</th>
<th>Estimated Cost</th>
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<td>Demolition, Miscellaneous Construction</td>
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<td>Cost for Space¹</td>
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<td>Heart/Lung Machine</td>
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<td>General Equipment²</td>
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<td>Integrated Booms</td>
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<tr>
<td>Angiography Equipment/Software</td>
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<tr>
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<td>Plumbing</td>
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<td>Cabinets/Room Storage</td>
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<tr>
<td><strong>Total Cost</strong></td>
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1- Assumes 800 square foot room, cost of $500 per square foot
2- Anesthesia equipment, lights, electrical units, etc.

Source: The Advisory Board, Technology Insights

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18 | Fall 2013 | Interventional Informer www.avir.org
The OR: Dissected

The hybrid OR includes a dizzying assortment of infrastructure, with the imaging equipment serving as the centerpiece.

At SJH, Mazeroll and colleagues aimed for a universal room to support maximum use. Six years ago, when the plan was conceived, Mazeroll estimated relatively weak demand for the suite. Initial interest stemmed from the need to support the pediatric and adult congenital heart program with percutaneous valves. However, volume was very low. At the same time, Mazeroll was working to expand vascular services. The hybrid presented the perfect environment to perform the true vascular hybrid procedure. Again, potential volume was low.

“If we were going to justify the cost of the room, we had to position it for multiple purposes,” Mazeroll says. The final proposal incorporated a design that would support adult or pediatric, cardiac or vascular, interventional and/or surgical patients.

The goal created a challenge as most existing x-ray imaging systems fell short of the multi-purpose bar. Congenital programs typically use bi-plane imaging systems, which are not ideal for vascular work and occupy space on either side of the patient, which is critical for open surgical options. With bi-plane imaging systems, one C-arm hangs from the ceiling, which creates a concurrent challenge: how to deliver proper airflow around the hardware to maintain OR infection control standards, says Gregory A. Wozneak, administrative director of invasive cardiology at UVA.

Traditional single-plane systems, which meet cath lab needs, often are too limited for transcatheter valve procedures. Some single-plane systems that work off of an articulating arm offer capabilities for transcatheter valve, but bring a fairly large footprint that can get in the way otherwise, says Lim.

SJH opted for an imaging system that incorporates seven articulating joints, robotics and a software program used in conjunction with a rotational angiogram that creates 3D-rendered images. “It has met 90 to 95 percent of our needs,” confirms Mazeroll.

Other sites take a focused approach. “You can’t be all things to all people. You need to focus on some primary goals, whether it’s transcatheter valve therapies or electrophysiology,” says Lim. For this reason, UVA limited the number of stakeholders on the planning team, including only representatives from cardiology, anesthesia, cardiac surgery, radiology and technical support staff.

Although it may be wise to control the number of stakeholders on the planning team, it is important to survey all of the subspecialty practices who will be working in the room about their needs, says Sperrazza. “Each specialty has unique nuances, and it’s best to address these upfront, in the planning phase.” Mercy Hospital had to retrofit one of its rooms with additional shielding and overhead lighting to accommodate electrophysiologists.

SJH took the assessment process one step further and created a cardboard mockup in the hospital basement. Physicians, nurses and staff toured the room to better visualize the layout. With their input, the construction team fine-tuned details, such as counter length and workstation locations.

Some hospitals bypass the universal or focused approach decision by constructing more than one hybrid OR. Take for example Mercy Hospital, which opened a pair of hybrid rooms. One is equipped with a bi-plane imaging system and primarily handles neurosurgical and neurovascular procedures. The second, outfitted with a single-plane system, is used for interventional radiology, diagnostic and interventional cardiology and vascular and endovascular interventions.

Additional imaging infrastructure at Mercy includes portable ultrasound. However, the hospital plans to add intravascular ultrasound (IVUS) by mid-2012. The goal is to limit movable equipment and integrate as many systems as possible, including x-ray, hemodynamic monitoring equipment and display systems, says Sperrazza. Initially, at a beefy 750 to 1,000-square-feet, hybrid ORs seem large. However, factor in multiple imaging, clinical and display systems along with three to eight clinicians, and space becomes precious. “Be conscious of movable equipment, and try to get equipment off the floor and wires out of the way,” says Sperrazza.

The space vs. equipment dilemma is particularly confounding with respect to display systems. “It’s almost impossible to have too many displays,” says Lim. A surgeon might need it on the left side of the table, a

continued on next page
cardiologist on the right, and an anesthesiologist or echocardiologist may require visibility from the head of the table. Add in the variety of images and data—fluoroscopy, echo, hemodynamic monitoring—and the need for flexible capacity becomes clear.

UVA placed 12 LCD monitors in its hybrid suite, learning a lesson about timing in the process. “By the time we were almost done, a number of companies had developed novel video solutions that would have been quite useful,” says Lim. His advice? “Try to anticipate the availability of near-future technology during the planning stage.”

Part of Mercy’s solution to the display dilemma is a 55-inch system that can be partitioned multiple ways for viewing imaging and hemodynamic data. It’s boom-mounted, so it can be moved as needed. SJH’s suite is outfitted with three boom-mounted display systems and two large flat-panel systems on the wall to present larger images and patient data.

Finishing details

The combination of limited space and multiple users in a hybrid OR creates supply constraints. Many sites turn to mobile carts, designating each cart for a specific end use, such as peripheral vascular procedures, and stocking the cart with the appropriate stents, balloons and wires. This model frees up space that would be reserved for supply cabinets.

SJH uses a radiofrequency identification (RFID) tagging system to track inventory. “It was a bit onerous to learn on the front-end,” admits Mazeroll, but it has streamlined processes. Each piece of high-dollar inventory is RFID-tagged. When a user goes to the cabinet and inputs the desired equipment, such as a specific 15 mm stent, the system provides the exact location via cabinet number and shelf. It also facilitates both re-ordering and billing, as the technology is interfaced with the billing system.

Other details that can flummox a project are the seemingly mundane, such as the number and type of outlets, says Lim. The hybrid OR requires a minimum of 24 outlets compared with eight in a cardiac cath lab, according to “Making the Case for the Hybrid Operating Room,” a report compiled by The Advisory Board.

The people factor

“One of my best decisions was to advocate for a dedicated hybrid team,” says Mazeroll, who made the critical decision after hearing about technologists’ frustration with their lack of expertise with the imaging equipment. Highly trained technologists adept with advanced systems and capable of performing advanced techniques, such as 3D image manipulation and multi-modality image fusion, are essential, adds Sperrazza.

Mazeroll insisted on training for all physicians who wanted to use the room and covered everything from scheduling to equipment use. “Small details can have a large impact.” After a mock case, one of the perfusionists, who happened to be petite, realized she would need a stool to reach her equipment on the boom.

An auxiliary benefit of the room, says Mazeroll, is that it has helped foster collaboration among specialists and erode existing silos. Early in the process, SJH insisted that its hybrid suite did not belong to any single person or department, but instead was available to credentialed and hybrid OR-trained physicians.

The formula for success in the hybrid OR is complex and specific to each institution. However, the inputs are constant, comprising imaging and display technology, lighting, carts and staffing resources. Thorough planning and goal-setting, coupled with painstaking attention to detail throughout the process, can go a long way toward setting the stage for success. HI
I would like to nominate the following AVIR member as a candidate for the 2014 Award of Excellence

Nominee (Candidate) Information:

Name of Candidate: ____________________________ Credentials: ____________________________

Home Address: ________________________________________________________________________

Home Phone: _________________________________________________________________________

Place of Employment: ___________________________________________________________________

Work Address: _________________________________________________________________________

Work Phone: _____________________________ Work Fax: ____________________________________

IMPORTANT: Is candidate currently aware that you have placed their name in nomination for this award? (This will help us determine how to proceed when we contact them for information and interview.)

Yes [ ] No [ ]

Nominated by:

Name: _______________________________________________________________________________

Work Position: _________________________________________________________________________

Home Address: __________________________________________________________________________

Home Phone: ___________________________________________________________________________

Place of Employment: _____________________________________________________________________

Work Address: __________________________________________________________________________

Work Phone: ___________________________________________________________________________

Work Fax: _____________________________________________________________________________

Relationship to Candidate (How do you know this person?):    Co-Worker/ Peer/ Supervisor

For how long?: _________________________________________________________________________

Signature of Nominator _________________________________________ Date: _____________________

Submission Deadline: December 01, 2013
Your response to these questions will help us get to know your candidate. Please feel free to attach a separate sheet if you do not have enough space to complete your response to any question below.

What contributions does this candidate make to the Interventional Radiology department?

Describe candidate’s competency and professionalism.

Describe candidate’s interaction with patients and their families (include patient education).

Describe contributions candidate makes outside of patient care, i.e., to department’s quality assurance program; development of policies and procedures; staff education; cost saving ideas; etc.

Describe candidate’s interaction with department personnel (radiologists, peers, ancillary staff and supervisors).

Describe candidate’s working relationship with hospital nurses, physicians, and allied health professionals. Include any work candidate does on hospital committees or projects.

Describe contributions candidate makes to the community, (i.e., health fairs, CPR instructor, etc.).

Describe other reasons you feel this candidate should receive this award - tell us how this candidate “goes the extra mile.”

You may include one letter of recommendation from each of the following: physician; technologist; coworker/peer; and supervisor/radiology director. Letters may accompany this nomination application or may be sent directly to the AVIR office address listed below.

Thank you for nominating this candidate. We may call you for some additional background on your nominee.

**Submission deadline is December 01, 2013.**

Mail to: AVIR Headquarters
2201 Cooperative Way, Suite 600 • Herndon, VA 20171
OR you can SCAN and EMAIL to: info@avir.org or any of the Board Members
Please call if you have any questions: Phone: (571) 252-7174
How do you go from where you are to where you want to be?

I was driving down the highway recently (as a rep, I do A LOT of that!) listening to ESPN radio and heard the announcers talking about celebrating “Jimmy V” week. For those of us old enough to remember, Jimmy Valvano was the outspoken, passionate men's basketball team who coached at Rutgers, Johns Hopkins, Connecticut, Bucknell, Iona, and NC State. He's probably best known on the hard-court for winning the NCAA Championship in 1983 versus the top-rated University of Houston while he was the head coach at NCSU. Off the court, he's well known for the speech he gave when he was honored as the first Arthur Ashe Award recipient during the inaugural ESPY awards in March 1993. At that time, Jimmy Valvano was in the final stages of battling bone cancer and in fact, he lost his fight less than two months after his appearance.

That night he mentioned that with ESPN's support, he was starting the Jimmy V Foundation for Cancer Research with the motto “Don't give up, don't ever give up.” (If you need a good motivating speech, Google the video and I dare you not to be inspired!) That phrase has been repeated over and over throughout the years and certainly resonates with me every time I hear it. But I also like another main point he makes. He said, “It’s so important to know where you are. I know where I am right now. How do you go from where you are to where you want to be? I think you have to have an enthusiasm for life. You have to have a dream, a goal. You have to be willing to work for it.”

Does this describe you? Do you already know where you are going and do you have the enthusiasm and passion and plan to get there? Unfortunately, if this does sound like you, you’re probably in the minority when you talk about a workplace. How many of us have gotten into the hum drum routine of going into the hospital, clocking in, working your shift, clocking out, and heading home only to do it all over again the next day (and that is if you’re lucky enough to not have call that night)?? If you’re in middle management, you’re probably thinking, “Yes, I have goals… the ones the hospital administration are showing down my throat.”

If this doesn’t describe you, I challenge you to follow the “S.M.A.R.T.” formula for goal setting and see what you can accomplish with some good old fashioned commitment and hard work. SMART stands for specific, measurable, attainable, relevant, and timely. Let’s start at the beginning…

SPECIFIC – A goal has a greater likelihood of being accomplished if it answers the six “W”s … who, what, where, when, which, why. The goal of “creating a better work environment” is too vague and needs specific information to make it more concrete. The goal of “improving communication between the techs and nurses by using checklists and sharing detailed patient and procedural information throughout the length of each case in order to enhance the work environment” is much more specific.

MEASURABLE – Establish concrete criteria so you can track your progress toward your goals. You should be able to answer the “how” questions including “how will I know when I’ve accomplished my goal?” In our example above, how will you know if communication has actually improved between techs and nurses? And remember that measurability applies to both the end result and the milestones along the way to reaching those goals. The milestones are feedback that you are on the right track.

ATTAINABLE – I’ve read many definitions of this word but two of my favorites are “appropriate” and “action-oriented.” As much as I’d love to say my goal is to play in the Super Bowl one day, the attainability factor is too low to even get me off the starting block. Now attending the Super Bowl, absolutely but playing? Not going to happen! Is it attainable to improve communication in your department? Without a doubt!!

RELEVANT – To be relevant, a goal must represent an objective toward which you are both willing and able to work. A supervisor’s goal to make thirty turkey sandwiches by 2:00 PM may be specific, measurable, attainable, and time-bound, but lacks relevance in the overall performance of your department. It’s important to raise the bar high enough to get you excited and enthusiastic about moving toward it but it also needs to have a relevant impact on your work environment.

TIMELY – You build in a higher sense of urgency when you create a time frame for your goals. “I want to pass my registry some day” just doesn’t have the same impact as a set deadline of “by September 1st.” Deadlines have a magical way of setting the end result and the milestones along the way to reaching those goals. The milestones are feedback that you are on the right track.

One final bit of advice for accomplishing goals … WRITE THEM DOWN!! Too many of us say, “Sure I have goals… in my head,” but your level of commitment rises tenfold when you actually put them on paper and post them where you can see them and hold yourself accountable to them. If you want to take it up another notch, share your goals with a friend or supervisor who can then act as an accountability partner to keep you honest. Whether you’re the rookie on the team or the seasoned veteran, it’s important to have goals in mind for your own professional development or the growth of your department. If you combine your SMART goals with the drive and passion to attain them and add in Jimmy Valvano’s advice to “don’t give up, don’t ever give up,” there’s no telling what you can accomplish!!!
Updated Registered Radiologist Assistant Entry-level Clinical Activities Effective July 1, 2014

Since certification examinations are required to be practice related, ARRT periodically conducts a job analysis to make certain that the certification examination content specifications and the clinical requirements remain comprehensive, accurate and fair. ARRT, with the help of the professional community, reviews the certification documents every three years.

In January 2013, the ARRT Board of Trustees approved the changes to the following document, which goes into effect on July 1, 2014. A track changes version is also available below to help easily identify where changes were made.

Overview of Changes

The following two statements were added to the Registered Radiologist Assistant (R.R.A.) Entry-Level Clinical Activities Document (ELCA):

• Assist the radiologist in determining whether indications meet the ACR Appropriateness Criteria® when advising those who order examinations.

• Assist the radiologist in presenting at multi-disciplinary conferences (e.g., tumor boards and case conferences).

Existing topics within the content specifications are sufficient to cover the two new task statements; therefore, no changes were made to the Content Specifications for the Registered Radiologist Assistant, or to the Didactic and Clinical Portfolio Requirements for Certification as a Registered Radiologist Assistant.

If you have any questions about these changes, please contact Nance Cavallin, senior exam development coordinator, at (651) 681-3145

Radiologist Assistant Bill Introduced in House

Amending Social Security Act to recognize RA State laws and allow Medicare reimbursement

(March 15, 2013) – Representatives Dave Reichert, R-WA, Jim Matheson, D-UT, Pete Olson, R-TX, and Bill Pascrell, D-NJ, yesterday introduced H.R. 1148, the “Medicare Access to Radiology Care Act of 2013.”

This bill would amend the Social Security Act to recognize radiologist assistants (RAs) as non-physician providers of health care services to Medicare beneficiaries, and would authorize physician reimbursement through the Centers for Medicare & Medicaid Services (CMS) for procedures performed by RAs in states that have laws establishing radiologist assistant practice guidelines.

RAs work under radiologist supervision and perform select imaging and patient-care duties traditionally performed by the radiologist. While they do not prescribe medication or therapies, diagnose or interpret medical images, RAs perform procedures and patient assessment and management that increase patient access to critical radiology services and augment the delivery of optimal, timely and safe radiology care – leading to greater efficiencies and value for patients and providers.

RAs are educated in an advanced medical imaging academic program specifically designed to complement the work of radiologists. Currently, 12 universities offer accredited education programs with radiologist-supervised clinical training, and 29 states license or certify RAs. Upon graduation from an accredited program, radiologist assistants take a national certification examination developed by The American Registry of Radiologic Technologists (ARRT) or the Certification Board for Radiology Practitioner Assistants (CBRPA). To maintain their national ARRT or CBRPA certification, RAs must maintain certification and registration in radiography, complete approved continuing education every two years, and comply with strict professional standards of ethical conduct as administered by ARRT.
Better Patient Access, More Promptly

“With radiologist oversight, RAs are perfectly qualified to perform aspects of imaging, patient assessment, management and procedures that allow radiologists the time to focus on procedures and consultations that can be performed only by a radiologist,” says Joy Renner, M.A., R.T.(R)(ARRT), FAEIRS, Radiologist Assistant program director at The University of North Carolina at Chapel Hill and chair of the Radiologist Assistants Educators Council (RAEC). “RAs allow radiologists to devote more focused, uninterrupted time reviewing and interpreting medical images and providing timely diagnoses which will provide for efficient, appropriate medical treatment. This means greater timeliness, accuracy and quality of care provided to Medicare beneficiaries. Consumers demand this level of care and are certainly entitled to this level of care, as well.”

“I’m happy I can help skilled students in my district find jobs by making a common-sense change to Medicare’s classification of radiologist assistants,” said Rep. Dave Reichert. “These bright professionals train for years at accredited schools to master the complex technologies necessary to safely and effectively perform medical imaging services. At a time when many Americans are looking for work and high numbers of Medicare beneficiaries are increasing the demand for services, this legislation will be highly supportive for both radiologist assistants and patients.”

Reimbursement by CMS Needed

The bill would enable healthcare facilities and radiology practices to be reimbursed for RA-performed services. By establishing a reduced reimbursement level for the professional component of procedures performed by RAs, the bill should result in savings to the healthcare system.

“I’m pleased to join my colleagues in introducing this common-sense legislation,” Rep. Olson said. “This measure will promote more efficient healthcare for America’s seniors, save jobs and help the Medicare program by expanding the role of radiologist assistants and reducing costs for quality care.”

“Although not a complete solution to the patient access problems that this country is facing, making this modest change to the Medicare law will enable radiologist assistants to provide care to the full extent of their training and scope of practice, thereby improving patient care and satisfaction, lowering costs and meeting patient demand,” said Jerry B. Reid, Ph.D., executive director with The American Registry of Radiologic Technologists (ARRT). “We applaud Rep. Reichert and the other cosponsors who recognize the need to adopt common-sense, bipartisan changes to the Medicare program so that seniors can benefit from innovations in health care delivery. ARRT is grateful to Reps. Reichert, Matheson, Olson and Pascrell for working to improve access and lower the cost of radiology services for Medicare patients. We look forward to working with them to achieve passage of this legislation.”

H.R. 1148 is strongly supported by ARRT as well as the American College of Radiology (ACR), the American Society of Radiologic Technologists (ASRT), and the Society of Radiology Physician Extenders (SRPE).

“Patients, state medical boards and the medical imaging community have embraced the radiology physician extender community and relied upon it to provide timely imaging access, says Jason Barrett, SRPE president. “Passage of this bill would allow Medicare beneficiaries to utilize this crucial access resource that some states have already recognized as a necessary component of healthcare delivery.”

“We believe this bill will preserve RA educational programs and jobs while saving needed health care dollars,” said ASRT President Donna L. Thaler Long, M.S.M., R.T.(R)(M)(QM)(ARRT), FASRT. “In addition, it will ensure that patients continue to have timely access to quality medical imaging services.”
Fluoroscopically-Guided Procedures Follow-Up Surveys

A considerable increase in the use of invasive fluoroscopically-guided interventional radiologic procedures has raised concerns about the health effects of radiation exposure from these procedures on staff and patients.

Number of ARRT Certifications Registered by Year for Cardio-Vascular Interventional (CV,CI, VI)

![Graph showing number of certifications registered annually by the ARRT in cardiovascular interventional modalities]

The number of certifications registered annually by the ARRT in cardiovascular interventional modalities has also been increasing over time.

The USRT study is in a unique position to evaluate the health effects on radiologic technologists (RTs) by surveying USRT Study participants about these procedures. Previously, the surveys collected fairly general information about imaging procedures that a technologist may have performed.

Recently developed a new USRT survey that focuses on exposures and work practices (personal protection, monitoring, etc.) associated with selected fluoroscopically-guided procedures.

Information from this survey will be used to help understand potential health risks that may be related to working with these high dose procedures. The results will inform clinical imaging practice and training in the future to protect health and minimize radiation exposure.

In past thirty years we have seen a sixfold increase in annual effective dose per person in the United States from radiologic procedures. Ten times as many radiologic procedures are performed per year. The greater use of medical radiation means that current technologists are performing More procedures and/or More technologists are working with these procedures.

To know more or be a part of this great work that the US Radiologic Technologist Study group is doing visit radtechstudy.nci.nih.gov.

AVIR Local Chapter has Benefits

In appreciation of those chapters providing minimums of 7 hours of continuing education for the chapter’s attendees, the AVIR is going to extend one FREE registration to the Annual Scientific Meeting of that year per year.

These category A credit hours will have to be approved by a RCEEM recognized by the ARRT and will need to be submitted to the AVIR office prior to the AVIR/SIR registration deadline.

Any questions concerning the formation of new chapters or existing ones please call the AVIR office at 703 234-4055 or the Director at Large

Crystal Hanson AVIR
Email chansonAVIR@gmail.com
Phone 608-732-7150
Again, thank you for your support!

Want to Contact the ARRT?

Online: www.arrt.org
Phone: 651-687-0048
Concern about:
extension 8540 Education & Registration
extension 8580 Ethics
extension 8560 Examination & Certification
extension 8530 Psychometrics
Izzy Ramaswamy, MS, RT(R)(CV)
President
A true IR advocate, currently on the leadership team at Miami's Baptist Cardiac & Vascular Institute. We are an ever expanding combined services department always looking into the future both in a fiscally responsible and technologically revolutionary way. We bring the best of healthcare to the local community and share our best practices to the worldwide community through our participation in ISET, SIR, AVIR, TCT and the rest of the international symposiums available each year. I look forward to a great year leading AVIR through this amazing period in time and feel privileged to do so. Thank you for the opportunity.

Robert M. Sheridan, RT (R) ARRT
Vice-President
Mr. Sheridan is the Director of Clinical Operations for Interventional Radiology at the Massachusetts General Hospital (MGH), a 900 bed academic medical center located in Boston. Massachusetts General Hospital is Ranked # 1 by US World News Reports and is the primary teaching hospital for Harvard Medical School.

Mr. Sheridan has 18 years experience in Interventional Radiology and is responsible for the overall strategic planning and operations for 15,000 image guided procedures for 6 IR divisions, and 4 clinical units.

Amanda Popovitch, RT (R) ARRT
Secretary/Treasurer
Interventional Radiographer III at Boston Children's Hospital, one of the leading pediatric institutions in the world. I have been working here for over eight years and prior to that I completed nearly four years as an Operating Room technologist at Children's Hospital of Philadelphia. Since working at Boston Children’s in Interventional Radiology my interest in pediatric disease has become a passion with primary interest in Vascular Malformations and Cerebral Neuro work as well as Universal Protocol. I was an invited speaker to the New Orleans AVIR conference in March 2013 and it was at this time that my interest in becoming more involved in the AVIR community grew. I look forward to bringing my knowledge of pediatrics to our incredible community of technologists!

Jared Friends
Media Chair
I was born into a family of thinkers; still unsure of what went wrong. Director of Sales and Marketing at Celligent Diagnostics and Carolinas Pathology Group at Carolinas Healthcare System. 2013 AVIR Media Chair. Thank you for the privilege folks! Principal of Kourai Group, LLC (The guys who built this website!). Educated in Clinical and Developmental Psychology. Been inside 200+ IR and Cath Labs... and counting! The end.

Crystal Hanson
Director At Large
I grew up knowing that I wanted to start a career helping people. At the UW Hospital in Madison I strive to put patient care first. I work first hand with physicians and RNs making sure their procedures go smoothly. Whether I am positioning or prepping patients, getting the physicians the correct wires and catheters, running equipment such as ultrasound, CT and fluoro, I am also using my anatomy background for good filming techniques. Interventional Radiology is constantly evolving and the ability to adapt to change is important. Being a young employee in Interventional Radiology, I feel that I am growing with the current technologies and could provide good leadership and advise to new technologists.

David Nicholson
Annual Meeting Chair
I have worked at the University of Virginia Medical Center Interventional Radiology Department since 2000. For three years I was the Clinical Coordinator for the Charles J. Tegmeyer School of Interventional Radiology and Special Procedures. Over the past 10 years I have spoken at several regional and national conferences. I have also participated in research projects as well as book chapters, abstracts, and manuscripts. I hope my interests in teaching and education will go far on the AVIR board, and I am excited to see what the future holds for the organization.

Dana Bridges, RN
Associate Representative
Currently working as VP of Client Development for SurgPro, a southern medical device distributor. We offer a wide array of vascular and interventional products and strive to deliver tomorrow’s technology today.

Professional accomplishments: Published author in journals (i.e., Developmental Psychology & The Sport Psychologist), periodicals (i.e., Nephrology News & Issues), and a developmental psychology text book (Social Development in Childhood and Adolescence: A Contemporary Reader).

David S. Douthet, RT(R)(CV)
Publications Chair
I have been involved in Interventional Medicine since X-Ray School when we were using Schonander Film Changers and had to pull the patients on a wood board, which was sitting on the X-ray table. It has been many Angios ago.

After working at 3 different Hospitals and several different clinics for 20 some years, I ended up in the commercial end of the business. Again 3 different commercial companies, to be currently working at W.L. Gore & Associates with in the Endovascular end of the business doing the EVARs and TEVARs. I keep my license current as you always want to leave a back up plan at hand.

I have been active in the AVIR since 1993 and have been the Publication Chair since 1995. I have had the pleasure of working with a lot of great folks over the years and look forward to every year. This is hands down the best thing I have ever done and I love doing it.
Our Board of Directors consists of President-Elect, Secretary/Treasurer, Director at Large, and Associate Representative. A requirement to be nominated for a Board position consists of being a current AVIR member and must have served on an AVIR committee for at least one (1) year. The following are a brief explanation of some of the responsibilities and commitments.

**President-Elect:** Three (3) year commitment.

Vice President – this is a voting position. Your first year responsibilities would include being the Chair of the Education Committee, Chair of the Fellowship Committee, and a member of the Finance Committee. You also shall attend all Board Meetings and conference calls, write newsletter articles, work closely with President for a smooth transition, and stand in for President whenever needed.

**President:** this position is a non-voting position (unless there is a tie). Your second year responsibilities would include being the Chair of the Ethics and Judicial Committee, a member of the Finance Committee, a correspondent with all external organizations, and presidential correspondence. You are responsible for writing the "Presidents Message" for the newsletter, work with Immediate Past President on projects thus enabling a smooth transition. You conduct the Annual Business Meeting and are responsible for the agenda for all of the Board of Director meetings and conference calls.

**Past President:** this is a voting position. Your third and last year of commitment include being the Chair of the Nominating Committee, a member of the Finance Committee, and are responsible for the AVIR External Liaisons. You will write newsletter articles, work with President on projects from previous years, and attend all Board Meetings and conference calls.

**Secretary/Treasurer:** One (1) year commitment.

This is a voting position. Your responsibilities include chairing the Finance Committee and the Membership Committee. You will work closely with the home office on all Financial Reports, write newsletter articles, present a Finance report at Annual Business Meeting, and attend all Board Meetings and conference calls.

**Director at Large:** One (1) year commitment. This is a voting position. Your responsibilities include being the Chair of Chapters Committee, a member of the Education Committee and the Finance Committee, assist with local chapter committees by answering questions and corresponding with local chapter members. You will write newsletter articles, present the Director-at-Large report at Annual Business Meeting, and attend all Board Meetings and conference calls.

**Associate Representative:** One (1) year commitment. This is a non-voting position and your responsibilities would include Chairing the Associate Representative Committee and attend all Board Meetings and conference calls. This position represents non-RT members.

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Your SPONSORSHIPS make our Organization Happen

By Amanda Popovitch

We, the AVIR Board and the AVIR a community would like to extend a sincere Thank You to all of our sponsorships for the past year. Without you our Annual National Meeting in New Orleans would not have been possible. Through your generous donations, technologists here in the United States and abroad are given the opportunity to further their education in the ever so growing field of Interventional Radiology. At the annual meeting we are able to network, share what is happening at other institutions and learn about your current and new products. In addition to the annual meeting our website offers members directed reading to earn free credits and take part in blog discussions. This year will prove to be one of the most successful year’s the AVIR has ever seen. If you have not had the chance to check out our site please take a minute to see what we have been up! We appreciate your continued support and look forward to seeing you in San Diego 2014!!!!
SPONSORS

AVIR extends its appreciation to the following corporate sponsors!

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CIT Review

You may find the following book very helpful when trying to review for the PV exam. This book in the past has been one of the main contributing resources for that exam. The sample focuses on protocol and equipment. It explains how to perform all current interventional radiology procedures, including pulmonary angiography, vein embolization, biopsies, drainage, and stenting. Chapters will include a discussion of issues such as risk management, outpatient care, and drugs and dosages. You’ll find it in an outline format making the information easily by, review, and remember.

MEMBERSHIP APPLICATION

ASSOCIATION OF VASCULAR AND/OR INTERVENTIONAL RADIOGRAPHERS

2201 Cooperative Way | Suite 600 | Herndon, VA 20171 | 703.234.4055 | Fax 703.435.4390 | Email: info@avir.org

FULL PAYMENT MUST ACCOMPANY COMPLETED APPLICATION FORM

Membership Category — Select only one | Please print or type

- Active | $ 75/yr*
- Clinical Associate | $ 65/yr
- Corporate Associate | $ 65/yr
- Student | $ 45/yr
- International | $85/yr

*ACTIVE – Submit ARRT Certification or Canadian Equivalent

Mr ☐ Mrs ☐ Ms NAME / FIRST M.I. LAST GENERATION (JR., SR., II, III)

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Length of Time as Tech Area of Expertise: ________________

Size of Institution (# of beds): ________________

___ ☐ Private ___ ☐ Academic

Number of Exams Performed at this Institution:

_________ ☐ Vascular _________ ☐ Interventional

Are You a Member of: ARRT ☐ Yes ☐ No ASRT ☐ Yes ☐ No
(If YES, please attach photocopy of membership card/s)

Other Professional Organizations of Which You are a Member:

__________________________

Related Interests (CQI, Teaching, Publishing, etc.):

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Payment Information: ☐ Check Enclosed

OR Charge Credit Card: ☐ AmEx ☐ MasterCard ☐ Visa

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The Association of Vascular and Interventional Radiographers (AVIR) is the national organization of healthcare professionals within Vascular and Interventional Radiology and involved in standard of care issues, continuing education and related concerns.

Who Can Become a Member of AVIR?

ACTIVE: Radiographers with a primary focus in Vascular and/or Interventional Radiology. Active members must be ARRT registered or have Canadian equivalent. Submit copy of certification with application.
Dues are $75 per year.

ASSOCIATE: Related healthcare professionals working with or having a special interest in Vascular and/or Interventional Radiology, including Nurses, Medical/Cardiovascular Technologies and Commercial Company Representatives.
Dues are $65 per year.

STUDENT: Students in certified programs for Vascular and/or Interventional Radiographers.
Dues are $45 per year.

INTERNATIONAL: Healthcare professionals working or having special interest in CIT and who reside outside of the United States and Canada. This category includes, but is not limited to, medical technologists, radiologic technologists, registered nurses, licensed practical nurses, Physicians and commercial company representatives.
Dues are $85 per year.

All Memberships are renewable annually each January.

Why Is Joining AVIR Important?

The AVIR is dedicated to you and is a powerful advocate for the special interest and concerns of healthcare professionals working in Vascular and Interventional Radiology. We acknowledge the importance of continuing education, establishing high standards of practice and care, certifying Vascular and/or Interventional Radiographers, and establishing a nationwide network for obtaining information and/or employment opportunities.

What Opportunities Does AVIR Offer?

- Professional growth
- Society of Interventional Radiographers (SIR) Annual Meeting
- Exchange of information and ideas
- AVIR Annual Meeting
- Continuing education opportunities
- Quarterly newsletter
- Local chapter involvement
- National membership directory