# Bulletin... Summer 2013

## The Pennsylvania Radiological Society

*A Chapter of the American College of Radiology*



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**PRESIDENT'S MESSAGE**

**Elaine Lewis, MD, FACR**
**Reading, PA**

Seven months ago I started my term as President of the Pennsylvania Radiological Society. During that time, the PRS has been working on various fronts on behalf of our membership and, by default, on behalf of those who are not members. I have contacted various practices throughout the state with an offer to visit and discuss the value of membership in the PRS. The responses have been varied, and it has become clear that the best approach is to have a known contact within the practice. Therefore, my first request to those of you reading this article is that if you know someone at a practice where membership is currently not a priority, send me the name and a contact person for that practice. Please inform them that I will be calling with an offer to visit and give a short presentation. My second request is that each current member of the PRS solicit one new member. It is only through a strong and active state and national society that we can successfully meet the many challenges for radiology & radiation oncology. The basis for a strong society is a broad based and active membership.

The PRS, in conjunction with the PA chapter of the American College of Cardiology, has written a bill titled "Appropriate Use of Preauthorization Act". Following review by the board of the PRS, the final draft has recently been completed. As per a resolution which was passed at the PA Medical Society (PAMED) House of Delegates meeting in 2012, PAMED is now tasked with having this bill introduced and working for its passage in the PA Legislature. If anyone has a personal relationship with a PA legislator who might be willing to introduce this legislation, please let us know. This is the type of situation where developing that type of relationship can really make a difference.

Other legislation currently re-introduced in PA includes the familiar Breast Density Legislation, Certificate of Need Legislation, and Self-Referral Legislation. The PRS monitors all of these bills and continues to provide input from the

radiologist's perspective. We have also been contacted again regarding a bill which Representative Quinn plans to re-introduce – Patient Test Result Notification. In past legislative sessions, the PRS has enlisted the help of the PAMED to oppose this bill. Representative Quinn's office has contacted the PRS to see if there is language which can be inserted into the bill that we would be able to support. A specific item which is of concern is the current language requiring a "lay report" for each study be mailed to the patient. The time and difficulty of dictating a "lay report" and cost of mailing the results are reasons alone to be concerned. The implementation of electronic medical records at many health systems makes some of these requirements unnecessary. If this type of legislation alarms you as a radiologist, be assured that the PRS is at the table as your advocate. It would be to everyone's advantage for the PRS to be able to say we represent all radiologists in PA during these discussions. So again, I ask for your help-recruit one new member and lets together make our society's voice STRONG!

## EDITOR'S REPORT

**Dwight E. Heron, MD, FACRO, FACR**
**Pittsburgh, PA**

In keeping with a renewed philosophy aimed at broadening the participation and experiences of the PRS newsletter, I have undertaken several initiatives to revamp current newsletter. The noticeable change will be fewer newsletters (3/year instead of 4). Second, my goal will be to transform the newsletter to be supplemented by more "real-time" news through the PRS website. This will be by no means an easy task but in an era of rapidly changing news important to the both Radiology and Radiation Oncology, we must find innovative way to communicate vital and challenging information to our membership. While, I don't think we can ever Tweet PRS News, I think there may be opportunities to leverage social media like these to enhance the interactivity of the newsletter.

I have initiated a special section in each issue of the newsletter that will offer CME for the readership. My vision will be to leverage multimedia opportunities within the newsletter for continue medical education. In the next few issues, we will cover practice and clinical topics important to both Radiology and Radiation Oncology.

The continuing and evolving success of the PRS newsletter is by no means a foregone conclusion. This will certainly require the collective wisdom and participation of the members of the PRS and I certainly look forward to hearing your ideas on how to make this newsletter both informative and educational.

## What If the Boston Bombings Contained Radioactive Material? Are You Ready?
## Fast Facts for the Radiologist

**Joel S. Greenberger, MD, FACRO, FACR**
**Chairman, Radiation Oncology**
**University of Pittsburgh, Pittsburgh, PA**

**Donald M. Yealy, M.D.**
**Chairman, Emergency Medicine**
**University of Pittsburgh Medical Center Pittsburgh, PA**

In the 12 years since 9/11 terrorist attacks, Americans have become accustomed to a 24/7 news cycle that can contain a density of information on any type of mass casualties. The recent bomb explosions at the Boston Marathon are fresh in the minds of Americans. We watched the horrors of injury and death, the valor of response; we learned that two young men committed the crime and saw them on multiple video surveillance or private cameras; we finally watched the massive Boston manhunt with shock and pride. One of us was in Boston through the initiation and conclusion of the manhunt. Improved information acquisition and dissemination allowed law enforcement officials to coordinate activities that led to apprehension of suspects within 4 days.

We ask, "What if the pressure cooker bombs had contained radioisotopes? What if these bombs had been "dirty bombs"? Since 9/11, emergency physicians, trauma surgeons, radiologists, radiation safety officers and hospital

management teams learned much about radiation counter terrorism. We improved surveillance to detect radioisotopes coming into the country from seaports, border crossings, and airports (1-2). However, the Boston Marathon bombings highlight new threats. These two young men carried explosive devices to the finish line of the Boston Marathon in back-packs – would it be more difficult to pack the bombs with radiation emitting isotopes? We all saw the video replay of the bomb explosions; our experience leads us to view these videos through a different set of lenses.
At the time that we observed the second bomb explode, smoke from the first bomb had already largely dissipated. The bombs were on a crowded street with tall buildings on either side, concentrating the smoke. The smoke blew across the street initially, but then dispersed down the length of the street. After the initial shock by the sound of the 1st explosion, there was a limited mass run for cover by those nearby. By the time of the second detonation, the modest crowd dispersal did not move many bystanders away from the smoke of either detonation. Given the density of people at the site of the bombs, we estimate that several hundred inhaled smoke. By the time first responders and spectators began to assist victims, the number of people who inhaled smoke may have totaled over 1000. *What if there had been aerial dispersal of radiation emitting isotopes in that smoke?*

If the bombs contained a long-lived radio-nucleotide such as Plutonium, optimal patient management would differ compared to those with isotopes with shorter half-lives. The latter are more easily acquired and include: Cobalt, Cesium, Iridium, Radio-Iodine, and Technetium. Hospital and basic science laboratory isotopes, including Tritium or $P^{32}$, could also have been placed around the explosives in the bomb, even if in liquid in glass bottles or in plastic bags. Aerial dispersal in smoke or in droplets, or fragments coated with radioisotopes could create inhalation and/or penetrating wounds containing radioactive material.

The Boston Marathon terrorists showed us the relative ease with which a weapon of mass destruction could be brought to an area of high population density. While future measures will include search of back-packs, gym bags, or other containers capable of holding a pressure cooker, we need to think about the consequences of this added threat of radioactive deployment within a small terror device.

How long would it take to determine that an aerial cloud and/or shrapnel and debris from a bomb was radioactive? Now, many ambulances, police vehicles, and first responder vehicles contain Geiger counters, and many first responders have been trained to use radiation detection devices. With these, many first evacuated victims could be quickly surveyed for radiation emitting materials on their clothing.

In the Boston bombings, by the time that radiation is detected, the smoke from the first bomb would have led to respirable particle inhalation by hundreds of people, all fleeing because of no apparent injury. Those hundreds of people would be secondary victims of such a dirty bomb.

Management of the primary victims, (those suffering concussion, traumatic wounds, burn, penetrating wounds, and traumatic amputations) would include radiation precautions. For those, primary victims of radiation terrorism there are now set protocols in place both in ambulances and in hospitals.

The University of Pittsburgh Medical Center and others published information regarding radiation detection systems in place in ambulances and hospital emergency departments (1-2). Detection of radiation by first responders when the first victims are evacuated in ambulances should allow determination of whether radioactive material is on the clothing, has been inhaled, or is part of shrapnel penetrating debris. It may not be possible in all cases to rapidly determine what types of isotopes (alpha-emitting, gamma or beta emitting) are present. Emergency departments and hospitals need an advance alert that potentially contaminated patients are arriving. Within ambulances, gowned and gloved first responders may begin the process of removing clothing, placing them in sealed containers, and by the time of arrival in the hospital, the patient and clothing, the first responders, and the transporting ambulance are all potentially contaminated.

The hospital emergency department ambulance bay at UPMC-Presbyterian University Hospital is equipped with an EMS-RAD Radiation Detector System (1, 2). This system allows identification of the types of isotopes, giving hospital personnel a clear idea of what isotopes are involved. Contaminated patients are triaged to specific areas, depending on

each hospital's structure. Some hospitals have an ambulance bay or driveway showers, which can remove debris from the patients depending on the quantity and type of radiation found on the clothing of the victim, and how much the dispersal of this material affected the ambulance. Patients entering the hospital are then treated according to protocols designed to protect the patient, caregiving team, and the hospital. In particular, emergency physicians, trauma surgeons, and radiologists are trained on safety measures for themselves and to engage experts promptly to optimize care and assessment of radioisotope exposure victims. Emergency department teams are trained to remove contaminated clothing and put it in radiation safety containers, and then vigorously scrub the body to remove contaminants. In suspected inhalation of radioisotopes, patients would be sent to specific floors in specific locations until the total body burden of radio-nucleotides is assessed.

National response teams (FEMA, CDC) are expected to arrive within 24 to 48 hours to assist in decontamination and management of patients. Prior to that time, web-based and electronic communication to hospital teams can provide important information to guide care, including external transfer criteria, need for specific actions (e.g., pulmonary lavage to remove high doses of particulate radiation emitting isotopes, or identifying safe environments within designated areas of the hospital). Support equipment including respirators and operating room equipment for managing patients with inhaled radioisotopes would be isolated and decontaminated at a later time.

One major concern we had in watching the Boston Marathon bombing was the issue of the secondary victims, those who had inhaled the smoke but were ambulatory and could exit the area. Management of these patients includes acute, sub-acute, and chronic concerns, all of which hinge on identification, containment, and management.

**PLAN OF ACTION:**

**Identification:** Once it is known that a bomb contained radioisotopes, all people near the area need immediate containment. Containment is both complex, and critical. Initial actions are to tell people nearby but indoors to stay indoors, close windows and doors, and stay in a confined indoor environment until notified. Those who were outdoors at the time of the explosion and did/could have inhaled the smoke should be directed to specified routes of exodus from the scene to places where outer garments could be removed and stored in a safe location. They must minimize contact with other people and not flee or leave the immediate area before decontamination. In this setting, just-in-time communication to first responders is key to minimize fleeing and start sequester and decontamination.

**Containment:** Containment is difficult, since physically uninjured people naturally want to flee. Radio and television broadcasts should advise such people who had already gotten to their vehicles to go to a specific area if they were anywhere near the cloud. Most metropolitan areas can create such locations in hospitals or quickly set-up triage facilities at a high school or a library. There, emergency response personnel remove clothing, wash the skin, put on protective clothing, and prepare for the possibility that the contamination event contained an inhaled isotope.

Containment and management of people with internalization of short-lived isotopes like $P^{32}$ or long-lived isotopes such as Plutonium must be addressed differently. Individual victim concerns would have to be balanced against community concerns, with a goal of minimizing the possibility of individuals carrying radioisotopes out of the vicinity of the dirty bomb. Thus, the acute response would be one of information transfer and containment for these secondary victims.

**Management: Sub-acute and chronic concerns** would include dealing with the basic fear of all individuals that radiation is to be avoided at all costs and that any exposure to irradiation is dangerous. This is why we have Radon testing in homes, and why there are signs in every diagnostic x-ray department to advise pregnant women to inform physicians and health personnel about their condition. We live in a world of paradoxical simultaneous acceptance and fear of radiation.

Sub-acute management of secondary victims includes concise, clear, and intelligible information on the isotope exposure, and what needs (and importantly, *what doesn't* need) to happen in response to the exposure.
Isotopes with short-half-lives such as P32, or radioiodine are associated with a risk of acute pneumonitis. Analysis of total body burden is best done in hospitals in a measured and coordinated manner. Individuals can be grouped as those

who had a low enough total body burden to be sent home and followed by local physicians, those that needed more intense intervention by the acute care facility, and those patients that need immediate attention. Depending on the number of individuals in the intermediate level category, specific hospitals could be designated as holding facilities for such patients. Re-opening of closed hospital units or re-deployment of a chronic care facility could be alternatives if large numbers of victims were in this category and overwhelmed standard hospital capacity. One concern is the management of individuals with inhalation of significant quantities of radioisotopes, but who had left the area of the bomb and were now in the process of exit from the geographic area.

To prevent dispersal of isotopes and/or contaminated individuals, local, county, state, and potentially National Guard units might have to be mobilized to contain the population at risk.

Translating this frightening scenario to the Pittsburgh area, the geography would alter the events. If occurring inside a building, we'd expect those nearby to flee to their cars, buses, or other vehicles, and begin to exit the city or at least walk far away. Inhalation risk would be confined to those within the building; if we acted quickly, we might be able to contain or track these people effectively. A less controllable situation would be an outdoor explosion, during a concert, or in one of the sports stadiums. Evacuation of immediate trauma patients by ambulance would happen first; at UPMC-Presbyterian, arrival would lead to a rapid analysis of clothing and individuals using the EMS-RAD detection equipment (1-2). This equipment is always monitoring the ambulance and walk-in bay, and would alert first responders and the health care system to the existence of radioisotopes in the explosion. By the time the next victims reached the trauma bay, the nature of the isotopes would be determined and the next wave of first responders would be notified to properly handle all subsequent evacuees.

A clear challenge will be the hundreds or thousands of individuals in an outdoor area, who had inhaled smoke and would be expected to have some level of detectable total body burden of inhaled radioisotopes. Given the geography of Pittsburgh or other major US cities, all bridges and routes of exodus could be contained using police vehicles to avoid transfer of contamination to distant geographic areas. Pittsburgh roads leading East could be managed by police vehicles surveying cars and personnel for radioactivity and then traffic could be halted until proper analysis and containment needs could be ascertained.

A natural consequence and the real goal of any terrorist event is to instill fear into and immobilize communities. Knowledge that radioactivity was present in the cloud of the explosion would lead to immediate evaluation of weather patterns, wind patterns, and in the event of an upwardly mobile cloud, analysis of prevailing winds and geography. A dirty bomb explosion admidst , "a beautiful Pittsburgh day" with a "light breeze" might be the worst challenge for first responders and management teams compared to a situation with pouring rain. Dispersal of the cloud exposes more people, pushing the smoke and cloud past limits of rapid containment. Individuals leaving the Pittsburgh area by crossing bridges or getting on highways would take radioactivity with them to remote locations. Airports, trains, and buses can be halted quickly, but automobile traffic would be a challenge.

Management of the chronic risks for secondary victims will also be a concern. Inhalation of any radioisotopes will raise the fear of radiation carcinogenesis. While difficult to communicate to the terrified exposed victims, small amounts of inhaled radioisotopes place individuals at very low risk for radiation carcinogenesis. Inhaled quantities too low to produce radiation pneumonitis, would likely be cleared through urine and feces over days to weeks. Isotopes taken up in pulmonary alveolar macrophages and traveling to regional lymph nodes would remain in the lungs much longer, but most in low enough quantities to make the risk of carcinogenesis no greater than that of background environmental radiation levels in Pittsburgh. The key to managing the fear is intensive information transfer. Rather than recount data from other exposure outcomes, local experts could deliver a succinct, easy to understand message to dissipate the fear using knowledge.

While we all hope that we will not be faced with management of the events following explosion of a dirty bomb, the recent events make the "unthinkable" a bit more thinkable. Local first responders and care providers will be challenged with a series of difficult decisions related both to management and triage of victims. Because of the expectation that

radiologists know more about radiation than other members of the emergency responder and medical care community, we need to be at the head of the line for renewed education and preparedness.

**What to Do?**

1. Manage patients by triage of injuries, but with concern to minimize contact with potentially contaminated clothing.

2. Follow hospital guidelines for containment of contaminated clothing, showering and washing patients, and triage to areas where radioisotope internalization can be measured by Geiger Counter.

3. Stay alert on web-based and electronic messaging to be updated on the nature and type of radioisotopes involved (be aware of long-lived radioisotopes such as Plutonium, compared to short-lived isotopes $P^{32}$ and hospital radioiodine).

4. Assist police, first responders, and paramedical personnel in triage of patients.

5. Be available for real-time consultation with police, first responders, and emergency medical vehicles to assist in the principles of:

    a. Identification (radioisotope and type of radiation emitted)
    b. Containment (localization and isolation of contaminated or potentially contaminated patients)

6. Be aware of sub-acute concerns concerning patient's fear and anxiety regarding a radiation contamination event.

7. Be prepared to discuss directly and refer patients to literature concerning chronic risks of inhalation or other forms of exposure of radioisotopes.

**Questions:**

1. What instructions should be given to people in the vicinity of a dirty bomb explosion?

2. What instructions should be given to emergency medical personnel and police regarding the management of a person exposed to radioactive dust, but, otherwise, demonstrating no physical injury?

3. What resources are available for radiologists requesting more information?

**References:**

1. Kim Jong Oh, Huq M Saiful, Novotny, Jr Josef, Bednarz Greg, Palatine Richard, Reilly Michael, Izadbakhsh Mark, Paris Paul, and Greenberger Joel S. Performance characteristics of a novel radioactive isotope detection and notification system designed for use in hospitals. Health Physics Operational Radiation Safety, 100(Suppl. 2): 571-578, 2011.

2. Dickson Ryan, Kim Jong Oh, Huq M Saiful, Bednarz Greg, Suyama Joe, Yealy Donald, Izadbakhsh Mark, and Greenberger Joel S. Interceptor and phantom trials of EDNS at UPMC. Hospital Health Physics (in press).

**Optimizing the accuracy of PET/CT for patients with head and neck cancer**

**Barton F. Branstetter IV, MD**
**Chief, Neuroradiology; Professor of Radiolgoy, Otolaryngology, and Biomedical Informatics**
**University of Pittsburgh Medical Center**
**Pittsburgh, PA**

PET/CT has become a critical tool throughout oncologic imaging, but it has had a particularly dramatic impact on patients with head and neck cancer. The intricate anatomy of the skull base and neck can be hard for even experienced radiologists to evaluate, and false-positive PET uptake can arise from numerous sources. What can we do to maximize the accuracy of our PET/CT interpretations in the head and neck?

# Terminology

PET/CT is performed at several different stages of patient care. Once a diagnosis of cancer has been established, a **staging PET/CT** is used to establish the extent of disease. PET/CT is particularly useful in determining the presence of regional (nodal) and distant (hematogenous) metastases. If performed correctly, PET/CT can also define the extent of the primary tumor in most patients.

If an exam is performed during or immediately after chemoradiation, it is a **monitoring PET/CT,** and it is used to determine whether the treatment regimen was successful. Not all patients get monitoring PET/CTs; they are frequently part of research protocols. It is important to realize that criteria for treatment success are different at this early time point.

Once a patient has been treated, and is clinically free of tumor, additional PET/CT examination are performed because recurrences can be detected earlier with PET/CT than with physical examination or traditional CT. Such examinations are called **surveillance PET/CTs**.

# Protocol

The radiology community remains split on the topic of iodinated **intravenous (IV) contrast** for PET/CT. In some diseases, IV contrast adds little to diagnostic accuracy. But in head and neck cancer, IV contrast is essential to accurate diagnosis. It is important to see PET/CT as a single integrated study, more than the sum of its parts. A **diagnostic-quality CT scan**, with parameters equivalent to any diagnostic neck CT, is needed for optimal evaluation of the neck, especially when we are confronted with equivocal FDG avidity. PET/CT is sometimes accused of having a high false-positive rate, but a diagnostic-quality CT can minimize that risk.

In addition to IV contrast, an appropriate display **field of view** is needed for neck images. Using a body FOV will render the anatomy too small to evaluate. The patient's arms should be placed alongside the thorax to avoid **streak artifact** in the neck. (We perform an additional low-dose chest CT with the arms raised to ensure high-quality images of the lung parenchyma).

# Utilization

In a political climate focused on cost containment, it is important for radiologists to discourage low-yield examinations. Oncologic PET/CT should only be performed **after a cancer diagnosis** has been established histologically. PET/CT is not an appropriate tool to search for potential malignancies. (Of note, PET/CT is very useful for identifying unknown primary tumors once metastatic cancer has been identified in a lymph node.)
The benefits of PET/CT are well-established for patients with squamous cell carcinoma, but patients with other cancers of the head and neck (e.g. glandular malignancies) derive less definitive benefit from PET/CT. Most glandular tumors have **variable FDG uptake**, so a lack of FDG uptake does not effectively exclude recurrent disease. In general, tumors of higher grade are more likely to show FDG avidity, but negative PET/CT in glandular tumors must be interpreted with suspicion. Patients with differentiated thyroid cancer will benefit from PET/CT only in very specific clinical scenarios (radioiodine-treated disease, elevated thyroglobulin, and a negative iodine scan).

PET/CT, if performed correctly, will sometimes be adequate to stage a primary tumor or evaluate a tumor bed for recurrence. However, **skull base primaries** may be masked by adjacent brain parenchyma, and additional dedicated imaging with MRI will be necessary in addition to the PET/CT. Optimal imaging **surveillance protocols** for patients with treated squamous cell carcinoma of

the head and neck have not been established in the literature. At the University of Pittsburgh, we start our PET/CT surveillance 2 months after the conclusion of therapy and follow every 3 months until 14 months, after which we cease radiologic surveillance in patients without evidence of disease. This is an aggressive regimen, and less frequent imaging is employed at other institutions.

## Clinically-relevant Reporting

BIRADS has been amazingly successful in mammography because the clinicians and the radiologists agree upon the implications of the scoring system. Patients are routed onto clinical pathways (observation, biopsy, surgery) on the basis of well-defined probabilities of cancer. A numerical scoring system is not applicable to all areas of radiology, but it is ideal for mammography because of the limited range of pathology. We should be able to provide PET/CT interpretations on a similar spectrum, because we are primarily interested in one question: has the cancer recurred?

At the University of Pittsburgh, every head and neck PET/CT is **classified by the likelihood of recurrence**, and these categories drive the next event in the patient's care. "Negative" exams may require no further follow-up (depending on how long the patient has been cancer-free). "Probably negative" exams require follow-up imaging, usually 3 months later. "Probably positive" exams require biopsy to confirm recurrence. These biopsies are often performed percutaneously under CT guidance. "Definitely positive" exams imply a new treatment course for the patient, usually after discussion in a tumor board.

In an era of increased regulatory scrutiny and heightened patient expectations, clinically-relevant, consistent, and meaningful reporting will ensure that radiologists continue to be essential and integral members of the patient's care team.

**CME Questions:**

1. PET-CT is useful in all of the following EXCEPT:
    a. Hematogeneous metastases
    b. Regional metastases
    c. Identification of occult primary tumor
    d. Tumor vs. inflammatory collection

2. In performing PET-CT in Head and Neck Cancers
    a. A non-contrast study is sufficient for optimal diagnosis
    b. Field-of-view is not a factor to consider
    c. Streak artifacts can be minimized with patient positioning

3. In post-treatment cancer outcomes reporting, a numerical reporting system
    a. Is impossible to implement
    b. Is feasible because the question is usually binary
    c. Would be of little value in selecting follow-up pathways

**HARRISBURG UPDATE**

**Kline Associates**
**Harrisburg, PA**

Pennsylvania's legislature is about to tackle the state's annual budget. Major issues to watch this cycle are funding for transportation and education but the biggest matter is privatization of the state's liquor store system. This may not play directly into the state's budget but the subject has taken center stage in the capitol. House Bill 790 was passed by the lower chamber. The bill was initially amended and voted out of the House Liquor Control Committee without any

hearing. Now the focus is on the senate Law & Justice Committee which is about to hold a second hearing on the bill. Even though there is support for privatization, the support drops when questions of social impact are factored in. Also, a recent poll at Franklin & Marshall College indicated that the entire subject is not the average citizen's top priority. The economy is still the most important subject to most Pennsylvanians.

Two current efforts by legislators will have a direct impact on radiologists. The first is two bills regarding breast density in the state senate. One bill would require patient notification of dense breasts, the other would require insurance companies pay for dense breast screenings. Both bills are in committees that are not inclined to move them.

The other effort is a reintroduction of a bill that would require patients be notified that their test results from radiological procedures have been sent to their primary care physician. Although the proposed language has been changed to address concerns expressed by PRS in the past there are still major problems with it. Members of PRS's Legislative Committee as well as current president, Dr. Elaine Lewis, have met with staff and the bill's sponsor to express concern. We are keeping the PRS board updated as these efforts move.

**A Better Solution for Managing Imaging**

**Scott Cowsill**
**Strategic Initiatives National Decision Support Company**

**A better solution for managing imaging.**

Thank you for taking a moment to review this important message about ACR Select, the complete web service version of American College of Radiology (ACR) Appropriateness Criteria® (AC). ACR Select represents the beginning of a new era in imaging management by leveraging the expertise of the ACR and its membership.

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Since its introduction in mid-2012, ACR Select™ has received accolades from both providers and payers as a new solution for managing IP and ED utilization. Importantly, ACR Select has also drawn praise as an alternative to traditional pre-authorization. With support and assistance from the radiology community, ACR Select is quickly becoming the optimal solution for managing diagnostic imaging, providing new functionality for providers and ACOs, and replacing traditional radiology benefit management (RBM) programs.

We invite you to join us in promoting a better solution for managing imaging and appreciate your assistance in introducing ACR Select to your colleagues and executive leadership at your organization."

Scott Cowsill | SVP | Strategic Initiatives National Decision Support Company scowsill@acrselect.org | www.acrselect.org Main: 855.475.2500, ext. 704 | Mobile: 248.413.7856 Connect with us: Twitter | Facebook | LinkedIn | YouTube

**2013 PRS Annual Meeting Educational Program**

**Robert S. Pyatt, Jr., MD, FACR**
**Chambersburg, PA**

Pa Radiological Society Annual Meeting, 27 – 29 September, 2013
Hyatt Bellevue, Philadelphia, PA
CME Program

8:00 a.m. Opening Remarks: Elaine Lewis, MD, FACR, President, The PA Radiological Society
Speaker Introductions: Robert S. Pyatt, Jr., MD, FACR, Program Chair

8:05 a.m. **"Hot Topics Affecting Radiologists and Radiation Oncologist Across the US"** , by Richard Duszak, MD, FACR, CEO of the Harvey L. Neiman Health Policy Institute and partner with Mid-South Imaging and Therapeutics

8:30 a.m. **"Cultivating Great Leaders"**, by Richard Gunderman, MD, PhD, FACR; Professor of Radiology, Pediatrics, Medical Education, Philosophy, Liberal Arts and Philanthropy at Indiana University Vice Chair of Radiology, Indiana University

9:15 a.m. **"Reinventing Radiology: A Vision for the Next Decade"**, by Richard Duszak, MD, FACR, CEO of the Harvey L. Neiman Health Policy Institute and partner with Mid-South Imaging and Therapeutics

10:00 a.m. Coffee Break

10:15 a.m. **"Trends In Teleradiology: A Report from the ACR Task Force on Teleradiology Practice"**, by Woojin Kim, MD; Assistant Professor of Radiology at the Hospital of the University of Pennsylvania, Associate Director of Imaging Informatics, Chairman, Efficiency Committee, Chief, Radiography and Fluoroscopy Modality, Director, Center for
Translational Imaging Informatic, Interim Chief, Division of Musculoskeletal Imaging
.

11:00 a.m. **"Re-Engineering Radiology in an Electronic and Flattened World: The Radiologist as Value Innovator"**, by
Paul Chang, MD, FSIIM, Professor and Vice-Chairman, Radiology Informatics Medical Director, Pathology Informatics University of Chicago School of Medicine;
Medical Director, Enterprise Imaging; Medical Director, SOA Infrastructure University of Chicago Hospitals

11:45 a.m. Questions and Answers for all morning speakers

11:55 a.m. Annual Business Meeting

12:00 p.m. Lunch for Attendees
**"Radiology Advocacy Network (RAN)"**, by Rajan Agarwal, MD, Radiology Group of Abington

1:00 p.m. **"Evolving Payment Models in Radiology: The Complex Transition from Volume to Value",** by Richard Duszak, MD, FACR, CEO of the Harvey L. Neiman Health Policy Institute and partner with Mid-South Imaging and Therapeutics

1:45 p.m. **"ACR Select"**, by Victor Panza, National Decision Support Company (NDSC), SVP of Business Development

2:30 p.m. Coffee Break

2:45 p.m. **"Hot Topics/ Issues Facing Radiology Residents in Pennsylvania"**, by Eric Faerber MD, FACR, Director, Dept. of Radiology, St. Christopher's Hospital for Children, Professor of Radiology and Pediatrics, Drexel University College of Medicine

3:30 p.m. **"Obamacare"; It's Here to Stay – What Does That Mean?"**, by Timothy Farrell, MD FACR, Past President, PA Radiological Society

4:15 p.m. Panel discussion and Q & A

4:30 p.m. Adjournment

7:00 p.m. **"Thirty Years of Radiology Informatics; Are We the Jetsons or the Flintstones?"**

Honoring - ***Beverly G Coleman, M.D., FACR***
Honored Lecturer**: Steven C. Horii, MD, FACR, FSIIM,** Professor of Radiology at the Hospital of the University of Pennsylvania Clinical Director, Medical Informatics Group, Department of Radiology Attending Radiologist, University of Pennsylvania Health Systems Attending Radiologist, University of Pennsylvania Presbyterian Hospital Attending Radiologist, Children's Hospital of Philadelphia Modality Chief, Ultrasound, University of Pennsylvania Medical Center

## RADPAC

**Ted Burnes**
**Director of RADPAC & Political Educations**

As of May 1, 2013, 61 Pennsylvania radiologists had contributed to RADPAC representing 6% of all radiologists in the state. The total raised from the 61 contributors in the state is $15,791 - which averages out to $258 per contributor.

Overall in 2013, RADPAC has raised more than $555,000 from more than 1,420 contributors nationwide. RADPAC has attended more than 130 fundraising events in Washington, D.C. and has contributed more than $335,000 to Members of Congress so far this year.

RADPAC continues to educate Members of Congress about the College's fight to stop the 25% Multiple Procedure Payment Reduction (MPPR) cut handed out by CMS in 2011. To date, the following U.S. House Members from Pennsylvania are co-sponsors of the MPPR bill (H.R. 846): Rep. Lou Barletta (PA-11) and Rep. Jim Gerlach (PA-6). Neither Senator Casey nor Senator Toomey are on the Senate MPPR bill (S. 623) ..... yet. Overall, H.R. 846 has 97 co-sponsors and the Senate bill, S. 623, has 6 co-sponsors. The most likely legislative vehicle for the MPPR is if/when Congress pass legislation to fix (or completely repeal) the Sustainable Growth Rate (SGR) which is the reimbursement formula for physician services provided to Medicare patients.

Additionally, the College has developed a Utilization Management policy which employs computerized decision support (CDS) tools in hopes to reduce the number of incorrect or inappropriate exams, better educate ordering physicians as to what imaging tests are the most appropriate for their patients and provide meaningful data to better determine the best use of imaging resources in the future. A bill has not yet been introduced for the Utilization Management policy, but the College is hopeful to have an active bill on this issue in the coming weeks.

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