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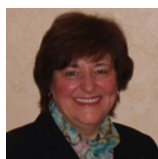
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MENTORING OUR FUTURE CARE GIVERS

By Mary Sousa, BSN, RN
President, ARIN 2015-2016



"The mind is not a vessel to be filled, but a fire to be kindled."

– Plutarch

Changes in the workplace and nurse shortages are bringing new graduate nurses directly into the Radiology and Imaging environments. Typically, these highly specialized positions required the applicant to have several years of experience in critical care (such as ICU, ER or PACU) prior to being considered for such a complex role. This paradigm shift requires us to develop new educational programs and orientation that includes the competencies, training and support a newly licensed nurse would receive in their first job as an RN. To meet this emerging trend, ARIN has created a New Graduate Nurse in Radiology Task Force and placed a call for volunteers. The response has been robust and the selection process is underway. The New Graduate Nurse in Radiology Task Force will address this new need and develop an orientation template for both the newly licensed nurse and the their preceptor. This program can be used alone or added to the ARIN Radiology Nurse Orientation Manual.

The success of any orientation program and of the newly licensed nurse to transition successfully into the new role and flourish is largely dependent on a concurrent mentoring program. Mentoring new RN graduates requires flexibility, and professionalism on the part of the mentor. The word "mentor" dates back to the Greek epic The Odyssey. As the story goes, Odysseus asks his trusted friend Mentor, to look after his son Telemachus during the time Odysseus would be away fighting in the Trojan War. Years later, Athena, the Greek goddess of wisdom, disguises herself as Mentor in order to give Telemachus important advice. As in The Odyssey example, mentors are trusted advisors who pass on information, support and guidance. A Mentor differs from a preceptor in that the relationship is intended to be long term, providing career or educational advice, sharing wisdom and often may continue for years. Preceptors are experienced nurses who teach and supervise during a specified period of time during the orientation phase (www.emory.edu).

According to an economic news release from the U.S. Bureau of Labor statistics released on December 8th, 2015, healthcare occupations

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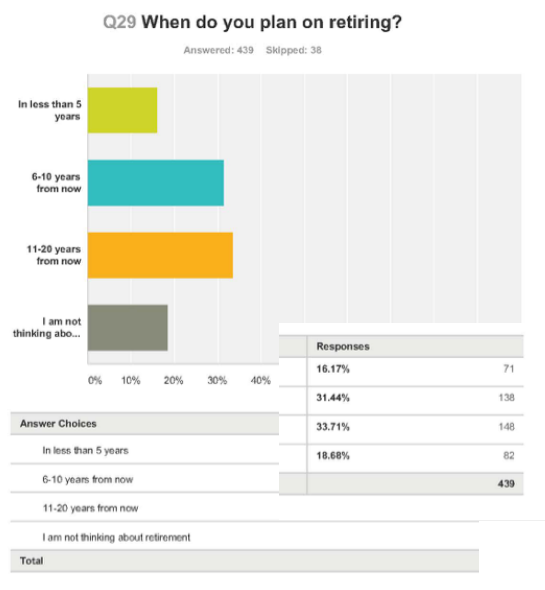




and industries are predicted to have the fastest employment growth and expected to add the most jobs during 2014-2024 (U.S. Bureau of Labor Statistics, 2014). At the same time, one million nurses will be retiring within the next 10-15 years. Fifty-three percent of the nurses working today are over 50 years old. (www.nursingworld.org). These startling numbers are also reflected in the ARIN Nurse Census Survey conducted last year. Of the 439 respondents, 47% percent intended to retire in the next 6-10 years. And even more alarming 81% in the next 11-20 years (Refer to figure 1). This survey illustrates expected shortages of RN's in Radiology nursing. By being proactive, we can add to the workforce with the supports of new graduates. The importance of doing this work, while the experienced nurses are employed in Radiology to mentor these graduates is essential to the success of the information transfer.

Workforce vacancy and knowledge gaps will be created as experienced nurses retire. It is imperative that healthcare facilities and organizations take immediate action to develop knowledge transfer strategies which include mentorship programs to support retention. Turnover rates are high for newly licensed nurses with replacement cost estimates in the vicinity, \$74,888 (Cottingham, 2015). These trends are not isolated to the US. The International health communities have long experienced shortages of nurses and the "brain drain" of nurses leaving their native countries to work abroad in the United States, Canada and the UK for example.

Radiology Nurse Census 2015



Transformational leadership success depends on programs that appreciate the needs of newly licensed nurses. According to Flinkman (2015), these needs include a solid orientation program which includes the support of mentorship. Supporting organized knowledge transfer strategies will create a return on investment by retaining the newly licensed nurses in the future nursing workforce.

This past year, I had the pleasure of meeting and engaging with Ryan Bannan, President of the National Student Nurses Association (NSNA). Our mutual interest in the future of nursing has served as an informational conduit between leaders in Radiology Nursing Education and student advisement groups. Today's nursing students have concerns related to their future career options. Although Radiology is not a traditional entry point for newly licensed nurses, the department offers a great experience with a variety of patient populations and valuable skill sets to learn. Additionally, continuous new innovations provides opportunity for lifelong learning in an exciting atmosphere that is constantly evolving.

ARIN recognizes student nurses will shape the landscape of the future of radiology nursing. Thoughtfully designed clinical rotations and active mentorship will provide an opportunity for us to welcome our newly licensed nurses into their new roles in the future of nursing.

Ryan speaks of his experience in a nursing clinical rotation in radiology and the importance of mentorship in the following article below.

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MENTORSHIP MOMENTS: ARIN & THE NATIONAL STUDENT NURSES' ASSOCIATION

By: Ryan Bannan, President NSNA
Mercer University, Georgia Baptist College of Nursing
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As President of the National Student Nurses' Association (NSNA), and current BSN candidate, I try to focus many of my discussions with students around what it means to be mentored and be a valuable and effective mentee. We need to do things like demonstrate ambition and resourcefulness before we can expect to hold the attention of any mentor (Faw, 2015). I never would have been elected to my current leadership role without taking time to reflect on and practice those characteristics which have positioned me for quality mentoring relationships.

Part of the NSNA mission is to mentor nursing students, and this requires the enlistment of professionals like yourself. Mentorship can be both valuable and frustrating for each party, it depends heavily on reciprocation, and it can be defined in a number of ways. My hope is that we can focus more on why we should strive for mentoring relationships instead of discussing the "how" or "what" of mentoring. In the next few paragraphs I will: Illustrate the example that the Association for Radiologic and Imaging Nursing (ARIN) President, Mary Sousa, has set as our own mentorship has developed; reflect on ways my experience at a clinical rotation in a nursing imaging unit could inform opportunities for ARIN leaders; and finally, highlight the importance of and opportunities for members within ARIN to connect with mentees.

One example of developing mentorship

I walked into the convention-hosted breakfast which was organized with circular tables, comfy chairs, and had echoes of 50 or so nursing leaders filling the air with their conversations and laughter. I was happy to be at the American Nurses Association (ANA) Membership Assembly during the July 2015 annual meeting. Despite the warm reception I received from everyone as the "new kid on the block," and with a plateful of eggs, bacon, and toast in hand I still faced the dreaded decision that seemed to tug at the depths of my confidence. Where should I sit?

Spotting an open space I quietly sat down next to, as I soon learned, the President of ARIN, Mary Sousa. We politely shared our stories of how we came into the positions we currently occupy, traded contact information, and reciprocated friendly greetings over email a few weeks after the meeting was over. During the course of that time and since then, two unique things happened which have only occurred with people who have turned into my closest and most trusted mentors: President Sousa

shared with me work she is actively engaged in and invited me to collaborate on a project she had in mind, an article for Vision Newsletter.

Reflecting on my clinical rotation in a nursing imaging unit

Among other work I'm aware of, President Sousa has shared with me the recent creation of a "New Grad Nurse Orientation Task Force" within ARIN which aims to create a program template to orient newly licensed nurses into radiology and imaging departments (ARIN, n.d.). I'm currently in the final semester of completing my BSN degree and as part of that clinical requirement, I had the opportunity to rotate through a nursing imaging unit in Atlanta, GA. Radiology and imaging nurses have a great chance to welcome, attract, and retain new grads to their teams through these types of experiences.

Feedback I received while at this clinical location was that new grads would be better suited to look for their first jobs in a different setting. Nurses I spoke with cited the importance of having well-honed assessment skills, the limited time available to make assessments, and the relatively high rate of patient turnover seen in that environment as reason for new grads to start elsewhere.

I challenge that assertion by asking us to look at ER positions, ICU positions, and the wave of other specialty opportunities for new grads across the nation. These types of experiences have been facilitated through the creation of nurse residency and orientation programs much like what the ARIN Board of Directors are currently refining (Remel, 2011). It may be true that many radiology and imaging units are currently staffed adequately (CNET, 2010). However, as President Sousa identifies in the companion article to this one, there is a need to assess the experience gap on nursing teams.

Radiology and imaging nurses do tend to have a lot of experience, and the variety of interventions combined with a fast-paced atmosphere provides a great learning environment. This is a place where preceptor relationships could flourish. It is not unreasonable to expect that some of those preceptorships could evolve into mentoring relationships outside of the clinical setting.

Continued on page 4

The importance of mentoring & opportunities to connect

The importance of mentoring within nursing is well documented (Chen, 2013). It has been a discussion among the nursing community for several decades, and it is a topic that needs to remain front and center in the professional mind. How we choose to participate in mentorship is not nearly as important as why we strive to do so. As long as we practice mentorship with a framework of ethics and self-discipline, nursing will remain the most trusted profession with perspectives that will realize a new level of influence among decision-making bodies.

But where does one find mentees? Student nursing groups should be your first stop on the way to developing a mentoring relationship. NSNA is the pipeline that helps students understand the privileges which come with membership in professional organizations and helps future nurses learn to navigate this type of elected leadership structure. It is through active participation in organizations like these that we make connections and find our voice to lead others. Log onto the [NSNA website](#) to find organizations in your area with nursing students who have demonstrated ambition and resourcefulness (NSNA, n.d.). Send direct and personal messages to the Presidents of these student organizations and express an interest to exhibit at their state association conventions, offer to sponsor a focus session on your specialty, or ask how to submit manuscripts to Imprint Magazine or state newsletters. You could also ask them to connect you with previous board members who have recently graduated. Invite them to attend your meetings, join you at conventions, get involved with your committees, write articles for your publications, or perhaps even alert them to job shadowing times on your unit.

Using micro-projects like these to create experiences which may develop into a mentoring relationship is a helpful and fun approach that respects the time and energy of each person. Share your work, and ask for their impression or takeaways. One of the most valuable and recurring dialogues I share with the Executive Director of NSNA, Dr. Diane Mancino, is when she shares her thought process on a decision and then poses the question to me: Your thoughts?

The NSNA core values of leadership & autonomy, quality education, advocacy, professionalism, care, and diversity all embody characteristics that a good mentor should strive for. By observing the leaders around us we can see the many ways to engage in fulfilling mentorships. Focusing on the “why” of mentoring may help ARIN leaders discover more opportunities to strengthen their professional community.

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2016 “TOP 10” TECHNOLOGY HAZARDS

By: Greg Laukhuf ND, RN-BC, CRN. NE-BC
ARIN Past President

The new year brings “Top Ten Lists” from many sources, including the dreaded New Year’s resolution list. What should an ARIN nurse really pay attention too? Below is a list of the top 10 technology hazards compiled by ECRI Institute, whose public service mission is to inform healthcare facilities about safety issues involving medical devices and systems (ECRI:2015). Many of the listed items are relevant to our practices.

The list is not based on the number of reported incidences but rather the judgement of the ECRI organization regarding which patient care hazards should receive the greatest priority in the upcoming year. The hazards cited are based on severity, preventability, frequency, breadth, insidiousness and profile. The top ten technology hazards for 2016 are:

1. Improper cleaning of endoscopy scopes prior to disinfection leading to deadly pathogen spread.
2. Missed alarms leading to fatal consequences.
3. Failure to adequately monitor opioid induced respiratory depression in post-operative patients, leading to injury or death.
4. Inadequate monitoring of telemetry patients, leading to increased patient risk.
5. Inadequate training of clinicians on Operating room technologies.
6. Errors from health information technologies, which are not in synch with facility workflows.

7. Unsafe injection practices that expose patients to infectious agents.
8. Gamma camera mechanical failures leading to patient injury and death.
9. Failure to appropriately operate intensive care ventilators resulting in preventable ventilator induced lung injury.
10. Misuse of USB ports causing medical devices to malfunction.

Radiology departments are brimming with technology and is an area at risk. The safe use of technology from syringes to sedation and patient monitors to electronic health records requires vigilance with ongoing identification of possible dangers and interventions taken to mitigate the dangers. After a careful review of the list, many of the hazards could be found in radiology departments. These risks are minimized through the active management of technology. Are any of these Hazards on your New Year’s “Top 10” list?

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NEWS FROM THE RADIOLOGIC NURSING CERTIFICATION BOARD (RNCB®)

Greetings from the Radiologic Nursing Certification Board (RNCB®)! As we begin, start the 2016 year we look back on the accomplishments of 2015. We added 125 new nurses working in the radiology and imaging environment to the ranks of the Certified Radiology Nurses (CRN®); and 175 nurses renewed their CRN® for another 4 years. The total of CRN®s now is at 1101 and growing!

The CRN® Exam Dates for 2016 year are:

April 6, 2016*

Application Due January 29, 2016
Application with late fee Due February 12
***Vancouver, BC, CANADA, Only**

May 14, 2016

Application Due March 4, 2016,
Application with late fee Due March 18

October 15, 2016

Application Due August 5, 2016
Application with late fee Due August 19

[Click here to view a current list of testing locations.](#)

[Click here to download Certification/Recertification Handbook.](#)



Recertification in 2016

The RNCB® sends out renewal notices to all individuals 6 months prior to CRN® expiration date. If you are currently certified please be sure the RNCB® National Office has your correct address on file. If you have moved since you became certified or recertified please notify [Harriet McClung](#), or call 855-871-6681 to update our records to ensure that you will receive your renewal notice in a timely manner.

CRN® Exam Updates: Planned Move to Online Exam

The RNCB®, in conjunction with our testing company, Centers for Nursing Education and Testing (CNET), conducts an annual review of the CRN® exam. Our goal is to move to an online CRN® exam rather than the current pen and paper Exam that is now administered. In order to have the online exam we need to increase the number of qualified questions in our item data bank. We are working hard to have the online exam in place in the coming year.



Annually the RNCB® will issue a call for volunteers for a Test Development/Item Writing Workshop from the current list of CRN®s. Volunteers from different radiology & imaging practice settings comprise the Work Group, which is conducted as a face-to-face session; the last one was held November 4-6, 2015, in Las Vegas, NV. For this workshop the Test Development/Item Writing Work Group volunteers were: Shelli Cramer, BSN, RN-C, CRN®; Christy Haines, GSN, RN, CRN®, RT(R)(CT); Leah Crement, RN, VA-BC, CRN®; Leigh Ann Grant-Simmons, MSN, RN, CNS, CCRN, CEN, CRN®; Becky Johnson, RN, CRN®; Sara Capalbo, BSN, RN, CRN®; Kathleen Snyder, MS, RN, CEN, CRN®; RNCB® President Mary Myrthil, MS, RN, NE-BC, CRN®; RNCB® Treasurer Elizabeth Anderson, BSN, RN, CT, CRN®; and RNCB® Director Chris Hockenberry, RN, CRN.



During the Test Development/Item Writing process each question in the CRN® Exam databank is evaluated for its current practice relevance. Some questions are tweaked a bit, some are removed from future exam cycles as they no longer reflect the process, and then there are new questions that are written. In addition to the oversight for Test Development, the RNCB® Board of Directors also conducts an annual review of the exam outcome and questions. We are working very hard to be able to administer the CRN® exam as an online process, we will keep you posted when this is available.

Be sure to [visit our website](#), for more information on the CRN® Exam and recertification.



ARIN TOWN HALL MEETING

Jim LaForge, MSN, BSN, RN, CRN
Director of Membership

In early December, ARIN held a Town Hall meeting in lieu of the monthly Chapters meeting. In what is hoped to be the first of many, the Town Hall meeting was nicely attended by several ARIN members along with ARIN Board members and Boulter Management representatives. The meeting was shared by way of the Go to Webinar platform which allowed for great dialogue for all in attendance.

This new format allows chapter leaders and/or chapter members to call into the meeting and view a shared screen and actively participate in the discussion. At this meeting Mary Sousa, ARIN president, presented a brief on what it means to be a member of professional organization; the roles and responsibilities of members and officers, the obligations of chapters such as filing the necessary annual paperwork and forms, and the responsibilities that need to be reciprocated between local chapters and the parent organization.

Also shared at this meeting was the technology currently being used by ARIN and the potential for creating websites for chapters that currently do not have one or for chapters that are simply looking to upgrade their current website. This is a technology that ARIN is willing to share with interested chapters and is fairly easy to use but requires commitment from chapter members to initiate and maintain the content placed on your website.

As ARIN moves forward, we believe the Town Hall meeting series will provide a valuable and meaningful forum where chapter members can discuss concerns and issues with Board and Management company members. We hope to share ideas, technology, and resources with chapters that are interested. Equally important, we want to glean and learn from you as chapter members, the heartbeat of ARIN. Look forward to the next Town Hall meeting. We will post it soon and often so you can plan on attending the next ARIN Town Hall meeting!



WEBINAR UPDATE

Cathy Brown BSCN RN CRN
Webinar Committee Chairman

On December 9, 2015 "Preventing CLABSI in the Radiology Department" was presented by Chris Cavanaugh BSN CRNI VA-BC. For those of you who were unable to attend the webinar recording and handouts are available on the ARIN website. CEU's can still be earned.

Our next webinar, Y90/TARE Treatment: What Nurses Need to Know will be presented on January 13, 2016 (7 pm Eastern, 6 pm Central, 5 pm Mountain and 4 pm Pacific) by Sarah Whitehead BSN RN CRN. Watch your email for a registration link.

A benefit of your ARIN membership is free access to live and recorded webinars. When first presented live, webinars have CEU's that are available for up to two years. These webinars are then archived so they can be viewed at your convenience. As time progresses and the CEU's expire, the recordings remain available for viewing.

The CEU's for the webinars are provided through the Georgia Nurses' Association and once you earn them they stay on your ARIN membership profile for 5 years, ready for you to review and print off when you need them for your license requirements.

If you have an idea for a webinar, a suggestion for something you'd like to see covered or are interested in presenting a webinar, please reach out to Cathy Brown, webinar committee chair at Cathy.Brown@ahs.ca.

DON'T JUDGE A BOOK BY ITS COVER

By: Heather Corrigan RN, Clinical Nurse
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People hasten to judge in order not to be judged themselves.

– Albert Camus

Societies and cultures have routinely engaged in various body modification practices for the purpose of protection, status, membership, ownership, or artistic individuality (Durkin, 2012). Recent polls reveal that 21% of Americans in the 18-50 age groups are tattooed (Blanton, 2014). As a healthcare provider who is visibly tattooed, I am aware of the social stigma that patients may be subject to due to social biases.

Historically, “people with tattoos, if they weren’t sailors or other enlisted men, were often assumed to be criminals and/or freaks: social deviants” (Rapp, 2010). Currently, tattoos, body piercings, and body modifications (e.g. scarification, branding, subdermal or transdermal implants) are a custom present among all age groups and demographics. While tattoos and piercings are the most recognizable body modifications, this category should also include cosmetic surgery and permanent cosmetics. While these forms of self-expression can elicit strong reactions in people, including healthcare professionals, it is imperative to not display judgment or bias, regardless of the type of body modification present. Some nurses may strongly support or reject a patient or peer’s choice of self-expression through tattoos, piercings, or other body modifications, however, as nurses, it is of paramount importance that we do not impose our personal beliefs or feelings onto our patients. Conveying interest or disapproval in regards to a patient’s piercing or tattoo would be tantamount to inquiring about an obvious cosmetic procedure. Failure to adhere to this could negatively impact the nurse-patient relationship.

Providing radiology nursing care for a heavily tattooed or pierced patient comes with safety concerns. The largest problem with all tattoos and implants is the danger of artifact or interference in the picture. This can possibly limit the scan or cause a poor quality study (Durkin, 2012). After consultation with the procedure or diagnostic team, treatment plans may have to be altered due to the tattoo or

piercing placement, as is the case with MRI and ferrous ink. In most cases, diagnosis and treatment can proceed without a safety issue. When starting a pre-procedure or diagnostic assessment, ask your patients if they have any body modifications. If they reply “yes”, conduct a thorough skin assessment (Armstrong, 2004). Piercings and tattoos may appear in visible and nonvisible body areas. The mouth, tongue, nose, eyebrow, navel, nipple, and genital area or permanent facial makeup are common sites. Tattoos may also be visible or nonvisible as in the case of the neon tattoos that are only visible under black light (Harrington, 2015).

If a patient with metal body jewelry is undergoing diagnostic testing, the jewelry may have to be temporarily removed. This is an important safety step in MRI. Explain to the patient that body jewelry may be removed because ferrous materials can become heated or pulled out by the magnetic field during the MRI scan. This can result in tissue tears or cause interference in the clarity of the MRI picture. It is important to inquire about the metal content of the jewelry; implant-grade titanium may be more MRI compatible as it contains virtually no nickel. If the patient is reluctant to remove his or her body jewelry, you should wrap the area in gauze to insulate it. The American Academy of Dermatology recommends using a plastic catheter to keep the piercing hole open during long procedures if the jewelry is removed (Durkin, 2012). After the MRI scan is complete, the patient can reinsert the body jewelry.

An added MRI safety concern is magnetic hysteresis. This is the process in which tattoos become heated in a magnetic field. The area of your patient’s tattoos should be monitored to assess for erythema, pain, irritation, or any other signs of an iatrogenic burn before and after the MRI scan. Because an MRI can cause the patient’s intracellular water temperature to rise, his or her skin should be closely monitored for potential burn risk for 48 hours after the procedure. It is important to recognize that darker pigments may have more iron oxide and conduct more heat in the magnetic field. Some newer tattoo inks contain

nontoxic, metal free ingredients that do not contribute to a burn risk, but are closer to the skin surface causing greater scan interference.

The oversight of tattoo inks and permanent makeup falls under the jurisdiction of the FDA. The FDA delegates the regulation of tattoo practice to state and local authorities. Because of other public health priorities and a lack of safety concerns, the FDA hasn’t regulated tattoo ink or the pigments. This may be changing with pending legislation in some states.

The FDA has issued papers on the risks associated with tattoo ink. A summary of risks to consider include (U.S. Department of Health and Human Services, 2009):

- Infection risk-used needles or ink cups can pass infections, e.g. hepatitis and HIV, from one person to another.
- Allergic reactions- to various ink pigments in both permanent and temporary tattoos
- Scarring- that may form from receiving or removing a tattoo.
- Granulomas- bumps which form from tattoo inks and piercings that the body perceives as foreign.
- MRI complications- swelling or burns of the tattoos and piercings in MRI.

Professional tattoo studios and piercers adhere to strict sterile techniques. Some patients elect to be tattooed or pierced in a non-professional setting where sterile techniques are not utilized and blood borne pathogen precautions are not adhered to. In unregulated tattoo shops or home-based studios, artists may use writing ink or printer ink which is damaging to the skin and present complications, for example allergic dermatitis, cellulitis, infection, and septicemia. All body modifications should be performed by a professional who is certified to pierce and/or tattoo (Schmidt, 2014; Davis, 2014).

As a radiology nurse, we may be the first to encounter a patient and realize they have a complication. If a patient presents with symptoms of an infection, ask to inspect any

Continued on page 8

areas of the patient's body that have been recently tattooed or pierced. An elevated white blood cell count may indicate infection. Assess the patient for signs of inflammation or infection that may be caused by allergic reactions to the metal used in inexpensive body jewelry or reactions to tattoo ink (Schmidt, 2014; Davis, 2014).

Patients with preexisting health conditions may be at greater risk for developing complications related to tattoos or piercings. Patients who have congenital heart disease should avoid getting tattooed or pierced due to the increased risk of endocarditis. Immunocompromised patients or patients who have had an organ transplant should avoid body modifications to minimize infection risks. Diabetics should avoid tattoos and piercings as well because of impaired healing processes related to the chronic disease. Patients who take blood-thinning medications may experience prolonged bleeding when receiving piercings or tattoos. Finally, it is important to remember that tattoos can mask conditions such as skin cancer. When providing care for a heavily tattooed patient, a careful skin assessment should be performed to observe for changes in a mole or other symptoms that might indicate malignancy (Schmidt, 2014; Davis, 2014).

Nursing care considerations for the radiology patient with body piercings should include (Schmidt, 2014):

- Erythema, edema, or drainage at the insertion site indicative of infection
- Splitting, shearing, or tearing of the skin tissue after MRI scan, which may cause the formation of scar tissue
- Allergic reaction to the jewelry (hypoallergenic jewelry, such as implant-grade surgical stainless steel or titanium, gold, platinum, niobium, and glass, is the only type of jewelry that should be used in a new piercing)
- Damage to underlying blood vessels or nerves
- Scarring of the piercing site
- Cracking or chipping of teeth or gums and difficulty chewing or swallowing in patients with piercings in or near the mouth.
- Don't remove body jewelry, unless it's necessary; in an emergency situation learn the correct way to remove the various types of jewelry.

"It is clear that people in cultures all around the world are 'judging books by their covers,' and bodies existing as they do in society, are one of the ways in which people classify those around them" (Rapp 2010). This concept has no place in nursing. As the number of patients that are tattooed or pierced increases, we as nursing professionals need to be sensitive to their healthcare needs. While a compliment to your patient on his or her unique body art is acceptable, it is inappropriate to inquire as to why the patient selected a specific tattoo or body piercing, much as it would be unacceptable to comment on a discernible rhinoplasty. Remember not to judge because this will impact the nurse-patient relationship. In caring for the ever-increasing patient population who engages in body modification, it is of utmost importance that no display of judgment or bias should impact patient care.

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IF YOU SEE SOMETHING, SAY SOMETHING

On a busy day with short staff and high-acuity patients, a nurse fails to notify the physician of an abnormal clotting time for her patient. Not knowing the result, the physician orders the patient's heparin to be restarted. The nurse mistakenly overlooks the abnormal lab tests and implements the order. Subsequently, the patient suffers significant brain hemorrhage and permanent disability.

In this situation, you might think it was the physician's, not the nurse's, responsibility to check the clotting time before restarting the heparin. But in a similar case, a nurse was held liable for failing to notify the physician. The case illustrates the important responsibility of nurses to notify others of a significant change in a patient's condition, including results of lab tests. Failure to do so can leave you open to legal action by patients or families. Here is what you need to know to ensure you are following correct procedures for notification.

A common problem

Allegations related to patient assessment monitoring, treatment, and care—three main areas where notification plays an important role—are relatively common and can be quite costly, according to the CNA/NSO claim study *Understanding Nurse Liability, 2006–2010: A Three-part Approach*. From January 2006 through December 2010, assessment allegations accounted for 12.6 percent of closed claims with a paid indemnity greater than \$10,000, monitoring accounted for 6.8 percent, and treatment and care accounted for 58.5 percent. The average paid indemnity was \$228,737 for assessment, \$223,282 for monitoring, and \$156,857 for treatment and care. So how can you lower your risks for being named in a lawsuit as a result of not notifying practitioners?

Monitor the patient

It seems self-evident that you should monitor your patients, but claim studies show that this doesn't always happen. Base your monitoring on practitioner orders and your professional judgment. For example, if your patient is having neurologic checks every 2 hours and develops altered cognition, perform a complete neurologic assessment.

Common areas to assess include vital signs, blood glucose, lab and diagnostic test results, clinical signs of bleeding, effectiveness of pain management, signs of infection or inflammation, nutritional intake, oral and I.V. fluid intake and output, outputs (e.g., urine, stool, wound drainage), wound status, behaviors, cognition, patient concerns, response to treatment, and patient safety.

Make the patient your ally. Tell him or her to report any problem promptly. Keeping patients and families informed will make it more likely they will speak up promptly. If there is a change in your patient's condition, you'll need to communicate it quickly.

Communicate effectively

Think before you speak with the practitioner so you can provide the information in a way that will get results. A commonly used tool is SBAR, which staff at Kaiser Permanente created based on a tool from the U.S. Navy. Here is an example adapted from material from Kaiser:

- **Situation.** Give a concise statement of the problem. "Dr. Jones, I'm calling about Jack Wilson, a 55-year-old man who is pale, diaphoretic, and complaining of chest pressure."

- **Background.** Give pertinent, but brief, information related to the situation. "He has a history of hypertension and was admitted yesterday for GI bleeding. He received two units of RBCs yesterday, and his hematocrit 2 hours ago was 32. His blood pressure is 90/50 and pulse 120."
- **Assessment.** Provide what you found and what you think about the situation. "I think he is bleeding again, and we can't rule out an MI, but we don't have a recent H&H or troponin."
- **Recommendation.** Request or recommend an action. "I'd like to get an ECG and labs, and have you evaluate him right away."

To make your communication more effective, use the practitioner's name to get his or her attention and state the problem clearly and concisely. If you are talking in person, make eye contact. Minimize background noise, particularly when you are on the phone, and avoid multitasking. Some hospitals have Rapid Response Teams that you can call if you feel the situation warrants more immediate attention. Use them if you need them.

Overcoming resistance

What if you feel the practitioner isn't listening to you or doesn't plan to take appropriate action? According to TeamSTEPPS, a tool for enhancing patient safety that you can obtain at no cost from the Agency for Healthcare Research and Quality, it's your responsibility to assertively voice your concern at least two times to ensure it has been heard. If the outcome is still not acceptable, you'll need to contact your supervisor or go up the practitioner's chain of command.

Remember that your goal is not just to notify someone—you want to ensure proper action is taken. Following the chain of command is important from a liability perspective, too. According to the

Understanding Nurse Liability claims study, claims involving the failure to invoke the chain of command represented 5.6 percent of the treatment and care closed claims and had one of the highest average paid indemnities (\$350,558)

Don't forget to document

It's easy to forget to document your efforts to contact the practitioner, particularly if the patient's condition is declining rapidly. However, that documentation is what will protect you should a claim occur. Date and time each entry and include detailed information about the patient's condition based on your assessment, who you notified, and actions taken. If you need to follow up with someone higher in the chain of command, note that as well. Other areas to document include reporting abnormal lab values and diagnostic tests.

Remember documentation basics: Follow your organization's protocols and guidelines from your professional association. Don't alter the medical record and comply with the policy for correcting errors.

Notifying practitioners

These actions will help ensure you properly notify practitioner of a change in a patient's condition:

- Frequently monitor the clinical situation of your patients so you detect problems early. Follow practitioner orders, but also use your judgment about when to conduct additional assessments.

Continued on page 10

- Listen to what the patient says. It can be tempting to dismiss another complaint from a “difficult” patient. Don’t.
- Assess and document, at a minimum, the following when there is a change in the patient’s condition: presenting problem(s), comorbidities affecting the patient’s status, mobility status, medications, behaviors, cognition, vital signs, and lab values.
- Notify appropriate practitioners of your assessment results.
- Document the results of specific patient-monitoring activities according to the practitioner’s orders and as indicated by the patient’s condition, including vital signs and other relevant information.
- Document all patient treatment and care, including timely implementation of practitioner orders, patient/family education, supervision of nonprofessional caregivers, tracking of test results/consultation reports, follow-up of delays and issues in obtaining tests or test results, and reporting of any patient incident (injury or adverse outcome and subsequent treatment/response).
- Document the actions you took to notify the practitioner and the response.
- If you do not receive a response in a reasonable time frame, seek assistance elsewhere and document your actions.

The bottom line

As a nurse, you are responsible to promptly notify practitioners of a change in a patient’s condition. The bottom line is that if you see something, say something—and document it.

Resources

Agency for Healthcare Research and Quality. Pocket Guide: TeamSTEPPS. Publication number #06-0020-2. <http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/instructor/essentials/pocketguide.html>.

CNA, NSO. Understanding Nurse Liability, 2006-2010: A Three-part Approach. www.nso.com/nurseclaimreport2011.

Kaiser Permanente. SBAR toolkit. <http://www.ihl.org/resources/Pages/Tools/SBARToolkit.aspx>.

This risk management information was provided by Nurses Service Organization (NSO), the nation’s largest provider of nurses’ professional liability insurance coverage for over 650,000 nurses since 1976. The professional liability insurance policy is administered through NSO and underwritten by American Casualty Company of Reading, Pennsylvania, a CNA company. Reproduction without permission of the publisher is prohibited. For questions, send an e-mail to service@nso.com or call 1-800-247-1500. www.nso.com.

IMAGING REVIEW COURSE NEWS

By: Bruce Boulter
Executive Director

Happy New Year from the IRC Team. As we jump into 2016, we are excited about all of the courses that are lined up in the new year. After the record breaking year in 2015 we look forward to advancing the careers of many radiology nurses across the country, but more importantly, improving the lives of the patients that we care for.

Starting in ARIN’s home state of Virginia, we will be at the University of Virginia on March 12-13. We will be conducting our traditional course the first two days of the Annual Convention April 1-2 in Vancouver, BC, followed by another trip to the east coast to the Johns Hopkins Hospital on April 16-17. Moving up the coast, we pay a visit to Beantown, or more accurately, Lowell, MA April 30-May 1. As usual, keep your eyes on the ARIN website to find a course near you.

While 2016 starts with a bit of an “east coast bias” to coin a sports phrase, we have received a lot of requests from facilities in the Midwest to hold courses throughout the year. We are considering the possibility of a live virtual course. We would love hearing from all of you on your thoughts on the idea.

WELCOME NEW PARTNERS

By: Bruce Boulter
Executive Director

As you visit our website, you have probably noticed the area of our partners. This is a very important part of our website and our association. These are not only our business partners, they are our friends, and a resource for more education for our members. Together we are working to improve patient care and enhance the caregiver experience.

This quarter we welcome two new partners to our association, Mavig – X-Ray Protection and System Solutions, and Skyline Medical Inc. In addition to these two new partners, we welcome Medtronic, formerly Covidien back again. We highly encourage you to visit our home page and click on their logos. Take the time to get to know these great companies and the products and services they provide.



PRACTICE ISSUES

ARIN has received member questions regarding the use of Pressure-Directed Embolotherapy with Antireflux catheters and using blood pressure readings in the targeted vascular territory.

Below is a link to the IO360, an Interventional Oncology On-line Journal, to an article written by Dr. Steven Rose addressing this topic.

<http://www.interventionaloncology360.com/content/pressure-directed-embolotherapy-antireflux-catheters-articles-official-show-daily-synergy>



EXCITING OPPORTUNITIES FOR RADIOLOGY NURSES IN SAUDI ARABIA

As the Nurse Managers of the Medical Imaging Department in the Ministry of National Guard Health Affairs, Riyadh, Saudi Arabia, we would like to introduce you to our nursing section and the exciting job opportunities which are available for Radiology nurses.

Our nursing section is unique and diverse and is comprised of Radiology Nurses who are highly skilled and experienced from different nursing and cultural backgrounds.

The role of the Radiology Nurse includes pre procedure preparation as well as intra and post procedural monitoring and direct patient care.

Due to the rapid development and expansion of Medical Imaging Department, the nursing role has become more specialized.

Our mission in Medical Imaging Nursing Section is focused on caring for the patient and family by providing the highest level of care and safety measures for all patients who undergo diagnostic or therapeutic procedures in KAMC and KASCH in accordance with JCIA Standards.

Our nursing unit in the Medical Imaging Department provides coverage in both King Abdulaziz Medical City (KAMC) (800+ beds) & King Abdullah Specialized Children's Hospital (KASCH) (500+ beds). Currently, we have approximately 40 nurses on staff and are continuously hiring more.

We have the following vacant positions:

- Staff Nurses in KASCH Medical Imaging (CT, MRI and Fluoroscopy) and Nuclear Medicine.
- Clinical Resource Nurse (similar as Clinical Nurse Educator) in KASCH Nuclear Medicine.
- Clinical Resource Nurse (similar as Clinical Nurse Educator) in KASCH Vascular & Interventional Radiology.
- Nurse Manager in KASCH Vascular & Interventional Radiology.

Our nursing unit provides a strong and well-tailored orientation and clinical training program to meet the expectation of new employees and to ensure efficient and competent nursing staff.

Our nurses provide support in Vascular Interventional Radiology, CT Scan, MRI, Fluoroscopy, Nuclear Medicine and Breast Biopsy (Women's Imaging). It is within the scope of Radiology Nursing practice to manage the nursing care of patients receiving sedation from non-anesthesiologists during therapeutic or diagnostic procedures.

Procedures performed in the Medical Imaging Department in KAMC and KASCH include vena cava filters placement and retrieval, Transjugular

Intrahepatic Portosystemic shunt (TIPSS), emergency stroke therapy, venous sampling, uterine fibroid embolization (UFE), internal iliac artery balloon occlusion, nephrostomy, percutaneous transhepatic cholangiography (PTC) & biliary drainage, CT colonography, cardiac CT, milk scan, direct cystogram, bone scan, barium swallow, hysterosalpinogram, breast biopsy, stereotactic breast biopsy and needle localization.

Benefits of working in Saudi includes, but not limited to:

- TAX- free salary (everything in KSA is tax free)
- Contracts are for one year, with a sign-on bonus equivalent to one month salary if you re-contract
- Ability to save majority of the salary
- Free medical coverage
- Opportunity to travel (Europe, Far East, Africa)
- 30 days annual leave per year + 11 days holiday-leave per year + midyear benefit (10 days leave and a ticket to London or point of hire)
- Furnished housing accommodation in a Western compound
- Free transportation services to hospital and accommodation
- Free mobilization and de-mobilization flights to and from point of origin
- Annual vacation air tickets to point of origin
- Multicultural work environment

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35TH ANNUAL SPRING CONVENTION

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THE COUNTDOWN IS ON

With 4 days and over 30 credits available through lectures, workshops and poster sessions your education needs will be met.

Some of this year's topics will include:

- Interventional Oncology
- Pediatric IR Cases and Challenges
- Safety in the Imaging Setting
- Leadership and Management
- New Technologies/Treatments in Imaging
- Patient Education in Radiology
- And Many More...

THREE WAYS TO ATTEND!

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- Watch virtual live broadcast
- Watch archive podcast

[Click here for more information.](#)



The NEW ARIN:
Visible, Vital and Virtual
The Future is Now.

RADIOLOGY NURSING PUBLICATIONS: A HISTORICAL OVERVIEW

By: Editorial by Sharon Lehmann, MS, APRN, CNS
Vision Newsletter Editor

"The Journal"

The American Radiologic Nurses Association was founded in 1981. In October-November 1982 the Publication called "images" was launched, by the Editorial Committee Chair and First Editor, Joanna V Po. A letter from President, Charlotte Godwin, RN was included in this issue.

Along the way there have been many editors for Images. They included:

1982-1984 Editorial Committee Chair & first editor "newsletter - journal",
Joanna V. Po, MSN, RN,-BC, CNS

1984-1985 Larry Camp, RN, RT

1985-Elaine Deutsch, RN & Judith Zink, RN, Co- Editors

1986-1987 Martha Kail, BS, RN & Judith Zink, RN, Co-editors

1986-1987 Martha Kail, BS, RN & Margie Lawless, BS, RN, Co-editors

1992 Patty Merrick, BSN, RN, Interim Editor

1993-1995 Margaret Doherty-Simor, BSN, RN

1995-1997 Sindy Benson, RN

1997-2002 Linda Strangio MA, RN, CCRN

2002-2003 Delma Armstrong, BSN, RN, CRN, Interim Editor

2003-2004 Marie Kornstein, MHSA, RN, C, CRN

Jan 2005-June 2005 ARNA BODs for vacancy

Beginning with the first issue of 2004 the journal began to be published with Elsevier and became titled "Journal of Radiology Nursing (JRN)". The Board of Directors felt this would increase the professionalism of the journal and enhance its standing in the publishing community.

In July 2005, Kathleen A. Gross, MSN, BS, RN-BC, CRN was named editor of JRN and has remained in this position since then. Each year Kathleen has taken the journal to new levels with the quality and wide range of articles that have been published. The journal is respected internationally by the nursing community. Kathleen recently prepared a report for the Nursing Editors History Project from which this information was obtained.

From the ARIN website: "The Journal of Radiology Nursing promotes the highest quality of patient care in the diagnostic and therapeutic imaging environments. The content is intended to show radiology nurses how to practice with compassion, competence, and commitment, not only to patients but also to the profession of nursing as a whole. The journals goals mirror those of the Association for Radiologic and Imaging Nursing: to provide, promote, maintain, and continuously improve patient care through education, standards, professional growth, and collaboration with other health care providers. ARINs Core Purpose: To foster the growth of nurses who advance the standard of care in the imaging environment."

"The Newsletter"

In 1995, ARNA started a quarterly newsletter called "RN News". In 2003 the name of the newsletter was changed to "Vision". I was unable to track down the first editors of the newsletter.

1998-February 2003 Helen O'Daly, BSM, RN, CRN

March 2003-February 2005 Susan Simson, MSN, RN

March 2005-June 2006 Paulette Snoby, MPA, BSN, RN, CCRN (interim)

July 2006-February 2008 Delma Armstrong, BSN, RN, CRN

March 2008-June 2009 Sharon Lehmann, MS, APRN, CNS (interim)

July 2009-February 2010 Kiley Brinks, BSN, RN

March 2010-present Sharon Lehmann, MS, APRN, CNS.

Articles in Vision provide information about the organization, including but not limited to, committee, convention, certification, and membership information as well as brief articles in the areas of education, management, research and patient care. Until the start of 2009, the newsletter was mailed via snail mail to the membership. It was during my presidency, in the spring of 2009 (Vol 14, No 1) that the newsletter became an on-line newsletter. This saved the organization approximately \$14,000 a year in postage!

In November 2013 when Bath Hackett, MSN, APRN, NP, CRN, who was then president, and Karen Green, MHA, BSN, RN, CRN, who was then the Executive Director came to Minneapolis for the National Organization's Alliance meeting, I was able to meet with them for dinner. They approached me about expanding the newsletter to 6 times a year, to start in 2014. My first reaction was, Wow-are you for real, can this be done, do we have enough information to fill 6 issues? Then I started laying out the publication schedule for the next year and the newsletter suddenly became published 6 times a year.

I have thoroughly enjoyed my time as newsletter editor. However, I now feel it is time for me to hand the reigns over to someone else. This does not mean I am leaving the organization, it just means, it is time for me to focus on other aspects of my career. I look forward to passing the "torch" to the editor and being able to mentor them as they enter into the position.

"The Core Curriculum"

1st edition: Morgan, L, Nunnellee, J. (eds). Core Curriculum for Radiologic Nursing, Oak Brook, Ill, 1999. American Radiologic Nurses Association.

2nd edition: Sasso, C (ed). Core Curriculum for Radiologic and Imaging Nursing. Pensacola, FL, 2008. American Radiologic Nurses Association.

3rd edition: Gross, K (ed). Core Curriculum for Radiologic and Imaging Nursing. Hillsborough, MJ, 2014. Association for Radiologic and Imaging Nursing.

"The Orientation Manual"

Green, K (ed). Orientation Manual for Radiology Nurses. Pensacola, FL, 2998, American Radiologic Nurses Association.

Duncan, K (ed). Orientation Manual for Radiologic and Imaging Nursing. Herndon, VA 20171. Association for Radiologic & Imaging Nursing.

The Standards of Practice

American Radiological Nurses Association & American Nurses Association. (2007). Radiology nursing: Scope and standards of practice, 1st edition. Silver Spring, MD: Authors.

Association for Radiologic and Imaging Nursing & American Nurses Association. (2013). Radiology nursing: Scope and standards of practice, 2nd edition. Silver Spring, MD: Authors.

We must also thank all of the authors, reviewers and contributors to all of these publications. Without the tireless efforts of all of these individuals, the radiology nursing profession would not have advanced to the elite nursing profession that it is known for today.

THE AGE OLD QUESTION: WOULD I DO IT AGAIN?

By: Greg Laukhuf ND, RN-BC, CRN. NE-BC
ARIN Past President

I have reached that plateau in life where I have become a consumer of healthcare. To clarify, this is different from my 20's and 30's when a trip to the physician was needed for health insurance purposes. Recently, I stopped in for a quick blood draw at one of the community hospitals in the system where I work as part of a preprocedure work up. As a patient, I never mention that I'm a nurse unless asked and I never mention that I am an employee of the system. I enjoy the anonymity and the sense of being a type of "secret shopper". In my personal health care journey, I have learned that when they know I am a nurse I get treated differently. It is assumed I know everything about the care I am receiving and the condition that may be diagnosed or treated. This has resulted in missed information and educational opportunities. Generally because the Radiology department is located in the basement and subbasement of the hospital, my presence usually goes undetected. Today was different, however. Why? My identity was suspected because of my need to share about the profession I would choose again, Radiology Nursing!

When I arrived at the desk in pre-admission testing, the patient access service representative directed me to a set of parallel chairs in the waiting room and asked me to have a seat. As I waited for the phlebotomist from the lab to call me into the room, I looked up and down the narrow area, noticing the print artwork, the line of patients and the healing landscape of the plants in the room. Returning from the lab area, the representative informed me that it would be a few minutes until the phlebotomist would come. I continued my appraisal of the physical environment, making a mental note of items I would check in a "like" or "dislike" column.

After about 15 minutes, (It seemed like thirty minutes as I was NPO sans coffee) I became aware of a growing sense of annoyance (caffeine withdrawal) and began looking for the receptionist to ask when I might expect to see the phlebotomist. As if on cue, "John" (name changed to protect the innocent) appeared in a crisp, white lab coat with a large friendly smile. Introducing himself, he apologized for my wait. Making solid eye contact and shaking my hand, he explained he had been detained on a blood draw that took longer than expected. His openness and friendliness defused my annoyance as we entered the lab. I shared that I had perhaps made a mistake by not pre-registering prior to the front desk for the usual 10 to 15 minutes of interrogation and paperwork.

John explained that was Ok, he would check my insurance card and computer information in the lab area to make sure no changes or updates were required.

Wow, those system patient service classes really do work, that's a nice improvement. My mental checklist from the waiting room continued. Productive and efficient? Check. Friendly greeting with a smile? Check. Transparency? Check. Two patient identifiers? Check. Hand washing and gloving? Check and check.

As he prepped my arm for the venipuncture, John asked what I did for a living. When I told him I was a Radiology nurse, he smiled and shared he was in his third year of the nursing program at a local university. "How long have you been a nurse and worked in Radiology?" he asked. "Twenty Eight years combined" was my reply. "How has nursing changed over the past 28 years?" Answering that question took the rest of the visit.

As I reflected back to answer John's question making a mental list, I realized that Radiology Nursing is tougher than ever before. First on the list, is the complexity. People arriving to radiology are sicker and their interventions more complex. The technology in the diagnostic and procedure rooms is ever changing. Drugs are a moving target of scarcity and new formulations, and there are more medications than ever each with multiple similar sounding names. The Institute for Safe Medication Practices (ISMP) monthly newsletter and tall man lettering is proof of this point (Institute for Safe Medication Practice, 2011).

Next on the list is information technology, which has become a two edged sword. It did speed us up and help to catch errors by the sharing of the patient's information. But, it has also complicated communication, changed effective time management, and shifted our focus from patient to machine or computer. The human connection is at the center of the art of nursing. The systems we work with are elaborate, filled with idiosyncrasies and nuances, all designed to make us work quicker, safer, and better—but sometimes overwhelming our minds and inviting the unsafe multitasking practice as we strive to keep up. It is a challenge to maximize the benefits of technology and not devalue the human component (Huston, 2013).

My mind flashes back to the handwritten SOAP note and physical assessment on each patient in the Neuro science stepdown Unit I

worked on as a new nurse before coming to Radiology. On that 30 bed unit, I worked with 1 RN and 2 LPNs. Each team had 15 patients. It seemed I was quicker and my documentation more individualized and complete back then as opposed to the checkboxes of today. I pondered how it was in some ways, it was still unchanged when I did come to radiology with 2 RNS that covered the whole department and all modalities.

And those good ol' Kardexes with your red and blue pens taped together! Despite pencil, erasures that wore holes through the card on which they were printed, that documentation system was an effective communication tool in nursing. I wore the paint off at least one of the metal flip presentation holders in which the cards were held.

Finally, and maybe most importantly, was the change in focus. When I became a nurse, the baby boomer focus was the patient and care of them until the job was done. I worry that this element of the job, focus on the patient, has become lost in the scramble of electronic health record, smartphones, tablets, pre-populated care paths and bundles.

I was shaken from my meditative state with a "We are done" from John. I had not felt the needle stick or the band aid he applied when finished. Looking me in the eye, he asked, "If you were me and deciding now, would you choose Radiology Nursing?"

As my mind's eye flashed through the many years, departments, colleagues, patients, and families with which and with whom I had worked, I experienced the blood, sweat, and caring tears that are an essential part of nursing. I felt the rush of pride, the reward of going home late and exhausted, knowing I had made a difference in more than one person's life that day. Sometimes a really huge and indescribable difference and sometimes a difference I would only find out at a future date. Now, in the face of complexity, technology, and focus on productivity with an eye on the bottom-line, I wrap up each day; proud to be a Radiology nurse.

Would I do it again? Would I choose Radiology nursing again? **Absolutely!!**

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NEWS FOR RADIOLOGY: WHAT YOU REALLY NEED TO KNOW!

By: Greg Laukhuf ND, RN, CRN, RN-BC, NE-BC

Doctors use virtual reality imaging to treat blocked coronary artery

http://www.upi.com/Health_News/2015/11/21/Doctors-use-virtual-reality-imaging-to-treat-blocked-coronary-artery/3191448150485/

Polish Interventionists employed a virtual reality system with a custom app and Google Glass to open a blocked coronary artery. This is a milestone in the use of technology to assist with surgery in a patient who had chronic total occlusion. This blockage is difficult to clear using standard catheter-based percutaneous coronary intervention. "This case demonstrates the application of wearable devices for display of CTA data sets in the catheterization laboratory that can be used for better planning and guidance of Interventional procedures, and provides proof of concept that wearable devices can improve operator comfort and procedure efficiency in Interventional cardiology," Dr. Maksymilian Opolski, of the Department of Interventional Cardiology and Angiology at the Institute of Cardiology in Warsaw, said in a press release.

Wireless Pacemaker shows promise

https://www.nlm.nih.gov/medlineplus/news/fullstory_154399.html

In a study presented at the European Society of Cardiology annual meeting in London and published in the New England Journal of Medicine, a tiny, wireless heart pacemaker in trial phase could offer alternatives to conventional, wired pacemakers, researchers report. The wireless pacemaker is attached to the heart using a catheter inserted through a leg. Traditional pacemakers use a generator and wires, and they require surgery to be implanted.

The study included 526 patients with an average age of 76, in the United States, Canada and Australia. During the first six months of use, the wireless pacemaker showed "good safety and reliable function," according to lead investigator Dr. Vivek Reddy, of the Icahn School of Medicine at Mount Sinai Hospital in New York City, and colleagues.

"It can't monitor patients remotely, so they have to go to the hospital for checks and cost twice as much as conventional pace makers," states Dr. Jagmeet Singh, a spokesman for the American College of Cardiology.

U of T research sheds new light on mysterious fungus that has major health consequences

http://www.eurekalert.org/pub_releases/2015-11/uot-uot112015.php

In a study published in journal PLOS Pathogens, researchers at the University of Toronto examined fungi in the mucus of patients with cystic fibrosis discovered how one fungal species has evolved to defend itself against neighboring bacteria.

A regular resident in the lungs of cystic fibrosis patients -the *Candida albicans* fungus is an "opportunistic pathogen." This means it usually leaves us alone, but can turn against us if our immune system becomes compromised. *Candida albicans* is a particularly wily fungus. Its signature maneuver is shapeshifting - it can morph from a round, single-celled yeast into a long stringy structure, allowing it to adapt to different environments and making it exceptionally harmful. For this study, researchers analyzed 89 mucus samples from 28 cystic fibrosis patients, using both high-throughput genetic sequencing as well as culture-based analysis. *Candida albicans* was predictably prevalent.

What surprised the researchers, however, was that some of these fungi began shifting into its stringy shape without any environmental

cue - usually this transformation doesn't happen spontaneously, but is triggered by the presence of certain substances, such as blood. To see if there could be a genetic explanation, the researchers sequenced the genomes of these samples and found a common denominator. All but one had genetic mutations in a gene known to repress the changing shape - called NRG1.

"We think the interaction between bacteria and fungus drove this," says Cowen. "Usually losing control isn't a very good thing, but in this case it may be a great defense mechanism for *Candida*. These fungi have essentially learned to ignore the bacteria."

Canadian-made blood pressure device that is worn on wrist gets clinical validation

<http://www.cantechletter.com/2015/11/canadian-made-blood-pressure-device-that-is-worn-on-wrist-gets-clinical-validation/>

Results presented in October at the Canadian Hypertension Society Conference, in Mississauga ON, the Canadian Cardiovascular Congress, on October 26, 2015, in Toronto ON, and on November 3 and 4, 2015 at the 7th Annual New Brunswick Health Research Conference in Fredericton, reveal that a non-invasive, wrist-worn blood pressure monitor developed by Cloud DX is comparable to an intra-arterial blood pressure catheter in an independent clinical validation study performed at the New Brunswick Heart Centre in Saint John.

Cloud DX's Pulsewave device was found to be within 5 to 10 mmHg of the direct catheter blood pressure readings, according to the study. The study concluded that "Pulsewave wrist cuff measures can be as accurate and precise as arm cuff measures in a real world patient population" and that "repeated BP measures at home, by the patient, enable clinically informed decision making; improve triage options for frail, obese and hypertensive patients, while enabling whole practice monitoring of blood pressure and assessment of drug efficacy or adverse events."

Needle-free blood draw technology to be tested at Utah hospitals

<http://www.ksl.com/index.php?sid=37339157&nid=148&title=needle-free-blood-draw-technology-to-be-tested-at-utah-hospitals&scid=queue-14>

One in 3 hospital patients is stuck with needles at least twice a day during their stay, he said, sometimes for the same blood draw procedure. Multiple pricks cause bruising, making it difficult to find a vein and sometimes leading to more sticks. A partnership between Intermountain Healthcare and Velano Vascular is investigating technology to "reduce the pin-cushion effect," with blood draws according to Velano spokesman Eric Stone.

The Velano technology, Stone said, is a "single-use, disposable medical device" that allows a blood draw to be done through a peripheral catheter that is already placed in most patients' hands or arms for drug, nutrient or saline infusion. The catheter has been effective for infusing fluid but not good for pulling blood back," he said. The new device then uses the IV catheter as a conduit to pull lab-quality samples. "It's simply a tube-in-a-tube approach." The "needle-free" technology, he said, is the first medical device where "the human compassion element really hits home and makes sense."

Continued on page 14

PICC Dwell Time Not Tied to Infections in Infants

<http://www.medscape.com/viewarticle/854522>

In a recent study published in Pediatrics, clinicians need not routinely replace uninfected peripherally inserted central catheters (PICCs) to prevent infection in infants, but should remove tunneled catheters before week 7 if no longer needed.

"Central catheters are life-saving interventions for infants in the [neonatal intensive care unit (NICU)], but are associated with central line-associated bloodstream infections (CLABSI)," writes Rachel G. Greenberg, MD, from the Duke Clinical Research Institute, Duke University School of Medicine, Durham, North Carolina, and colleagues. "Previous studies have provided conflicting results on the impact of catheter dwell time on risk of CLABSI."

New Diagnostic Tools Emerge in War against Superbugs

Wall Street Journal (11/16/15) Roland, Denise

<http://www.wsj.com/articles/new-diagnostic-tools-emerge-in-war-against-superbugs-1447703534>

Companies are moving away from the development of new drugs to battle antibiotic-resistant superbugs and investing in developing diagnostic technologies that can pinpoint the cause of infections. This move can reduce the unnecessary prescription of antibiotics, which is a major driver of drug-resistance bacteria. Traditional diagnostic testing can take several days for results and leading to over-prescribing more than 25 percent of the time, according to a 2013 U.S. study published in the Journal of Antimicrobial Chemotherapy

Sticking It to the Patient Less Often

Iowa Now (12/02/15) Snee, Tom

<http://now.uiowa.edu/2015/12/sticking-it-patient-less-often>

An invention from the University of Iowa (UI) could make it easier for nurses to insert IV catheters. Robert Anderson, a registered nurse, led a multidisciplinary team in developing the Segmented Stabilization System. Similar devices are on the market, but the product is tailored to peripheral, thin-walled veins. The device uses a flexible guide wire to direct a catheter into a blood vessel while protecting the vessel's interior wall. Anderson believes this will limit unsuccessful IV placement attempts and decrease the number of pokes for patients. The product has licensed to a company in China and a product could hit the global market within the next couple of years. It is expected the company will seek approval to market in the United States.

Job-Seeking Nurses Face Higher Hurdle as Hospitals Require More-Advanced Degrees

Wall Street Journal (10/15/15) P. A3 Sussman, Anna Louie

<http://www.wsj.com/articles/job-seeking-nurses-face-higher-hurdle-as-hospitals-require-more-advanced-degrees-1444849456>

Hundreds of thousands of Americans flocked to nursing schools over the last 10 years, drawn by the prospect of a well-paying job with a degree that takes only a few years to earn. However, many graduates are finding that hospitals are now seeking nurses with more-advanced degrees, in response to an increasingly complex healthcare system. This trend in the nursing industry mirrors one unfolding in other sectors, such as manufacturing and office administration, which are demanding more education and skills than before. Some hospitals are requiring a bachelor's degree or higher for their nursing residency programs. Hospitals that do hire associate-degree nurses are increasingly putting provisions in their contracts that require completion of a bachelor's degree within a set period of hire.

CELEBRATE NATIONAL RADIOLOGY NURSE DAY

Tuesday, April 12, 2016 is National Radiology Nurse Day. This is a day to recognize those working in the specialty practice of radiologic and imaging nursing who advance the standard of care in the imaging environment. There are a few websites dedicated to products that can assist your department in celebrating this day.

1. [Brown Industries, Inc.](#) You can select from recognition pins, key holders, greeting cards, plaques, and desktop awards.
2. [NurseWing.com](#). There is a wide variety of nurse appreciation gifts to select from on this site.

In the past, hospitals have celebrated National Radiology Nurse Day by hosting pot lucks, or physicians have purchased breakfast or lunch. Nurses have made posters for the lobby explaining what radiology and imaging nursing is, which is not only to educate the public, but also their co-workers. You could also develop a kudos board for your department to promote and share what you appreciate about each other as co-workers.

Please share your celebrations so that they can be published in the Vision newsletter. Send your submissions to Sharon Lehmann at lehma006@umn.edu.





I AM A RADIOLOGY NURSE!

Christina L. Higgins

Why did you become a nurse?

I became a nurse because I loved the idea of spending my career caring for people. I also liked the diversity of the field of nursing. I can work in a hospital, school, the community, or in the business world.

What about nursing makes you happy?

I am happy when I spend time educating patients and families. I love the idea of empowering patients to care for themselves at home by preparing them with the education they need to do so.

I am happy being able to create a meaningful connection with a patient and bringing a smile to his/her face.

What has been the most amazing experience you have had as a radiology nurse?

There was a patient that came to radiology in new acute respiratory distress. I was very concerned they were going to require emergent intubation. When I called for help the physician, technologists, and another nurse from the department responded right away. The patient was able to have the procedures they needed and did not require intubation. It was amazing to be a part of such an excellent team. We acted quickly and efficiently.

What are the challenges you encounter and how do you overcome them?

There is always the struggle of feeling rushed to get the procedures done during each day. Sometimes, with this rushing, you as the nurse feel that you cannot take all the time you need to learn about your patient. At times, it feels as if there is a divide between the nurses and the technologists in our department. I try to overcome this by remembering that the patient comes first, and reminding others of this fact. The patient's safety and comfort are what is most important. I work each day to communicate with the technologist and physician about each patient. If they understand what my concerns are and why the delays occur, I then feel more supported by them.

What has your nursing journey been like?

I started out on a telemetry unit taking care of primarily post angiogram patients. I acquired my love of patient education while working on this unit. Most of the patients on this unit were admitted for less than 24 hours and so needed a great deal of education to prepare themselves for going home. Then, I moved to an intensive care unit (ICU). My time in the ICU was very important to my career as it has prepared me to care for critically ill patients. In the ICU, a nurse spends time educating families, rather than patients, and so my passion for education continued. Next, I have moved into radiology. Currently, I am perusing a Master of Nursing degree in nursing education.

At the end of a busy day, how do you find balance in your life?

I go home to my family and enjoy time with my husband and children. My girls can always help me to smile.

How has ARIN played a role in your career?

I attended the ARIN's Spring Convention in 2014. The courses offered were very helpful, but it was the discussions that occurred between the attendees that I enjoyed the most. ARIN included open discussions as a part of the conference. We would discuss staffing, what nurses do with downtime between cases, best practice guidelines, documentation, and much more. These discussions really made me appreciate how my department is managed, but I also learned ways to improve it too.

It was during the ARIN Spring Convention that I first learned about the certified radiology nurse (CRN) exam and the ARIN review course to prepare for the exam.

We hosted the ARIN 2 day review course at my hospital to prepare our nurses for the CRN exam. We had nurses attend from other hospitals in Minnesota, and even other states. The course was helpful, and the opportunity to network with other radiology nurses in the area was priceless.

"I Am a Radiology Nurse" features unique Radiology Nurses in everyday practice. To be featured in this column, contact Liz.boulter@arinursing.org

NOA REPORT

By: Evelyn P. Wempe, MBA, MSN, ARNP, ACNP-BC, AOCNP®, CRN®

On November 19th through the 21st, Mary Sousa, ARIN President and Evelyn Wempe, ARIN President-Elect, had the opportunity to attend the 14th Annual Fall Summit held by the Nursing Organizations Alliance (NOA) in Palm Springs, California. The purpose of the NOA Fall Summit is to bring nursing organizations together that represent the various specialties in the nursing profession and discuss issues and common interests to foster growth and advancement.

Highlights from the 2015 NOA Fall Summit included:

- Discussion on Health care reform, its transformation and how it impacts nursing
- Advancing Diversity and Inclusion within associations
- Association membership and millennials – The value of becoming and retaining members, staying relevant in an era of social media and technology advancement
- Interprofessional Practice and Education to advance the profession and improve patient outcomes

In addition to the wonderful topics discussed at the Summit, ARIN was selected to present at NOA's Wow Session: Associations of Great Impact. The goal of the session was for associations to discuss activities that have had a great impact within the organizations, among its members and within the nursing profession. ARIN presented key activities in the discussion panel that focused on what we, as an organization, have done this past year to increase the visibility of radiology and imaging nursing and voicing the vital role the nurse in the radiology and imaging environment. Key points presented were on international membership growth, improvements with ARIN's website for easier accessibility by members, offering more imaging review courses including virtual courses to reach members who are unable to attend a live course, more educational opportunities through webinars, and free CEUs via the Journal of Radiology Nursing.

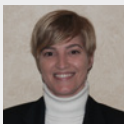
Overall, the NOA Fall Summit was a wonderful experience which provided Mary and Evelyn the opportunity to network and initiate discussions relevant to ARIN and how we can continue to foster, promote and generate ways to continue to increase visibility to the radiology and imaging nursing specialty.

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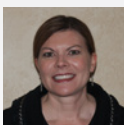
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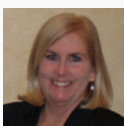
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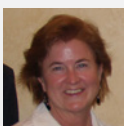
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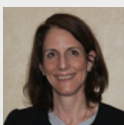
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