

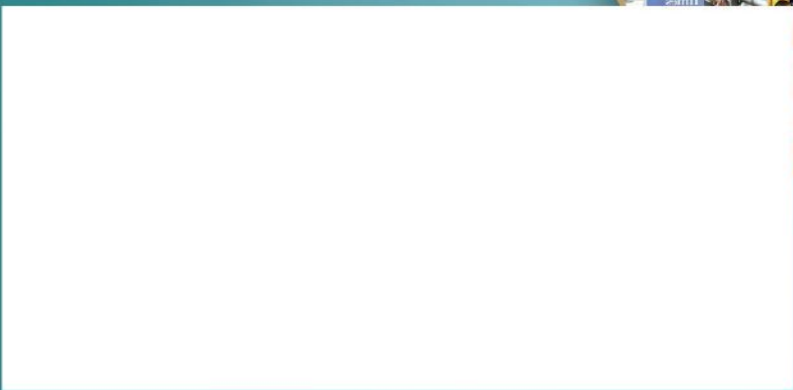
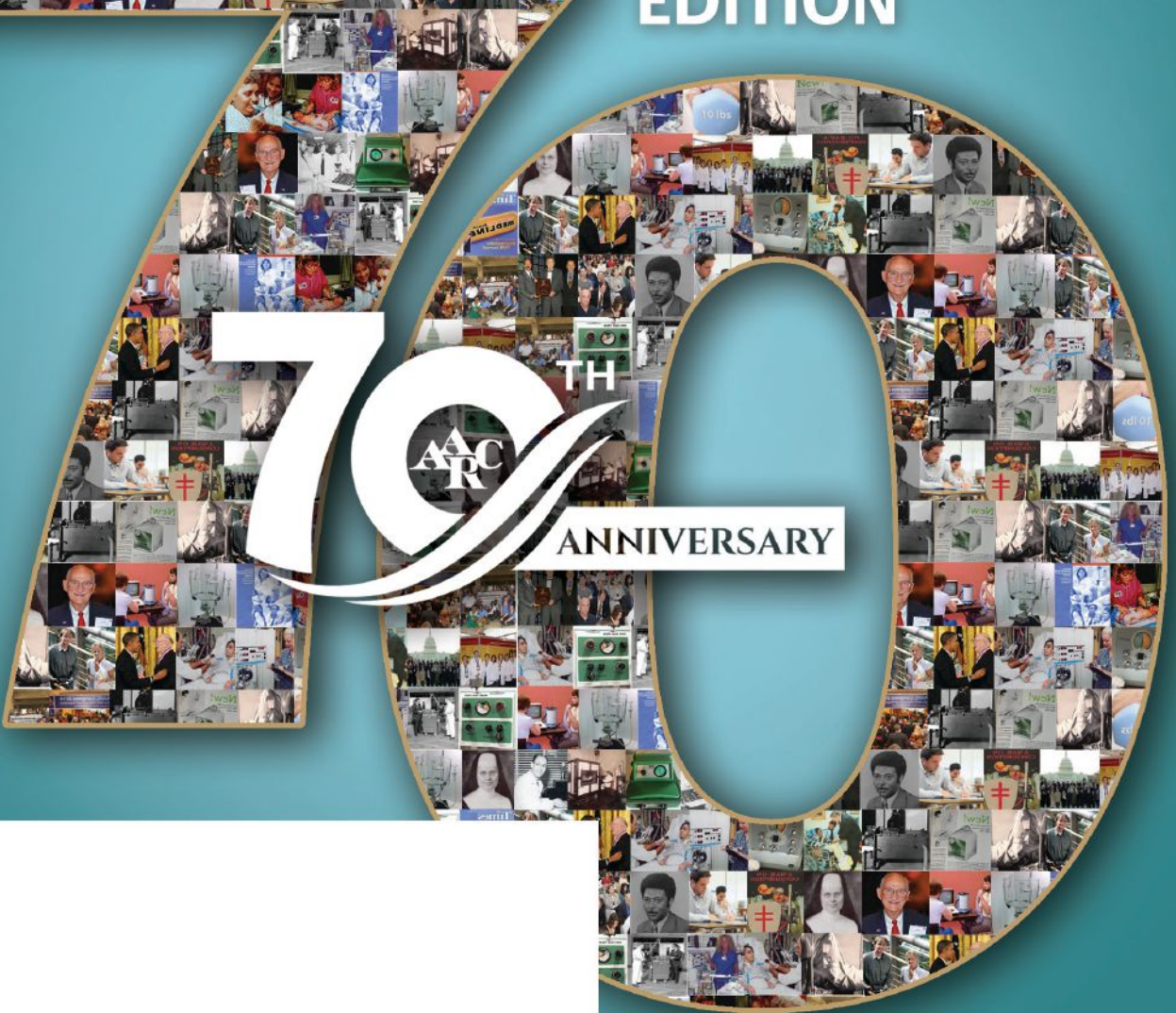


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AARC Strategic Plan

The American Association for Respiratory Care has a Strategic Plan that includes its Mission and Vision Statements for 2015–2020.

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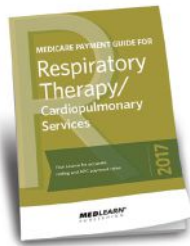
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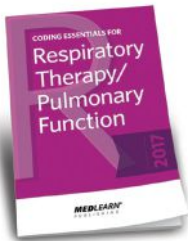
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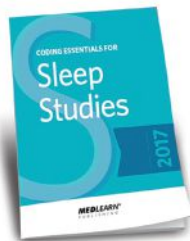
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Skin Integrity and the NIV Patient

by Brady Scott, MSc, RRT-ACCS, FAARC

Noninvasive ventilation (NIV) is the application of positive pressure, in the absence of an artificial airway, to augment alveolar ventilation, improve oxygenation, assist cardiac function, increase lung volume, and unload respiratory muscles.¹ In the acute-care setting, the major clinical goals of NIV are to decrease work of breathing, improve gas exchange, and avoid endotracheal intubation. It can be administered using various interfaces such as nasal masks, oronasal masks, total face masks, and helmets. The benefits of NIV are well documented; its use may decrease the incidence of hospital-acquired infections and reduce mortality.²

While there are clear advantages to using NIV in the acute setting (when no contraindications exist), there are associated complications. These range from claustrophobia, an increased risk of aspiration, and facial skin breakdown. Recently, the issue of facial skin breakdown resulting from NIV interfaces has garnered attention. Since respiratory therapists are vital in the successful application and management of NIV, they must be keenly aware of the risk of facial skin breakdown and skilled in techniques to reduce the risk to the patient.

The expanding role of NIV

The role of NIV has expanded over the years as technology has evolved and evidence for its use has strengthened. Today there is sound evidence to support the use of NIV in the setting of acute cardiogenic pulmonary edema and exacerbations of obstructive lung disease. Evidence for application in other patient populations is continuously mounting, including acute asthma, immunocompromised patients, post-extubation, pre-intubation, postoperative

respiratory failure, acute respiratory distress syndrome, and palliative care. While the exact frequency is unclear, the use of NIV is increasing. One study reported that NIV use in acute respiratory failure increased from 29% to 42% from 1997 to 2011.³ These findings were consistent with other studies.⁴⁻⁹ The increased use of NIV could result in a rise in the incidence of facial skin breakdown. This underscores the need to understand and execute appropriate prevention, recognition, and treatment.

about the author...



Brady Scott, MSc, RRT-ACCS, FAARC, is the director of clinical education and assistant professor for the respiratory care program at Rush University in Chicago, IL.

Reducing facial skin breakdown

Before action can be taken to reduce facial skin breakdown, it is important to understand how it occurs, how it is classified, and which patients it affects the most. Skin ulceration develops from pressure and periods of ischemia. Excessive skin moisture due to contact with mask components also increases the frequency and severity of ulceration. Pressure ulcers can develop from the epidermis to deep tissue. The severity of a pressure ulcer is classified in stages 1-4. Stage 1 is defined by an area of non-blanchable redness that can be painful, soft, and differing in temperature from the surrounding skin. Stage 2 pressure ulcers show some dermal loss, such as an intact blister or skin tearing. In stage 3, subdermal elements can be

visualized. Stage 4 wounds are considered full-thickness tissue loss with exposed bones, muscles, or tendons.¹⁰ Many patients, both acutely and chronically ill, are at risk for developing facial skin breakdown (see Table 1).¹¹

Pressure and moisture are contributing factors to facial skin breakdown, both of which an RT can directly influence. Excessive pressure is likely the result of at-

Table 1: Risk factors for facial skin breakdown

• Acutely ill
• Chronically ill
• Hypoxemic
• Hypotensive
• Decreased level of consciousness
• Vascular disease
• Malnutrition
• Dehydration
• Chronic skin condition
• Over-tightened mask
• Poorly fitted mask
• Pressure, shear, or friction from mask
• Edema
• Shape and size of face
• Length of time mask is applied
• Inability to self-adjust mask

tempts to reduce leaks around the mask by overtightening the interface straps. Other than being uncomfortable for the patient, leaks around the interface can be the source of many problems, such as cycle, trigger, and flow asynchrony. To avoid facial skin breakdown, instead of overtightening the interface, the leak should be managed with a properly fitted interface. Sizing tools are packaged with masks that are commercially available and should be used. The proper use of these sizing guides and gauges can improve the mask fit, reduce leakage around the interface, avoid wasting equipment, and reduce cost.

After assuring the mask is properly sized, there are additional steps that RTs can take to prevent facial skin breakdown (Table 2). The bridge of the nose is a common area of concern with regard to skin damage from NIV. In fact, it has been reported that breakdown of nasal skin occurs in 5–20% of patients.¹² Because of this, RTs should rotate between oronasal masks (commonly used in acute care) and full-face masks. This distributes pressure over a larger surface area and can reduce the incidence of pressure ulcers.¹³ Full-face masks have been shown to be effective, comfortable, and well tolerated by patients with acute respiratory failure.¹² These could be a viable option for RTs challenged with maintaining adequate gas exchange and skin integrity.

Reportable events

In addition to the negative impact that facial skin breakdown has on the patient, there is a direct impact on the hospital as well. The considerable cost and overall morbidity associated with the treatment of pressure ulcers has led to substantial changes to federal reimbursement. Stage 3 and 4 pressure ulcers (acquired after admission to the hospital) are now classified as serious reportable events. These changes have resulted in a reduction in reimbursement for the treatment of acquired pressure ulcers.^{10,12,14} Therefore, it is increasingly important to promptly detect and properly treat stage 1 and 2 pressure ulcers before they escalate into a more serious condition that will require public reporting and, subsequently, a negative impact on reimbursement.

The role of the respiratory therapist

Perhaps the most important role the RT can play is to be an advocate for the patient. The RT can promote proper skin assessment and interventions on all NIV patients, when indicated. Skin should be inspected in areas that are in contact with the NIV mask at least daily and any time that the mask is removed or repositioned.¹⁵ RTs can participate actively and communicate effectively as part of an interdisciplinary team to assure skin integrity is a priority. Finally, the technical expertise that an RT brings to this issue cannot be overstated: RTs understand and are familiar with NIV interfaces, clinical uses for each, alternatives, and even substitutes for NIV, such as a high-flow nasal cannula when possible.

Table 2: Ways to avoid facial skin breakdown

• Identify patients at risk
• Frequent skin assessment
• Minimize the pressure applied to skin (avoid overtightening of the mask/head-strap)
• Use correct size mask and headgear
• Use adjustable forehead spacer
• Rotate types of masks
• Allow the patient regular breaks from NIV (when possible)
• Assure clean, dry skin when applying NIV
• Use protective skin barriers (foam, hydrocolloids)



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The RT can prevent facial skin breakdown

Respiratory therapists should be diligent in the prevention of facial skin breakdown caused by NIV masks. Risk factor assessment, frequent skin inspection, and timely interventions are elements of care that RTs should take a principal role in to accomplish this goal and improve patient outcomes. ■

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Ensuring Safety in the Sleep Center

by Bryan Ellis, BS, RRT, RRT-NPS, CPFT, RPSGT

Merriam-Webster's online dictionary states that safety is the condition of being safe from undergoing or causing hurt, injury, or loss, and it is synonymous with protection, security, or safeness.¹ The World Health Organization clarifies that safety in health care is the reduction in risk of unnecessary harm associated with health care to an acceptable minimum.² Patient safety in the sleep center environment does not differ much from any other health care setting. It is the responsibility of the health care organization to proactively identify safety risks and determine what can be done to mitigate those risks to safeguard patients. The elements of safety in the sleep center extend to all persons who enter the sleep center, including patients, staff, and patients' family members. These elements include facility environmental safety, occupational safety, facility security, emergency management, and patient emergencies.

Risk Analysis

The first step in this safety process is to utilize a systematic process for assessing and managing these safety elements. Our facility adopted a six-step process: Planning, Teaching, Implementation, Response when needed, Monitoring, and Improving.

1. Planning involves assessment and analysis of facility spaces, equipment, and other resources that are needed to safely and effectively support the services and care provided. The planning process includes the development of routine processes, procedures, and policies.
2. Teaching involves educating and training staff about their roles in the processes to maintain the environment of safety established for

patient care. This also involves competency assessment of the staff's ability to consistently perform their roles.

3. Implementation involves actively carrying out the plans and processes that have been created and actively managing these elements to maintain safety.
4. Response involves an active response to a safety event, when necessary. Response is

participating in the safety event and following established processes to deal with the safety event.

5. Monitoring involves the evaluation of the developed processes for compliance of the implementation of the plans or processes.
6. Improving is simply using the results of the monitoring and evaluation to assess whether changes are needed to processes and plans to improve safety in the organization.

Patient safety is assessed and implemented within each facility, and all of these processes are based

on regulatory health care requirements. Adherence to these regulations is implemented through accreditation agencies. For a sleep center to bill Medicare for outpatient sleep studies, The Centers for Medicare and Medicaid Services require that all sleep centers are accredited. The current local coverage determination policy for outpatient sleep studies in our jurisdiction in New Mexico is policy L35050, which states that all sleep centers should be accredited through one of three accrediting agencies: the American Academy of Sleep Medicine (AASM), The Joint Commission (TJC), or the

about the author...



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Accredited Commission for Health Care, Inc. (ACHC).³ The individual policies and accreditation standards of all three of these agencies address patient safety standards in either specific chapters or standards, or as part of more comprehensive safety culture that crosses multiple chapters and standards.^{4,6}

Patient Safety in Ambulatory Care

Our first responsibility is to assess what risks in our sleep lab environment could cause possible harm to patients, staff, and visitors. Safety is all-encompassing, and we have tried to create a safety culture by including risk assessment in the following elements:

- **Environmental Risks:** These risks are more focused on what is termed the “environment of care,” which addresses the three basic elements of the building/space of the sleep lab and how it is arranged to protect patients, staff, and visitors; the equipment that is used in patient care and within the operation of the building/space; and the how staff works in the building/space and their responsibilities for minimizing risks.⁵ For example, the physical layout of the building, such as stairs, steps, carpets, or changes in floor grades, may represent fall risks to ambulatory patients or patients who require assistive devices. Additionally, the layout of patient care areas relative to office areas are important for security-sensitive areas.
- **Emergency Management Risk:** Emergency management looks at how a number of potential emergencies (natural hazards, technological hazards, human hazards) could occur and would affect the safety risks of the patient(s) while in the sleep center or how it could disrupt the ability of the sleep center to continue to provide care. The initial planning portion in managing this type of risk involves the development of an emergency management plan (EMP). One of the most common methods used to develop this EMP is with a tool referred to as a hazardous vulnerability analysis (HVA). This HVA tool is widely used throughout many federal and state agencies and local communities as well.
- **Hazardous Materials:** Identifies what hazardous materials may be used in the sleep center/lab and how the patients, staff, and visitors may be possibly exposed to these agents. Hazardous materials risks that are in the community (industrial risk exposure) can be addressed in the HVA of the EMP.
- **Occupational Risks:** Community infectious risks can impact the sleep center. The influx of community infections can expose other patients and staff to infectious risks. Staff adherence to hand-hygiene procedures should be addressed. Additional risks from polysomnography (PSG) equipment, sensors, and positive airway pressure (PAP) equipment and supplies should be identified. Issues of disinfection of reusable masks and other supplies should follow specific manufacturer’s guidelines and Centers for Disease Control guidelines.⁷ Blood-borne risks are minimal due to the low-risk nature of sleep study procedures.
- **Human Resources (HR):** Risks associated with staff credentialing of independent practitioners, staff training, and staff competency assessments should be considered in the development of procedures, processes, and policies. Reassessment of these three HR-related activities should be included in monitoring and improving the goals of decreasing risks.
- **Building Safety and Security:** Facility security should be reviewed to note how patients enter the building during daytime hours of operation and how doors are locked to ensure staff safety. Nighttime security is usually different, but procedures and protocols should be established to ensure that staff and patient safety are maintained. Building safety is an essential aspect of any facility. The building safety includes utility safety, fire safety (e.g., fire alarm notification and fire suppression), ingress and egress illumination, and signage. If a sleep center is connected to a larger facility (e.g., a hospital), there is a strong likelihood that many of these building safety issues could be managed by the organization’s engineering staff. In this scenario, some of the risks could be of concern to the sleep center’s staff training purposes (e.g., evacuation, fire drills, use of fire extinguishers, etc.), but the sleep center staff may not be directly responsible for fire extinguisher maintenance, egress lighting, or signage. In a free-standing center, it is the responsibility of the center’s leadership to establish what areas are to be assessed and how frequently they should be assessed. In our sleep center, we have developed a facility inspection that is completed and documented each calendar month. In each review, we inspect and document lighting at each exit and test each

light (battery function in case of power loss), test each smoke detector (battery function), inspect each fire extinguisher (pressure gauge), check emergency oxygen tanks, and check emergency resuscitator bag equipment.

- Patient Emergencies: Protocols for patient emergencies should be established to identify what defines an emergency and what type of emergency dictates a specific intervention. Supplemental oxygen for use in PSG testing and PAP therapy is frequently delivered with oxygen concentrators, but high-flow emergency oxygen should be available. Bag-valve resuscitators should be available for use when indicated, providing staff are trained in their use. In case of need for cardiopulmonary resuscitation (CPR), all staff should be trained and maintain CPR certification. In the event that advanced life support is needed, entry into the emergency medical system should be initiated. In a hospital-associated facility, protocols should be established if entry into a rapid response system is immediately available. In a free-standing facility, entry into the community 911 system is required.

Although many of these elements may be individually recognized as different parts or pieces in an organization's many programs, policies, and processes, they overlap in scope and make up a comprehensive safety policy.

In summary, safety in a stand-alone facility is similar in most aspects to any other ambulatory care environment, with the difference of available resources. A sleep lab or sleep center that is part of a larger health care organization, such as a hospital or hospital system, may have additional resources within the larger organization that may bear responsibility to maintain many of these elements. In a free-standing ambulatory environment, the leadership in the sleep lab bears the ultimate responsibility for identifying possible safety risks, establishing and implementing actions to mitigate risks, and establishing actions to take when events occur.

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Executive Office Update

Your AARC Membership Is an Investment in *You*

by Thomas J. Kallstrom, MBA, RRT, FAARC

Have you ever wondered where the money you give to the AARC for your membership investment actually goes? It is a fair question, and one that deserves an answer. We all work hard for our paycheck, and you should expect your professional association to be fulfilling its mission. So let's take a closer look.

The AARC offers many benefits to members, and it is easiest to group them into the following categories:

- Membership Services
- State Society Support
- Government Affairs
- Education Services
- Publication Services

Membership Services

Our Membership Services team provides support to members who contact us by email or telephone. This includes our ability to provide members access to our networking platform, AARConnect. We are proud to be able to offer immediate support to our members when you need us. Each time you call the AARC office, you will speak with a member of the AARC team. We do not, nor will we ever, put in place an automated calling system that instructs our members to listen to a long message directing them to hit a number of keys on their phone, only to get to another recorded message that directs the caller to go to our website. I find that very exasperating—don't you?

When you call the AARC, we will be able to help you with a real person on the other side of the phone. Twenty-four percent of your membership dues cover these services.

State Society Support

Did you know that the AARC annually gives back to your state chartered affiliate \$13 (14% of annual membership dues) from your membership dues for each member in your state? This allows the local operations of your chartered affiliate to have the financial support that they need for their activities. Additionally, state societies that sign the Association's revenue-sharing agreement are eligible to co-market with the AARC and receive additional remuneration on multiple products and services sold from the AARC.

State Society Support also includes grants that the AARC provides to state-chartered affiliates. In addition to this, our Political Advocacy Contact Team (PACT) needs this funding for the annual Hill Day in Washington, where RTs have face-to-face meetings with federally elected officials to promote the needs of our patients and profession. This year we will again focus on the respiratory therapist's need to be

recognized in telemedicine.

Another benefit for members under this umbrella is the Disaster Relief Fund, which is made available to members who have property that was damaged in an area designated as a declared disaster, usually due to tornados, hurricanes, floods, or other natural disasters. This relief comes in the form of \$500 and an additional year of membership of the AARC. To date, the AARC has given out over a quarter of a million dollars for our members in need. A portion of this comes directly from your dues. Not to be overlooked, funding is also provided for the AARC's annual affiliate state

about the author...



Thomas J. Kallstrom, MBA, RRT, FAARC, is executive director of the AARC.



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By Richard Casaburi MD MEngr PhD

leadership meeting and House of Delegates participation, both of which have representation from your state. Overall, support to state societies and the Disaster Relief Fund make up 24% of your dues.

Government Affairs

Government Affairs is another important service that directly impacts the respiratory care profession. We use the funds provided in this area to support our lobbyists in Washington, DC. Our lobbyist team in Washington works directly with the U.S. Congress, making sure that our initiatives are known and supported. In addition, our government affairs staff works tirelessly to keep abreast of state and federal issues to advocate on behalf of respiratory therapists, the profession, our patients, and the Association. These staff members work with our state affiliates to monitor state legislation and regulations that have an impact, positively or in some situations negatively, on the respiratory therapy profession and/or pulmonary patients in that state.

Working with state society leaders to devise strategies to best support or oppose new state initiatives is a key element of our Government Affairs mandate. On the federal side, monitoring federal regulations that have an impact on respiratory therapists and our patients is also very important. The AARC makes our position known to the government through public comments on a variety of issues essential for us as we work to obtain optimal reimbursement and coverage of the services provided by respiratory therapists. These comments can be found on the front page of our website, www.aarc.org, under Moving the Profession Forward. Combined, 13% of your dues support Government Affairs services.

Education Services

Education is an important and necessary benefit. In fact, all members are able to receive over 50 continuing education credits annually at no cost. This is likely more than you would ever need for licensure requirements in one cycle.

In addition, members enjoy reduced costs when attending all AARC-sponsored educational meetings and when taking advantage of more than 100 courses in our AARC University. Eleven percent of your member dues support Education Services.

Publication Services

Our members continue to find value in being up to date on the profession through our publications, *AARC Times* and *RESPIRATORY CARE*. We distribute both of these highly respected publications as either paper or electronic versions. Interestingly, more than 75% of our members prefer the electronic version of the publica-

tions, and in doing so, pay less for their membership, thus passing the savings back to the member.

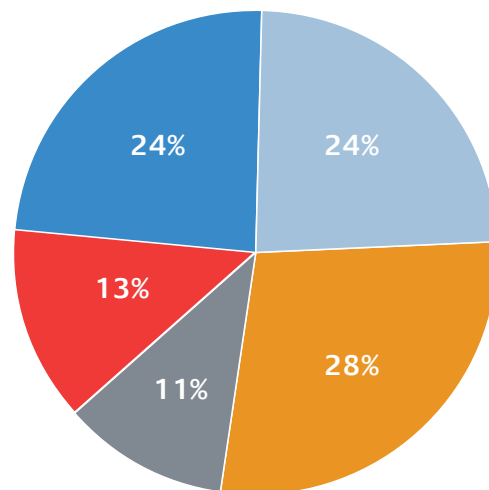
Twenty-eight percent of your membership dues pay for Publication Services. Unfortunately, this does not cover all costs of the publications, such as the salaries of the personnel who write and publish these magazines.

A friendly challenge

The revenue that the AARC collects in membership dues annually covers only a portion of the expenses necessary to run an organization of our size and outreach. The intention of this month's column is to allow you to take a closer look at member services and to highlight the membership benefits pertinent to the practicing RT.

I challenge you to look at any similar-size medical association, and you will see that the cost of membership to the AARC is significantly less. In addition, the member benefits provided by the AARC are greater than those provided by other associations — and at a lower cost.

Sadly, only one third of practicing RTs are members of the AARC. We need to change this and get the message out to all practicing RTs that there is more power in greater numbers. Membership in the AARC is an investment in you, your patients, and our profession, and I thank you for your commitment to our profession. ■



- Membership Services
- State Society Support
- Gov. Affairs
- Education
- AARC Times and RC JOURNAL

General Counsel

So You Want To Run Your Business

by Anthony L. DeWitt, JD, RRT, FAARC

Across the country, entrepreneurial therapists have from time to time developed ideas for commercial products, set up companies, and become successful business people. Starting a company, whether it will sell items for therapists or offer consulting services to hospitals, is a daunting task that requires business acumen that is beyond the scope of this column. But one thing is certain: if you set up a business, and you intend to profit from it, you had better take pains to ensure that your investment and future are protected.

The first step in protecting yourself is understanding the risks, and understanding the processes that are available to help you minimize those risks. That requires you to spend some money up front for a good attorney to help you set up your business venture, and for an accountant to give you good tax advice.

One of the most common questions lawyers get is “Can I incorporate myself?” The answer is yes. There are services available to provide you with incorporation documents and to guide you through the process to form a corporation. But, just because you can incorporate, doesn’t mean you should incorporate. Deciding which business form to use depends a lot on what kind of business you’re creating. And the only way to decide this is to have someone who evaluates risk for a living help you.

Just as there are lots of different meds you can drop into a nebulizer, there are multiple forms of businesses and many different ways to protect your assets. This is where an attorney earns his money.

A corporation is a virtual person. Although it has no body, it can sue and be sued. It can commit crimes and be punished. Its actions, however, can only be carried out

by its employees and officers. It is created by filing documents with your state’s Secretary of State or Corporation Commission. A corporation, once created, requires regular maintenance, much like a car. The corporation has to do more than just exist on paper. Officers have to be appointed, and those officers have to have annual meetings. It must record its acts through resolutions retained

in the corporate record books. It must be adequately capitalized. If it does these things, then its acts become the acts of a corporation, and if it errs badly and injures someone, then usually only the corporation, and not its shareholders, can be sued. However, if the act causing liability is that of a corporate officer, both the officer and the corporation may be liable. If the act is outside the regular scope and course of the employee’s duty, that officer or employee may be directly liable but the corporation may escape liability. If you thought a corporation was the answer to every business problem, think again.

A more recently invented business form is the Limited Liability Company (LLC) or Limited Liability Partnership (LLP). These business entities are usually one-time creations that are created for a definite number of years, and for which no corporate records need be kept. If an LLC is sued, only the business entity, and not the person

who formed the entity, is liable. While some states have judicially modified this principle, in most states it remains absolute. I often do business as a consultant through Penumbra Seminars, LLC, a company registered in Missouri.

Partnerships and Limited Partnerships are additional business forms that offer some protection from liability,

about the author...



Anthony L. DeWitt, JD, RRT, FAARC, is an attorney and a partner in the firm Bartimus, Frickleton, and Robertson, PC, and resides in Opelika, AL. He has also published two books and numerous legal journal articles. This article is not a substitute for legal advice.



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although that protection is not absolute. In some cases they may be better options depending on the type of services your business will provide.

Simply forming a corporation or an LLC will not necessarily result in the protection of your assets, however. You have to act through the corporation. If you form the IMARRT Corporation to sell your smoking cessation materials, you'll need to bring the materials under the corporate form by placing the assets in the corporation. This is usually done by "assignment." An assignment allows a person (e.g., the woman who wrote the smoking cessation materials) to "assign" her copyright to the corporation. If someone sues for some other tortious act, the corporate form will protect the person who owned the copyright from liability, provided she did not take action outside the corporate form.

Tax consequences require accounting advice. For example, corporations are taxed separately from their owners. So if the corporation makes \$100,000 in a tax year, and it pays its owner \$50,000, the corporation will pay tax on \$100,000 and the owner will pay tax

on \$50,000, even though the corporation has already been taxed on this sum. Because of this double-taxation issue, many people now use the Limited Liability Company because it has the ability to be taxed like a partnership, yet preserves the liability protection. A partnership is taxed on what is paid to the partners. So if the LLC makes \$100,000, then the owners pay tax only on \$100,000.

In addition to tax advantages, Wyoming offers those who want to form an LLC a unique form of protection. The Wyoming Secretary of State will only reveal the name of the person who formed an LLC. It will not reveal the names of the person or persons who own it. So if a lawyer opens the LLC, and then hands it off to the owners, only the owners know who is actually in control. This makes it difficult to sue the owners or pierce the corporate form in court. It does not, however, make the company immune from a lawsuit.

All corporate forms, whether they be corporations or LLCs, must have a "registered agent." The registered agent is the person whose job it is to receive lawsuit documents. So if IMARRT Corporation is sued for bat-

tery, the lawsuit papers are served to the registered agent. That agent is often the attorney who formed the corporation, but anyone can be a registered agent, including the owner. The most important duty for a registered agent is to accept and forward lawsuit papers.

Just as there are companies that will help you form a corporation, there are companies that are willing to be your registered agent. One must be careful to keep these registered agent companies up to date with key corporate information. In a recent case, a company was sued on a contract debt but had not provided the registered agent company with a good address for the delivery of documents. Had the registered agent company used the United States Postal Service, the mail would have been forwarded. But it used Federal Express, which does not forward mail, so the lawsuit papers were never received. As a result, a default judgment in excess of one million dollars was entered on a spurious claim.

A good attorney, in addition to giving you advice on what corporate form to use, can also help with suggestions about how to structure your business. For example, if two friends form a partnership, and both own 50% of the business, what happens when there is a disagree-

ment? An operating agreement setting out what happens when there is a disagreement, how disagreements are resolved, and how the company can be unwound at a later date are all very important considerations that can be handled by a competent attorney.

Even though a corporate form like an LLC can help protect assets, every company, no matter how large or how small, needs a good comprehensive general liability insurance policy that covers the negligent conduct of its employees. This is especially true if the company owns vehicles or employs people who will take care of patients. Every employee should be encouraged to have their own professional insurance if they are providing professional services. Good insurance ensures that if someone comes looking for easy money by raiding the corporate coffers, an attorney is available to defend the action and a fund of money is available to pay damages.

If you're thinking of forming a business, your first step should be to speak with a lawyer, and your second step should be to engage an accountant. Legal and tax problems tend to be the things that cost most entrepreneurs their businesses. Planning in advance is the key to success. ■

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Coming of Age

Overcoming the Stigma of Palliative Care

by Helen M. Sorenson, MA, RRT, FAARC

When is the last time you saw an order for a “palliative care consult” or “palliative care only” on the patient’s chart? Because of increased awareness and advanced training, there is a trend for hospitals to employ palliative care physicians, so these orders may become more common. Before I continue, let me give you an analogy.

Many (older) therapists may remember the song that goes “Love and marriage, love and marriage, go together like a horse and carriage...” We now know from statistics that love and marriage do not always go together. Palliative care and hospice have been equated to “love and marriage” in the health care setting, in that they go together or imply the same thing. If you consider the definitions of each of these interventions, they are clearly not the same.

Hospice is a service that patients qualify for when the physician documents that he or she would not be surprised if the patient died within the next 6 months. Palliative care is, and has always been, control of a bothersome symptom. Because most physicians are diligent in providing palliative care to their dying patients, the line between the two has become blurred, so that they are now considered synonymous. Unfortunately, patients also perceive that palliative care is reserved for the dying, so they decline this when it is offered. This is how the stigma associated with palliative care developed.

Recent psychological research has provided insights into how stigma operates to disadvantage those who are targeted by it.¹ Chronic illness can lead to experienced or anticipated stigma within the health care system. Where morbidity rates are available, statistics suggest that more than 50% of adults are living with at least one chronic disease.² It is not just the health care system that

perpetuates stigmas. Structural stigmas, defined as societal-level conditions, cultural norms, and institutional policies, can constrain opportunities and resources, and thus the well-being of those stigmatized.¹

Stigmas are hard to overcome. They are defined as something that detracts from the character or reputation of a person, or an indication that something is not considered normal. Stigmas unfortunately do exist in health care institutions. Patients diagnosed with HIV,

drug abuse, COPD, and even insulin-dependent type 1 diabetes have experienced stigmatization, sometimes hinting that they just suffer from the “blame and shame diseases.”³ Patients with COPD struggle with dyspnea, excess secretions, and coughing. A 2011 study described the experiences of stigma related to social changes from the perspective of adults with moderate to severe COPD. The 16 participants in the study were all aware of the potential stigma related to their disease. They perceived blame related to smoking, whether real or not, from friends, relatives, health care professionals, and even themselves. Their reduced social activities, which realistically might be related to their functional limitations, could have also been an attempt to avoid potential stigmatizing.⁴ Failure

to understand the difference between hospice and palliative care can also create stigmas.

Is this what we are dealing with? Are patients and family members, fearing that palliative care equates to hospice care, saying “no, thank you” to any interventions that would imply loss of hope? If the distinction between palliative care and hospice is not presented to the patient, we should not be surprised by their ambiguous response.

about the author...



Helen M. Sorenson, MA, RRT, FAARC, retired after teaching respiratory care for 33 years. She is currently serving as Adjunct Faculty at UT Health in San Antonio, TX.

What is needed, according to Lilly and Senderovich, is a new paradigm for palliative care.⁵ This would be an integrative approach to introduce palliative treatments along with disease-modifying interventions. This might be an “end-around” maneuver to circumvent the difficult prognosis associated with COPD. Thus, any patient with COPD would receive individualized palliative interventions based on their symptoms from the time of their diagnosis. Understanding that “palliative” means comfort, not dying, might help eliminate some of the stigma.

Is this issue related to terminology? Over the years, labels such as curation, palliation, palliative medicine/palliative care, best supportive care, supportive therapy, and palliative therapy have been used.⁶ In 2013, a small study was conducted to see if patients understood the term palliative care. A telephone survey of 169 patients with advanced cancer were asked about future needs of services for themselves or their families. They were randomized to hear either the term “palliative care” or “supportive care” during the phone call. Those who heard the term “supportive care” had a greater understanding of services (7.7% vs 6.8%), and an overall favorable impression of services for themselves and for their family (8.6% vs 7.7%). Regardless of an effort by many in the field of medicine to separate hospice from palliative care, misunderstanding still exists.⁷ In 2010, a randomized controlled study of early palliative care was conducted with 151 patients with metastatic non-small cell lung cancer. All patients received standard oncology care, but those randomized received early palliative care. The FACT-L scale was used, in which scores range from 0 to 136. Higher scores in patients who received early palliative care indicated a better quality of life at 12 weeks than those who did not receive such care (98.0 vs. 91.5, $P = 0.03$), fewer depressive symptoms (16% vs. 38%, $P = 0.01$), and less aggressive care (33% vs. 54%, $P = 0.05$). Overall median survival was longer among patients receiving early palliative care (11.6 months vs. 8.9 months, $P = 0.05$).⁸

What are the barriers to palliative care? Unfortunately, sometimes it is us! A 2014 study investigated knowledge of and optimal timing for palliative care referrals in patients with heart failure. The conclusion was that palliative care referrals were suboptimal due to limited provider knowledge and misconceptions of palliative care.⁹ If we continue to see palliative care as a service available only to and reserved for those near death, we will never get past the stigma of patients saying, “I don’t need it yet, I am not dying.” The tendency toward thinking “cure or comfort” does little to help our patients with lung disease.¹⁰

How do we overcome any stigma? Information, education, and communication! In addition to pharmacological care of our COPD patients, we need to understand their suffering, their losses, and their limitations.¹¹ A palliative approach to their real and ongoing symptoms (dyspnea, anxiety, fear of exacerbation) using a holistic approach could empower them and contribute to a better quality of life.¹⁰ According to the legendary coach Bob Knight, “Good basketball always starts with a good defense.” What is our best defense—making sure that the terms hospice and palliative care are understood correctly. The ball is now in our court...let’s see how many 3-pointers we can make. ■

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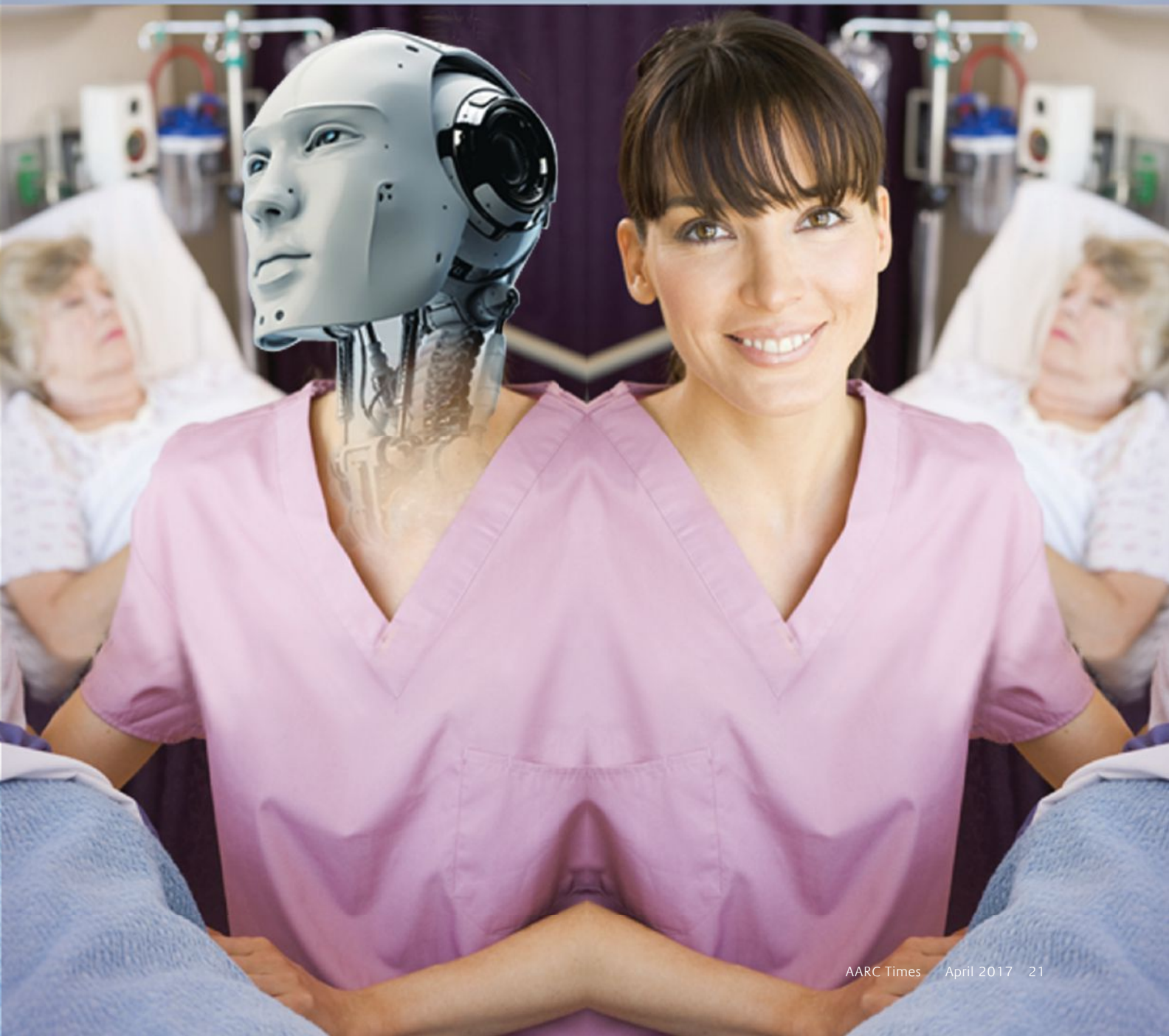

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— NO. —

Our patients don't want robots. They want compassion.

by Debbie Bunch



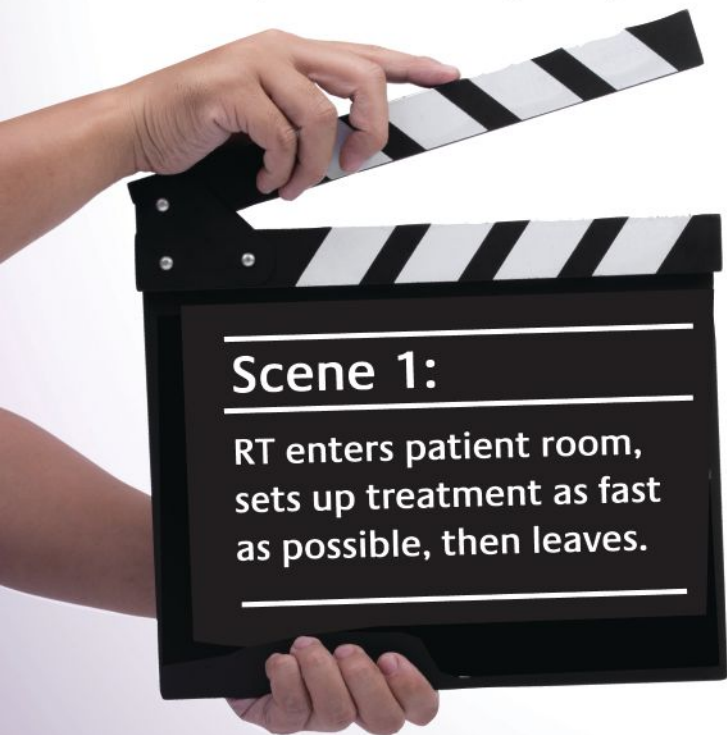
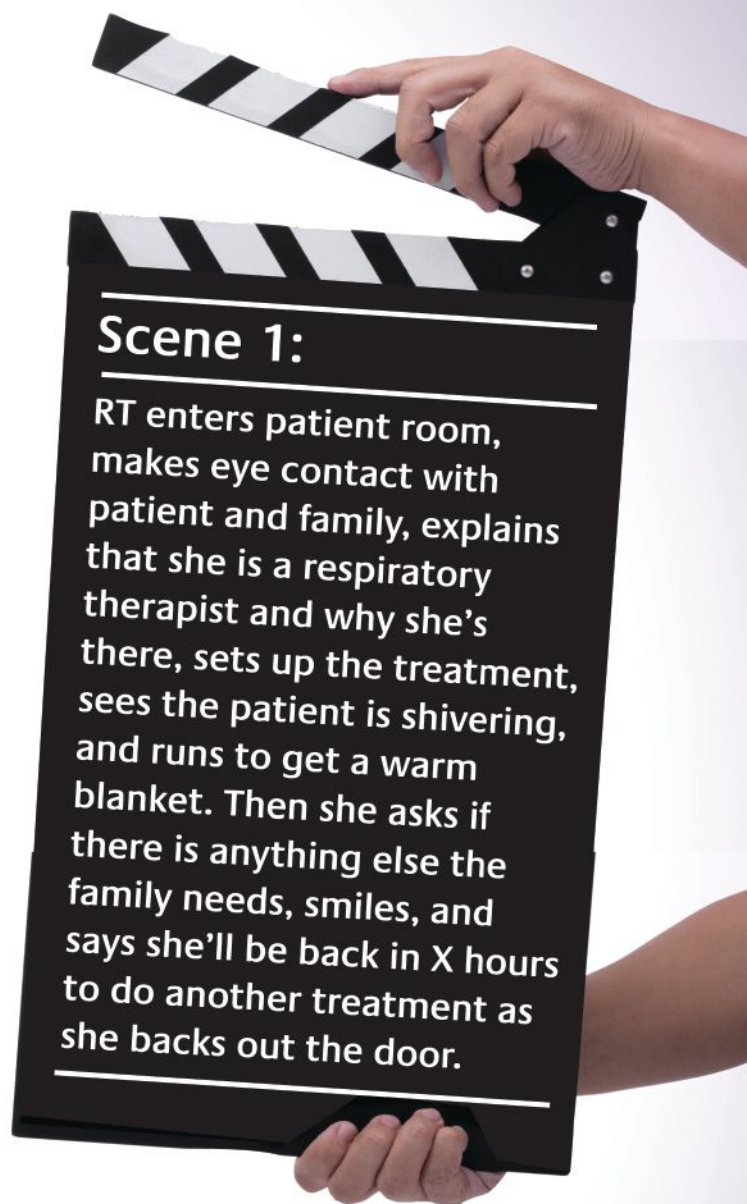
WHICH HOSPITAL WOULD YOU WANT TO GO TO IF YOU WERE IN NEED OF CARE?

Imagine two hospitals in the same town on a cold and icy night in February. Emergency rooms are packed with weather-related illnesses and injuries, and censuses are running close to full.

Two six-month-old babies with colds that get bad, then worse, then “I don’t know what this is.” Families bundle everyone up and head out the door, one to hospital A, the other to hospital B. Both infants are assessed, admitted, treated according to evidence-based guidelines, significantly improve, and go home two days later.

A week or so later, each mother receives a HCAHPS patient satisfaction survey mandated by the federal government to rate hospitals on the care they deliver. Despite similar overcrowding and hectic conditions in both hospitals that night, the mom who took her child to hospital A gives the facility overwhelmingly good marks. The mom who took her child to hospital B fails the facility on just about every measure.

Why the difference? It didn’t have anything to do with the competence of the staff or the treatments given to the children, or even with how long the families had to wait for services. It had to do with the compassion (or lack thereof) shown to them during their stay.



Room for improvement

According to a 2015 white paper from the Schwartz Center for Compassionate Healthcare, a nonprofit organization in Boston, MA, founded by health care attorney Ken Schwartz as he neared the end of his life in 1994 due to advanced lung cancer, the delivery of compassionate care leads to improved quality of care and better health for patients, as well as a deeper human connection with caregivers. For health care organizations, it results in lower staff turnover, greater patient loyalty, lower costs due to shorter lengths of stay, lower rates of re-hospitalization, and fewer costly procedures.

Unfortunately, compassionate care is not always a top priority for organizations or the clinicians who work for them. A 2011 study published in *Health Affairs* that surveyed 800 recently hospitalized patients and 510 physicians found that, while compassionate care was ranked as “very important” by nearly all, only 53% of patients and 58% of physicians believed the health care system generally delivers this level of care to patients.

As bedside caregivers, respiratory therapists are on the frontlines in health care facilities every day. How do RTs view compassionate care, and what do they do to ensure they deliver it?

Walk in their shoes

AARC member Susan Borque, CRT, from Goshen Home Medical in Goshen, IN, says she defines compassionate care as “having the ability to deliver care in a way that makes the patient feel as if they are the most important person to me.” She believes patients who receive this level of care end up feeling comfortable enough with their caregiver to ask questions and raise concerns, and that, in turn, empowers them to participate in their own care plan.

Michael Hess, BS, RRT, a chronic lung disease coordinator at Western Michigan University in Kalamazoo, likens compassionate care to knowing and understanding the whole patient. “Maybe they can’t afford their medications. Maybe they don’t really understand which ones to take at which times, and they’re afraid to look dumb or silly. Maybe they’re starting to have memory problems, and they’re in denial. Maybe they’re just frustrated with their nicotine addiction and don’t know how to ask for help,” he says. “When we lecture patients on what they’re doing wrong, instead of looking at how to make things right, we only end up isolating and alienating them.”

Kenneth Miller, MEd, MSRT, RRT-ACCS, RRT-NPS, AE-C, FAARC, agrees. “Compassionate care is the attempt to place yourself in the current physical and mental status of the patient or family that you are providing care for,” emphasizes the educational coordinator and dean of wellness for respiratory care services at Lehigh Valley Hospital in Allentown, PA. “It shows a real desire to provide the best care to the patient, which makes the patient feel confident that the care received is appropriate.”

An impact on outcomes

According to the authors of the *Health Affairs* study, strong evidence suggests that patients who receive compassionate care have both better patient care experiences and better outcomes. Adam Mullaly, BSRT, RRT, AE-C, a COPD navigator at Main Line Health-Bryn Mawr Hospital in Bryn Mawr, PA, has observed that “patients who have a perception that care is being delivered in a non-compassionate manner often become skeptical of the health care they are being provided, leading to increased and unnecessary anxiety.”

Those negative feelings can make it more difficult to acquire patient buy-in for the all-important patient care plans, says Gretchen Stanton, BSRT, RRT, who works as the pulmonary resources program RT at Hospice of the Valley in Phoenix, AZ. She also performs pulmonary function testing at a physician practice and is a clinical specialist for Hill Rom. “Over time, motivation and desire to take care of self diminishes, and their problems—physical, emotional, spiritual—become more profound,” notes Stanton.

Medical errors are more easily committed, too. “I believe when time isn’t taken to listen to a patient and their families, important things can be missed,” says Bradley K. Lavan, BS, RRT-NPS, vice chair of the Respiratory Care Clinical Practice Council and a respiratory therapist at Children’s Hospital of Pittsburgh of UPMC in Pittsburgh, PA. “These include medication dosing schedules, pain levels, and changes in clinical status. A lot of errors can be prevented when compassionate care is utilized.”

Key qualities of successful organizations

The problem with delivering compassionate care 24/7, of course, is that hospitals are extremely busy places that, while expecting compassionate care from their clinicians, often don’t give them the time or training it takes to actually make it happen. The Schwartz Center interviewed leaders at 35 hospitals and health systems across the country to find out where they stand on the issue of compassionate care. The Schwartz Center





found that health care organizations successful in driving compassionate care share some key qualities:

- They understand that employee experience drives patient experience and compassionate care, and that supporting caregivers is essential to the process.
- They incorporate compassionate care practices into their patient-experience initiatives.
- They are committed to involving patients and families in care improvement activities.
- Their hiring and training programs focus on compassion.
- They have a culture of experimentation, compassionate care champions, and units that model compassion and share successful strategies.
- They emphasize continuity of care and teamwork.
- They share patient experience data to drive improvement.
- They believe simple tactics can make a difference.

Addressing the time crunch

The AARC members contacted for participating in this article agree with most if not all of those tactics. The “time crunch” argument is one they especially believe must be addressed. “Scheduling and staffing levels can prevent any provider from providing adequate care, let alone compassionate care,” says Lavan. “Working short-staffed and within a small time window can decrease patient satisfaction scores and increase the likelihood of errors occurring.” He believes hospitals need to think past the bottom line to improve staffing and break up assignments into more easily manageable chunks to overcome these problems.

Steven Klyce, RRT-NPS, a therapist with the travel staffing firm PRCS, cites workplace conditions such as understaffing, low pay, long hours, high census loads, high acuity, and communication conflicts as factors that can derail compassionate care. “If the staff member is preoccupied by any or all of these detriments, then it is increasingly likely they would not be able to focus on individual compassion toward their patients or each other,” he says. “Facilities may not be able to realistically solve all of the details, but admitting to and making a genuine effort to eliminate the barriers will lift morale and foster a more conducive environment.”

Of course, clinicians need to hold up their side of the bargain, too. “Staff bears the responsibility not to abuse the time given,” emphasizes Stanton. That means using the extra time bestowed by management on patients and not on social media, roaming the halls, conferencing in the cafeteria, or other personal pursuits. Klyce adds that facilities must guard against clinicians who exhibit a false type of compassion, too, such as looking upon the patient with pity. Patients want to be understood and cared for; they don’t want to be viewed as pitiful or helpless.

Training is vital

That’s where training comes into play. “I think providing education to health care providers—such as AIDET, crucial conversations, etc.—is absolutely mandatory,” says Mullaly. “It needs to be a ‘cultural’ thing within the hospital, with everyone engaged.” He believes compassion should be included in every job description, and people who prove unable or unwilling to deliver compassionate care should find another line of work. “It only takes a few providers who do not adhere to negatively impact the whole hospital,” emphasizes the therapist.

When Mike Hess was completing his bachelor’s degree coursework, he took a class on relationship-centered communication skills that he first thought of as a “fluff” class. He now appreciates the class for its direct implications for compassionate care. “It ended up giving me a genuine appreciation for being present and open with others and touched on some of the basics of motivational interviewing,” he says. “I think training these ‘attending skills,’ whether it’s through workshops or in-services or adding them into the student curricula, would be very helpful.”

Miller believes hospitals should hold briefing sessions to give clinicians a chance to voice their feelings about compassionate care and identify any stressors that may be preventing the delivery of compassionate care. Elyse Carroll, BS, RRT, CTTS, respiratory disease manager for

the Hospital for Special Care in New Britain, CT, suggests communication should take place across the entire health care team.

“Every caregiver, MD, RN, and RT, has the responsibility to share information and relay stories as they get to know each patient and the situation so that the team understands the whole picture,” she says. Keeping the number of team members to a manageable level for patients is important, too—especially patients who are receiving many services for chronic conditions. “Having programs and case managers who manage patients with chronic lung disease lifelong—not just during their sick stay—is a way for patients to get comfortable with and share their wishes with one team, who can then advocate and communicate for them, instead of many on many teams.”

In practice

What do these RTs do to ensure they are delivering compassionate care to their patients? Susan Borque says being a good listener and making eye contact help her connect with her patients. Steven Klyce approaches all of his patients by imagining that they are members of his own family. Kenny Miller tries to view each patient as an individual, not just a therapy or an intervention. Gretchen Stanton takes a few moments to clear her mind of anything not related to the patient she is about to see before entering the patient’s room so she can focus on that patient and that patient alone. She also makes it a point to ask them how she can help them today rather than begin by stating what she is going to do with, to, or for them.

To B.J. Brown, RRT, a therapist who works in outpatient cardiopulmonary rehabilitation at Deaconess Hospital in Spokane, WA, nonverbal cues are important, too. “I’ll hold their hand while I look in their face to introduce myself and why I’m there. I stroke their head, flatten their hair, flip the pillow, offer a warm blanket, pick up trash in the room, tidy the bedside table,” Brown says. She is shocked at how far this goes to help someone feel better and wishes more people would do it.

Gail Dutcher, RRT, AE-C, RPFT, a pulmonary function technologist, RT, and asthma educator at Children’s Medical Center in Plano, TX, works in a pediatric outpatient specialty clinic and finds the best way to deliver compassionate care to her young patients is to help relieve some of the guilt she sees in their parents. It’s a tactic that could work for the informal caregivers of other patients, too. “There are, of course, truly neglectful parents. We see our fair share,” says the therapist.

“But most are just trying to meet everyone’s needs and get through the day. I try very hard to empower them.” By letting them know that no one expects them to be perfect (she tells them, “The spacer that goes to school may never come home. It may never get washed. Don’t stress about it. You have other things to worry about.”) and then building their confidence by providing them with handouts and giving them a contact number to call if they have questions, she feels she’s delivering compassionate care.

Delivering true value

There will no doubt always be clinicians who insist that providing competent care to patients in need should be compassionate enough. But patients on the receiving end of that care will forever disagree. When someone is sick and suffering, a kind word, a tender touch, an offer to do a little something extra makes a real difference, not just in improving a hospital’s patient satisfaction scores, but in fostering recovery and wellness in the individual. Therein lies the true value of compassion. ■



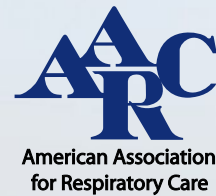
Be Our Guest!

The International Fellowship Program is a sponsored activity of the American Respiratory Care Foundation (ARCF). Since 1990, health professionals from more than 63 countries have shared experiences, knowledge and developed lasting friendships through this exceptional program.

If you provide respiratory care outside of the United States, and would like to share and expand your knowledge, please consider applying for our International Fellowship Program.

The three-week program takes each participant to two host cities in the United States and concludes with attendance and acknowledgement at the AARC's International Respiratory Congress.

APPLICATIONS ACCEPTED THROUGH JUNE 1



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Show off your city and your hospitality skills to respiratory professionals from around the world through the International Fellowship Program. Hosts provide the visiting Fellows with a quality educational experience and give them the opportunity to observe respiratory care in a wide variety of settings. If you are located in a city or metropolitan area (an area within a 60-mile radius of a major city) apply to be a host today!

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INFORMATION
CONTACT:**

Crystal Maldonado
crystal.maldonado@aacrc.org
972-243-2272

**APPLY TO BE A GUEST OR HOST ONLINE:
www.arcfoundation.org/international/fellows/**

HOW WE GOT FROM

There TO Here

The AARC turns 70 on April 15th this year, and over the past seven decades, we've seen our profession go from a small band of "inhalation therapists" who tunneled their way out of oxygen orderly positions to become the right-hand men and women to physicians using the latest in technology to treat people with respiratory disease to the respiratory therapists we all know today as the lung health experts. In the following AARC Times interview, AARC Historian Trudy Watson, BS, RRT, FAARC, explains how the Association led the way from there to here.

There really wasn't much to the "inhalation therapy profession" back in April of 1947 when our profession's founding fathers formed the "Inhalation Therapy Association." How do you believe that momentous act set the stage for all the developments in respiratory care that were to follow?



**AARC Historian
Trudy Watson
chronicles the
Association's
incredible
journey**

The organizers of the ITA laid the foundation for those interested in "inhalational therapy" to receive instruction in the early therapeutic modalities, to receive guidance from physicians and other health care professionals, and to share information and provide networking opportunities for the early clinicians through monthly meetings, institutes, and an annual conference.

Today, that foundation remains strong. The AARC provides numerous opportunities for continuing education through the annual Congress, Summer Forum, on-line courses, workshops, and webcasts. It provides physician input and guidance through the Board of Medical Advisors, committee activities, Journal Conferences, and continuing education presentations. It offers numerous networking opportunities for our members through specialty sections, roundtables, and AARConnect, and provides dissemination of informa-



tion worldwide through the AARC website, RESPIRATORY CARE, AARC Times, and specialty section newsletters.

The 1950s saw the profession move from one in which clinicians were trained exclusively on the job to one seeking the development of school programs. What did it take to begin creating school programs where none had existed before, and how did the AARC leadership make it happen?

In 1954, two physician groups in New York established a special committee to identify the essential requirements for inhalation therapy schools. In 1957, the AAIT, along with the American College of Chest Physicians (ACCP), American Medical Association (AMA), and American Society of Anesthesiologists (ASA), recommended the adoption of the "Essentials for an Approved School of Inhalation Therapy" for a three-year trial period to the AMA's House of Delegates. The AMA's House of Delegates granted formal approval of the "Essentials" in December 1962. The Board of Schools of Inhalation Therapy Technicians was officially established in Chicago in the fall of 1963 as an "inspecting, surveying, and reporting agency."

The AAIT/AART/AARC has participated in the review and approval of all subsequent revisions of the "Essentials/Standards" for our profession's educational programs.

The 1950s also saw the birth of what we now know as the RESPIRATORY CARE journal. Why

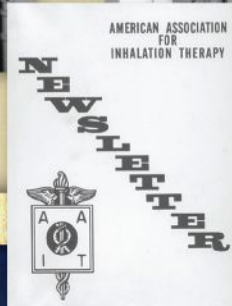
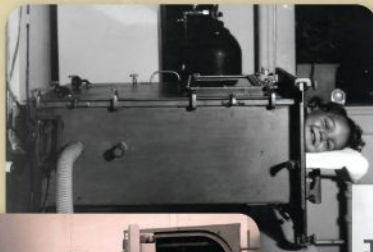
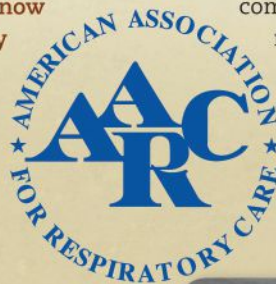
was our early foray into scientific publication important to the future of the profession, and what do you see as the ultimate results of that forward-thinking action on the part of our founding fathers?

In 1956, *Inhalation Therapy*, the journal of the AAIT, was created as an educational and informational publication. The journal shared original research, provided information on new products, and provided key information about the therapeutic modalities and disease management. One has to keep in mind that the *Inhalation Therapy* journal began publication approximately eight years before formal inhalation therapy education programs began, and more than a decade before the first comprehensive inhalation therapy textbook appeared. Our early practitioners relied upon the *Inhalation Therapy* journal as their primary source of information for clinical developments and trends in the profession.

Today, RESPIRATORY CARE remains the preeminent peer-reviewed scientific journal of the profession and is the recognized medium for respiratory therapists and physicians around the globe to share their relevant original research on all aspects of respiratory care.

By the time 1960 dawned, leadership of the profession was thinking about not only school programs but also formal credentialing. How did the profession end up with the two-credential system it still has today?

In the earliest days, the ITA/AAIT required successful completion of written examinations as a criterion for membership in the Association. Since there



were no formal education programs or formal credentials yet, acceptance for membership in the Association was viewed as a “registry” of sorts.

In November 1960, the American Registry of Inhalation Therapists (ARIT) was officially established. It was sponsored by the AAIT, ACCP, and ASA. Among the primary purposes of the ARIT was to prepare and administer examinations to test the competency of inhalation therapists, to grant and issue certificates to qualified individuals, and to maintain a registry of credentialed inhalation therapists.

The initial examinations consisted of written and oral components. By the late 1960s, approximately 10% of inhalation therapy practitioners were registered. To address the large number of non-credentialed practitioners, the AAIT proposed the creation of a credential for inhalation therapy technicians. While many strongly opposed it, the Technician Certification Board was established by the AAIT in 1969. Over the next five years, more than 10,000 were credentialed as certified inhalation therapy technicians by the AAIT/AART.

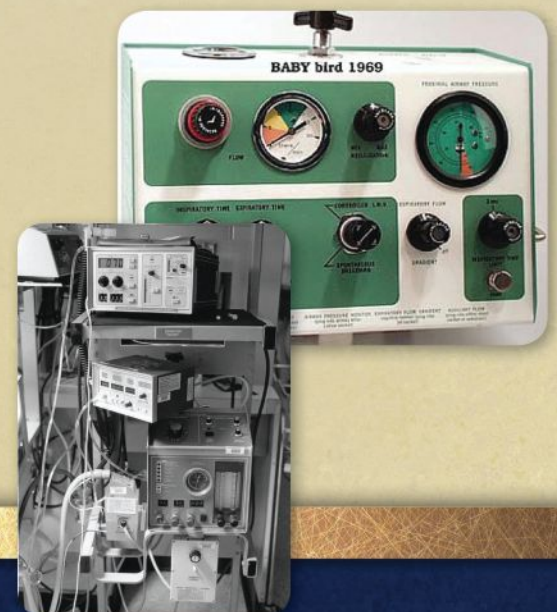
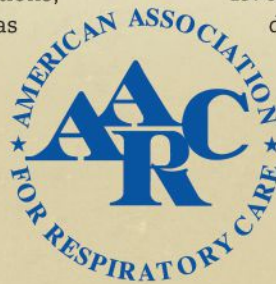
In 1972, the “Essentials” for respiratory therapy technicians and respiratory therapists were adopted, establishing two levels of respiratory education programs. In 1974, the two agencies offering respiratory therapy credentials evolved into one — the National Board for Respiratory Therapy (NBRT). The eligibility requirements for NBRT/NBRC credentialing exams have evolved, but both Certified Respiratory Therapist and Registered Respiratory Therapist credentials are still offered. With few exceptions, states recognize the NBRC’s CRT credential as one of the requirements for licensure as a respiratory care practitioner.

The 1970s brought both growth and challenges — the latter in the form of testimony before Congress by then Department of Health, Education, and Welfare (DHEW) Secretary Joseph A. Califano, who cited limited evidence for the provision of inhalation therapy services. How did this incident change the Association’s mission, and what do you believe were the good things that eventually came out of it?

The 1970s were filled with controversy for respiratory therapy. One of the major challenges occurred in 1974, when the Sugarloaf Conference findings questioned the rationale for the use of intermittent positive pressure breathing (IPPB). As a result, IPPB was replaced by more efficacious modalities.

When health care costs were scrutinized during Congressional hearings in 1977, the need for respiratory care services was challenged. The AART enlisted our communities of interest to respond to Secretary Califano’s concerns. As a result, the DHEW issued a statement indicating that “respiratory therapy is an essential life-saving method of treatment” and “respiratory therapists are dedicated responsible professionals.” The case for ongoing research to demonstrate the value of the respiratory therapist was made and eventually received a major boost when the AARC established a One Million Dollar Research Fund to support such research in the mid-1990s.

The AARC’s Clinical Practice Guidelines and Expert Panel Reference-Based Guidelines evolved from those 1970s challenges, when the absence of clinical evidence was problematic for our profession.



The 1980s will definitely be remembered for the breakthrough achievements made in state licensure for RTs. The pursuit of licensure, however, wasn't always viewed in a favorable light by the AARC. Why didn't leaders endorse licensure, what changed, and why is it now accepted?

In the 1970s, there were mixed opinions regarding the need for state licensure. In 1971, a two-year moratorium on new state licensing was imposed by the DHEW and was actively supported by the AAIT. The AAIT leadership held the general opinion that state licensure could negatively impact the profession by lowering standards.

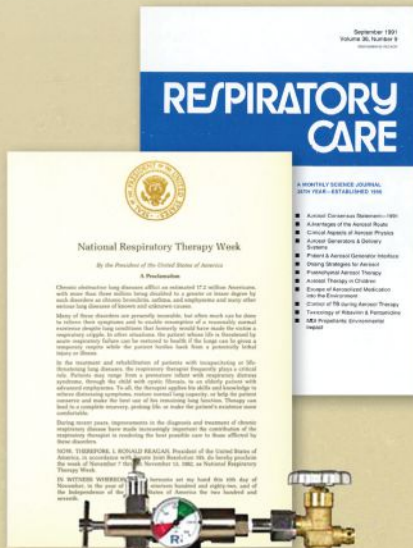
However, as other professions with legal recognition began to identify traditional respiratory therapy modalities as within their scopes of practice, it became imperative for the AART to develop a strategy to assist the Chartered Affiliates to pursue state licensure. It took a major paradigm shift within the AART, but support for licensure was underway by 1980 when the "Model Practice Act" was developed. Since that time, the AART/AARC has provided essential resources and support to assist the Chartered Affiliates with their practice acts and licensure efforts. In 1982, California became the first state to pass a licensure law governing respiratory therapy. Nearly 35 years later, 49 states, Puerto Rico, and the District of Columbia have attained licensure for respiratory therapists.

The 1980s also saw the debut of National Respiratory Care Week. What went into this effort, and how do you think it has helped to increase awareness of the profession?

In 1982, the AART petitioned President Ronald Reagan to declare National Respiratory Therapy Week. President Reagan had received a bullet wound to his chest in the 1981 assassination attempt. He underwent emergency surgery and remained hospitalized for two weeks. Perhaps because he had firsthand experience with respiratory therapy modalities, he was amenable to fulfilling this request. But not only did President Reagan issue a proclamation declaring November 7-13, 1982, as National RT Week, he invited representatives from the AART to visit him in the Oval Office. Our 1982 AART President John Walton, President-elect Glen Gee, AART Executive Director Sam Giordano, two pediatric patients with respiratory issues, and Dean Sterling, a respiratory therapist from Children's Hospital in Washington, D.C., met with President Reagan.

National Respiratory Care Week has been proclaimed in October every year since 1983. Departments and programs across the country honor and celebrate the respiratory therapist and offer activities to increase the public's awareness of the profession. In addition, since 2003, the Wednesday of Respiratory Care Week has been designated Lung Health Day to promote community awareness of pulmonary health.

With the major profession-building battles behind us, the AARC was free to focus on other goals by the time the 1990s rolled around. The AARC created an international presence for the profession, lobbied Congress for legislation important to the Association and our patients, and sought new ways to



raise public awareness of RTs and the important role we play in the health care system. How did these initiatives change the profession for the better?

Since 1990, when the AARC International Fellowship program was initiated, more than 160 health professionals from 65 countries have participated in the program. In 1991, the International Council for Respiratory Care (ICRC) was established “to advance the safe, effective, and ethical practice of respiratory care worldwide.” Currently, 25 countries are represented on the ICRC.

On a national level, the AARC’s Political Advocacy Contact Team members, along with numerous volunteers, have increased our legislators’ awareness of key issues impacting our patients and the respiratory care profession. Other AARC resources, such as YourLungHealth.org, provide information for patients, their families, and the general public.

All of these initiatives have advanced the respiratory care profession.

Since the world ushered in the new millennium, the AARC has forged ahead with its legislative goals; embraced the digital age with website improvements, online education, and other cutting edge technologies; and continued to address ongoing needs to improve the educational and credentialing landscape for therapists. What would you say have been the most significant accomplishments of the profession in the 2000s so far and why?

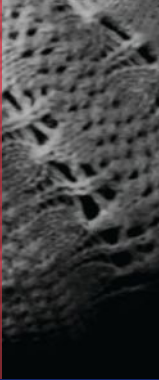
The “2015 and Beyond” conferences and recommendations have definitely impacted the profession. Changes in credentialing, such as the TMC exam, and accreditation, like the new requirement that new RT programs must award a baccalaureate or graduate degree beginning in 2018, are direct results of those conferences.

In addition, the Association has established a goal that, by 2020, 80% of respiratory therapists will hold, or be working toward, a bachelor’s degree. The AARC continues to move our profession forward.

If you could look into a crystal ball, what do you think you’d see as the new major milestones being celebrated by the AARC when it comes time to celebrate our 100th anniversary in 2047?

I know there will be amazing technological and medical advances over the next three decades, but the major milestone I’d like to see celebrated in 2047 would simply be that 100% of the respiratory therapists in the United States would be members of the AARC. Wouldn’t that be a great milestone to celebrate? ■





AARC: 1947–2017 — Your History Is Here

The AARC's Virtual Museum Will Take You from the Earliest Use of Oxygen Therapy to 21st-Century Respiratory Care

As the keeper of AARC history, the Association has always housed important documents and other memorabilia in its Executive Office. But as the AARC — and indeed, the profession itself — began to age, it became apparent that those items, along with any others out there in the wider world that pertain to our Association and our profession, should have an official home of their own.

Enter the Virtual Museum. Launched in 2015, this online venue showcases the history of respiratory care in 22 galleries featuring everything from documents outlining the earliest use of oxygen therapy to videos of 21st-century RTs explaining why they became RTs. It was spurred

on by forward-thinking leaders who knew how easy it would be to lose track of these precious items as the years went by. Supported by generous financial donations from the respiratory care community and fueled by respiratory therapists, physicians, industry representatives, and others who answered the call for historical photos and documents, the museum is a testament to a profession that, while still young when measured against medicine and nursing, is now solidly in its middle age.

We invite you to take a few moments to browse through the museum and see just how far the respiratory care profession has come. It's available 24/7 at museum.aarc.org. ■



— 2017 —

Since 1947, the AARC has been leading the effort to advance the science and practices of the respiratory care profession while promoting the highest quality of care for our patients. Collaborating with the respiratory communities at-large, we have successfully advocated at the federal, state and local level for patients, their families, the community, the profession and the respiratory therapist.

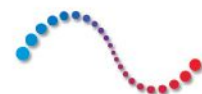
The AARC'S CORPORATE PARTNERS

The collaborative efforts between the respiratory care profession and manufacturers in pursuing unique and innovative ways to improve both the quality and outcomes of our patients makes us natural partners in today's ever changing health care continuum.

As health care finances become more strained and patient care becomes increasingly more complex, the mutual challenges become greater for the profession and its industry partners. The inherent synergies of the corporate partner concept are to provide an effective and efficient way to address those needs utilizing our combined skills and resources.



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*Changing lives
with every breath*





70 Years of the AARC: 1947–2017

By Debbie Bunch

On April 15, 1947, the Association was formally incorporated as the Inhalation Therapy Association (ITA), a not-for-profit entity in the State of Illinois. Today, 70 years later, the AARC continues its mission to serve its members and patients who are cared for by respiratory therapists. Over the years, we have provided Association members the opportunity to receive continuing education through a variety of formats, such as the annual Congress, webcasts, print, and more.

In addition, the AARC has advocated to ensure that patients have access to high-quality care provided by the respiratory therapist. We reach out to our patients as advocates and provide them with education that allows them to improve self-management of their disease through our patient website, YourLungHealth.org.

RTs are striving to go beyond the hospital to the patient's home, outpatient clinics, and the

community. As health care evolves, RTs will need to expand their knowledge, skills, and attributes to serve as chronic disease managers both within and beyond the hospital setting to cover the continuum of care. Telemedicine will offer many new opportunities for RTs, and the AARC will continue its efforts to help them succeed in the new paradigm.

Today our profession continues to garner respect from health care providers, and we are often called upon for our input by colleagues in industry, health care, and government. On the next few pages, you will see our humble beginnings and realize how far we have come. We can all be proud of our profession's history and the obstacles we have overcome together. As we pass this milestone, the AARC will continue to be an advocate for our members and patients. We look forward to continued success and to celebrating more milestones over the next 70 years. ■

mid 40s–50s

March–April, 1947:

The Articles of Incorporation for the Inhalation Therapy Association (ITA) are filed on March 7, and the State of Illinois legally charters the ITA as a not-for-profit corporation on April 15. The initial membership consists of 59 brave-hearted individuals — 17 of them from various religious orders — who are determined to represent this newly forming profession to the nation and the world.

1947:

The structure and purpose of a hospital-based inhalation therapy department is outlined by Albert Andrews, MD, in his book, *Manual of Oxygen Therapy Techniques*.

1950:

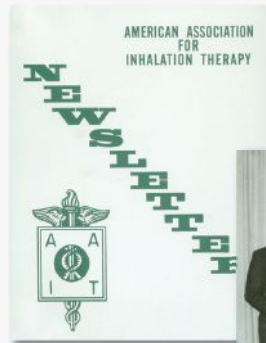
“Standards of Effective Administration of Inhalation Therapy” is published by the New York Academy of Medicine, opening the door to formal education for people in the field.

1954:

The ITA becomes the American Association of Inhalation Therapists (AAIT); the New York State Society of Anesthesiologists and the Medical Society of the State of New York form a Special Joint Committee in Inhalation Therapy to establish “the essentials of acceptable schools of inhalation therapy.”

November 7–11, 1955:

The AAIT holds its first annual meeting at the Hotel St. Clair in Chicago.



1956:

The American Medical Association (AMA) House of Delegates adopts a resolution calling for the use of the New York “Essentials” in the creation of schools of inhalation therapy. The AAIT begins publishing a science journal, *Inhalation Therapy* (now *RESPIRATORY CARE*).

1957:

The AAIT, AMA, American College of Chest Physicians, and American Society of Anesthesiologists jointly adopt the “Essentials for an Approved School of Inhalation Therapy Technicians.” The Essentials begin a three-year trial period.

early 60s–70s

■ **1960:**
The American Registry of Inhalation Therapists (ARIT) is formed to oversee a new examination leading to a formal credential for people in the field. The ARIT administers the first registry exams in Minneapolis, MN, on November 18.

■ **1962:**
The AMA House of Delegates grants formal approval for the “Essentials for an Approved School of Inhalation Therapy Technicians.”

■ **October 8, 1963:**
The Board of Schools of Inhalation Therapy Technicians is formed in Chicago.

■ **1966:**
The American Association of Inhalation Therapists becomes the American Association for Inhalation Therapy; the AAIT hosts its first Education Forum, the precursor to today’s Summer Forum.



■ **1969:**
The AAIT launches the Technician Certification Program to offer a credential to people working in the field who do not qualify to take the registry exams.

■ **January 9, 1970:**
The Board of Schools of Inhalation Therapy Technicians becomes the Joint Review Committee for Respiratory Therapy Education (JRCRTE).

■ **1973:**
The AAIT becomes the American Association for Respiratory Therapy (AART).

early 60s–70s

1974:

The profession's two credentialing programs merge into the National Board for Respiratory Therapy (NBRT). The AART forms the American Respiratory Therapy Foundation (ARTF) to support research, education, and charitable activities in the profession.

May 2–4, 1974:

The National Heart and Lung Institute and American Thoracic Society convene a conference to review the scientific basis of respiratory care, concluding that intermittent positive pressure breathing (IPPB), the mainstay of respiratory therapy treatment at the time, is of questionable value. The conference spurs the AART to begin scientifically examining treatments and modalities used in the profession.

1977:

Department of Health, Education, and Welfare (DHEW) Secretary Joseph A. Califano testifies at Congressional hearings on health care costs, citing limited professional evidence for inhalation therapy services. The AART responds with letters to government officials and others explaining the vital nature of RT services. The letters generate support from leading physicians and a reply from the DHEW on behalf of Secretary Califano stating that “it is a well-documented fact that respiratory therapy is an essential life-saving method of treatment” and “respiratory therapists are dedicated, responsible professionals.”

July, 1977:

The AARC publishes the first issue of *AARC Times* magazine, the “People Magazine” for the respiratory therapist.

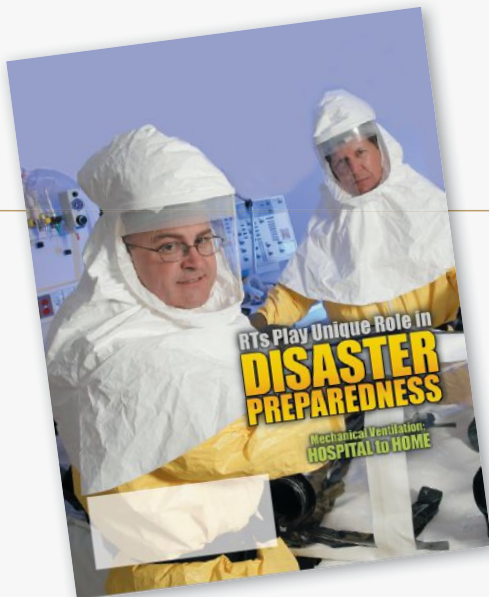
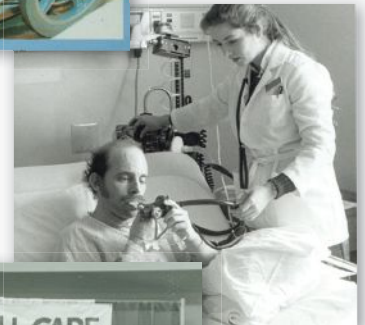
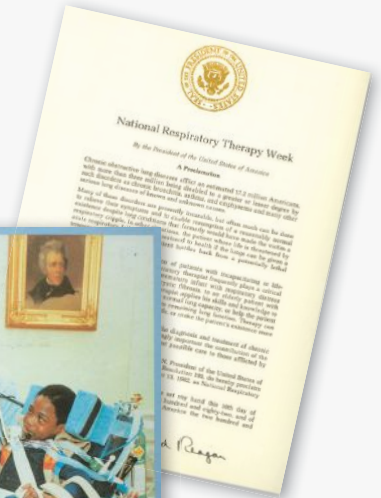
1978:

The Association forms its first specialty sections to meet the needs of RTs practicing in specific areas of the profession. The National Sputum Bowl makes its debut at the AARC Congress in Las Vegas, with the Idaho team taking home top honors.



early 80s–90s

- **1982:** California passes the first modern licensure law governing the profession of respiratory care. President Ronald Reagan proclaims the first National Respiratory Care Week.
- **1986:** The AART becomes the American Association for Respiratory Care (AARC); the ARTF becomes the American Respiratory Care Foundation (ARCF); the NBRT becomes the National Board for Respiratory Care (NBRC).
- **1990:** The AARC begins developing Clinical Practice Guidelines (CPGs) for treatments and modalities common in the profession. The ARCF launches an International Fellowship Program to foster knowledge of respiratory care by health care professionals from around the world. International Fellows have come to the United States every year to tour health care facilities in two cities and attend the AARC Congress.



- **1991:** The International Council for Respiratory Care is formed in partnership with the AARC to promote the globalization of quality respiratory care.
- **1992:** The AARC establishes a Disaster Relief Fund to assist members in federally declared disaster areas.

early 80s–90s



- **1996:**
 The Association enters the Internet age with the debut of www.AARC.org. The Task Force on Restructuring is formed to restructure the AARC to better meet the needs of its members.
- **1997:**
 The AARC launches the Fellow of the American Association for Respiratory Care, or “FAARC,” designation to recognize outstanding achievement in the profession.
- **1998:**
 The JRCRTE evolves into the Committee on Accreditation for Respiratory Care (CoARC); as a result of the work done by the Task Force on Restructuring, the AARC Bylaws are changed to include specialty section chairs of sections with at least 1,000 members on the Board of Directors, the positions of secretary and treasurer are combined, and the vice president position is split into two positions, one to address internal affairs and one to address external affairs.

2000–2010

2000:

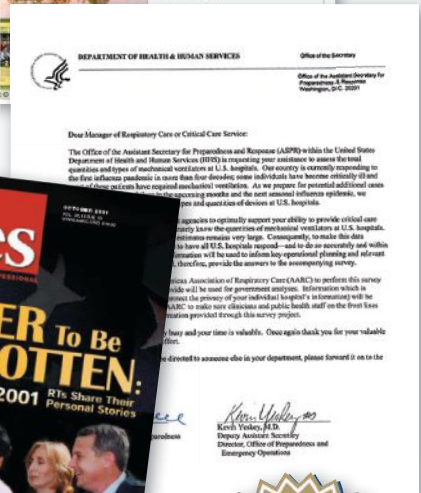
RESPIRATORY CARE is accepted into Index Medicus, the principal bibliographic database of the National Library of Medicine and its online counterpart, the MEDLINE service. The AARC launches an annual Capitol Hill Lobby Day to educate members of Congress on key respiratory issues.

2001:

Respiratory therapists play a valuable role in helping victims of the the September 11th terrorist attacks on America. AARC Executive Director Sam Giordano, MBA, RRT, FAARC, notes in the October 2001 issue of AARC Times that hundreds had volunteered to help in the aftermath of the tragedy. We devote a whole edition of the magazine to the 9/11 coverage of RTs on the scene, including several photos of the President and First Lady meeting health care personnel. In 2011, the George W. Bush Presidential Library accepts the edition for display in its publication archives area.

2003:

The Association brings www.YourLungHealth.org to the Internet to serve as a resource for patients and their families. The AARC begins delivering free continuing education credit to members on its website.



2004:

The AARC launches a Quality Respiratory Care Recognition program to identify hospitals that follow strict guidelines governing the quality of the respiratory care they provide to patients.

2005:

The Association develops the 435 Plan to ensure a rapid response to fast-moving legislative issues to advocate for patients and respiratory therapists.

2000–2010



2006:

AARC launches a Benchmarking Program to assist respiratory care managers in providing accurate data to support administrative decisions and identify and promote best practices in the profession. The AARC forms the International Educational Recognition System to promote high-quality respiratory care education around the globe.

2007:

Toni Rodriguez, EdD, RRT, becomes the first AARC president to serve a two-year term. After years of work on the part of the AARC, RRTs with bachelor's or master's degrees become eligible to be commissioned as officers in the U.S. Public Health Service. AARC launches the 2015 and Beyond project to define the knowledge, skills, and attributes that will be needed by RTs in the 21st century.

2009:

The AARC conducts the National Ventilator Survey on behalf of the U.S. Department of Health and Human Services. The AARC launches the Asthma Self-Management Education (ASME) certification program. The Association creates a presence on social media with the addition of both Facebook and Twitter pages.

2010:

Hawaii becomes the 49th state to achieve state licensure. The Association furthers its entry into social media with the debut of AARConnect. *AARC Times* goes digital with the launch of a flipbook-style publication on www.AARC.org. AARC launches the Leadership Institute to provide members with the skills they need to succeed in management, education, and research.

2011-2017

- 2011:**
 RESPIRATORY CARE enters the digital age with a flipbook-style publication, epub ahead of print feature, and HTML format for articles.
- 2013:**
 The AARC launches an Adult Critical Care Course to help therapists prepare to sit for the NBRC's new Adult Critical Care Specialist credential. The AARC offers Exam Prep for the first time to help RTs prepare for the CRT and RRT credentialing exams.
- 2014:**
 AARC University debuts and serves as a portal to all of the Association's online educational offerings.
- 2015:**
 The AARC hosts its first-ever Patient Advocacy Summit prior to AARC Congress 2015 in Tampa, FL, drawing participation from a range of patient advocacy groups as well as industry representatives. The Virtual Museum becomes a reality, showcasing the history of the respiratory care profession and the AARC.



- 2016:**
 The AARC calls for 80% of RTs to have earned, or be working toward, a bachelor's degree by the year 2020, issues a new RT Education Position Statement calling for all newly created respiratory care educational programs to award (at a minimum) a bachelor's degree, and takes steps to investigate the feasibility of an Advanced Practice Respiratory Therapist.
- April 15, 2017:**
 The AARC marks 70 years as the premiere respiratory care organization in the country and around the world.





AACRC Summer
forum

Starr Pass Resort + Tucson = Family Fun

If you're coming to Tucson this June, bring along the family.
It's a great place for a fun family vacation!





Attendees at this year's AARC Summer Forum will find a wealth of entertainment opportunities

The Summer Forum promises to deliver cutting-edge information to managers and educators in respiratory care, and it will all happen at the beautiful JW Marriott Tucson Starr Pass Resort & Spa. This premiere destination is nestled among the saguaro-covered foothills of the Sonoran Desert and offers a range of amenities visitors young and old will love. Top Tucson attractions are just minutes away, too.

Starr Pass Golf Club

Bring your clubs and take your choice between three nine-hole championship golf courses, each with its own unique Arnold Palmer design. Whether you decide on the Rattler Course, Roadrunner Course, Coyote Course, or all three, you are guaranteed to face challenging holes in a fabulous desert setting.

Swimming

The resort features four ways to have fun in the water. The Monsoon Falls Waterslide is perfect for kids and families who want to inject a little excitement into their stay. The multi-level outdoor pool is perfect for anyone who just wants to stick a toe in the water. And the Starr Canyon Lazy River offers a chance to take in the views while gliding by in a comfortable float. The resort also features a whirlpool for those who want to ease their sore muscles after taking advantage of the many fitness activities available.

Fitness:

From the world-class gym to trails for biking, jogging, mountain biking, and hiking, you and your family will find plenty of active things to do during your stay.



Learn more about the Starr Pass Resort & Spa at <http://www.marriott.com/hotels/travel/tussp-jw-marriott-tucson-starr-pass-resort-and-spa/>.



Child's play

Bringing the kids along with you? The Rising Starr Kids Club is perfect for children ages 4–12 and will ensure your little ones stay busy while you are attending the meeting. Full-day and half-day sessions are available. If your family includes teens, they'll love the Blur Teen Lounge, where they can enjoy the latest games, technology, and movies. And if your kids like golf, you can take them out on one of the three Marriot courses, where they can play for free after 3 p.m.!

Relax in the spa

The Hashani Spa offers a full range of services, from body scrubs and couple's massage to a plunge pool, steam room, manicures-pedicures, and more.

Get a bite to eat

Five premiere restaurants ensure everyone will be well fed: the Signature Grill features an inventive menu inspired by the Native American, Mexican, and Cowboy cultures; Primo with Patio Dining is a Mediterranean restaurant offering handcrafted Italian fare; Catalina Barbeque Co. & Sports Bar is the place to go for Arizona barbeque at its best; Salud delivers Mexican cuisine in addition to desert-inspired cocktails (with a daily Tequilla Toast at 5:30 p.m.); and Plunge Poolside Dining has great sandwiches and other casual fare, all served up poolside. For coffee lovers, there's a Starbucks on site, and the Signature Grill offers a breakfast buffet every morning.



Learn more about the Starr Pass Resort & Spa at <http://www.marriott.com/hotels/travel/tussp-jw-marriott-tucson-starr-pass-resort-and-spa/>.



The resort will keep you and your family busy throughout the three-day meeting, but if you're planning to come in a few days early or stay a few days after the Forum ends, the Tucson area has much to offer as well.

Arizona-Sonora Desert Museum: Ranked as one of the top 10 museums in the country by TripAdvisor, this 98-acre museum is part zoo, part botanical garden, part art gallery, part natural history museum, and part aquarium. With two miles of walking paths through desert habitats, 230 animal species, 1,200 types of plants, and a comprehensive regional mineral collection, it's an experience you won't want to miss.

Old Tucson Studios: This Wild West attraction features live-action stunt shows, musicals, vintage rides, genuine southwestern barbeque, and special events. More than 400 films have been made in Old Tucson Studios, starring everyone from John Wayne and Clint Eastwood to Steve Martin and Martin Short. It's still the area's premiere film location.

Pima Air & Space Museum: Originally founded to preserve the aircraft of World War II, this museum showcases everything from vintage B-52 bombers to a full-size mockup of the X-15 in five exhibit areas, including one devoted exclusively to space travel.

Titan Missile Museum: Learn more about the Cold War at this preserved Titan II missile site, the only one of 54 such sites across the U.S. that still exists today. Once one of America's most top-secret places, the museum is now a National Historic Landmark.

Old Town Artisans: Located on the site of a fort built by the Spanish in 1775, Old Town Artisans features an array of unique shops and restaurants in a quaint setting that will make you feel like you are back in the Old West. You are sure to find a one-of-a-kind treasure here to take home here.

Mission San Xavier del Bac: Still a working church, this picturesque building and National Historic Landmark is undergoing extensive restoration and is open to the public for tours.

Tucson Children's Museum: Kids love the hands-on exhibits in this nationally recognized children's museum. With 13 permanent exhibits on everything from health and wellness to creating electricity, a good time is guaranteed for all. The museum even features a "Wee World" especially designed for kids four and under.

Reid Park Zoo: Founded in 1965, the zoo is home to hundreds of animals in naturalistic environments. The 24-acre campus offers a chance to see an array of animals from all over the world.



See you at the Summer Forum!

As you can see, the Starr Pass Resort and the city of Tucson make for the perfect summer vacation for you and your family. Plan now to team up your continuing education needs with a summer getaway and join us in Tucson for Summer Forum 2017 June 25-27.



Additional information about Tucson can be found at www.visittucson.org.

2017 AARC Summer Forum Program



Tucson, Arizona



2017 AARC Pre-Summer

Saturday, June 24 | Tucson, AZ

NATIONAL BOARD FOR RESPIRATORY CARE (NBRC)

8:00 am – 11:00 am

Compliance with CoARC Standards: What are Key Elements from NBRC Reports

**Thomas Smalling, PhD RRT-NPS
FAARC, Bedford TX**

**Robert C. Shaw Jr., PhD RRT FAARC,
Olathe KS**

During a session co-presented by CoARC and NBRC representative's examples of reports the NBRC provides to programs will be evaluated in small groups who will develop plans to improve the performances of future program graduates.

COMMISSION ON ACCREDITATION FOR RESPIRATORY CARE (CoARC)

12:00 noon – 1:30 pm

Meet the Referee

This session is an opportunity for program personnel and administrators to meet with their program referees on an individual basis to discuss:

- Recent changes to CoARC policies, procedures, and documentation involving the referee process;
- Interpretation of the new CoARC accreditation standards;
- What is recommended for improvement of the institution or program, including any progress reports; and
- How to communicate appropriately and effectively with their program referee and Executive Office staff.

Attendance for this session is on a first-come, first-served basis and attendees are required to pre-register with the CoARC by contacting Michelle Poster at michelle@coarc.com.

AMERICAN ASSOCIATION FOR RESPIRATORY CARE (AARC) Pre-Course

1:00 pm – 4:55 pm

Laying the Foundation

**Shawna L Strickland PhD RRT-NPS
RRT-ACCS AE-C FAARC/Presiding**

Respiratory therapy educational programs have the opportunity to position their graduates for great success in the changing landscape of health care. The pre-course will highlight how program faculty can develop graduates that are prepared to deliver evidence-based care and adapt to changing professional needs.

Course capacity is limited. Approved for 3.49 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.



Forum Program

1:00 pm – 1:30 pm

Fostering Positive Educational and Professional Outcomes

**Shawna Strickland PhD RRT-NPS
RRT-ACCS AE-C FAARC, Irving TX**

The overview session will set the stage for the remainder of the pre-course by exploring skills and competencies that employers' desire in respiratory care graduates, and by exploring the importance of professional development in preparing graduates for success.

1:35 pm – 2:25 pm

The Accreditors are Coming, The Accreditors are Coming! Relax; It Is All About the Process

**David L Vines MHS RRT FAARC FCCP,
Chicago IL**

Accreditation is a vital aspect of higher education. Programs are required to submit annual reviews and participate in regularly scheduled site visits from the accrediting agency. It is important for the respiratory care professional program to understand accreditation standards as set forth by CoARC to meet outcome measures for not only the annual review but the site visit as well. This lecture will review important steps in preparing for a successful CoARC site visit.

2:25 pm – 2:35 pm

Break

2:35 pm – 3:25 pm

The Critical Role of the Liberal Arts in the RC Curriculum

**Bill Galvin MEd RRT CPFT AE-C FAARC,
Havertown PA**

How often has a student said to you, "I'm studying to become a respiratory therapist; why do I have to take philosophy, sociology, and psychology?" The presenter will share surveys and anecdotal comments from liberal arts colleagues to make a compelling case for the role and value of incorporating the liberal disciplines in the RC curriculum.

3:30 pm – 4:20 pm

Plowing the Path for RTs to Earn Bachelor's Degrees

**Ellen Becker PhD RRT-NPS RPFT AE-C
FAARC, Chicago IL**

The AARC set a goal in 2015 for 80% of all respiratory therapists to have a bachelor's degree or to be working towards a bachelor's degree by 2020. This presentation will highlight the ways that educators in associate and baccalaureate degree programs can help RT students in associate degree programs plan to complete a bachelor's degree. Further, RT managers will learn how to guide working therapists toward helpful resources for completing this advanced degree.

4:25 pm – 4:55 pm

Why Become a Mentor?

**Helen Sorenson MA RRT FAARC,
San Antonio TX**

Becoming a faculty mentor is a rewarding and challenging experience. Characteristics of a mentor include the three C's: competence, confidence, and commitment. Mentors provide career guidance and support for the mentee. This relationship is an investment in the success of the mentee and the respiratory care program.



Strickland, Shawna



Vines, David L



Galvin, Bill



Becker, Ellen



Sorenson, Helen

Pre-Summer Forum (continued)

Saturday, June 24 | **Tucson, AZ**

AMERICAN ASSOCIATION FOR RESPIRATORY CARE

5:00 pm – 6:30 pm

Welcome Reception

Stressed from a long day of travel?
Apprehensive that it's your first Summer
Forum and you aren't sure what to expect?
Or perhaps you're just anxious to reconnect
with old friends? Regardless, you won't
want to miss the AARC Summer Forum

Welcome Reception. Enjoy beverages and
light snacks as you network with colleagues
from around the country and
mingle with AARC Corporate Partners.
Interact with executives from the AARC,
CoARC, and the NBRC. There's no better
way to kick off 3 days of learning than by
attending this opening event. Attendance is
limited to registered attendees only.



2017 Summer Forum

Sunday, June 25 | **Tucson, AZ**

See pages 64–67 for registration form and fees, hotel reservation information, and travel discounts. Approved for up to 17.72 hours of continuing education credit (CRCE).

GENERAL SESSION

7:30 am – 8:20 am

**Thomas Lamphere BS RRT-ACCS
FAARC/Presiding**

The State of the Profession

**Brian K Walsh PhD RRT-NPS FAARC,
Boston MA**

In this keynote address, AARC President Brian Walsh will update the audience on the goals, priorities, and strategic focus of the Association for 2017. Attend this presentation and better understand the current and future direction of the profession, and notably, the three domains of focus (safety, quality, and value) that will serve as the Association's road map during Dr. Walsh's presidency. This is your opportunity to hear from our president regarding topics that are important to you!

EDUCATOR TRACK

8:30 am – 4:25 pm

**Ellen A Becker PhD RRT-NPS
Chair, AARC Education Section/
Presiding**

8:30 am – 9:10 am

Making It Stick: The Neurobiology of Learning

**Dennis R Wissing PhD RRT AE-C
FAARC, Shreveport LA**

An overview of brain neurobiology and how the brain learns. Emphasis is placed on what teaching strategies work best to promote learning and retention using principles of neurobiology.

9:15 am – 9:55 am

Great Teachers Don't Just Teach Content: Strategies for Creating a Positive Learning Environment

Jody Lester MA RRT, Boise ID

There is a direct relationship between the learning environment and student achievement. This presentation will focus on what is known about learner motivation and illustrate strategies for developing the optimal learning environment.

10:00 am – 10:40 am

Tips and Tricks for Teaching Systematic Interpretation of Chest Images

Jeff Anderson MA RRT, Meridian ID

This lecture will present a systematic approach to teaching the interpretation of CXRs and CTs. It will include image acquisition processing and interactive display to students.

10:40 am – 11:20 am

Exhibitor Break



Walsh, Brian



Wissing, Dennis R



Lester, Jody



Anderson, Jeff



2017 AARC Summer

Sunday, June 25

Tucson, AZ (continued)

11:20 am – 12:00 noon

They Haven't Done the Reading, Again! Strategies for Getting Students To Read What's Assigned

Jody Lester MA RRT, Boise ID

A typical component of nearly every academic course is assigned reading. However, it is far less typical that every student comes to class having completed the assigned reading. This presentation will explore what the research says about why students don't do the reading (or don't do it effectively), as well as strategies to frame the reading and prepare students to engage productively with it.

12:05 pm – 12:45 pm

Teaching Palliative Care: As Easy as 123: A B C

Helen Sorenson MA RRT FAARC, San Antonio TX

Palliative care remains misunderstood by a majority of health care providers. For most, Palliative Care = End-of-Life Care = Hospice. The reality is that palliative care is comfort care and is applicable to any patient, any age and any diagnosis that has created bothersome symptoms. By using the 123: A B C guide you will learn how to teach and how to practice palliative care in the classroom and in the clinical setting.

12:45 pm – 2:15 pm

Lunch (on your own)

Demystifying the Results Section of Research Papers

2:15 pm – 2:55 pm

Interpreting the Statistical Data Reported in Journal Articles

Ellen Becker PhD RRT-NPS FAARC, Chicago IL

The results section of research papers lists several statistical tests and mathematical symbols. Many readers skip this section because the combination of words and symbols are meaningless. This lecture will help you interpret what is meant by p-value confidence interval and odds ratio. It will also highlight the limits of using only these values when interpreting study results.

3:00 pm – 3:40 pm

Identifying Characteristics of Variables

David L Vines MHS RRT FAARC FCCP, Chicago IL

Consumers of research need to understand a few characteristics of the study variables in order to assess whether the statistics used were appropriate or not. This hands-on session will help participants differentiate whether a variable was dependent or independent and which level of measurement was used during data collection.



Lester, Jody



Sorenson, Helen



Becker, Ellen



Vines, David L



3:45 pm – 4:25 pm

Evaluating the Appropriateness of the Statistical Tests Used in Journal Articles

Constance Mussa PhD RRT-NPS, Chicago IL

Many therapists cannot evaluate whether the statistical tests used in the results section are appropriate. This hands-on session will provide participants with the decision-making tools and guidelines for commonly used statistical tests.

MANAGER TRACK

8:30 am – 4:25 pm

Cheryl A Hoerr MBA RRT FAARC Chair, AARC Management Section Presiding

8:30 am – 9:10 am

Patient-Centric Care: What Is It and What's the Fit for the RT?

Garry W Kauffman MPA RRT FACHE FAARC, Winston Salem NC

Patient-centric care has been around for decades in different forms. In the 1980s the first salvo included staff reduction, clinician elimination, de-skilling, and reduction of mid-level management. What has changed about this focus on patients — other than a catchy new phrase? Absolutely everything! Patient-centric care is about providing the right care, at the right time, with the right quality, by the right person, and being able to measure the outcomes of this care. For RTs there is no better time to demonstrate your value, and for RT managers this is the best time to demonstrate your knowledge and ability to manage this new care delivery system based on evidence-based medicine, system-wide cost-effectiveness, and patient/family satisfaction.

9:15 am – 9:55 am

Providing Effective Feedback That Helps Staff Grow

Julie Jackson BS RRT-ACCS, Des Moines IA

Providing effective feedback can be difficult for even the most experienced manager. Feedback can be both positive and negative depending on the situation. For staff to developmentally grow in their careers, they need their leaders to provide them with both types of feedback. This presentation will discuss how managers can deliver effective feedback that will fuel the best performance.

10:00 am – 10:40 am

Understanding Your “Why”: Developing a Vision for Your Respiratory Care Department

Teresa A Volsko MBA RRT FAARC, Akron OH

Respiratory care leadership teams are facing the challenges of health care financial reform. Thriving during these tumultuous times requires an innate understanding of your “why” or purpose. Understanding your “why” is the key to developing a vision and strategic plan which aligns your organization's true north objectives and operational imperatives. Examples of developing a mission and vision statement as well as strategies used to leverage the value the RC department brings to your organization will be presented.



Mussa, Constance



Kauffman, Garry W



Jackson, Julie



Volsko, Teresa

2017 AARC Summer

Sunday, June 25

Tucson, AZ (continued)

10:40 am – 11:20 am
Exhibitor Break

11:20 am – 12:00 noon
**The Respiratory Dashboard:
What Every Director Needs To
Know to Wed Respiratory Care
Clinical Goals with the Tenets
of a Compliance Program**

**Kimberly Bennion MHS BSRT RRT,
Salt Lake City UT**

The presenter will share the seven elements of a compliance program as they relate to Respiratory Care Service Line clinical goals.

12:05 pm – 12:45 pm
**Competencies for Complex
Medical Technology**

**Cheryl A Hoerr MBA RRT CPFT FAARC,
Rolla MO**

**Julie Jackson BS RRT-ACCS, Des
Moines IA**

As medical technology continues to advance, respiratory therapy managers and educators may struggle with ensuring staff competency to maximize patient safety especially with low-volume/high-risk procedures. This panel discussion will address the challenges and barriers to developing competencies for complex medical technology from the manager's perspective and provide the attendee with recommendations for improving staff competency assessment.

12:45 pm – 2:15 pm
Lunch (on your own)

2:15 pm – 2:55 pm
**Garnering Administrative
Support To Create a Culture of
Inquiry**

**Teresa A Volsko MBA RRT FAARC,
Akron OH**

Education is essential to obtain the skills necessary to conduct research and embed evidence-based protocols into our clinical practice. Garnering administrative support for education and training is important for RTs to advance their practice. This lecture will review the strategies used to secure financial support for RT education and training for research quality and evidenced-based practice initiatives. Examples of how to tie the business plan for educational initiatives into the organizations strategic goals will be provided.



Bennion, Kimberly



Hoerr, Cheryl



Jackson, Julie



Volsko, Teresa A



Forum

3:00 pm – 3:40 pm

How Do I Even Begin To Create and Implement Protocols, Order Sets, and Standing Orders with All These Regulations?

**Kimberly Bennion MHS BSRT RRT,
Salt Lake City UT**

We all know protocols with associated order sets and standing orders facilitate rapid evidence-based patient care and respiratory care critical thinking; however, most professionals may not be meeting all regulatory requirements. The presenter, who is health care compliance certified, will take attendees through the step-by-step process and templates to create, gain approvals, educate and implement evidence-based protocols/processes that even regulatory agencies have asked her to present.

3:45 pm – 4:25 pm

While Respiratory Therapists May Be Superheroes "It's Not My Job" May Just Be Our Kryptonite

**Frank R Salvatore Jr RRT MBA FAARC,
Danbury CT**

During this lecture, the participant will review the many changes within health care that have occurred over the past few years and find out why it's time for our profession to morph beyond just performing tasks.

4:45 pm – 5:30 pm

Meet the Management Faculty Mixer

Networking with peers and sharing of best practices is one of the most valued reasons to attend educational meetings. In this informal, casual "get together", attendees will have an opportunity to ask questions of faculty and talk shop with other managers who share the same everyday challenges you do. Grab your bathing suit, sunglasses and sun tan lotion and network in a non-intimidating environment at the luxurious and relaxing Starr Pass swimming pool. Umbrella drinks are a requirement for entry! NO CRCE will be offered for this event.



Salvatore, Frank R



2017 AARC Summer

Monday, June 26

Tucson, AZ

GENERAL SESSION

7:30 am – 8:20 am

Thomas Lamphere BS RRT-ACCS
FAARC/Presiding

Finding the Evidence: Separating Science from Fake News

Dean R Hess, PhD RRT FAARC,
Boston MA

What is the best evidence? When do you trust a colleague; and when do you need a randomized controlled trial? This lecture will describe an approach to the scientific method to facilitate decision-making based on evidence rather than anecdote.

EDUCATOR TRACK

8:30 am – 4:25 pm

Ellen A Becker PhD RRT-NPS Chair,
AARC Education Section/Presiding

8:30 am – 9:55 am

CoARC SYMPOSIUM Strategies for Improving Program Graduate's Ability To Transition Successfully to Employment



8:30 am – 9:10 am

Bridging the Gap: A Department Manager's Perspective

Kenneth Winn MHA RRT, Hamden CT

Orienting and ensuring competence in new RT employees is vital to providing safe and effective care for patients. It is resource intensive and department managers often struggle with how to make the orientation process a successful one for both the graduate and the employer. This presentation discusses the challenges faced by both the employer and the new employee during the transition process and methods that promote a successful transition.

9:15 am – 9:55 am

Bridging the Gap: An Accreditor's Perspective

Allen N Gustin Jr MD FCCP, Chicago IL

Accreditation organizations have been tasked by policy makers and the public to improve the quality of patient care and to adapt to the ever-changing health care environment. Traditional educational systems have been primarily focused on a "time duration" for each student and are "teacher-centered." On the other side accreditation organizations are changing to competency-based educational systems which focus on the mastery of specific knowledge and on acquiring specific skills. Competency evaluation requires the use of milestones as a cornerstone of the evaluation process. This presentation will provide an overview of competency-based evaluation, provide examples of competency-based evaluations that respiratory education programs can use



Hess, Dean R



Winn, Kenneth



Gustin, Allen N



to implement the concept of milestones, and demonstrate how to successfully implement these competencies as per the 2015 CoARC Standards.

10:00 am – 10:40 am

Responding to Classroom Safety: Preparing a Departmental Safety Policy

**Douglas S Gardenhire EdD RRT-NPS
FAARC, Atlanta GA**

This lecture will discuss faculty and administrative components related to department and classroom safety. The presenter will discuss developing departmental and classroom safety goals, developing departmental and classroom emergency response plans, and the implementation of a safety plan.

10:40 am – 11:20 am

Exhibitor Break

11:20 am – 12:00 noon

EURECA: Enhance Undergraduate Research Endeavors and Creative Activities

**Jennifer Anderson EdD RRT-NPS,
Wichita Falls TX**

When students are faced with the word “research” they tend to get sweaty, worked up, and run the other direction. We must expand efforts to develop the next generation of respiratory therapy researchers to guide our future practice. Find out how to Enhance Undergraduate Research Endeavors and Creative Activities by developing strong mentoring and collaborative partnerships between students and faculty. In this lecture we will discuss how to facilitate research by

providing incentives and support for students to engage in high-quality research and creative activities in an interdisciplinary environment.

12:05 pm – 12:45 pm

Creating a Village: Building a Long-Term Research Agenda for Your Department

**Dave Burnett PhD RRT AE-C,
Kansas City KS**

Exploring the opportunity to develop research within your department and mentoring faculty to help build a successful long-term research agenda. Improve the potential to create sustainable programs and provide enhanced educational opportunities for your students through a research agenda.

12:45 pm – 2:15 pm

Lunch (on your own)



Gardenhire, Douglas S



Anderson, Jennifer



Burnett, Dave

Win Prizes with the AARC Passport Game!

Download the AARC Mobile App to play the AARC Passport Game during Summer Forum. Collect points to win by posting pictures, scanning QR codes, evaluating sessions and more. Winners will be announced at the closing ceremony. Play for a chance to win a Grand Prize registration for Congress 2017!

To play:

- > Go to EVENTS within the AARC app
- > Find the MORE Tab
- > Select AARC PASSPORT GAME
- > Start earning points to win!



2017 AARC Summer

Monday, June 26

Tucson, AZ (continued)

2:15 pm – 2:55 pm

Marketing Your RCP Educational Program: Lessons Learned

**Lutana Haan MHS RRT RPSGT,
Boise ID**

Are you struggling to get people to know about your amazing program? The respiratory program at Boise State is working with our own campus marketing team to increase the number of applicants to our program. We will share resources and insights into our marketing plan and budget.

EDUCATION SECTION MEMBERSHIP MEETING

3:00 pm – 3:40 pm

**Ellen A Becker Chair, AARC Education
Section/ Presiding**

Updates on issues important to the section will be discussed, with interactive dialogue on how the section chair and the AARC can better serve the Education Section and its members. This is your opportunity to influence the profession and network with your peers. All Summer Forum attendees are invited to attend.



Haan, Lutana



Scott, Brady

3:45 pm – 4:25 pm

Opening a Can of Worms: What Do I Do Now?

**Brady Scott MS RRT-ACCS FAARC,
Chicago IL**

Educational programs have established policies and procedures as well as professional codes of conduct. However, not all situations are included in these documents. How does the program handle unique and unexpected breaches of professionalism? The presenter will provide a series of unique situations to highlight potential gaps in departmental and institutional policies as well as garner discussion about the appropriate courses of action.



MANAGER TRACK

8:30 am – 5:00 pm

Cheryl A Hoerr MBA RRT FAARC
Chair, AARC Management Section/
Presiding

8:30 am – 9:10 am

**Interdisciplinary Care
Redesign: Achieving
Continuous Improvement
in Quality, Cost, and Patient
Experience through a
Standardized Approach**

Julianne Buchler RN MBA, Chicago IL

Care redesign aims to improve outcomes through a structured interdisciplinary process of standardizing approaches to patient management. The presentation will provide an overview of this novel approach including tools and key success factors for achieving sustained change aligned with organizational objectives and informed by data.

9:15 am – 9:55 am

**The Discharge Planning
Checklist**

**Krystal Craddock BSRC RRT-NPS CCM,
Sacramento CA**

As more RTs are taking on the role of case manager and navigator we must change our thinking from critical care to what our patients will need when they arrive home from the hospital. This presentation will guide RTs on what to consider when planning the patient's discharge.

10:00 am – 10:40 am

**Pursuing an Expanded Scope
of Practice: To the Top of Your
License**

**Robert L Joyner Jr PhD RRT-ACCS
FAARC, Salisbury MD**

Patient care continues to evolve at a brisk pace with sicker patients being cared for with fewer resources. Sufficient staffing expansion is not usually an option and other providers do not have our education training or expertise. The solution to this problem lies in our ability to practice at the top of our license.

10:40 am – 11:20 am

Exhibitor Break

11:20 am – 12:00 noon

Maximizing Patient Education

**Shawna Strickland PhD RRT-NPS
RRT-ACCS AE-C FAARC, Irving TX**

The respiratory therapist's role in patient education is significant and can make a large impact on the ability of the patient to self-manage his/her disease process. This presentation will discuss barriers to effective patient education as well as strategies and methods to improve patient education.



Buchler, Julianne



Craddock, Krystal



Joyner, Robert L



Strickland, Shawna



2017 AARC Summer

Monday, June 26

Tucson, AZ (continued)

12:05 pm – 12:45 pm

How to Lie with Statistics and Figures – What's a "P" Anyway?

Dean R Hess PhD RRT FAARC,
Boston MA

For many in leadership roles research is not something we learned in RT school. Additionally, many of us don't have the resources to do clinical research within our organization. This lecture will take some of the mystery out of the language of research.

12:45 pm – 2:15 pm

Lunch (on your own)

2:15 pm – 2:55 pm

Things That Make You Go "Hmm?" — Non-Evidence-Based Respiratory Care

Thomas Lamphere BS RRT-ACCS RPFT
FAARC, Sellersville PA

This lecture will review common respiratory therapies and practices that have little or no evidence to support their use yet are still utilized in many facilities. This "non-evidence-based" care uses valuable financial resources, including both manpower hours and equipment/disposable supplies. Attendees will be provided with current evidence and to improve the quality of the care.

3:00 pm – 5:00 pm

ACHE-AARC Joint Program

Developing Service Lines: A Panel Discussion

This is the first ever joint programming between ACHE members and RT leaders. This session is designed to examine how health care organizations are using a service-line approach to organizational development for the purposes of strategic planning, business planning, operations, and marketing. Service-line development is not only an organizational tool, but also can increase physician involvement, align resources, and provide an integrated continuum of care for the patient. Benefits can include increased customer satisfaction, quality and performance improvements, market share gains, and financial improvement. This program will review the common operational and cultural issues of organizing around service lines, followed by panelist presentations of specific service-line case studies.



Hess, Dean R



Lamphere, Thomas



Forum

Tuesday, June 27

Tucson, AZ

GENERAL SESSION

7:00 am – 7:55 am

**Thomas Lamphere BS RRT-ACCS
FAARC/Presiding**

Agency Updates!

**Brain K Walsh PhD RRT FAARC –
AARC President**

**Tom Kallstrom MBA RRT FAARC –
ARCF Executive Vice President**

**Brad Leidich ED RRT FAARC –
CoARC President**

**Robert L Joyner Jr PhD RRT-ACCS
FAARC – NBRC President**

The leadership of the AARC, ARCF, CoARC, and NBRC will join attendees to discuss the latest professional, research, accreditation, and credentialing issues facing respiratory care.

EDUCATOR TRACK

8:00 am – 12:15 pm

**Ellen A Becker PhD RRT-NPS
Chair, AARC Education Section/
Presiding**

8:00 am – 9:30 am

**Jimmy A Young Memorial
Lecture**

**Presented by the National Board for
Respiratory Care**

**Specialists Reveal Details
about Their Practices in Adult
Critical Care and Neonatal/
Pediatric Care**

**Robert C Shaw Jr PhD RRT FAARC,
Overland Park KS**

Results from job analysis studies will be described. These results support the content of future examinations associated with the RRT-ACCS, CRT-NPS, and RRT-NPS credentials.

9:30 am – 9:45 am
Break

9:45 am – 10:25 am

**Creating an Interprofessional
Curricula: Interprofessional
Simulations for Health Care
Students using High-Fidelity
Manikins**

**Deborah A Patten MA RRT CHSE,
Highland Heights KY**

This lecture will describe the process and implementation of incorporating interprofessional simulations using high-fidelity manikins at regular intervals in academic coursework among health care students of differing disciplines.



Walsh, Brian K



Kallstrom, Tom



Leidich, Brad



Joyner, Robert L



Shaw, Robert



Patten, Deborah



2017 AARC Summer

Tuesday, June 27

Tucson, AZ (cont.)

10:30 am – 11:10 am

The Advanced Practice Respiratory Therapist (APRT): Exploring the Potential

Brian K Walsh PhD RRT-NPS FAARC, Boston MA

Shane Keene DHSc MBA RRT-NPS CPFT RPSGT FAARC, Cincinnati OH

Robert L Joyner Jr PhD RRT-ACCS FAARC, Salisbury NY

John Wilgis MBA RRT, Orlando FL

This panel discussion by the Ad Hoc Committee on Advanced RT Practices, Credentialing, and Education will discuss the effort, over the past year, of exploring the need for an advanced practice provider to care for patients with cardiopulmonary disease. Moderated by Dr. Shawna Strickland.

11:15 am – 12:15 pm

Dr H Fred Helmolz Education Lecture Series

Presented by the Commission on Accreditation for Respiratory Care

Tom Hill PhD RRT FAARC/Presiding

Joseph P Coyle MD, Charlotte NC

Shane Keene DHSc MBA RRT-NPS CPFT RPSGT FAARC, Cincinnati OH

Respiratory therapy degree advancement programs provide a pathway for respiratory therapists who have earned an associate degree (AS) to earn a bachelor's degree (BS) or graduate degree (MS). As the number of degree advancement programs continues to grow, both faculty and students seek to have a better understanding of what a successful degree advancement program looks like and whether programmatic accreditation of these types of programs matters. This presentation addresses both of these issues.

MANAGER TRACK

8:00 am – 12:25 pm

Cheryl A Hoerr MBA RRT FAARC Chair, AARC Management Section/Presiding

MANAGEMENT SECTION MEMBERSHIP MEETING

8:00 am – 8:30 am

Cheryl A Hoerr MBA RRT FAARC Chair, AARC Management Section/Presiding

Updates on issues important to the section will be discussed, with interactive dialogue on how the section chair and the AARC can better serve the Management Section and its members. This is your opportunity to influence the profession and network with your peers. All Summer Forum attendees are invited to attend.

8:35 am – 9:15 am

Respiratory Care Clinical Practice Committee

James Deckman MS RRT-NPS, Clearwater FL

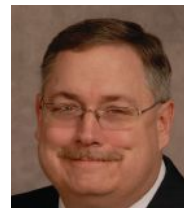
This presentation provides a comprehensive look at how to get team members on board and keep them on board. Studies have shown that engaged staff provide higher quality care, improve patient satisfaction, and decrease staff turnover—all of which we as leaders desire. By having your RT staff onboard and engaged, you as the RT leader can best determine how to utilize their skills and knowledge, collaborate with them so that they understand the 'why' as well as the 'what', and match them with opportunities to improve your department's value and demonstrate your value as an RT leader in your organization.



Walsh, Brian K



Keene, Shane



Joyner, Robert L



Wilgis, John



Coyle, Joseph P



Deckman, James



9:20 am – 10:00 am

Regional Management of Respiratory Care Services in a Multi-Site Health System

Holly Williams BS RRT, Greenville SC

Managing multiple respiratory care departments across multiple sites poses many challenges that differ from those that arise in a single location department. Ensuring that each site is successful requires careful planning and commitment from the Respiratory Care manager. The unique challenges that regional managers face require creative thought and adaptability. This session will review some of the specific challenges as well as essentials for success. Communication is always identified as a number one barrier; different techniques to address this barrier will be discussed. There will be several organizational charts presented to demonstrate various models that can work in respiratory care departments.

10:00 am – 10:15 am
Break

10:15 am – 11:40 am

Research Workshop for RT Managers

Sarah Varekojis PhD RRT FAARC, Columbus OH

Thomas Lamphere BS RRT-ACCS RPFT FAARC, Sellersville PA

One of the main purposes of research is to solve problems. Many departments struggle with challenges that range from job satisfaction to hospital readmissions to device selection to orientation. This session will explore using research methods to address issues managers encounter in moving their department forward.

11:45 am – 12:25 pm

By Helping Others You Help Yourself to Success

Scott Reistad RRT CPFT FAARC, Colorado Springs CO

Many may have heard the famous quote by Zig Ziglar, "You can get everything in life you want if you will just help enough other people get what they want." However, now research has shown this is not just a witty saying, but a validated truth. As it turns out nice guys don't finish last after all!

CLOSING CEREMONY

12:30 pm – 1:30 pm

Thomas Lamphere BS RRT-ACCS FAARC/Presiding

Historical (Hysterical) Notes

Crystal Dunlevy EdD RRT, Columbus OH

The journal RESPIRATORY CARE once had a feature called "Historical Notes" edited by Phil Kittredge. Looking at the evolution of our profession can sometimes be more hysterical than historical (and much more entertaining)! This presentation will highlight some of our hysterical history. From the argument over whether to call our most revered gas dephlogisticated air or oxygen to the Hero of Inhalation Therapy (the HIT list,) you will laugh, cry, and run the gamut of human emotion as you learn fun facts about the history of respiratory care. Nurses know who Florence Nightingale is; shouldn't Sister Mary Yvonne be on the tip of your tongue?



Williams, Holly



Varekojis, Sarah



Lamphere, Thomas



Reistad, Scott



Dunlevy, Crystal

2017 AARC Summer

Registration Form

Sunday-Tuesday, June 25-27, 2017 • Tucson, AZ

INTERNET: Go to www.AARC.org to register online and to receive a confirmation.

or MAIL: Send this form to AARC Summer Forum, 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063-4706 U.S.A.
Full payment must be included with your registration form. Make checks payable to the AARC.

or FAX: If paying by American Express, MasterCard, or VISA, you may fax your registration form to 972-484-2720.

PLEASE PRINT

First/Last Name for Badge _____

Credential (check up to three to be printed after your name): RRT PhD MS MBA FAARC Other _____

AARC Member # _____ E-mail Address _____ @ _____

Employer _____

Preferred Mailing Address Home or Business Daytime Phone () _____

City _____ State _____ Zip _____

Military Registration

The AARC pre-course and Summer Forum registration fees are being waived for all active duty military health care professionals (not just respiratory therapists). Go to www.aarc.org/aarc-meetings/summer-forum-2017/military.php to view the instructions and download a military registration form.

Pre-Course

Laying the Foundation

Saturday, June 24, 1:00 pm - 4:55 pm

CHECK ONE:

AARC Member
AARC Senior Member
AARC Student Member*
Non-member

Through April 3

\$60
 \$15
 \$15
 \$100

Through May 31

\$80
 \$20
 \$20
 \$125

After May 31 and On-Site

\$100
 \$25
 \$25
 \$150

* Must be registered for the Summer Forum. Will not receive CRCE credit.

Summer Forum

Sunday, June 25, 7:30 am - Tuesday, June 27, 1:30 pm

CHECK ONE:

AARC Member
AARC Senior Member
AARC Student Member**
Non-member

Through April 3

\$290
 \$75
 \$25
 \$400

Through May 31

\$315
 \$80
 \$25
 \$450

After May 31 and On-Site

\$400
 \$100
 \$25
 \$510

Spouses may register on-site for \$60.

Which track will you primarily attend? Education Management

** Will not receive CRCE credit.

Method of Payment

Check or Money Order enclosed

Charge my Visa MasterCard American Express

Name of Card Holder (print) _____

Credit Card # _____

Expiration Date _____ Signature _____

*** Join the AARC and save! If you opt to pay the non-member fee, you are entitled to free, automatic 1-year AARC membership.

Check here if you DO NOT wish to receive this complimentary membership.

No invoices will be issued. Cancellations must be in writing. There will be either a 25% or \$50 handling fee, whichever is less, for cancellations received by Friday, June 2, 2017. No refunds will be made thereafter.

Forum

Site and Travel Information

Save with Discounted Transportation and Lodging

Site

All AARC Summer Forum meetings will be held at the JW Marriott Tucson Starr Pass Resort & Spa, 3800 W. Starr Pass Blvd., Tucson, Arizona 85745; phone (520) 792-3500.

Resort Fee Benefits for AARC Attendees Staying at the JW Marriott Starr Pass Resort & Spa

- Daily resort fee discounted from \$29 per night to \$5 per night.
- A \$10 Starbucks gift card issued at check-in for each room scheduled to stay 5 or more nights.
- Enhanced high-speed and wireless high speed Internet for up to 5 devices in all guest rooms.
- Wireless Internet in the lobby.
- Unlimited local and US domestic long distance calls.
- Complimentary self-parking (normally \$10/day).
- Daily fitness activities at Hashani Spa.
- 10% off one-time spa treatment for each attendee. Identify yourself as an AARC attendee when you call for an appointment.
- Complimentary access to Hashani Spa facilities as an exclusive benefit for Marriott Rewards Elite Members. Fee for non-Elite members: \$25/day, based on space availability.
- Unlimited golf driving range.
- 10% off published golf rates at Starr Pass Golf Club.
- Two complimentary kid's meals per paying adult at Signature Grill (12 and under; dinner only).
- 15% off all gift and clothing purchases at the Resort, Hashani and Golf shops. Identify yourself as an AARC attendee before paying at the register.

Hotel Reservations

- **Cut-Off Date** for the AARC's special sleeping room rate is Friday, June 2.
- **Room Rate** shown is per room per night. Deposit required.
\$132 + \$5 resort fee + taxes = \$157.51/night for single through quad occupancy.
- **Call (877) 622-3140.** Refer to "AARC Summer Forum."
Discounted rates are available only through this phone number.
- **Online** at <https://aws.passkey.com/go/AARCSummerForum>.

Airline Discounts

Tucson International Airport (TUS) is approximately 13 miles from the hotel. Discounted fares also apply to family and friends.



- **Online** at www.delta.com. Select Advanced Search and enter Meeting Event Code **NMPQ7** in the box provided on the Book A Flight page.
- **Call** Delta Meeting Network at (800) 328-1111. Refer to Meeting Code **NMPQ7**.



- **Online** at www.united.com. Click "All Search Options" and enter **ZXXC512319** in the Promotions/Offer Code box on the Book A Flight page.
- **Call** United Reservations Meetings Desk at (800) 426-1122. Refer to Z code **ZXXC** and Agreement Code **512319**.

2017 AARC Summer

Ground Transportation

Airport Sedan/Shared Ride Shuttle Service



Starr Transportation [www.starrtransportationaz.com] offers three options for service to and from the airport.

- **The Sedan** seats 1–3 passengers, or up to 4 passengers depending on the size/amount of luggage. Rate: \$45 per vehicle, each way.
- **The SUV** seats 4–6 passengers. Rate: \$65 per vehicle, each way.
- **The Van** seats 7–14 passengers. Rate: \$75 per vehicle, each way.

Reservations are required and can be made by calling (520) 544-7895 or by e-mailing starrtransportation@gmail.com. You will receive a confirmation within 24 hours after submitting your reservation request.



Arizona Stagecoach offers shared ride service between the airport and the resort. The shuttle may make multiple stops between the airport and the hotel. Rates: \$28 per person one way or \$50 round trip. Additional passengers added to the same reservation are \$4 per person one-way or \$8 per person round trip. Additional passengers must be coming and going at the same time as the primary traveler in order to receive the additional person discount. Children 6 and under ride free; children 7 to 12 are \$4 when booked with a primary traveler.

Reservations are required. Book online at www.azstagecoach.com or call (877) 782-4355 or (520) 889-1000 and use Group Code **AARC** for the discounted rate.

Taxi

AAA Airport Cabs LLC, Discount Cabs, Flash Cab and Yellow Cab are the only authorized companies to take walk-up passengers at the Tucson International Airport. A one-way fare is approximately \$38. There is also a \$22 per hour charge for wait time. There is no additional charge for luggage or for more than one passenger going to the same destination.

All four taxi companies pick up passengers at a stand on the commercial roadway in front of the baggage claim area.

Forum

Rental Cars



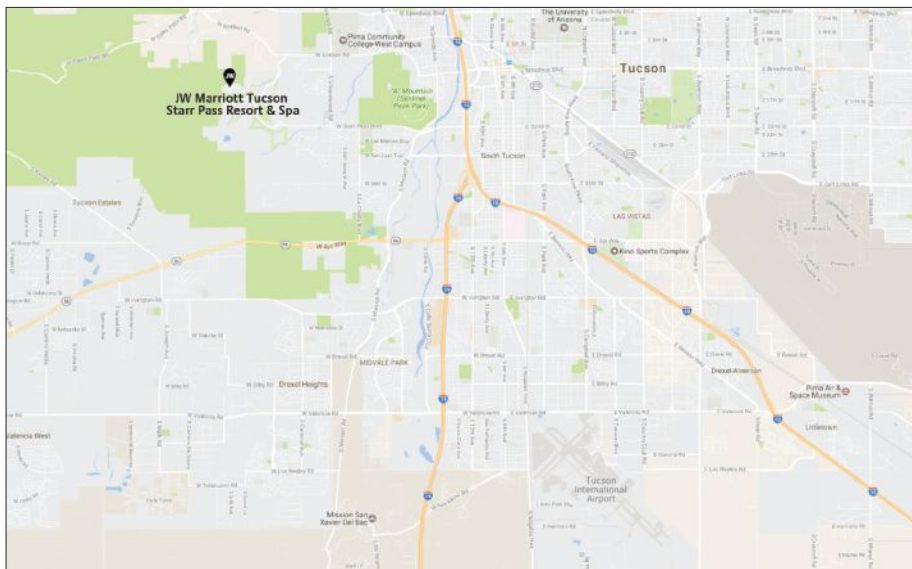
- Online at www.budget.com. Enter the BCD number, **U064639**, to receive the discount.
- Call (800) 842-5628. Refer to Discount Offer Code **U064639**.



- Online at www.enterprise.com. Enter Discount Rate Code **L9D0194** in the “Promotion Code” box.
- Call (800) 736-8222. Refer to Discount Rate Code **L9D0194**.



- Online at www.hertz.com. Enter **049T0013** in the Convention Number (CV) discount box.
- Call (800) 654-2240 or (405) 749-4434. Refer to Convention Discount Code **049T0013**.

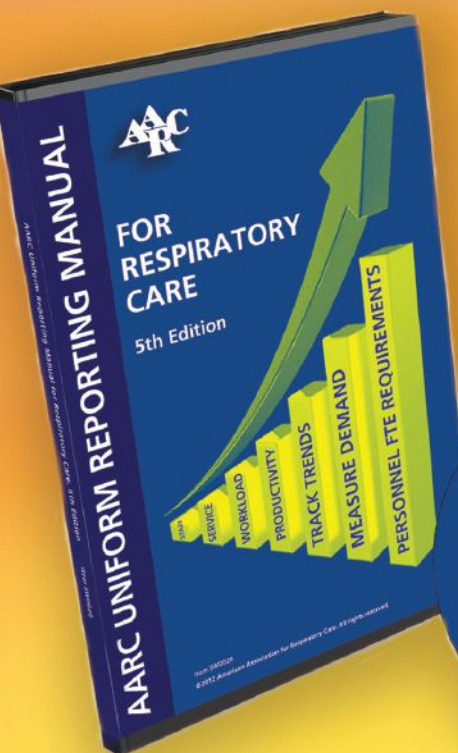


What To See and Do

- Visit [Tucson.org](https://www.visittucson.org) [<https://www.visittucson.org>]
- Visit [Arizona](http://www.visitarizona.com/cities/tucson-and-southern) [<http://www.visitarizona.com/cities/tucson-and-southern>]
- Tucson – United States’ first UNESCO City of Gastronomy [<https://www.visittucson.org/visit/food-drink/featured-tucson/exploring-tucson-gastronomy>]
- Arizona-Sonora Desert Museum – A living museum [<http://desertmuseum.org>]
- Sabino Canyon Tours [www.sabinocanyon.com]
- Pima Air & Space Museum [www.pimaair.org]
- Tucson Mall [<https://www.tucsonmall.com/en.html>]
- Reid Park Zoo [<https://reidparkzoo.org>]
- Tucson Museum of Art & Historic Block [<https://tucsonmuseumofart.org>]
- Postal History Foundation [www.postalhistoryfoundation.org/museum-exhibits.html]
- John Dillinger’s famous hideout – Hotel Congress [<http://hotelcongress.com/history/john-dillinger/>]
- Univ of AZ Richard F Caris Mirror Lab Tours [<http://mirrorlab.as.arizona.edu>]
- Kitt Peak National Observatory [<https://www.noao.edu/kpvc/>]
- Biosphere 2 [<http://biosphere2.org/promo>]
- Colossal Cave Mountain Park [www.colossalcave.com]
- The O.K. Corral and Boothill Graveyard in Tombstone [www.tombstoneaz.net]

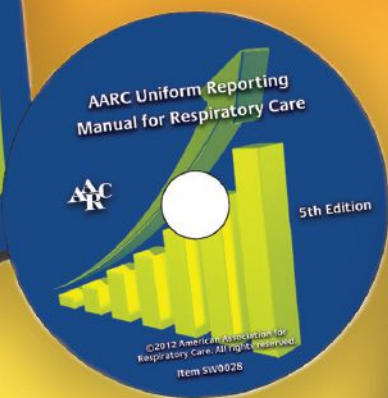
Smart Respiratory Management Tools

AARC Uniform Reporting Manual for Respiratory Care, 5th Edition



This is an invaluable resource to analyze productivity, track trends in the utilization of services, establish FTE requirements, and measure demand and intensity of services. Compares activities based on relative workload intensity, providing an objective means of assessing staffing needs. Standardized worksheets are included for each productivity system.

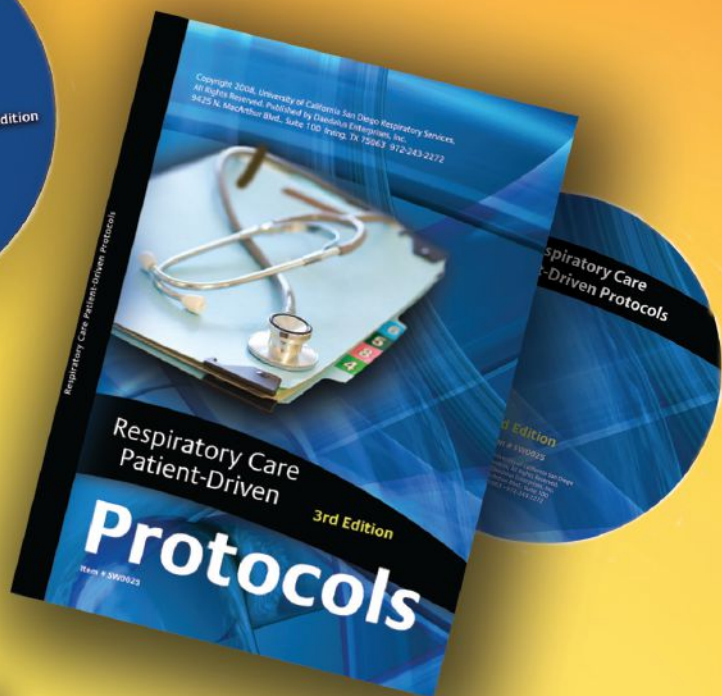
ITEM # SW0028
 Nonmember Price \$225.00
MEMBER PRICE \$175.00
 Member Savings \$ 50.00



Respiratory Care Patient-Driven Protocols, 3rd Edition

The pressure is on to efficiently operate a respiratory care department more economically. One of the most significant ways to accomplish safe and effective cost savings is through the use of protocols by respiratory therapists. Protocols have been scientifically validated as an effective method to reduce expenses and this manual is an excellent resource for the development, implementation, or refinement of care plans. Contains algorithms with each protocol.

ITEM # SW0025
 Nonmember Price \$130.00
MEMBER PRICE \$ 90.00
 Member Savings \$ 40.00



Orientation and Competency Assurance Documentation Manual for Respiratory Care, 2nd Edition

Take the worry out of documenting orientation and competency in respiratory care. With its easy-to-use digital format, this manual provides tools for documentation of compliance for Respiratory Care Services with the 2010 standards for CMS, IHI (Institute for Healthcare Improvement), and The Joint Commission. Terminology is consistent with the AARC's Uniform Reporting Manual. Includes guidelines in chapter format with reference to over 90 detailed competency documentation forms.

ITEM # SW0027
 Nonmember Price \$159.00
MEMBER PRICE \$119.00
 Member Savings \$ 40.00



More details and additional management and educational resources are available from the AARC Store.

<http://c.aarc.org/go/aarcstore>



Industry Watch

Monaghan Medical announces Aerobika® study results

According to Monaghan Medical Corporation, results from a study published in *Academic Radiology* show patients with non-cystic fibrosis bronchiectasis responded favorably to airway maintenance therapy using the company's Aerobika device.

Researchers noted significant improvements in ventilation function for a number of bronchiectasis patients after three weeks of using the Aerobika device, and there were no adverse events related to the use of the device. The company believes the study adds to the growing base of evidence demonstrating that the Aerobika® device is effective for lung health maintenance.

VIVUS acquires rights to PAH drugs from Selten Pharma

According to VIVUS, Inc., it has acquired exclusive worldwide rights for the development and commercialization of tacrolimus and ascromycin for the treatment of pulmonary arterial hypertension (PAH) and related vascular diseases

from Selten Pharma, Inc. "We are excited to partner with VIVUS to strive to bring new therapies to PAH patients who have limited treatment options," said Selten President and CEO Leo Gu, PhD. "Early compassionate use of the licensed compounds demonstrate potential to go beyond symptom management and impact the progression of disease."

Lung cancer study gets underway

Oryzon Genomics has announced that the first patient has been treated in the Phase I study of RG6016, a LSD1 inhibitor, in small cell lung cancer. The clinical trial, executed by Roche, involves participants with relapsed, extensive-stage disease small cell lung cancer (ED SCLC) and is designed to assess the safety and tolerability of RG6016 in participants with relapsed ED SCLC. The open-label multicenter trial is being conducted in several European countries and Canada.

Celtaxsys appoints new board member

Celtaxsys has appointed Dr. Abel De La Rosa to the company's board

of directors. He is the chief scientific officer for the Drug Innovations Venture at Emory and the Emory Institute for Drug Development, both based at Emory University in Atlanta, GA. Celtaxsys is currently conducting a landmark Phase II clinical trial of its flagship compound, once-daily oral acebiplustat, in adult cystic fibrosis patients in the United States, Canada, and the EU.

Indi gets LCD for diagnostic test

Indi (Integrated Diagnostics®) has announced that Palmetto GBA, a Medicare Administrative Contractor and national Medicare MoDx program leader, has posted a local coverage determination for Xpresys Lung 2, a molecular diagnostic blood test designed to provide physicians with an objective tool to address the management of indeterminate lung nodules. "We are delighted that Xpresys Lung 2 has been recognized by Palmetto GBA as meeting the high bar of evidence for coverage by Medicare's MoDx program," Indi CEO Albert A. Luderer, PhD, was quoted as saying. "This

is an important step in making the test widely available to patients and physicians."

AAFA and partners introduce new app

The Asthma & Allergy Friendly™ Certification Program is an independent program administered by the Asthma and Allergy Foundation of America (AAFA) in partnership with the international standards body Allergy Standards Limited (ASL). This Certification Program app will help empower consumers to make informed purchasing decisions when choosing allergen-avoidance products. Created in 2006 to scientifically test and identify consumer products that are more suitable for the 60+ million people with asthma and allergies, the Certification Program covers products from cleaning products, vacuum cleaners, and air cleaners to bedding, toys, flooring, and professional cleaning services. "With the launch of the Certification Program app, we can now take our mission one step further for consumers to make informed choices by offering reliable information right on their

smartphones,” says Dr. John McKeon, CEO of ASL.

Pulmatrix receives QIDP status for CF drug

Pulmatrix, Inc., has announced that its drug candidate for treating fungal infections in the lungs of cystic fibrosis (CF) patients, PUR1900, has been designated as a Qualified Infectious Disease Product (QIDP) by the FDA. Under the QIDP program, which is designed to speed the development of novel drugs against important pathogens, Pulmatrix will receive five years of additional market exclusivity for PUR1900. “The new QIDP designation is a significant boost to our efforts to make this drug available as quickly as possible to CF patients suffering from fungal lung infections,” Pulmatrix CEO Robert Clarke, PhD, was quoted as saying. When added to the FDA Orphan drug designation for PUR1900, the company will have 12 years of market exclusivity.

ResMed device improves CPAP adherence

European research from PricewaterhouseCoopers has revealed that patients with sleep apnea who use ResMed’s myAir™ have greater adherence to CPAP therapy than those who don’t. Specifically, myAir patients use their device an average 46 minutes

longer per night compared to other patients. The average adherence to CPAP treatment for new patients in their first week of treatment is 76% for myAir patients compared to 71% for other patients. myAir is a digital and online support program that enables patients to track their own treatment and get personalized coaching tips to support motivation. The data were published in a recent white paper.

Vivonoetics teams up with Roche FIREFISH study

Vivonoetics, Inc., developer of VivoSense® respiratory testing solutions, is partnering with Great Lakes NeuroTechnologies to provide advanced respiratory assessment to the Roche FIREFISH study, the first large spinal muscular atrophy (SMA) clinical trial to use respiratory inductance plethysmography (RP) systems to noninvasively sense respiratory excursions of the body in infants and young children with the condition. “We strive to advance clinical trials through the use of wearable technology,” notes Vivonoetics COO Dudley Tabakin. “With our expertise in wearable respiratory sensors and detailed data analytics, we have developed a solution that works for monitoring infants with airway obstruction observed in SMA.”

Humana and BI announce study results

A new study showing an association between non-adherence to medications for many chronic diseases and non-adherence to COPD medications has been published in the *International Journal of COPD*, report Humana, Inc., and Boehringer Ingelheim Pharmaceuticals, Inc. Results showed patients who are likely to be non-adherent to other medicines are also likely to be non-adherent to their COPD medicines. “These findings are important, because they help guide physicians on how best to support COPD patients with historically low adherence in taking their medications so they can achieve optimal health outcomes,” says Andrew Renda, MD, MPH, Bold Goal director for Humana.

Aridis Pharmaceuticals receives development award from CFFT

Aridis Pharmaceuticals, Inc., has secured a therapeutics development award from Cystic Fibrosis Foundation Therapeutics (CFFT), the drug discovery and development affiliate of the Cystic Fibrosis Foundation. It supports the development of Panaecin™ (gallium citrate), Aridis’ development-stage therapeutic


candidate aimed at treating life-threatening lung infections through Phase IIa clinical trials in CF patients. Panaecin™ has broad bactericidal activity in vitro against gram-negative and gram-positive bacteria, including antibiotic-resistant strains and highly antibiotic-resistant biofilms. It is being developed as an aerosol treatment for lung infections such as those involved in CF, pneumonia, bronchiectasis, and COPD.

COPD Foundation partnership to benefit emphysema research

The COPD Foundation-sponsored COPD Biomarker Qualification Consortium (CBQC) is partnering with the Bio-Techne Corporation. They will evaluate the suitability of a soluble form of receptor for advanced glycation end products (sRAGE) as a predictive biomarker to support subject selection for clinical trials in emphysema. Increasing evidence suggests that serum sRAGE could serve as an indicator of the presence and progression of emphysema. The program will proceed in two phases: 1) development of the assay in a small number of samples; and 2) evaluation of the selected assay based on the FDA guidance for clinical bioanalytical method validation. ■


Industry Update

Featuring information on products and equipment from manufacturers




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by Tri-anim

VibraPEP®




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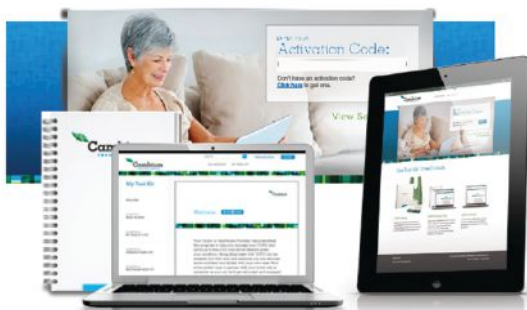
Immediate availability of resuscitator bags, airways, masks, filters, eye protection etc.



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- Easy to understand physiology of COPD
- How to avoid flare-ups – quicker reaction time
- Building a rescue plan with the doctor
- Understanding medication and medical devices
- Hands-on workbook and tools for daily living

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WWW.AARC.ORG

Volume pricing available.
Contact 972-243-2272 or
email info@aacr.org.





Classifieds

ADVERTISING SECTION



Clinical Anesthesia Specialist opening

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RC Currents

IN THE NEWS

John Walsh, COPD Foundation Founder, Passes Away



The AARC was saddened to learn of the death of COPD Foundation Founder and Director Emeritus John Walsh, who passed away recently after complications from an accident he suffered last year.

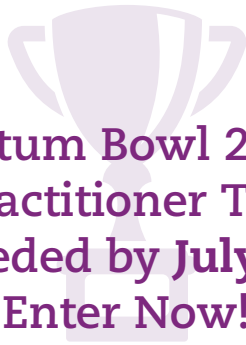
According to the COPD Foundation, Walsh “lived each day pushing himself to advocate for those who did not have a voice, and the world is a better place because of it.”

Diagnosed with alpha-1 antitrypsin deficiency, the genetic form of chronic obstructive pulmonary disease (COPD), he touched the lives of countless individuals through his pioneering efforts in the respiratory profession and his dedication to improving health, promoting worldwide detection, and finding a cure for COPD.

He was also a friend to the respiratory care profession, which he embraced in his mission to improve the lives of people with COPD. As he told RTs many, many times over the years, “We are all connected at the lungs.”

“John was an inspirational thought leader in the respiratory care community and advocated from everywhere for the AARC and the respiratory therapist,” says AARC Executive Director Thomas Kallstrom, MBA, RRT, FAARC. ■





Sputum Bowl 2017: 15 Practitioner Teams Needed by July 15 — Enter Now! —

The Sputum Bowl is a time-honored tradition that's been held at the AARC Congress every year since 1978. In recent years, however, most of our teams have been in the Student section of the competition. To continue hosting Practitioner teams as well, organizers have decided that we must have 15 Practitioner teams registered for the Bowl by **July 15**. So if you're thinking about fielding a team, now's the time to sign your group up! Go here to read more about the Sputum Bowl and find the team registration forms: www.aarc.org/resources/programs-projects/aarc-sputum-bowl/ ■



Transitions

In the lives of AARC members



John Mugford, an Alpha-1 patient who served as chair of the Alpha-1 UK Support Group, passed away in January at the age of 65. Diagnosed with the condition in 1999, he joined the support group two years later and was instrumental in establishing the group as a charity, initially in England and Wales and later in Scotland. He was elected chair in 2010. Improving the lives of people with Alpha-1 was his mission. ■



Contribute to Our “Transitions” Column

The AARC “Transitions” column is devoted to sharing news about the passing of friends and colleagues who are AARC members.

You can submit news about a recent passing by going to c.AARC.org/transitions. Please provide any information about the member's recent obituary so that we can share it with the membership and pay tribute. ■

Share Your Wisdom in Our Reflections Column

Our “Reflections” column is geared especially toward AARC members who have recently retired from the profession. We'd like you to look back at your career or some aspect of it and tell us what it meant to you and why. Funny, sad, inspiring — the door is wide open!

Start brainstorming some ideas and then submit your “Reflections” story to *AARC Times* Editor Marsha Cathcart at cathcart@aarc.org. ■





AARC Member Ensures Coal Miners Get Their Day in Court

Back in 2001, as a respiratory therapy supervisor at a hospital in Canonsburg, PA, Lynda Glagola, RRT, regularly came into contact with coal miners who were suffering the ill effects of years spent underground digging out the coal that fuels the production of electricity. These patients and their families tugged at her heart strings, so when funding dried up for the services being provided to them by the hospital, and federal government representatives asked those doing the work to consider writing grant proposals to continue the work, she couldn't resist.

"I founded a non-profit entity and wrote my first-ever grant proposal in 2002," says the AARC member. "The clinic was funded and has continued to be funded since 2002." Officially called the "Alveoli Corporation," the clinic does business under the name "Lungs at Work" and serves coal miners throughout the region. "We continue to be the only free-standing black-lung clinic funded by the federal government under the black-lung clinics program," says Glagola, who recently won the Mike South Award, sponsored jointly by the National Coalition of Black Lung and Respiratory Diseases Clinics, the United Mine Workers, and the National Black Lung Association.

In addition to another respiratory therapist who provides much-needed diagnostic testing and coordination of medical care for miners suffering from respiratory problems, Glagola has two social workers on staff who work with the miners to file and obtain evidence for their claims. A pulmonologist sees patients two days a week at the clinic, while Glagola concentrates on representing patients in the legal system, though she says this was never her intent. She envisioned a medical clinic for coal miners, but it became evident very early on that legal representation was a missing link and as vitally important to this population as medical services.

"I evaluate the medical results and determine whether their objective medical testing would qualify them to receive benefits," explains the therapist.

"I determine what other evidence they may need in order to be successful, whether that be x-ray readings, a more thorough exercise blood gas, or a second medical opinion from a knowledgeable pulmonologist." Glagola attends depositions involving both miners and physicians to ensure that the facts of the case are accurately reflected in the record, and when the medical evidence has been collected and a hearing date is scheduled, she presents the evidence before the administrative law judge, takes the miner's testimony, and writes the brief the judge will use to issue a decision.

"Basically, I act in the same way an attorney would in representing a miner, though they know more law and I know more medicine," says Glagola. Should either side appeal the ruling of the administrative law judge, Glagola briefs the case before a three-judge panel called the Benefits Review Board.

Glagola estimates that she appears in court on behalf of miners about 10–15 times a year. She attends depositions far more frequently — five or more times each month. While she knows her role is rather unique for an RT, she believes RTs have exactly what it takes to ensure a fair day in court for miners. She knows of one other RT acting in this capacity, located in southwestern Virginia.

"I know what the medical science says on the issues, and I know how to debate it. I know how to evaluate medical tests and what the different causes of abnormalities are," she says, noting that coal mine dust lung disease can manifest in multiple ways. The most common are small nodules on the chest x-ray known as simple coal workers pneumoconiosis or large opacities on the chest x-ray known as complicated pneumoconiosis, or progressive massive fibrosis. "Lesser known but also well documented by medical research are all forms of emphysema, chronic bronchitis, small airways disease, and diffuse pulmonary fibrosis mimicking idiopathic pulmonary fibrosis," Glagola explains.

With a 95% success rate in legal cases — a fact she attributes to her preliminary work with miners and honesty in telling them whether they have a good case or not — Glagola is making a real difference in the lives of people who depend on federal benefits to manage their coal mining-related health conditions. Without her services, their options would be minimal at best. “There are few attorneys who will take these cases because they cannot be settled and they cannot receive a percentage,” she says. “I have helped many miners on their second go-round when they should have won the first time but had inept or uneducated representation.” They all tell her they wish they’d known about her before and they wouldn’t know what they would do without her. The clinic’s largest source of growth over the years has been word of mouth from one miner to another.

For Glagola, working with these miners and their families is a privilege. “Respiratory therapists make a difference every day... but this is the most rewarding job I have ever had,” she says. “Indeed, I believe that I may have found my life’s mission.” ■



Guiding the Way to Family-Centered Care

An expert panel representing health care providers from around the world has developed a new set of guidelines to promote family-centered care in neonatal, pediatric, and adult intensive care units (ICUs). On the basis of an analysis of more than 450 qualitative and quantitative studies, the panel came up with 23 recommendations, grouped into five areas:

- Family presence in the ICU
- Family support
- Communication with family members
- Specific consultations and ICU team members
- Operational and environmental issues

The guidelines, which are based on evidence showing that family-centered care may prevent or lessen the impact of post-intensive care syndrome, were published in a recent edition of *Critical Care Medicine*. ■

Lung Cancer Screening: Roadblocks Abound

Philadelphia researchers presenting at the recent Society of Thoracic Surgeons meeting suggest lung cancer screening programs face an uphill battle in some communities, despite the benefits these programs bring.

In their study, 278 patients were confirmed for testing eligibility by a lung navigator. Among that group, 15 patients (5%) were deemed to have results that were suspicious, with a chance of malignancy, and four of them ultimately underwent anatomic resection for stage I non-small cell lung cancer.

A survey distributed to all primary care and referring physicians at the end of the study found that the testing program may be underutilized. According to the results, while 100% of providers were aware of the screening program, 15% had never referred a patient. In addition, 26% were not aware that low-dose computed tomography scans for select patients at risk for lung cancer are recommended by the U.S. Preventive Services Task Force.

The authors believe several factors are coming into play, such as an unwillingness to discuss the possibility of lung cancer on the part of both smokers and the physicians who care for them and problems associated with gaining insurance coverage for the testing. A significant number of providers also did not know the eligibility requirements for testing (a 30 pack-year smoking history, current smoking, or quitting within the past 15 years). “We hope there will be better and increased access to screening,” study author Simran Randhawa, MD, of Einstein Healthcare Network, was quoted as saying. “For patients, this means more hope and more lives saved.” ■





Draeger Is There for Giant Pandas

Two giant pandas born last year in Atlanta, GA, had a better chance at survival, thanks to Draeger. The company donated state-of-the-art incubators to house them during the sensitive, high-risk days and weeks following their birth, enabling zoo staff to maintain a consistent 35°C temperature and the 80% humidity necessary to support their postnatal care.

“When we heard that Zoo Atlanta needed incubators that could reach higher temperatures and offer humidity options to ensure the cubs’ wellness, we knew our products would fit those needs,” Draeger Director of Marketing Merouane Djerbal was quoted as saying. “While the incubators are designed for neonates, they provide the temperature, humidity, oxygen, [and] light and sound levels needed to support positive outcomes for these pandas.”

Today the panda twins are happy and healthy and now have names. Following an ancient Chinese tradition, the zoo announced they will be called Ya Lun and Xi Lun at the 100-day celebration of their birth. ■

Public Is Buying into E-Cigarette Harm

A new study that combined e-cigarette data from the 2012, 2013, and 2014 Health Information National Trends Surveys shows the percentage of people who believe e-cigarettes are less harmful than regular cigarettes dropped from about 50% in 2012 to 43% in 2014.

“It’s a good thing that information about e-cigarettes’ possible adverse health effects has gotten out there, especially considering there wasn’t a government or public health push during the study years,” according to study leader Eric W. Ford, PhD, MPH, a professor at Johns Hopkins Bloomberg School of Public Health. Indeed, the study years saw a plethora of advertisements from e-cigarette makers touting their products as potentially safer alternatives to cigarettes or harmless tools in the battle to quit.

The study appeared in an online edition of the *American Journal of Preventive Medicine* earlier this year. ■



Protein Linked to Breathing

Scientists from the Scripps Research Institute have found that a protein known as Piezo2 appears to be involved in how the body controls breathing.

Using genetically modified mouse models, they discovered that newborn mice lacking the Piezo2 channel showed severe respiratory distress that led to death, a finding that could help explain sudden infant death syndrome, which is thought to be associated with dysfunctional airway sensory neurons. Adult mice lacking the Piezo2 channel in sensory neurons exhibited significantly increased tidal volume as well as an impaired

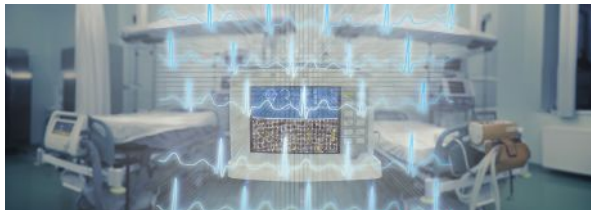
Hering-Breuer reflex. The investigators believe the research may be relevant for understanding respiratory diseases such as COPD and sleep apnea, which appear to be tied to disruption of the airway sensory feedback system.

The study was published in a recent edition of *Nature*. ■

ICU Overload

Does every patient in your intensive care unit today really need to be there? According to a recent study in *JAMA Internal Medicine*, the answer may be no. UCLA researchers reached that conclusion after looking at 808 ICU admissions over a one-year period at Harbor-UCLA Medical Center. Results showed 23.4% of patients were in need of close monitoring but not ICU-level care. Another 20.9% were critically ill but unlikely to recover because they had underlying illnesses or severity of acute illness likely to lead to death. For another 8%, death was imminent or the same outcomes were expected in non-ICU care.

“While this is a study of just one hospital and results may differ at other medical centers, we suspect that these characteristics of ICU utilization are commonplace and prevalent in many institutions,” study author Dong W. Chang, MD, was quoted as saying. He and his fellow investigators are quick to point out, however, that in some hospitals the ICU may still be the best place for some of these patients because those facilities don’t have the ability to provide adequate care for them in non-ICU areas. ■



Indoor Smoking Bans Lower Asthma ED Visits for Kids

Indoor smoking bans are linked to a reduction in the number of emergency department (ED) visits for pediatric asthma in a study published in a recent edition of the *Annals of Allergy, Asthma & Immunology*.

The investigators looked at 20 metropolitan areas that introduced clean indoor air regulations prohibiting smoking in public places, then reviewed 335,588 asthma-related ED visits that occurred in these communities between July 2000 and January 2014. Pre-ban vs. post-ban comparisons showed ED visits fell 8% after one year with a ban in place, 13% after two years, and 17% after three years.

The findings held true even after the results were adjusted to take other factors into account, and the researchers also note no general, nationwide decline in children’s asthma-related ED visits were seen during the time period, beyond those linked to communities with the smoking bans. ■



Hospitals Respond to Financial Penalties for Readmissions

The Hospital Readmissions Reduction Program is getting the job done, report Boston researchers who looked at data on 15 million Medicare discharges for patients diagnosed with acute myocardial infarction, congestive heart failure, and pneumonia. Based on 30-day readmission rates after initial hospitalization, hospitals were categorized into one of four groups according to the penalties they had incurred under the program: highest performance (0% penalty), average performance (greater than 0% but less than 0.5% penalty), low performance (equal to or greater than 0.5% but less than 0.99% penalty), and lowest performance (equal to or greater than 0.99% penalty). Results showed all four groups improved to some degree, but those in the lowest-performing group prior to implementation of the law improved the most.

“For every 10,000 patients discharged per year, the worst-performing hospitals — which were penalized the most — avoided 95 readmissions they would have had if

they’d continued along their current trajectory before the implementation of the law,” says study author Francesca Dominici, PhD, from Harvard University. “It’s a testament to the fact that hospitals do respond to financial penalties, in particular when these penalties are also tied to publicly reported performance goals.”

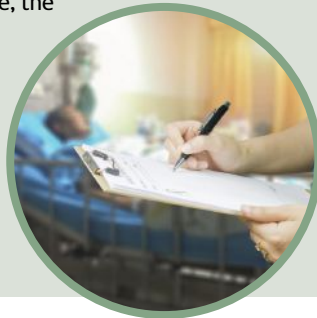
The study appeared in a recent issue of the *Annals of Internal Medicine*. ■



ECLS Analysis Shows Benefits for Patients

An updated analysis of a worldwide database on the use of extracorporeal life support (ECLS) shows how the technology is benefiting patients. Here are some of the findings:

- In 2015 ECLS was used in 7,901 patients at 310 centers worldwide.
- 70% of patients were successfully weaned off ECLS, and 58% survived to hospital discharge.
- When ECLS was used for respiratory failure, the rate of survival to discharge was 74% for newborns under 30 days old and 58% for older children and adults.
- In patients with various causes of cardiac failure, overall rates of survival to hospital discharge were 42% for newborns, 51% for older children, and 41% for adults.



- Newborns with respiratory failure remain the largest group of ECLS patients. Although the use of ECLS in this group of patients has decreased in recent years, rates of survival to hospital discharge have decreased, most likely due to advances in mechanical ventilation that have resulted in a more critically ill group of infants being placed on ECLS.

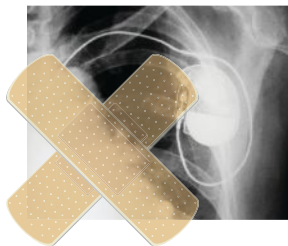
- Adults with respiratory failure are the fastest-growing group of ECLS patients, a trend that may reflect the impact of the H1N1 influenza epidemic, as well as the 2009 CESAR study showing that extracorporeal membrane oxygenation improves survival in adults with severe respiratory failure.

The review was published in a recent edition of the *ASAIO Journal*. ■

Strange But True...



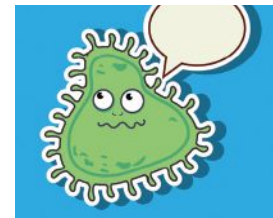
What goes around, comes around: An ancient Chinese remedy for malaria may have implications for the 21st-century treatment of tuberculosis. Michigan State University researchers have found that artemisinin stops the ability of *Mycobacterium tuberculosis* to become dormant, the stage of the disease that often makes the use of antibiotics ineffective.



Out with the old: Electronic pacemakers featuring electrodes inserted into various areas of the heart are used to correct the dysfunction of the heart's natural pacemaker mechanism. Canadian researchers working with colleagues in Israel have discovered a way to use human embryonic stem cells to create a biological pacemaker that could make the electronic version obsolete.



Taking security to heart: New York investigators are working on technology aimed at using a person's ECG signal to protect his personal electronic health record. The signal acts as a key to lock and unlock files contained in the record. There are still some bugs to be worked out of the system — such as the fact that one's ECG may change over time due to age or illness — but the researchers believe they can engineer the system around those factors.



Chatty viruses: Viruses that talk? Well, not exactly, but researchers from the Weizmann Institute of Science have found that viruses secrete small molecules into their environment during infection that other viruses can pick up and “read,” enabling them to coordinate their attack. The simple messages translate into a fairly sophisticated strategy wherein viruses know when to replicate quickly so they can kill the host as fast as possible, such as at the beginning of an infection, and when to dial it back to ensure there will still be hosts left for future generations of viruses to infect. ■



Calendar of Events

AARC & State Society Programs

April 5-7
Anaconda, MT
43rd Montana State Respiratory Conference
Contact: www.msrcmt.org

April 18-21
Baton Rouge, LA
LSRC 47th Annual Educational Meeting and Exhibits
Contact: djguillot29@gmail.com

April 19-21
Land of the Ozarks, MO
MSRC 46th Annual Conference
Contact: kelliecarroll8@gmail.com

April 26-28, 2017
Lincoln, NE
Respiratory Therapy – Navigating the Future
Contact: lisa.fuchs@methodistcollege.edu

May 1-3, 2017
Wisconsin Dells, WI
North Regional Respiratory Care Conference
Contact: bsherwood@corespiratory.com

May 3-5, 2017
Vail, CO
Colorado Society State Conference
Contact: delegate@colosrc.org

May 15-17, 2017
Sioux Falls, SD
SDSRC Annual Conference and Meeting
Contact: sdsrsrc.president@gmail.com

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For information on submitting calendar events, go to: <http://tinyurl.com/aarcstatemeeting>



AARC Times

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5 Tips for a Winning Photo

1. Photo must be vertical and not horizontal.
2. Set your camera to take the highest pixel photo.
3. Put yourself in the best position to get the shot, even if that means getting down on the floor or up on a chair.
4. Make the picture tell a story about the respiratory care profession. A picture that conveys some emotion about your patients is always preferable to one that does not.
5. Submit a brief story about your inspiration for taking the shot.

Finalists in the competition will receive a **FREE one-year AARC membership renewal.**

For contest guidelines visit:

www.AARC.org/resources/publications/aarc-times

The deadline to submit photos is **May 1, 2017.**

Email your photo to joyce.havins@aacrc.org or send a CD to: Photo Contest, 9425 N. MacArthur Blvd., Irving, TX 75063.

All photos become the property of the AARC and everyone in the photo must sign a release form provided on the Photo Contest website.

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