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2 Hirst KR, Patel A, Vines DL. Evaluation of Bronchial Pressures and Tidal Volume Using Three Different Adult High Flow Nasal Cannula (HFNC) Devices. AARC 2011 Open Forum # 13 Presentation. i. Cited in support of PEP effect only

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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.

Bookmark this page:  
[http://www.aarc.org/member\\_services/mission/](http://www.aarc.org/member_services/mission/).



American Association  
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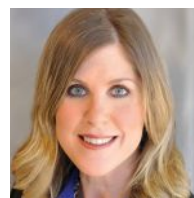
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## Thank You, AARC Members!

**O**n this month's cover of *AARC Times*, we feature you, our members. The AARC continues to strongly support the profession because of members like you.

The people on the cover this month are respiratory care students, practitioners, disease managers, authors, advocates, medical mission volunteers, lifesavers, newsmakers, and leaders of organizations related to the respiratory care profession. Several volunteered their time to advocate for respiratory care patients and the profession over the past year.

As you read this edition of *AARC Times*, we hope you will think about everything being done by you and for you — the 50,000+ strong who make up the Association worldwide and who drive the advances in respiratory care today. The AARC Annual Report in this issue highlights the many activities, programs, and projects of the Association throughout the past year.

Thank YOU for all you do, and thank you for being an AARC member! Everyone has a role to play in the profession. What's yours? ■



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3. Sindee Karpel, Ft. Myers, FL
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24. Christie Ward, Jackson, TN

# Transitioning the RT: Home Care Competency and Education

by Zach Gantt, RRT

The need for respiratory therapists to be working as navigators, disease managers, and proponents of population health has become increasingly evident over the last 5 years, particularly with the changes emanating from the Patient Protection and Affordable Care Act.<sup>1</sup> Affordable, accountable, and value-based care are rapidly driving the evolution of our profession and are likely creating the largest opportunity we have ever seen to advance the profession. Today, we see great opportunities for respiratory therapists to be leaders in facilitating quality management while improving the respiratory patient's discharge care plan and experience. In addition, the RT can assist in assuring that the transition process includes accurate and complete information for the patient and is coordinated with the entire acute and post-acute health care team.

### Aligning value-based incentive programs

The introduction of pay for performance incentives has elevated the importance of comprehensive hospital discharge plans for respiratory patients, and, in some pilot programs, complementary respiratory transition plans in post-acute care. Hospitals are now being penalized for readmissions and are forced to understand and create standardized post-acute respiratory outcome measures. Many of the transition protocols focus on establishing the site of care, general symptom awareness, and primary care follow up. Although this is certainly appropriate, a comprehensive program should include understanding the risk factors correlated with increased readmissions. The current value-based incentive program is focused on reducing 30-day avoidable readmissions; however, on the horizon is the broadening of the readmission definition as well as the

depth of the measurement incentives to foster a disease management goal.

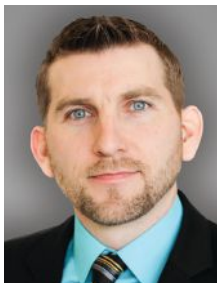
If you think about these disease management goals, they are almost non-existent in the home care arena. In fact, the system for reimbursement for home care is not in sync with that for the acute care providers. Home health care was founded on nurses being the majority provider, and reimbursement is lacking for RTs. Durable medical equipment (DME) services are reimbursed more on the basis of products (e.g., oxygen delivery systems) for which

reimbursement has been reduced over the years. Implementation of competitive bidding has reduced reimbursement significantly for these providers. For business survival reasons, some DME providers have had to drastically reduce the number of clinicians they formerly employed to visit patients in their homes on a regular basis. These reductions in visits and monitoring formerly done by RTs is another aspect of the health care continuum that is out of sync with the acute care programs and adds further concern over whether we are fixing one part of the system without understanding the impact on another.

### Take a deep breath and redefine competencies

Forecasting the future is difficult but it seems reasonable that successful transitions will be more of a "pull" into the home rather than a "push" out of the hospital. What will allow RTs, and all health systems involved in this care continuum, to advance the health of our communities will be to institute standardized measures within the construct of evidence-based medicine and/or best practices to measure performance over not just 30 days, but throughout the patient's lifetime.

### about the author...



Zach Gantt, RRT, is the CEO of Encore Healthcare; the chair elect of the AARC Homecare Section; and president of the Tennessee Society for Respiratory Care.



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Acute care is where most RTs are employed and the standardized measures of quality, patient satisfaction, and clinical outcomes are stipulated and governed by well-established organizations (e.g., The Joint Commission). This focus has naturally driven the standardization and structure that have led to competencies for health care professionals in acute care hospitals. In post-acute care accreditation, specifically home health care and associated DME services, it is focused on business practices, protected health information security, and compliance with Centers for Medicare & Medicaid Services standards.<sup>2-3</sup> Over the years, RTs have described making this jump from the acute care structured tasks to post-acute patient care as “it’s like the wild west” and “I feel like I’m on my own.”

The AARC has a team of experts addressing the development of these competencies and accreditation. Pulmonologists Dr. Kent Christopher and Dr. Brian Carlin; AARC Associate Director of Education, Shawna Strickland; and Home Care Specialty Section Chair, Kim Wiles have developed a structure that outlines the competency categories and the corresponding knowledge/skills to drive effective patient management, as follows:

- **Patient assessment** of physical, cognitive, and social domains using hands on, in-home measures.
- **Equipment and therapeutic** assessments covering the devices, monitors and associated plan of care to connect the patient assessment to outcome goals.
- **Patient/family management and home safety** assessments encompassing self-management and motivation, risk, infection, safety factors, and caregiver support.
- **Health policy reform** to address accreditation agency collaboration and establish reimbursement criteria for respiratory services.
- **Palliative and pediatric** specific guidelines to enhance quality of life goals and identify the greater pediatric support network and future growth needs.

### Transitioning opportunity into reality

Every day, patients are discharged with post-acute respiratory needs and both hospitals and payers recognize the gaps in their capabilities to successfully “pull” that patient into the desired post-acute care venue. Our opportunity is to create programs to enhance that transition by addressing the immediate patient needs, while capturing data of risk factors and performance measures to understand current performance and improve it.

Successful respiratory care companies will have clinical leadership that promotes home therapist competencies, employs evidence-based and/or best practices, and collects outcome data to assure that the service is effective, efficient, and of optimal quality. This will prepare the business for the transition into a respiratory services provider that will be successful in the new economic model. The rapid innovation of public and private funded health plan performance incentives provides an enormous opportunity for respiratory care professionals. By managing and assisting the collaboration between providers, both our patients and all health care providers will witness a comprehensive health system that transcends all care venues. ■

### References:

1. Patient Protection and Affordable Care Act, 42 U.S.C. §18001 (2010).
2. Centers for Medicare and Medicaid Services website. DMEPOS accreditation fact sheet. Available at: <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/MLN-Publications-Items/CMS1246764.html>. Accessed April 1, 2016.
3. Centers for Medicare and Medicaid Services website. DMEPOS Competitive bidding, Homecare, Centers for Medicare & Medicaid Services. Available at: [https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/DMEPOSCompetitiveBid/index.html?redirect=/DMEPOSCompetitiveBid/01\\_overview.asp](https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/DMEPOSCompetitiveBid/index.html?redirect=/DMEPOSCompetitiveBid/01_overview.asp). Accessed April 1, 2016.

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## How To Best Communicate Your Issues to Your Elected Officials

by Cheryl West, MHA

**A**t one time or another, most of us have focused on some issue that energizes us to the point where we believe we need to, or feel we should, let our elected officials know what we think and what we would like these elected officials to do about the issue in question. Here are some points to consider before “speaking up.”

### What’s the issue?

This is a pretty obvious question, but what is it or what is happening that concerns you to the point where you feel your elected official should know how you feel or what you want them to do about it? One recommendation: be aware of any opposing views, if there are any. The more you know about all sides of an issue the better it is to have a rational and reasonable response to any counter argument and to affirm your own position.

### Which elected official can best address specific concerns?

If, for example, you have a sure fire way to end world hunger, letting the members of your city or town council know about it probably isn’t going to do much to advance the issue of ending world hunger. On the flip side, complaining that your street lights are out or there are pot holes in the road isn’t going to be an issue your U.S. senator is going to focus on, but it might be one that your town council or state legislator would. These are exaggerated examples but they go to the point that you need to assess who would best address your issue.

Of course, there can be national issues or trends in other states or other parts of the county that you might oppose or support and intend to let your own elected official(s) know your viewpoint. Voicing your opinion on

what might develop into a potential national or state policy is simply being an informed citizen contributing to a larger discussion, and it’s certainly your Constitutional right to do so.

However, it is advisable to carefully pick the issues you want to take up with officials from states other than your own. Keep in mind the operative word for “elected official” is *elected*. The official is focused on the opinions

and concerns that impact the people who put him or her into office. A voter from Buffalo, NY, writing to a Montana member of Congress or the Montana governor will likely be ignored by the elected Montana official. So the simple bottom line is: elected members at any level (local, state, or Congressional) want to hear from and will pay attention to their constituents (those who voted them in and can vote them out of office).

### about the author...



Cheryl West, MHA, serves as director of government affairs for the AARC.

### What should you say or write?

Whatever you want to say, the first sentence needs to be “Hello, I’m Joe Smith and I am your constituent” or words to that effect. Right out of the box, you need to tell whomever is

reading or listening that you are in the officials’ district or state. In other words you live and vote in this elected official’s “territory,” whether that’s the local school district or the state.

### Should I snail mail or email?

Clearly email is easier and is the way to communicate these days. However, a “real” letter shows the recipient that you care enough about the issue to actually sit down and write a letter and either mail it or fax it. Like it or not, a written, original letter elevates your concern to its reader.

**Should I call?**

If you decide to phone the official, know that you likely will not speak to the official and will leave your message with a staff person. After you have identified yourself as a constituent, ask for the staff person who handles the general topic of your issue (i.e., health issues, agriculture, transportation, etc.).

Sooner rather than later, make sure the staff person has your contact information. This is especially true if you have to leave a voice message. Leave your phone number or email right at the beginning of your message, not at the end. Before you call, write down your short script and practice it so you can verbalize your issue in half a minute. Being unclear, repetitive, or rambling does not get your message across in a serious way.

Whether you're writing or calling, especially if you are writing down your concerns, do not write a *War and Peace* epic tale. It won't get read. A written message needs to be no more than one page and in short paragraphs — bullets points are even better. A "subject" header is essential because the staff who read letters

will have a file of similar issues or subjects. This is one way an elected official can gauge the interest of the voters on a particular topic. It goes without saying whatever the message it should be polite, respectful, and to the point. Even through you might thoroughly disagree with the position of an official, a reasonable message achieves partially what you want — that is someone will read it and hopefully consider it as well.

**The final point: What do you want them to do?**

Make it clear what you want or whether you are just letting them know, as their constituent, how you feel about a specific subject. If you want something done, simply say, "I asking you to support, or oppose or to consider, etc."

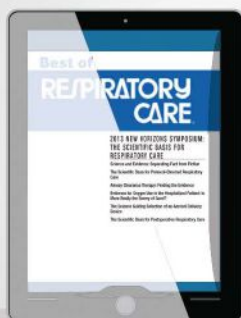
However you might communicate with your elected official, keep in mind that as a voter you have every right and perhaps an obligation to let your official know your views on issues important to you. They will never know this unless they are made aware of it and they hear from you, their constituent. ■

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## Coming of Age

# When Chronic Illness Takes Your Identity— Shifting the Focus to a Valued Life

By Arpi Minassian, PhD, and Arianna Villa, BS, RRT

### The psychological impact of lung disease

Lung diseases, such as chronic obstructive pulmonary disease (COPD), are a leading cause of mortality worldwide and have a deleterious impact on quality of life. Symptoms of dyspnea and fatigue are experienced daily by patients even in mild disease stages.<sup>1</sup> These challenges limit activities necessary for daily living, and reduce engagement in hobbies and interests that would ordinarily bring joy and a sense of meaning. Feelings of powerlessness over symptoms, especially in acute phases of illness<sup>2</sup> compound a belief that lung disease has robbed the individual of his or her identity.<sup>3</sup> Patients describe that their sense of who they were before the onset or worsening of their disease is changed or lost, a sentiment expressed poignantly by an individual in a qualitative study by Ellison et al<sup>4</sup>: “You aren’t the person you used to be. You are someone else now.”

### Depression and anxiety

The shift in identity, embarrassment, guilt, anger, and concern about being a burden are all significant contributors to the high prevalence of depression in people with lung disease. Although reported rates vary widely, probably due to sampling and measurement differences, a review suggests that anywhere from 37%-71% of people with severe COPD have depression symptoms.<sup>5</sup> Anxiety is also exceedingly common, particularly because of its cyclical relationship with dyspnea. People with lung disease almost universally agree that shortness of breath episodes cause their anxiety to increase, which in turn worsens their dyspnea. Physiological studies confirm patients’ experience of the fear-dyspnea cycle.<sup>6</sup> Not surprisingly, panic attacks are prevalent. Depression and anxiety are of concern because they compound the emotional suffering of the patient and because of compelling evidence that psy-

chological comorbidities are associated with worse functioning, longer hospitalizations, and higher mortality.<sup>7</sup>

### Psychotherapeutic interventions targeting depression and anxiety in lung disease

Providers have long recognized that treatment of a person with lung disease requires attention to the emotional factors that mitigate the patient’s medical condition and influence the likelihood of benefiting from intervention. Common psychotherapy interventions include support groups, cognitive behavioral therapy (CBT) and, recently, complementary medicine approaches such as Tai Chi<sup>8</sup> and yoga.<sup>9</sup> Whereas most of these treatments result in statistically significant improvements in mood and quality of life,<sup>7</sup> the magnitude of these beneficial effects are typically not dramatic. Pulmonary rehabilitation, the treatment of choice for diseases such as COPD, decreases depression and anxiety symptoms in the short-term, but more enduring effects on mood are not seen,<sup>10</sup> leaving room for improving psychological treatment approaches in this population.

CBT is often used in patients with lung disease<sup>11</sup> and its theoretical underpinnings are certainly relevant.

The “cognitive” aspect of CBT teaches patients that faulty or distorted thinking causes depression to worsen and changing these negative thought patterns can improve mood. The “behavioral” portion emphasizes remaining active and engaging in hobbies and interests. Patients immediately understand that their thoughts can worsen mood; for example, in response to a dyspnea episode. Patients also describe that their hobbies have been curtailed, often drastically. But how can they cope with the profound sense that they are not who they used to be?

### about the author...



Arpi Minassian, PhD, is a clinical professor in the Department of Psychiatry at the University of California at San Diego.

An alternative to CBT that might assist patients in regaining their identity is acceptance and commitment therapy (ACT).<sup>12</sup> ACT is a psychotherapy technique that can be implemented as individual therapy or as group therapy; the group therapy approach is optimal for pulmonary rehabilitation programs. The theoretical principle of ACT is that psychological inflexibility can lead to anxiety and depression. The ACT therapist discusses with the patient that thoughts and emotions can be exaggerated and distorted. Unlike in CBT, however, the emphasis is not on trying to change thoughts, rather on shifting one's focus to behavior that is consistent with personal and deeply-held values. What makes ACT an appealing approach for people with unremitting diseases such as COPD is its tenet that struggles and suffering do not need to be eliminated in order to live a meaningful and valuable life. While to our knowledge there have not yet been published studies on the efficacy of ACT in pulmonary disease, it has shown benefit in other chronic conditions such as fibromyalgia<sup>13</sup> and in palliative care patients.<sup>14</sup>

We use ACT in our psychotherapy groups at the University of California at San Diego Pulmonary Rehabilitation Program, with an emphasis on having patients identify their personal values. Experiential exercises illustrate that, despite their lung disease, patients possess values such as: relationships with loved ones, grandchildren and friends, service to the community, spirituality, curiosity/thirst for knowledge, appreciation of culture, nature, art, and many others. We then ask patients to identify activities they still can engage in that are consistent with their values, and thus live a meaningful life not wholly defined by lung disease. Mindfulness meditation, another central ACT component, is introduced. Our patients describe this treatment as "somewhat" or "very" helpful. Acceptance-based approaches such as ACT hold promise in assisting people with lung disease recover and renew their identity.

### The role of the respiratory therapist

Patients with lung disease often feel helpless, guilty, and angry about their condition. The RT is often the provider that patients find the most empathic, thus they typically share their experiences with depression and anxiety more so than with their pulmonologist. The RT can have a pivotal role in helping the patient identify his or her own reasons that treatment (e.g., pulmonary rehabilitation) is important. The RT's role in helping the patient set individualized goals for pulmonary rehabilitation is critical, makes the program personally meaningful, and may prevent early dropout from treatment. Connecting these goals with the patient's personal val-

ues can be done in a support group format that an RT can co-lead with a mental health clinician. Thus, the RT can participate in a powerful and easily implementable intervention that may move the individual beyond their suffering and toward a life that holds purpose and meaning. ■

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## Feel Good Foolishness and Social Media Silliness

by Anthony L. DeWitt, JD, RRT, FAARC

**P**ride in what we do as therapists is common. Everyone loves being the smartest person in the room — the gal who has all the answers. Sometimes our pride in our profession can reach dangerous heights. And when an excess of pride is married with social media, bad things happen:

Called to a code in dialysis.... I check the pupils and note they are pinpoint. I let the team know and suggest narcan....hospitalist dismisses the finding.

RN: it can't be narcotics, its been 3 hours since he got any and he was fine when I brought him down here.

Me: I ask the dialysis tech how much fluid they have pulled....

Tech: 1.8 LITERS

Me: if the circulating volume decreases, drug concentration increases...

RN: blank look

MD: maybe we should try narcan Narcan does the trick and we get the pt back. RN shoots me a look....

Me: "what? I'm just up here, playing with hot air..."

THAT is why it's a team....it wasn't respiratory but we STILL solved the problem.

Me: 1, RN: O, MD: still clueless

---

Okay, let's concede up front this is a good outcome. It's unlikely to produce a lawsuit. But this online post demonstrates everything bad about social media, and it also demonstrates that just because a group on social media may be closed, it doesn't mean that the post itself cannot get out to the general public.

Suppose a therapist and friend of the dialysis nurse sees this post and forwards it to the nurse, or worse yet, the physician.

Perhaps more importantly, suppose a patient's family member stumbles onto the post. At the very least the therapist is going to get fired, and more likely, they'll be reported for a HIPAA violation and an ethics violation to the Board of Respiratory Care.

But just in case someone thinks I am picking on therapists, let me assure you that therapists are not the only offenders. From a website known as allnurses.com, the following comes:

### about the author...



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I am two weeks into a new dialysis career. I come from a critical care background and happen to be ACLS certified. There was a patient that coded at the center today. I was the first one to the patient no pulse and not breathing. I called for O<sub>2</sub> and the crash cart, which were both brought by an RT. The center director RN and the charge RN came at that point. I started directing the code and was asked to leave. Long story short... the crash cart was never unlocked, no O<sub>2</sub> to the patient, no CPR started, no blood sugar obtained. Needless to say I quit, but, before I did, I wanted to know why the patient wasn't put on a monitor. Charge [nurse] responded by saying [it] was broke. I asked why

we had a crash cart if nobody knew how to use it, the CD response was that was in case a Dr. was making rounds and wanted to run the code. \*\*\*\* Come to find out, I was the only person in the building that was ACLS certified and I guess since I had no dialysis experience they would rather have let the lady die to save face. Anyone that has dialysis experience care to explain what the policy concerning a code in their center is? I left out of there distressed that they would not let me do anything for the

patient when it was apparent these people didn't have a clue. Thanks!!!!!!!!!!!!!!

If the therapist in the story above this was exercising poor judgment, then this nurse is practically begging to get the facility, the nurses, and herself sued for wrongful death. And with her statement that the facility "would rather have let the lady die to save face," you have all the earmarks of a case where punitive damages may be called for because it demonstrates a willful and wanton disregard of the patient's welfare.

Attorneys and paralegals do a lot of online research. They search for names, and user names, and they can subpoena third-party resources, like websites, to provide the names of persons who post on them. It truly is amazing to see what people post on social media. One recent post on a respiratory therapy-related group on Facebook included this:



12-month-old patient brought to the ED for increased work of breathing. This is the x-ray. What's your diagnosis?

Seriously? While no patient identifying information is embedded in the graphic, the graphic is clearly a patient's chest film, and the patient is identified by age and source of admission. The image was posted from a cell phone, and this would make it hard to source. But you can bet that if the hospital IT department learned that images stored on its servers were being posted on Facebook, they would pursue the issue. Someone's head would likely roll over that.

Here is what is safe to say about your job on social media:

- I love taking care of patients.
- I love my job.
- I love my co-workers.
- I love my boss.
- I had chicken salad for dinner last night.

Why are these things safe? Because they are positive, reflect well on your employer and on you, and they do not cause problems with other caregivers.

Here is a short list of what it is **not** safe to post or discuss on social media:

- Patients – even without mentioning names.
- Nurses not acting appropriately.
- Patients being put at risk.
- Doctors who are clueless (or other insulting remarks).
- Chest films, ventilator waveforms, blood gas results, and similar clinical information.
- Any photo showing any patient in the facility, even with the patient's permission.

Everyone has bad days. Some things you can't talk over with a spouse. Some things you can't talk over with your parents. You have a vow of confidentiality to honor. If you can't talk about it to your mom, your dad, your sister, your brother, or your spouse, then you cannot mention it on social media either. If you mention a bad outcome as a way of venting to your 10,000 closest RT friends, you are not only putting your job at risk, you're putting your professional license and career at risk. Here is truly the golden rule regarding Facebook postings: If you would be embarrassed to see what you posted splashed across the front page of your local newspaper, then you better not post it. ■

## Breath Stacking as a Lung Recruitment Method

By Jenni Raake, MBA, RRT-NPS, FAARC

As respiratory therapists, we are given the rewarding task of helping restore health to our patients. Many patients we treat develop acute lung injury (ALI) due to atelectasis, respiratory failure, illness, and trauma.<sup>1,2</sup> Treatment of ALI is designed to improve oxygenation and ventilation, and can be applied to neonatal through adult patients.

Therapeutic interventions range from oxygen delivery devices, incentive spirometry (IS), chest physiotherapy, sustained inflation maneuvers, and non-invasive pressure ventilation to mechanical ventilation. Recruitment maneuvers (RMs) can also be used, and are designed to increase transpulmonary pressure, thereby increasing the number of alveoli participating in gas exchange.<sup>3</sup>

One type of RM is known as breath stacking (BS). First described by Marini et al,<sup>4</sup> BS is the act of providing three to four inhalations with an exhalation at the end of the last breath. The stacking effect recruits lung tissue by achieving maximal inspiratory capacity.<sup>4</sup> BS can be performed in infant, pediatric, and adult patients, and can be categorized in three ways: voluntary breath stacking (VBS), supportive breath stacking (SBS), and involuntary breath stacking (IBS).<sup>5</sup>

In VBS, the RT coaches the patient to inhale three to four breaths over the course of 20 to 30 seconds, closing their glottis between each breath. By stacking successive breaths, the patient maximizes their inspiratory capacity by increasing the volume of each consecutive breath.<sup>6</sup>

VBS can be performed in conjunction with IS, cough-assist therapy, and/or followed by a forced exhalation to aid in mucociliary clearance. Suitable for school-

aged pediatric patients through adult patients with atelectasis, pneumonia, or post-operative respiratory complications, VBS can be performed in the hospital or at home.

For patients lacking the ability to cooperate, SBS can be applied by the RT. SBS uses a resuscitation bag with a mouthpiece and nose clip, or a mask and one-way valve to block exhalation until the end of the recruitment period. SBS is suited for patients with respiratory insufficiency due to neuromuscular disease such as Duchenne muscular dystrophy or amyotrophic lateral sclerosis. These patients may have the cognitive ability to cooperate with the RT's instructions, but may lack the physical ability to perform VBS.

For patients unable to perform VBS or SBS, the RT may opt to perform IBS. IBS can be used in all age groups. With spontaneously breathing patients, a resuscitation bag with a one-way valve and mouthpiece, mask, or tracheostomy tube adapter is used. In mechanically ventilated patients, the RT can use a resuscitation bag, or occlude the expiratory limb of the ventilator for up to 20 seconds while the ventilator is delivering inspired breaths.

The benefit of RMs is measured by lung mechanics and blood gas values. In a study by Dias et al,<sup>7</sup> patients achieved significantly greater lung

volumes with BS than with IS in both the preoperative and post operative periods. Another study demonstrated that patients using BS were able to generate lung volumes on post operative day 2 equal to those attained during the preoperative period; a quicker recovery than achieved with IS.<sup>8</sup>

### about the author...



Jenni Raake, MBA, RRT-NPS, FAARC, is a respiratory therapist at the University of Cincinnati Medical Center in Cincinnati, OH. She has over 35 years of experience in neonatal, pediatric, and adult care.

In mechanically ventilated adults, the benefits of BS have been demonstrated. A study by Porto et al<sup>9</sup> showed an increase in aO<sub>2</sub> and a reduction in aCO<sub>2</sub> when using BS in ventilated patients. Another adult study found IBS reduced intrapulmonary shunting by nearly 10% in the postoperative cardiac patient, and concluded it was as beneficial as incremental PEEP maneuvers.<sup>10</sup>

Pediatric patients have gained benefits from the use of BS. In postoperative orthopedic children, BS was effective in reducing the need for supplemental oxygen in chronically ill patients.<sup>11</sup> In children with neuromuscular disease, the use of BS demonstrated a 50% improvement in lung volumes.<sup>5</sup> Another study showed that BS was effective in improving maximal inspiratory capacity and forced vital capacity in pediatric patients with neuromuscular disease.<sup>12</sup> BS has been recognized as a standard of airway clearance in pediatric care.<sup>13</sup> Limitations of these studies were small sample sizes.

Breath stacking has demonstrated benefits to many patients; however, there are certain risks associated with the maneuver. The two most common complications of recruitment maneuvers are barotrauma and hemodynamic compromise.<sup>14</sup> It is essential for the RT to monitor patient vital signs when performing breath stacking with patients.<sup>15</sup> BS should be considered a contraindication in patients with cardiac instability, a pneumothorax, or an increased intracranial pressure.<sup>16</sup>

The RT plays a vital role in the use of BS with their patients. As a clinician, the therapist can help promote the use of BS through consultation with the medical team. As a leader in cardiopulmonary health, the RT can help develop a program within their department which includes BS as a therapeutic option for lung recruitment. As an educator, the RT can teach others how to perform the procedure on patients, or can help educate the patient and family how to perform the procedure at home.

In conclusion, BS is another type of RM that RTs can use to improve lung recruitment in mechanically ventilated or spontaneously breathing patients. There are more studies needed to evaluate long-term outcomes, especially in pediatric patients. ■

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# Storytellers

## Ask... and You Shall Receive

By R. K. Anthony

**Author’s Note:** All names have been fictionalized to protect patient privacy.

I’d met Paul a week before he passed away. It was a sunny California morning in July, and Paul’s private hospital room glowed with natural light through the tall windows in the corner. I walked into his room, gave my usual greeting, and mentioned his breathing treatment through the fragrant burn of hand sanitizer. The overhead TV blared the local news, but neither Paul nor his wife was watching it.

Paul was a healthy-looking gentleman — clean-cut face, light-pink skin, a neatly barbered businessman haircut. He appeared to be a fit 50 years old (he was actually 62).

The hospital bed lay flat, and Paul positioned himself rigidly on his side facing me. His right hand clung to the bed rail as though he were balancing himself against vertigo. His knuckles pushed against the skin along the top of his hand, and four white spots revealed themselves. His eyes focused on an invisible object, as though his physical condition was out of tune with his thoughts. He glanced my way on occasion, in a sideways manner. There was an open food tray on his over-bed table loaded with scrambled eggs and white toast — uneaten.

Through the sweat on his forehead, glinting in the light, he tried to conceal each labored breath.

I lifted the bed and looped the nebulizer around his head, observing his first breaths of the medication. He inhaled so deeply it was like he repeatedly prepared himself to blow a balloon.

His wife, Sarah, was on the phone in the corner of the room, quietly telling the caller on the other side, “Our faith is getting us through this.”

Time felt like a departed concept in Paul’s room. I knew we were still in the hospital, but I couldn’t shake the feeling of *presence* that dilated each moment into a sequence of lifetimes.

I took a second to investigate Paul’s medical chart in the room, scrolling to the latest physician’s progress note. When I reached the assessment and impression, it dawned on me how severe Paul’s condition was: He had stage four bone cancer, which metastasized to the lungs. But that wasn’t the worst of it: He had just learned of his condition two weeks ago.

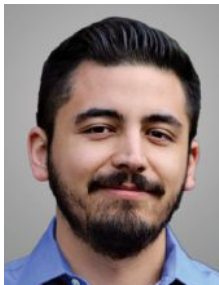
My posture slumped, and my purple-gloved hands hovered idly above the keyboard. I shifted the weight on my feet without thinking. If I had tried to speak then, I know even silent air wouldn’t have escaped my lips. But for some reason beyond my grasp, I still felt a need to ask about how the diagnosis had affected him.

“I understand you have a serious illness, Paul,” I said, awkwardly, not knowing how to tread this ground. “How has it affected you...emotionally?”

Paul looked like the kind of guy who spent his weekends refurbishing old Chevy sedans without gloves — not the type of guy who would respond to a question about his emotional state. But in that hospital room, a week before his passing, he did just that.

“There weren’t any signs,” he said, between breathlessness and choking up. “I knew I wasn’t feeling well

### about the author...



R. K. Anthony (Ryan Hernandez, BS, RRT) is a respiratory therapist and writer in Los Angeles, CA.



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for a few months, but I never expected this.” Tears started running from his eyes.

At the sight of a grown man breaking down, my eyes welled shortly after, the hospital room faded into the distance, and only Paul and I were left in that sacred space.

“I never had breathing problems before this,” he said. “But now I’m focusing on every breath. It makes me anxious, which worsens the breathing. It’s scary.”

I held back my automatic discourse on the connection between anxiety and shortness of breath. He seemed well informed. “How’s your family handling the news?” I asked.

“You know,” he said, “in spite of it all, I know they get it. It’s hard on them, but they’ll be all right. They know where I’m going.” He paused, looking beyond me. “Soon I’ll be in the hands of my Savior, and I’m feeling OK because my children” — he paused again, eyes tearing up — “they’re walking in the Truth. I can say with certainty that my children are saved. And that makes this — all of this — OK.” The air thickened around Paul’s declaration, and he said nothing more until the treatment was over.

The morning light ladled a supernatural peace into the room. I felt a small change in me, an amendment to my internal contract, one I didn’t anticipate before walking into Paul’s room. His faith left a deep impression on me.

Sarah was off the phone now and she chimed in, “We’re a family of faith. It’s going to be hard — we’ve been married forty years — but I’m certain he’ll be safe.” She placed her hand on Paul’s shoulder. “It’s just going to be hard to lose my best friend.”

When the nebulizer sputtered its final mist, I wrapped things up and said a few words of consolation. My assignment changed later that morning, and I never saw Paul again.

A few weeks later, I had a chance encounter with Sarah at a grief support group at my church. At the end of the group session, I walked up to Sarah and reminded her of who I was. When she finally recalled that I was Paul’s respiratory therapist, I told her that her husband’s courageous faith, in the face of such devastating news, profoundly impacted me and inspired a strengthening of my own faith.

Sarah placed a hand over her mouth and wept, face curled up, as though the reminder of Paul’s absence was unbearable. When she was calm again, she said, “Paul died at our home a week after that day.” She thanked me for speaking up and was grateful to hear that Paul had left an impression on me.

“That’s the kind of guy Paul was,” she said. “He always wanted to leave a good impression on people.”

This experience taught me an important lesson: to ask patients how they feel, not just physically, but emotionally. Since then, I’ve changed my practice and now actively seek an emotional connection with my patients, beyond respiratory therapy. It’s too easy to stay on the surface — time constraints and unscheduled procedures are nearly constant and often prevent deeper connections. But I’m glad I took the time to dig a bit deeper.

It’s likely Paul never would’ve offered that information if I’d never asked. Yet in the time it took to complete a single nebulizer treatment, I was left with an experience I’ll never forget. ■



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The health care system of the future will demand higher levels of education from clinicians. The AARC is working toward those goals for respiratory therapists today.

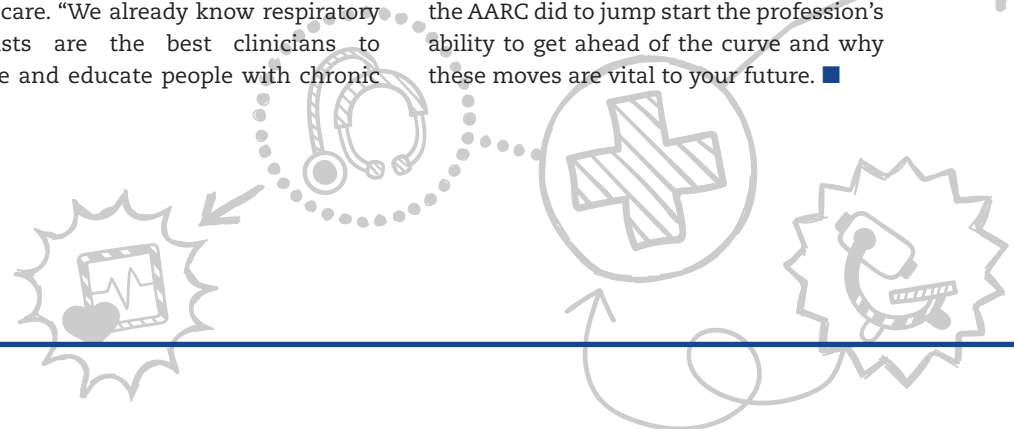
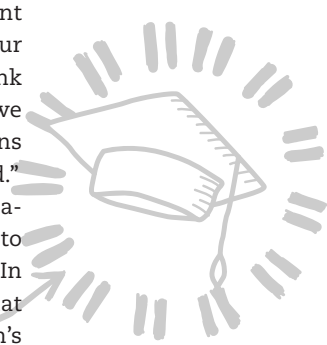
by **Debbie Bunch**

Health care in the 21st century is quickly being defined by new paradigms for preventing and managing diseases that already exist to minimize their impact on the economy and, most importantly, the patients who suffer from them.

To compete in this newly defined system, clinicians will need higher levels of education. Through a series of breakout initiatives in 2015, the AARC doubled its efforts to ensure respiratory therapists would not be left behind in the evolution of health care. “We already know respiratory therapists are the best clinicians to manage and educate people with chronic

respiratory conditions, but convincing payers and other thought leaders of this fact is going to require a significant investment in additional education on the part of our workforce,” says AARC President Frank Salvatore, MBA, RRT, FAARC. “Last year we got the ball rolling with several actions designed to move the profession forward.”

Throughout the past year, the Association initiated a host of other activities to advance your career in respiratory care. In this issue you can read highlights of what the AARC did to jump start the profession’s ability to get ahead of the curve and why these moves are vital to your future. ■



# BOLD moves

The AARC's 2014 Human Resources Survey showed 65% of respiratory therapists hold a bachelor's degree or are working toward a bachelor's degree. But as value-based care takes hold, respiratory therapists could be at a disadvantage when trying to expand their scope of practice to be first-in-line chronic disease managers/educators if they do not have, at a minimum, a bachelor's degree that would put them on par with similar disciplines.

For that reason, the AARC Board of Directors issued two broad statements designed to bring the profession closer to the 100% bachelor's degree mark within the

next few years. At their meeting prior to the Summer Forum in Phoenix, Board members moved to upgrade the Association's previous goal for bachelor-degreed RTs, calling for 80% of therapists to either hold a bachelor's degree or be working toward one as the entry level into practice by the year 2020. In order to gauge progress toward that goal, the Board also launched plans to conduct another Human Resources Survey in 2017, with the hope of seeing a significant increase in bachelor-degreed therapists over the 2014 figures. At their next meeting, held in conjunction with AARC Congress 2015 in Tampa, the Board approved another statement



## Even More Things AARC Did for You in 2015

What else did the AARC bring to you last year? In addition to publishing *RESPIRATORY CARE* and *AARC Times*, organizing the Summer Forum and AARC Congress, presenting 24 live Webcasts, and meeting the day-to-day needs of our members, the Association:

**Activated** the AARC Disaster Fund for members affected by deadly weather events in several areas of the country. These members could receive a grant of up to \$500 for damages they suffered.



**Offered** reduced membership dues to senior AARC members who have retired from full-time employment and to recent graduates who are just beginning their respiratory care careers.

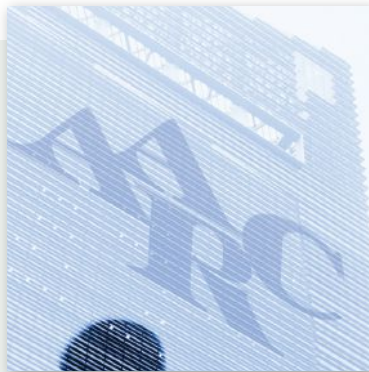
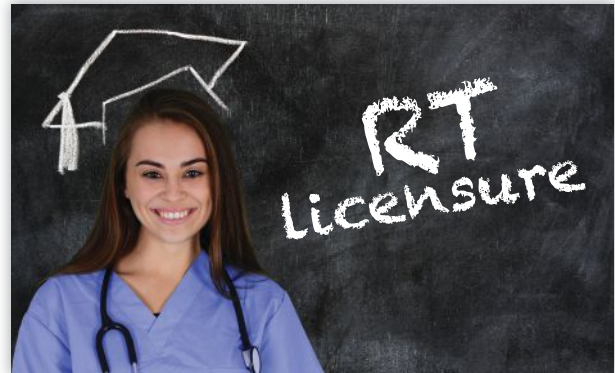




calling for all new RT educational programs to be accredited at the bachelor's degree level or higher. It encouraged existing associate's degree programs to work toward upgrading to the bachelor's degree. Early this year, CoARC made it official by stating that it will no longer accredit *new* respiratory care programs that do not offer at least a bachelor's degree.

In concert with these efforts, the AARC Board initiated plans to establish an Advanced Practice Respiratory Therapist (APRT) role that would position RTs to take on a mid-level provider role in facilities. In addition to defining the term and setting up a committee of members from the AARC, NBRC, CoARC, and other organizations to look into performing a job analysis and needs assessment, the Association plans to (based on the outcomes of the job analysis, needs assessment and committee recommendations) request the NBRC explore development of an APRT examination and credential. Together with a move-

ment underway in some states to upgrade RT licensure to require the RRT credential for entry into practice (Ohio and California have already made the move), AARC leaders believe these initiatives will help place our profession on a level playing field with other clinical disciplines that already require a higher level of education and credentialing for their workforces. ■



**Established** a more formal “on-boarding” program for new AARC committee chairs.

**Approved** several measures designed to enhance educational and professional resources for students.

**Launched** a “grassroots member initiative” to continue to engage members in advancing the respiratory care profession.



**Approved** revised position statements on electronic cigarettes, RT education, ethics and professional conduct, licensure of respiratory care personnel, and continuing education. It also issued a new position statement on the pulmonary disease manager and one on using RTs to insert and maintain arterial and vascular lines.



# Raising Awareness

Patients are why respiratory therapists do what they do, and patient advocacy is vital to all our interests. The AARC worked closely with a range of patient advocacy organizations in 2015 to learn more about what patients want from RTs and to spread the word about chronic lung disease to the general public and our fellow health care communities of interest. The main event took place at AARC Congress 2015 when we held our first Respiratory Patient Advocacy Summit. Taking place the day before the Congress began, the summit drew participation from AARC leaders, patient advocacy group members, Boehringer Ingelheim, Sunovion, GSK, and others who



gathered to discuss a range of issues important to both patients and practitioners.

The COPD Foundation, U.S. COPD Coalition, Allergy & Asthma Network, and pharmaceutical companies graciously lent their support to the event, providing speakers to talk about key areas of concern. They joined RTs in a roundtable discussion to offer solutions for people living with lung disease. A second annual summit is in the works for AARC Congress 2016 in San Antonio this October.

Patient advocacy didn't stop there. The Association partnered with the family of the late Leonard Nimoy on helping bring about a documentary film to show his battle

**Encouraged** members to take advantage of a new Alarm Safety Compendium developed by the Association for the Advancement of Medical Instrumentation with input from the AARC and other organizations in the National Alarm Coalition.



**Participated** in a ventilator alarm webcast sponsored by the Association for the Advancement of Medical Instrumentation that featured a respiratory therapist and a nurse discussing ways the two disciplines can work together to successfully handle ventilator alarms. The free Webcast was made available to AARC members.



**Added** a number of new galleries to the AARC's Virtual Museum, an online resource housing historical artifacts of the profession. Among the new offerings is a series of videos featuring RTs explaining why they decided to become a respiratory therapist.

with COPD and his mission to ensure more people know about the condition. A trailer for the film debuted at AARC Congress 2015 during the Association's annual awards ceremony. Producers are aiming for a release this summer of "COPD: Highly Illogical — A Special Tribute to Leonard Nimoy," which plans to feature a leading RT talking about COPD care and treatments. It is expected to raise awareness of both the disease and the health care workers like respiratory therapists who help patients cope with the disease. Late in the year, the Association was approached by



the Centers for Disease Control and Prevention (CDC) to play an active role in promoting its new "Tips from Former Smokers" campaign, and the AARC was pleased to welcome CDC representatives to AARC Congress 2015. Their booth drew big crowds in the Exhibit Hall and AARC support of the campaign continued into the new year as Web stories were published urging RTs to review the campaign materials. The CDC issued a special "call out" to RTs recognizing the important role they play in tobacco cessation. ■



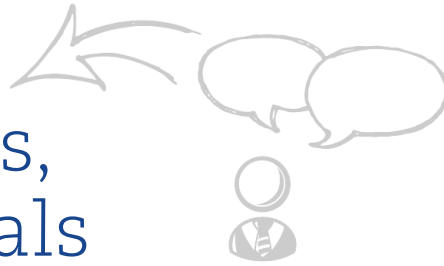
**Participated** in a #COPDChat sponsored by the COPD Foundation on Twitter to raise awareness of COPD during COPD Month last November.

**Joined** the Coalition for Respiratory Compromise Institute to represent RTs' interests to groups and organizations dedicated to advancing patient safety efforts addressing this preventable causes of death in the nation's hospitals.

**Urged** members to join the COPD Foundation's new online collaborative network known as The COPD PRAXIS. The network offers member discussion boards plus a wide range of resources designed to help clinicians reduce readmissions and remain informed on legislation related to COPD.



# New Programs, Easier Renewals



The continuing education of respiratory therapists remains at the forefront of AARC objectives, and 2015 saw the addition of several new programs. Given the new focus on disease management and patient education for people with chronic respiratory conditions, the Association launched a new Pulmonary Disease Educator Course in Arlington, VA, in the spring and held a second session in Dallas, TX, in the fall. A third outing for the course took place in Chicago in March of this year. The course covers all the bases when it comes to educating patients about their lung disease and how to keep it under control.

Other new courses AARC launched last year covered pulmonary diagnostics and tobacco cessation, and work commenced on new courses for this year as well, including those dealing with neonatal pediatrics and sleep medicine.

The Association also delivered more than 100 on-demand courses through AARC University.

To make it easier for members to renew RT credentials, the Association also partnered with the NBRC to set up a system by which any CRCEs earned through AARC courses would quickly and easily transfer into the NBRC Continuing Competency Program renewal website; all you do is enter your AARC member number into the site, and your AARC CRCE transcript is automatically imported. ■

**Pulmonary Disease  
Educator Course**

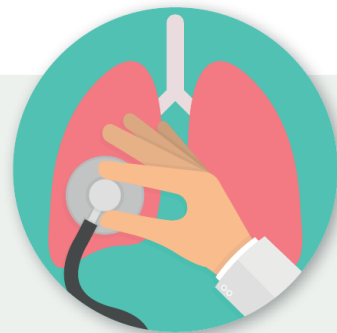
**Pulmonary Diagnostics  
and Tobacco Cessation**

**NBRC Continuing  
Competency Program**



**Joined** more than 100 other organizations in supporting transparency on out-of-pocket medication costs in a proposed cost estimator under development by the Centers for Medicare and Medicaid Services for the federally facilitated insurance marketplace.

**Sponsored** a booth at the Health Occupations Students of America conference that was hosted by students and faculty from California College in San Diego.



**Published** a new Aerosolized Medication Clinical Practice Guideline in *RESPIRATORY CARE* that questions the value of these medications for airway clearance. The guideline was developed by an AARC task force working with researchers from Vanderbilt University.

# Your Success Is Our Success

Helping therapists thrive in the workplace is priority one at the AARC, and two initiatives last year targeted that goal.

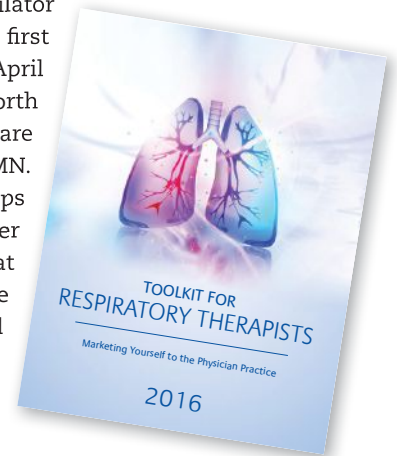
Bring it to life with  + 


Early in the year, the Association partnered with Edison Nation Medical to help you bring your innovative ideas for new medical products and services to fruition. Equipped with the expertise necessary to navigate the entrepreneurial waters, Edison is helping a number of AARC members move their ideas forward, and we anticipate seeing some of their products on the market very soon.

The Association also published a new guide to help therapists get their foot in the door in the increasingly important physician office market. "Toolkit for Respiratory Therapists: Marketing Yourself to the Physician Practice" was developed with input from content experts in 2015 and was launched early this

year. The document specifically outlines the potential for expanded respiratory therapist services post-discharge that are included in new reimbursement programs from Medicare.

Our mission to ensure the respiratory care workforce is prepared to meet the needs of patients in the event of a national disaster continues. The CDC contracted with the AARC to provide three Strategic National Stockpile Ventilator Workshops this year. The first workshop took place in April in conjunction with the North Regional Respiratory Care Conference in Rochester, MN. The other three workshops are slated for this summer in California, Ohio, and at a tri-state meeting of the Alabama, Louisiana, and Mississippi Societies. ■




 **Supported** patients' rights by joining more than 50 other organizations in asking the Equal Employment Opportunity Commission to withdraw a proposed rule that would weaken the right of patients to keep their health information confidential.



 **Supported** the Texas Society for Respiratory Care in its efforts to maintain licensure for RTs in the state of Texas. Licensure was preserved after Gov. Greg Abbot signed legislation moving RT licensure from the umbrella state licensing agency to the Texas Medical Board.



 **Endorsed** the new Accreditation Standards for Degree Advancement Programs in Respiratory Care put forth by CoARC.



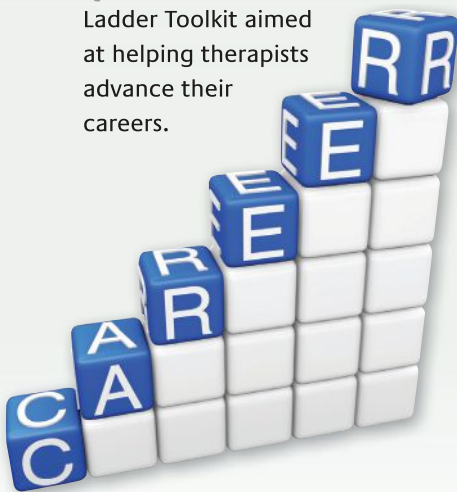
# 2015 Annual Financial Report

In February 2016, the AARC engaged the public accounting firm Salmon Sims Thomas to conduct an audit of its financial operations. It issued an unqualified opinion stating that the AARC's financial statements were presented fairly and conform with generally accepted accounting principles.



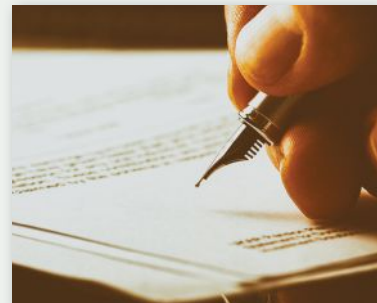
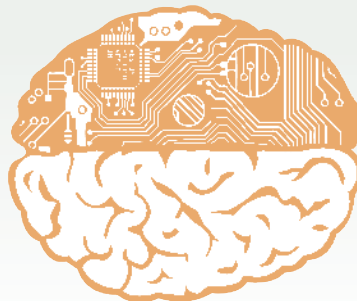
In 2015, the AARC's total revenues (excluding investments) were \$9,506,083; total expenses were \$9,137,194. Figures 1 and 2 highlight the sources of last year's revenues and expenses. Net assets at the end of 2015 were \$23,622,000. ■

**Issued** a Career Ladder Toolkit aimed at helping therapists advance their careers.

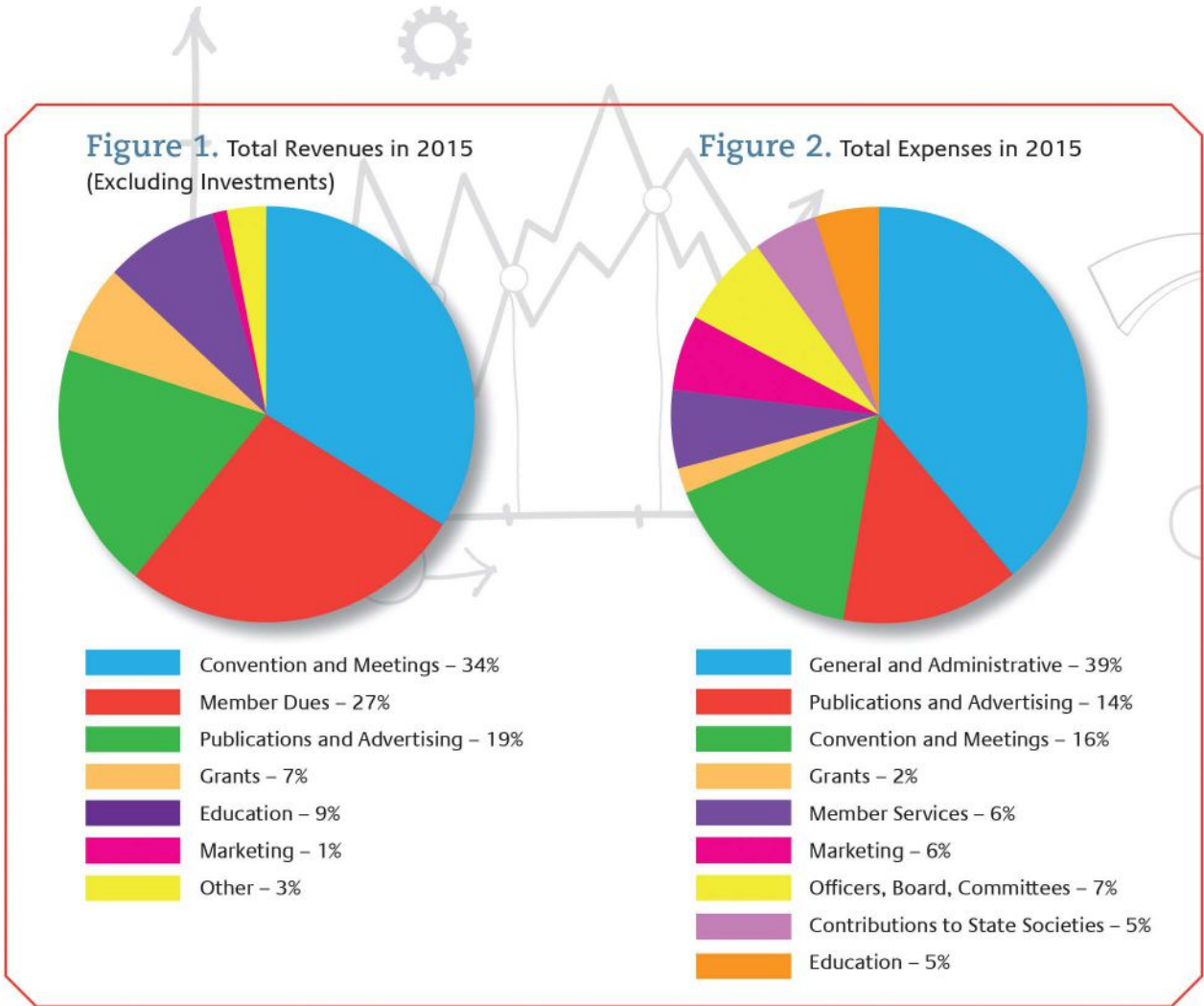


**Approved** six AARC Bylaws revisions aimed at enhancing the overall operation of the Association.

**Published** a clinical simulations briefing paper that reviews the value of simulations in increasing critical thinking abilities among RTs.



**Approved** the development of a Safe Initiation and Management of Mechanical Ventilation white paper to be completed in conjunction with the University Hospital Consortium.



**Joined** more than 30 other organizations in urging the Obama administration to support a proposed regulation to extend the U.S. Food and Drug Administration authority over all unregulated tobacco products, including e-cigarettes, hookahs, and cigars.



**Offered** free disposable peak flow meters to AARC members engaged in community events last spring.



**Shared** a new report from the National Health Council on the patient experience with the health insurance exchanges. As a member of the council, the AARC helped develop five principles considered vital to developing a better health marketplace for patients.





# Opening Doors


2015 saw a shift in the AARC's advocacy efforts on Capitol Hill, as the Association decided that the best way to move the RT forward in the legislative arena would be to support legislation covering a range of disciplines. We found our mark in the form of the Medicare Telehealth Parity Act, which specifically includes the respiratory therapist among the professionals that would be covered under an expansion of current Medicare telehealth provisions.

Our 2015 Capitol Hill Lobby Day saw members of the AARC's Political Advocacy Contact Team (PACT) out in force to educate their members of Congress on the merits of the legislation, and



that effort continued this past April as the AARC PACT once again made its way up Capitol Hill for their 2016 visit with members of Congress and their staff.


If passed, this telehealth bill would open many doors for the RT to provide remote monitoring and education to chronic lung disease patients who are in desperate need of guidance on managing their conditions. It would also set a meaningful precedent for the use of RTs outside the hospital setting. The February 2016 edition of *AARC Times* featured telehealth and showed how one RT is making a successful career of it. ■

 **Offered** free AARC Congress registration to RT students who signed up to compete in the 2015 Sputum Bowl in Tampa, FL.



The 62nd International Respiratory  
Convention & Exhibition



 **Participated** in a live video stream of the COPD Readmission Summit hosted by the COPD Foundation. AARC Executive Director Thomas Kallstrom, MBA, RRT, FAARC, was among the presenters. We also participated in the third annual Patient Safety, Science & Technology Summit, where Kallstrom accepted a Humanitarian Award on behalf of RTs everywhere. ■



# RC Currents

IN THE NEWS

## ARCF Now Accepting Applications for the 2016 International Fellowship 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 International Fellowship Program is a sponsored activity of the American Respiratory Care Foundation (ARCF). Since 1990, health professionals from more than 50 countries have shared experiences, knowledge, and lasting friendships through this exceptional 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 Congress, scheduled this year for Oct. 15-18 in San Antonio, TX.

Learn more and apply by **June 1** at [www.arcfoundation.org/international/fellows/](http://www.arcfoundation.org/international/fellows/). For more information, contact Crystal Maldonado at [crystal.maldonado@arc.org](mailto:crystal.maldonado@arc.org). ■

**ar**  
**cf** American Respiratory Care Foundation

About ARCF | Awards | Award Recipients | Conferences | International | Support | News | Contact Us

### Application for an International Fellowship in Respiratory Care

Before you begin, you will need the following files on your computer:

1. Your current **curriculum vitae** (résumé/biographical data).
2. One **letter of recommendation from the director of your institution** verifying your plans to develop some type of training program in respiratory care and/or establish respiratory care as a separate health profession.
3. **Two letters of recommendation** specifically addressing your professional expertise and qualifications in support of your application.
4. A **digital photograph** of yourself.

Please submit the following information:

**Personal Information**

## International Fellowship Program Looking for City Hosts



Every year the ARCF sponsors an International Fellowship Program that brings physicians, therapists, and nurses from other countries to our shores to learn more about American-style respiratory care in two cities. It can't happen without city hosts in each of the localities, and now is the time to step up and volunteer.

Learn more about the program and apply by the **June 1** deadline at [www.arcfoundation.org/international/fellows/city\\_host.cfm](http://www.arcfoundation.org/international/fellows/city_host.cfm). This year's fellowships will take place this fall just prior to AARC Congress 2016, Oct. 15-18, in San Antonio, TX.

For more information, contact Crystal Maldonado at [crystal.maldonado@arc.org](mailto:crystal.maldonado@arc.org). ■

## Check Out the AARC New Members List Online



The “New Members” column can be accessed at [http://c.AARC.org/new\\_members](http://c.AARC.org/new_members). Current AARC members are encouraged to check this site on the first of each month to view the names of individuals who have been approved as “Active Members” of the Association.

## Educators: Help Recognize Outstanding Students

The American Respiratory Care Foundation (ARCF) is accepting applications for its undergraduate and postgraduate Education Recognition Awards now through **June 1** and is asking RC educators to help get the word out to their students. So check out the list of available awards and then encourage your best and brightest students to apply.

The ARCF offers awards to students who are currently enrolled in accredited respiratory care educational programs and to respiratory therapists who are pursuing an advanced degree. Awards include registration and airfare to attend the AARC Congress, scheduled this year for Oct. 15-18 in San Antonio, TX.

To see all of the awards bestowed by the ARCF every year, go to the Foundation’s Grants, Awards, and Fellowships page at [www.arcfoundation.org/awards/](http://www.arcfoundation.org/awards/). For more information, contact Crystal Maldonado at [crystal.maldonado@aacr.org](mailto:crystal.maldonado@aacr.org). ■



## Contribute to AARC Times Columns in 2016

*AARC Times* launched two new columns this year, and we need your stories keep them running.



The first is called “Storytellers,” and it’s where AARC members can share stories about their favorite or most memorable patient. Maybe it was an “aha moment” when you knew you had made the right professional decision for that patient or maybe it was an event that is truly unforgettable.

The second, “Reflections,” is for 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! Share your ideas with current working professionals to bring it forward and make that all-important connection with your peers.

Start brainstorming some ideas and then submit your stories to *AARC Times* Editor Marsha Cathcart at [cathcart@aacr.org](mailto:cathcart@aacr.org). ■

▶ STUDENT CORNER

## The Power in Community Service

By Jamy Chulak, MS, RRT

Service to the community has the power to create a deeper sense of purpose in the life of a student.



Establishing a personal connection to the patient, the public, and the profession through community service allows us to gather together to make a difference.

Collaborating with those who regularly participate in community service activities helps the student understand that a sense of purpose through volunteering their time offers rewards and perspectives not often captured in an academic or clinical

setting. Community service has the power to offer unintended outcomes that reveal pathways and personal connections to people who may change your life and how you approach the people you encounter on a daily basis.

In an attempt to ensure the community service event remains altruistic to the student experience, we offer guidance, but our student leaders have the option to choose the event. A portion of our co-curricular requirements for the Student Club Organization is a commitment to community service that is reported to the department and celebrated each year at graduation.

Our students have worked with the American Lung Association, along with the COPD and CF Foundations, to support their events and efforts to serve the public. We've joined our local Area Health Education Centers to provide smoking cessation education to middle school children and training for respiratory care students. Service to the profession is exercised through volunteer work with the Florida Society for Respiratory Care's State Sunshine Seminar as well, and we've enjoyed our partnership with the AARC when the Health Occupation Students of America (HOSA) comes to Orlando. This event allows our students to engage in deep discussion and instruction with talented high school students interested in health care professions. The experience and memories captured are powerful reminders that we are part of a community, part of a cause, and part of a profession.

When you set out to do community service, take time to think about the intended outcome of the organization's community service opportunity. If you are unsure that you have the capacity to offer service that is tangible or meaningful, then just try volunteering in another capacity with friends. You may discover value in the services you offer that were not available without your presence. Communicate your intent when working at the community service event. You may discover your ideas and goals change as you engage in the needs of the organization. A new and better idea of service may erupt. Be courageous and act out your good deeds within your community, your profession, and your family of community service volunteers. Be great!

*Jamy Chulak is chair of the respiratory care program at Valencia College in Orlando, FL. ■*



## We Invite RT Student Members To Send Us Your Stories

AARC Times is always looking for good stories from AARC student members that relate special experiences and give the RT student perspective on the respiratory care profession they have chosen as a career.

If you have a story to tell, please contact AARC Times Editor Marsha Cathcart at [cathcart@aacrc.org](mailto:cathcart@aacrc.org) and include in the subject line, "Student Member Story." Be sure to give us your full name, AARC member number, a brief description of the story subject, and why you would like to have it published. Then attach a Word document of the story. We hope to hear from you soon! ■

## RT VOICE COMES THROUGH LOUD AND CLEAR AT NHLBI COPD MEETING

Respiratory therapists were out in force earlier this year as the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) hosted the first-ever town hall meeting aimed at developing a National COPD Action Plan. AARC President Frank Salvatore, Jr., MBA, RRT, FAARC, and House of Delegates Speaker-

collection, analysis, dissemination, and reporting of COPD-related public health data.

- Increase and sustain research to better understand prevention, pathogenesis, diagnosis, treatment, and management of COPD.
- Increase awareness and sustain COPD education among stakeholders, decision makers,



AARC President Frank Salvatore snaps one of his famous selfies with fellow therapists in attendance.

RTs were happy to lend their expertise to the multidisciplinary group.

Working group members discuss issues important to COPD patients.

elect Keith Siegel, BS, RRT, CPFT, led the charge from the respiratory therapy standpoint, joined by a number of state affiliate members from Virginia, Maryland/DC, and Massachusetts, as well as other therapists from across the country.

“We saw that the NHLBI was holding the meeting in order to shape the goals, initiatives, and efforts that would be outlined in the National COPD Action Plan to combat COPD, and we knew that RTs needed to be involved.” says Salvatore. Overall, the meeting was attended by more than 150 professionals who were there to represent a diverse group of disciplines involved in the care and treatment of COPD. Patients and caregivers were on hand as well to provide the very important patient perspective.

Everyone in attendance was assigned to a working group to address issues ranging from empowering patients, families, and communities to recognize and reduce the burden of COPD, to increasing and sustaining the prevention, detection, diagnosis, treatment, and management of the disease. Other overarching objectives included:

- Increase collaboration and coordination to sustain surveillance and evaluation to improve

individuals with COPD, their families, caregivers, communities, and populations at risk.

- Integrate recommended policy, educational, and program changes into the legislative, research, public health, and care delivery structures of the nation.

In addition to Salvatore and Siegel, about 20 RTs attended the meeting, and Salvatore says most of the six working groups included a respiratory therapist. RTs spoke up for increased access to RTs for patients but made sure patient advocacy remained at the core of their comments.

“It was an honor to represent the AARC along with President Salvatore at this historic meeting,” says Siegel. “This country has long needed a comprehensive national COPD policy, and the work that was done in Bethesda represents a giant step toward achieving that goal.”

“All of the RTs worked as patient advocates beyond just the access issue and many good objectives were created by the work groups to begin laying the foundation for the National COPD Action Plan,” emphasizes Salvatore. “The RTs present at this meeting truly embraced the multidisciplinary approach to addressing the creation of this plan.” ■

## RT-Driven Monitoring Cuts Rapid Response Team Calls by Half

Thanks to state-of-the-art ETCO<sub>2</sub> monitoring technology, rapid response team calls have been cut in half at one California hospital, and respiratory therapists are driving the process.

The monitoring went into operation at White Memorial Medical Center in Los Angeles after concerns were raised at Adventist Health, parent company of the hospital, about the risk of respiratory depression among patients receiving patient-controlled analgesia (PCA) or moderate sedation during procedures. Corporate officials sent out a request to member hospitals to find out if they were interested in a new technology aimed at monitoring both oxygen saturation and ventilatory status in these patients.

At his hospital, the answer was an overwhelming yes, says Richard Kenny, MSM, RRT-NPS, RRT-ACCS, director of respiratory care services at White Memorial, and respiratory therapists quickly took ownership of the new monitoring paradigm. "When the conversation on PCA and ETCO<sub>2</sub> monitoring started, it was heard by many, including the respiratory therapist, that respiratory therapists are the experts," says the AARC member. "There was no argument by any of the therapists that this should not be the case, and respiratory gladly took over the ETCO<sub>2</sub> monitoring of PCA patients."

Kenny says the combined units use an algorithm to measure both ETCO<sub>2</sub> and oxygen saturation, allowing for a better read on the patient's condition. "Having separate devices leads to confusion, in my opinion," he says. "Too many numbers to look at, too many alarms, and cumbersome in taking up table space and electrical outlets. Making it simple and effective by combining is the smart choice."

Therapists are responsible for setting up the ETCO<sub>2</sub> device that directly attaches to the PCA device, setting alarm limits to match the patient, rounding every four hours (nurses also see the patient every four hours, which means patients are monitored every two hours by either an RT or a nurse), and documenting ETCO<sub>2</sub> readings. Since the monitoring can take place anywhere in the hospital,

all 64 therapists in the department have been trained in the service.

The nearly 50% drop in the number of rapid response team calls has been one of the most significant outcomes from the use of this technology. "When the patient meets and crosses a set parameter, the alarm is loud and cannot be silenced until such time as a nurse or therapist is at the bedside to ensure the patient is awake and able to respond appropriately," says Kenny. Should the alarm sound again in a short period of time, a request for a change in medication is called in to the physician. "It should be noted that when the ETCO<sub>2</sub> device alarms, the PCA device is placed in automatic standby mode," adds Kenny. "It cannot be restarted until an evaluation of the patient has been done and it is determined safe to restart the pump."

The biggest challenge he and his colleagues faced in implementing the monitoring was the tendency of patients to want to remove the cannula. "Patients find it uncomfortable and inconvenient at first, especially as they begin to awake post op," says Kenny. Initially therapists and nurses had a hard time understanding why patients would try to remove the cannula when they had been instructed not to do so, but after they realized that patients are often too groggy at first to understand what's being told to them, they bought into the idea that re-education would be necessary. That solved the problem. "Now that time has passed and all understand the importance of this technology and how it prevents unwanted situations, there is no issue," says the RT manager.

Since beginning the monitoring with PCA and conscious sedation patients, the hospital is now looking at using the technology on any patient where respiratory depression is a concern. "As conversations took place and policies went through the approval process, questions were raised of, 'why not this patient or that patient?'" he says. "That's when it was decided to expand the monitoring process with ETCO<sub>2</sub>. It's the right thing to do." ■



Richard Kenny and his RTs are driving a new monitoring program.

# State Societies Travel to State Capitals

The California, Missouri, and Kansas Societies took their legislative concerns directly to their state legislatures earlier this year.

## California

The California Society for Respiratory Care (CSRC) hosted its second annual Legislative Advocacy Day in Sacramento on Feb. 1. “Well over 100 CSRC members and colleagues attended this very important exercise of our rights as California respiratory care professionals and citizens of the United States,” says CSRC President Michael Madison, MBA, RRT.

Before the members headed out to visit their state legislative offices, Sen. Richard Pan, MD, addressed the group and shared some of his experiences representing California’s 6th Senate District. The prearranged appointments with legislators gave California therapists the chance to educate them on the bills the CSRC would be endorsing and sponsoring during the current legislative session. Sen. Jim Nielsen, of the 4<sup>th</sup> District and author of SB 525, which will clarify aspects of the respiratory care practice act, was named the CSRC Legislator of the Year.

“Our time in Sacramento was both very exciting and quite successful as we continue to promote our profession in California as well as leading our profession nationally with a prime example of what it means to be a proactive respiratory care professional,” says Madison.

## Missouri

AARC members in Missouri focused on telehealth advocacy during their annual Legislative Day in Jefferson City on Feb. 3. “We have a couple of telehealth bills active in Missouri,” says Missouri Society for Respiratory Care Legislative Committee Co-Chair Ronda Bradley, MS, RRT, FAARC. “What has been determined thus far is that the language in the HB 1923 bill is designed to not be restrictive of any licensed health care provider operating under their scope of practice — that is us!”

More than 40 RTs and RT students attended the Legislative Day event, which featured an exhibit in a central area of the legislature along with the visits to individual legislators’ offices to lobby for the bill. Students came from six area colleges — Ozark Technical College, Rolla Technical Institute, St. Louis College of Health Careers, the University of Missouri, Cape Girardeau Career and Technical Center, and Missouri Southern State University — and some of them were even introduced on the legislature floor, providing some great recognition for the profession of respiratory care.

“It was a wildly successful event and we already have plans to grow for next year,” says Bradley. In the meantime, she’s continuing the mission to advocate for respiratory issues important in her state via her membership on a task force set up to look into barriers to care and cost reduction initiatives for technology dependent pediatric patients. “I am honored to have a seat at the table with the Missouri Hospital Association, the Missouri Home Medical Association, the pediatric pulmonary physicians group, and the medical director of Medicaid.”



The Missouri delegation gathered for a photo op on the steps inside the Capitol Rotunda.



Rep. Bill Otto, center, took time out of his schedule to meet with, from left to right, Cali Knepp, Yvonne Cheng, Dana Evans, and Diana Caro.



MSRC President G.W. Hamilton rallied the troops in the exhibit area.

## Kansas

The Kansas Respiratory Care Society traveled to Topeka on March 15, a trip RTs from the Sunflower State have been making every year since the 1980s. Says Karen Schell, DHSc, RRT-NPS, RPFT, “The personal connections that we have made have been helpful many times as issues have come up in the state that we need to address as a profession.”

This year’s event featured a display in the capitol building rotunda and visits to every legislative office. “We go to every office and invite staff down to the display and leave an informational flyer with information about our profession and any specific bills or issues we are or are not supporting,” says Schell. “The staff is really good about letting us know where to catch legislators if they are not available when we stop by and they send the legislators down to our booth as well.”

Schell says she and her colleagues research legislation coming before the legislature before they make the trip so they’ll know what issues they want to address with their elected officials and they also take time to visit with other people in the building lobbying for other issues that day. “There are different patient advocacy groups and coalitions we have been asked to join as a result of our visits. This helps us make connections for promoting and advocating for our patients.”

They often get the chance to provide a little respiratory education as well. This year a couple of senators who suffer from asthma came by the booth and the RTs on hand were able to provide them with some much needed tips on understanding and managing their condition. “The day is always very positive and we go away energized and pumped up to move forward,” says Schell. ■



Kansas members have been traveling to Topeka since the 1980s.



This year’s display focused on COPD.

## Sleepy Drivers Are Dangerous Drivers

Truck drivers who are diagnosed with obstructive sleep apnea (OSA) but fail to accept treatment for the condition are five times more likely to be involved in a motor vehicle accident than other drivers, report Virginia Tech Transportation Institute researchers publishing in a recent edition of *Sleep*.

Their study compared 1,600 drivers with OSA who were prescribed auto-adjusting positive airway pressure treatment and either did or did not adhere to the treatment to 1,600 drivers deemed unlikely to have OSA. Preventable, U.S. Department of Transportation-reportable crashes per 100,000 miles were compared across the study groups. Results showed OSA drivers who refused treatment had 70 preventable serious truck crashes versus

14 in both the control group and in the group of OSA drivers who adhered to the treatment.

The study was conducted among drivers of a trucking company that mandates OSA testing for its drivers. The authors note that among drivers who refused treatment, 60% quit the company before being discharged, a fact that gives them cause for concern. “Given the amount of job turnover in parts of the trucking industry, we can reasonably assume these drivers are going to drive for another firm,” study author Jeff Hickman was quoted as saying. “Essentially, as long as specific rigorous screening standards for obstructive sleep apnea are not in place, these drivers, if they remain untreated, are likely to remain a risk on the roadways.” ■



## For One RT, Biking Event Turns into Lifesaving Experience

Last July, Kelli Chronister, MS, RRT-NPS, CPFT, was on mile 22 of a 25-mile biking event called the Sweet Corn Challenge when one of the riders up ahead of her suddenly went down on his bike.

"I was about 30 feet behind a male rider when I noticed he sat up, turned back, had a blank look on his face, and fell from the bike," says the assistant professor and director of clinical education for the RT program at the University of Akron in Akron, OH. "It took me about 10 seconds to get to his side and realize he had no pulse and appeared to be in cardiac arrest."

Chronister immediately yelled to her biking partner, Kristen, to call 911, and then she started CPR, assisted by two other riders who had rushed to the man's side as well. They took turns performing compressions for about four or five minutes until the paramedics arrived. The man was immediately defibrillated and placed in an ambulance.

That was the last she heard of the case until a couple of weeks later, when she learned the gentleman had undergone bypass surgery and then headed home to Vermont. A former resident of the Akron area, he had come back to town for a visit and decided to participate in the Sweet Corn Challenge. "He was riding with his wife and his daughter, who were waiting for him at the top of the hill where he had the arrest event," says the AARC member.

Relieved to find out he was doing okay, Chronister put the incident aside and went on with her busy life as an RT educator. But her community wasn't ready to let her service go. Earlier this year, she learned she would be recognized by the local Red Cross as one of ten 2016 Acts of Courage honorees.



She received the award at an ceremony held in early March. "It was inspiring to be there with nine other community members who had participated in a lifesaving event," she says. "This included a nine-year-old who had used the Heimlich on his friend after merely seeing a poster in the cafeteria — his friend was choking on a cheese puff at a birthday party!"

Chronister says several of her friends attended the awards ceremony to cheer for her, and she knows a number of other people who inquired about learning CPR after finding out about her experience. That, she emphasizes, has been the very best thing to come out of the recognition she received.

Says the RT, "I was certainly happy I could help bring more awareness to the lifesaving act of CPR." ■



An avid cyclist, Kelli Chronister says she was pedaling up a steep hill near the end of the race when her RT skills were called into action.



## "Your Uber Is Waiting"

Getting patients to keep their doctors' appointments after a hospitalization is considered key to reducing hospital readmissions. At MedStar Health, a health care system serving Maryland and Washington, DC, some providers are turning to Uber to help.

A "Ride with Uber" link on the health system website allows patients to quickly and easily schedule rides to their appointments, and they get automatic reminders that the appointment is coming up about an hour before Uber is scheduled to pick them up. Low-income patients are among those most likely to miss appointments due to transportation issues, so MedStar has initiated a pilot project that offers subsidized rides to those in need. The strategy was covered in a recent edition of *Hospitals & Health Networks*. ■



## CPAP May Improve Diabetes Control

For patients with sleep apnea and uncontrolled type 2 diabetes (T2), CPAP may be the answer, find Spanish investigators publishing in a recent edition of the *American Journal of Respiratory and Critical Care Medicine*.

They looked at 50 patients with both OSA and sub-optimally controlled T2 who were assigned to CPAP intervention or control. Diabetes medications remained the same during the trial unless a change was deemed medically necessary and patients were not asked to alter their diets or level of physical activity. Results showed patients who successfully used CPAP to treat their OSA had a significant—

- Decrease in glycated hemoglobin (HbA1c) levels at six months;
- Improvement in insulin sensitivity at three and six months;
- Decrease in insulin resistance at six months;
- Lower levels of the inflammatory molecules IL-1 $\beta$  and IL-6 and higher levels of the hormone adiponectin, an important glucose regulator; and
- Decrease in LDL cholesterol.

Based on the findings from other studies, the authors believe the 0.4% reduction in HbA1c in their study might translate into a 6-8% decrease in cardiovascular disease risk and a 15% reduction in microvascular complication risk in these patients. ■

## Teach-to-Goal Strategy Improves Inhaler Use

A “teach-to-goal” approach to rescue inhaler instruction can significantly increase the ability of patients to use these devices correctly and help them maintain that knowledge over time. That’s the take home message from University of Chicago investigators who compared the teach-to-goal method to a standard patient education encounter in 120 patients. Among the findings —

- Immediately following the education sessions, MDI misuse was significantly lower in the teach-to-goal group than the brief-instruction group, 11% vs. 60%.
- Acute-care events within 30 days of inhaler education were 17% vs. 36%.
- Acute care events within 30 days among those with low health literacy were 15% vs. 70%.

However, at 90 days, 48% of the teach-to-goal group and 76% of the brief-instruction group were not using their inhalers properly, leading the authors to conclude that inhaler education for these patients must be ongoing. “Our study shows that there may be improved clinical outcomes to providing teach-to-goal inhaler education in the hospital, especially for patients with lower health literacy levels,” study author Valerie G. Press, MD, MPH, was quoted as saying. “But it also shows clearly that ongoing instruction in inhaler technique is required after discharge for long-lasting skills retention and improved health outcomes.”

The study appeared in a recent issue of the *Annals of the American Thoracic Society*. ■

## Contribute to Our “Transitions” Column

The AARC “Transitions” column is devoted to sharing news about the passing of AARC members.

You can submit news about your colleagues’ recent passing by going to <http://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. ■

## Late Surfactant Improves Some Patient Outcomes



Administering surfactant to premature infants who are still on mechanical ventilation at day 14 doesn't alter the early course of bronchopulmonary dysplasia (BPD) but it does reduce respiratory morbidity in the first year of life. That conclusion comes from French investigators who randomized 118 neonates born at less than 33 weeks gestation to either surfactant or air on day 14 and then reviewed outcomes at 36 weeks gestational age and one year postnatal age.

Fraction of inspired oxygen requirements declined in the surfactant group for up to 24 hours after instillation but the combined rate of severe BPD or death at 36 weeks' postmenstrual age was about the same for the two groups. However, fewer surfactant infants required re-hospitalization and these infants were also less likely to need respiratory physical therapy. The study was published in *JAMA Pediatrics* earlier this year. ■

## Computer-Assisted Stethoscope

Could a computer-assisted stethoscope help you better determine breath sounds in your patients? Japanese investigators believe the answer is yes. They recorded respiratory sounds from 878 people to create sound templates for their device, then used the templates to develop an algorithm that they believe quickly and accurately distinguishes between five different sounds.

"Most electronic stethoscopes focus on digitally recording respiratory sounds and less on classifying them," write the authors. "In contrast, we have developed a computer-assisted [stethoscope] that has novel ways of analyzing and displaying information and works in real time, classifies respiratory sounds into generally accepted categories, and classifies sounds when different sounds are present at the same time." The researchers published their findings in a recent edition of the *Annals of Internal Medicine*. ■



## Exercise Increases Smoker Quit Rates

Studies have shown up to 33% of smokers suffer from high-anxiety sensitivity, a condition characterized by a racing heart, sweating, and dizziness, and one reason why they smoke is to control those symptoms. New research out of the University of Texas at Austin finds exercise can help these smokers kick the habit for good.

Their study was conducted among 136 patients randomly assigned to either a 15-week intervention that included 25 minutes of vigorous exercise three times a week or wellness education sessions. Both groups received cognitive behavioral therapy and optional nicotine replacement therapy patches. Twenty-six percent of the patients in the exercise group were successfully abstaining from cigarettes by the end of the study compared to 12% of those in the control group. At six months, the abstinence rates were 23% and 10%, respectively. The study was published in a recent edition of *Psychosomatic Medicine*. ■



## Strange But True...

**Thinking makes it happen:** Investigators from Duke Health have developed a brain-machine interface that's allowing monkeys to operate a robotic wheelchair with just their thoughts. The development could one day help patients with quadriplegia or ALS more effectively navigate their way through the world.



**Food for thought:** New research finds adding algae to animal feed could stop — and possibly even turn back — the clock on atmospheric carbon levels by the end of the century. It could free up millions of acres currently used to produce pasture and feed crops, reducing the tension that exists between food security and bioenergy crops. The study appeared in a recent issue of *Carbon Balance and Management*. ■

## Asthma Linked to Fertility Problems

In a study involving 245 women between the ages of 23 and 45 who were experiencing unexplained fertility problems, European researchers find asthma may be the missing link.

Ninety-six of the women either had an existing doctor's diagnosis of asthma when they entered the study or were diagnosed with asthma upon enrollment. All were monitored as they underwent fertility treatment. Results showed the median total time to pregnancy was 32.2 months in non-asthmatic women versus 55.6 months in those with asthma. Overall, 39.6% of women with asthma successfully conceived compared to 60.4% of women without asthma. These findings were more pronounced in the older women in the study.

The authors aren't sure how asthma could be affecting fertility but suggest different types of asthma, psychological well being, asthma medications, and hormones may all be coming into play. The study appeared in the *European Respiratory Journal* earlier this year. ■



## Parents Give Flu Vaccine Mixed Reviews

Health officials recommend an annual influenza vaccine for children age six months to 18 years, but flu vaccination rates fall far below national targets. Researchers from the University of Michigan believe part of the reason lies in the fact that many parents don't believe the flu vaccine is as necessary or important as the other vaccines their children receive.

They reached that conclusion after surveying parents who did and did not get the flu vaccine for their children. Fifty-nine percent of parents who decided to forego the vaccine said it was less important than other vaccines versus just 14% of those who did get the vaccine for their children. Forty-eight percent of those whose children didn't receive the vaccine said it wasn't as effective as other vaccines and around 20% believed the flu vaccine isn't as safe as other vaccines as well.

The findings on pediatric flu vaccinations were included in the C.S. Mott Children's Hospital National Poll on Children's Health. ■



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# Industry Update


Featuring information on products and equipment from manufacturers




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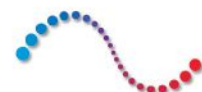
— 2016 —

*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 healthcare 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.





# Industry Watch

## Joint venture for BD's Respiratory Solutions business

BD (Becton, Dickinson and Company) has announced a definitive agreement to sell 50.1% of its Respiratory Solutions business to Apax Partners and form a joint venture that will operate as a new, independent company. The new company will include all business lines within BD's Respiratory Solutions business, including Ventilation, Respiratory Diagnostics, Vital Signs, and AirLife. BD's Respiratory Solutions facilities in the United States and other nations will transfer to the new company and the new company will employ more than 5,000 associates around the world. BD will retain 49.9% of the company as a significant but non-controlling minority owner.

## Arch Biopartners, University of Cincinnati to team up on *P. aeruginosa* drug

Arch Biopartners Inc. has entered into an exclusive license agreement with the University of Cincinnati (UC) for AB569, a new candidate drug

to treat *Pseudomonas aeruginosa* (*P. aeruginosa*) respiratory infections. In the last year, Arch management has worked with the lead inventor of AB569, Dr. Daniel Hassett from the UC College of Medicine, to build the patent portfolio for AB569. They are also helping prepare a clinical development plan to test the safety and efficacy of the drug against *P. aeruginosa* respiratory infections in cystic fibrosis patients.

## Verona Pharma announces study results

Positive data have emerged from a Phase IIa dose-finding clinical study using a new proprietary nebulized formulation of RPL554, according to Verona Pharma plc. RPL554 is a novel inhaled PDE3/PDE4 inhibitor with both bronchodilator and anti-inflammatory properties in the same molecule that's currently in development as a treatment for acute exacerbations in COPD patients in a hospital or home care setting. The company reports that nebulized RPL554 demonstrated a dose-dependent bronchodilator response, and the response was

highly statistically significant at all doses tested. The maximum bronchodilator effect was comparable to that observed with a supra-maximal dose of nebulized salbutamol and no serious adverse events were noted.

## Digital health tool to help COPD and asthma patients

Propeller Health has teamed up with Boehringer Ingelheim Pharmaceuticals Inc. in a commercial partnership to use digital health tools and services to help people with COPD and asthma better manage their diseases. Under the terms of the partnership, people who are being treated with a Boehringer Ingelheim prescription medication approved for use in the company's RESPIMAT® inhaler will have the opportunity to enroll in a new program at select U.S. health systems that is designed to determine how Propeller's novel health technology tool for the RESPIMAT inhaler impacts adherence rates and patient engagement. Using a combination of inhaler sensors, apps, analytics, personal feedback, and education, the platform

passively tracks how and when each patient uses his inhaled medications and can send alerts to patients and their caregivers.

## MedBridge Healthcare, Sleep Services of America merge

Vicente Capital Partners' portfolio company, MedBridge Healthcare, has merged with Sleep Services of America (SSA), a wholly owned subsidiary of the Johns Hopkins Health System. SSA President John Mathias will join the MedBridge Healthcare senior management team while continuing to lead SSA as an operating subsidiary of MedBridge Healthcare. MedBridge and SSA collectively provide more than 60,000 diagnostic sleep studies per year, serving patients in more than 140 locations in 21 states and the District of Columbia.

## RespireRx Pharmaceuticals to move ahead with drug development

RespireRx Pharmaceuticals Inc. has received notice that the FDA has removed the clinical

hold on the company's Investigational New Drug application for CX1739, allowing the initiation of clinical trials for the company's proprietary lead ampakine. They are performing a phase IIa clinical trial to confirm the ability of CX1739 to antagonize the respiratory depressant effects of fentanyl, a potent opioid, without altering its analgesic properties. "The FDA clearance of our Phase IIa clinical trial of CX1739 provides further validation of RespireRx's worldwide leadership role in the research and development of next-generation ampakine medicines," RespireRx President and CEO Dr. James S. Manuso was quoted as saying.

### **Content Checked, Kitchology will help people with food allergies**

Content Checked Holdings, Inc., a creator of mobile applications for people with dietary restrictions, has entered into a partnership with Kitchology, Inc., a mobile platform that provides tailored recipes to consumers with special dietary needs. The partnership will give Kitchology access to Content Checked's vast database of nutritional and ingredient information on over 300,000 packaged food products distributed in the U.S. Content Checked will gain access to the Kitchology platform,

including core recipes and curated recipes modified for and by consumers with dietary restrictions or allergies.

### **Nivalis Therapeutics gets go ahead for Phase II study**

Nivalis Therapeutics, Inc. is expanding its clinical development plan for N91115, the company's lead investigational drug and first-in-class stabilizer of the cystic fibrosis transmembrane conductance regulator protein. An independent data monitoring committee (DMC) has completed its review of the interim safety data from the company's ongoing Phase II study evaluating the efficacy and safety of N91115 in adult patients who have two copies of the F508del mutation and are being treated with Orkambi™. The DMC concluded that there were no safety concerns and the study may proceed with enrolling and randomizing patients in a higher (400 mg) dose cohort of N91115, Nivalis reports.

### **Elusys Therapeutics receives FDA approval for anthrax antitoxin**

According to Elusys Therapeutics, Inc., the FDA has approved ANTHIM (obiltoximab) Injection, the company's monoclonal antibody (mAb) anthrax antitoxin. ANTHIM is indicated for the treatment of inhalational

anthrax due to *Bacillus anthracis* in adult and pediatric patients in combination with appropriate antibacterial drugs, and for prophylaxis of inhalational anthrax when alternative therapies are not available or are not appropriate. "This marks a historic milestone for our company, resulting from an unprecedented partnership with several government agencies, to develop a new anthrax antitoxin that will be an important addition to the Strategic National Stockpile and help protect the safety of our citizens and emergency personnel in the event of a biowarfare attack," said Elusys President and CEO Elizabeth Posillico, PhD.

### **Royal Philips launches new sleep website**

Royal Philips has launched SendMeToSleep.com, an online resource to help those who struggle with sleep get a better night's rest. Released in support of the World Association of Sleep Medicine's annual World Sleep Day in March, the website features a variety of visual content, including videos and images to help restless sleepers. It is also designed to serve as a resource for chronically sleep-deprived individuals who may have an underlying sleep issue. The campaign aims to drive awareness and education around sleep

issues and is the latest effort in the company's continued dedication to enhance the lives of patients suffering from obstructive sleep apnea or other serious sleep disorders.

### **PneumaCare gets FDA clearance for imaging device**

PneumaCare Ltd has received 510(k) clearance from the FDA for its Thora-3DI™ imaging device. The noninvasive, non-contact device uses a patented technology known as structured light plethysmography to measure breathing through detection of movement of the chest and abdomen. The technology can be used to accurately measure respiratory status in patients with a wide range of respiratory conditions, including asthma, COPD, pneumonia, and lung failure, as well as to assess patients before and after surgery. The device achieved CE mark approval in Europe in 2012 and PneumaCare reports it is now working with its strategic partners to make the device available in the U.S. and other markets that recognize 510(k) authorization. ■

**Brief submissions and photos for this column may be sent to AARC Times Editor Marsha Cathcart at [cathcart@aarctimes.org](mailto:cathcart@aarctimes.org).** ■



# Classifieds

ADVERTISING SECTION

## Looking for Neo/Peds Respiratory Therapists and Associate Clinical Manager to join our team at Children's Hospital Colorado!

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# Calendar of Events

## AARC & State Society Programs

### August 3-5

Biloxi, Mississippi

Tristate Respiratory Care Conference

Contact: <http://www.tsrcc.net>; Raymond Pisani, (985) 518-3346; [tristaterespiratorycare@gmail.com](mailto:tristaterespiratorycare@gmail.com)

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### September 6-9

W. Columbia, South Carolina

SCSRC Annual Conference

Contact: [treasurer@scsrc.org](mailto:treasurer@scsrc.org), (803) 936-7511

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### September 8-9

Verona, New York

36<sup>th</sup> Annual NYSSRC Symposium

Contact: <http://www.nyssrc.org>

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Submissions for the next available issue are due May 20.

For information on submitting calendar events, contact: Beth Binkley, AARC Times, 9425 N. MacArthur Blvd, Suite 100, Irving, TX 75063-4706. Voice (972) 243-2272 Fax (972) 484-2720 E-mail: [binkley@aacrc.org](mailto:binkley@aacrc.org)

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## “So, How Would You Like Respiratory?”

by Jean DuBois, RRT-NPS

One day can change the direction of your life’s journey. So was the day following the loss of my grandchild in 1985. Legionnaires disease? Why were the best hospital, medical team, and medicine not enough to save this five-month-old baby girl?

I became obsessed. I questioned the Centers for Disease Control and all who were involved in her care. I was relentless, and mostly frustrated about it. The death of a child is devastating to a family and we were falling apart.

I needed to channel my grief in a positive direction. An education program for health care fields became available. I asked about entering nursing and the question popped into the interview, “How would you like respiratory?” The respiratory therapist had been the person entering my room after the birth of my children with the little plastic gadgets for me to use to take deep breaths.

There was a need for therapists, and I told myself, “I can do it!” Pure grit, determination, and prayers got me through my program. When I did my clinicals at Memorial Hermann in Houston, TX, I was assigned to the pediatric intensive care unit and a therapist named Joy. Although she did not remember me, I remembered her. She and a nurse named Annette were on the team that withdrew life support on my granddaughter Ashley. The care and concern they and everyone else showed for her parents and the entire family was extraordinary. Her picture was still in the PICU when I arrived there as a student.

What we, as health care providers, don’t know is just how much of an impact we have without saying a word. I have many negative feelings from those two weeks we spent in the hospital with Ashley, but

none from the bedside and absolutely none from Joy and Annette. They shed tears with us and, I believe, influenced the higher force that directed the next 30 years of my life.

### Three notable physicians

While I was still in school, I applied for a temporary license to work at “The Tub” (Ben Taub) in Houston, driving 100 miles a day and loving this profession. My supervisor, Lee Davis, assigned me to pediatrics, against my protests, stating he knew it was my calling. He was so right. I obtained my NPS in 1991 — the first exam!

In Houston, I was so fortunate to be in the right place at the right time. I was able to watch Dr. Denton Cooley, the first physician to implant a totally artificial heart in a patient, in surgery from the gallery filled with respiratory students. He pointed to the tubing of the heart-lung machine: “This is a respirator, you manage a ventilator.” Truth!

I was unaware of an unspoken rule regarding the renowned heart surgeon, Dr. Michael DeBakey. When he entered an elevator, everyone was to exit. One day I didn’t. He looked at my badge and at me and, after a long pause, he stepped in, turned, faced the door, and rode silently with me.

Noted trauma surgeon Dr. Red Duke, with his old truck, boots, jeans, and hat, would appear in scrubs and turn the radio to country music station KIKK, singing along as he prepared for surgery. It was wonderful to get an up-close view of these three great physicians who made such wonderful contributions to medicine.

### about the author...



Jean DuBois, RRT-NPS



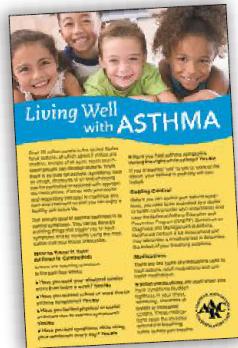
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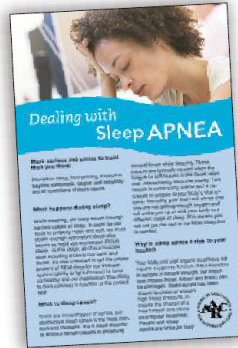
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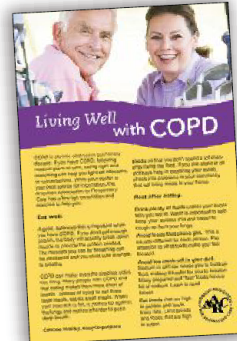
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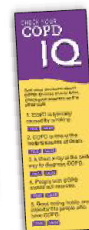
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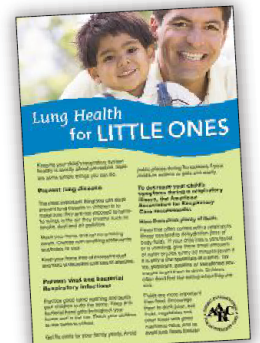
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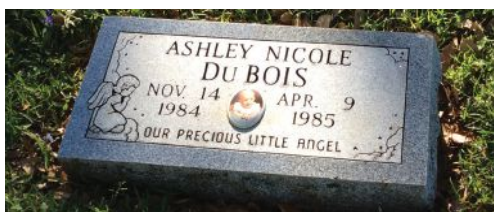
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Jean DuBois's newfound interest in genealogy is taking her to cemeteries to visit the graves of her ancestors.



Ashley helped shape her grandmother's career in respiratory care.

### Teamwork and respect

Life eventually took my husband and me to Maryland, but after 17 years and three different hospitals, it was time to come home to Texas. I accepted a position in the CVICU at Children's Medical Center in Dallas. Words

cannot express how much this hospital and what it stands for means to me: true teamwork and respect. As a respiratory therapist, you practice your profession and are valued for your knowledge. However, to whom much is given, much is required. The status quo would not be acceptable. I always set high standards for myself. My work ethic was a reflection of my standards. Every child deserved the best I could give, nothing less. Here was my passion. Many talks with my director, Brandon Daigle, centered on this passion and the role of the respiratory therapist.

I have experienced so many areas of respiratory care, adult to neonatal, long-term care to acute care to ICU, management, education, and ECMO, and I am passionate about my profession then and now.

I retired in 2014. Grief and loss set in. I am a respiratory therapist and I could not wrap my mind around no longer practicing. What was I going to do now? I asked one of the founding physicians how you could just stop when you had so much knowledge and ability. She smiled and said, "You leave at the top of your game." Those who hang on begin to show cracks. The Super Bowl QB Peyton Manning said the same thing this year. But will I miss it, I asked myself. Absolutely!

### A blessing and a legacy

So now what? Remember that husband? We are adjusting to each other. Now that he sees me every day, all day, he is so lucky! He hates me to criticize medical mistakes on television and at the movies. No scrubs!

We have a greenhouse and a garden, and my daughter has introduced me to genealogy. Along with finding "dead relatives" I am meeting people who are related to me in some fashion and enjoying old photographs (so few smiled!).

I am a grandmother to four awesome young people. A sewing machine and a box of quilting material await my touch, and I've surrounded myself with books, books, and more books. A new Jeep is in the driveway, too, just to go to all those cemeteries and on all those road trips! My life is full and blessed.

What started as a tragedy became a blessing and a legacy to a beautiful baby girl. One's life is not the result of one extraordinary incident but the sum of many small efforts done with passion and love. ■

**Editor's Note:** Jean DuBois, is a retired member of the AARC. If you have retired, we would like to work with you to craft a story about your life and respiratory care career for this "Reflections" column. Contact AARC Times Editor Marsha Cathcart at Cathcart@aarc.org and write Reflections in the subject line.

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