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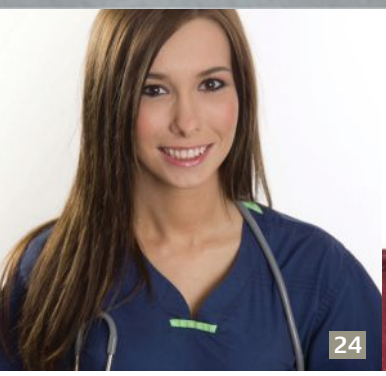
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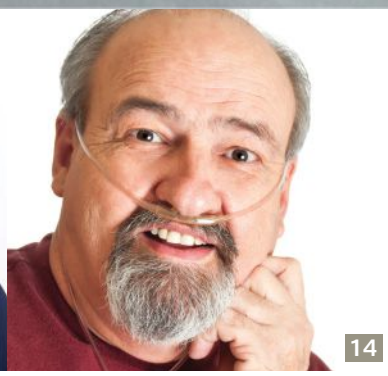
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AARC Strategic Plan

AARC Vision/Mission Statement: The American Association for Respiratory Care (AARC) will continue to be the leading national and international professional association for respiratory care. The AARC will encourage and promote professional excellence, advance the science and practice of respiratory care, and serve as an advocate for patients, their families, the public, the profession, and the respiratory therapist.

AARC Strategic Objectives

• Refine and expand the scope of practice for respiratory therapists in all care settings.
• Advance the knowledge base and educational preparation of respiratory therapists to ensure competent patient care and to foster patient safety initiatives.
• Support research and scientific inquiry to strengthen the scientific foundation and promote best practice for patient care.
• Establish professional standards and outcomes supported by scientific evidence.
• Advocate for federal and state health care policies that enhance patient care, patients' access to care and professional practice.
• Partner with governmental agencies, community organizations, third-party payers, professional societies and the public to promote healthy behaviors and prevent cardiopulmonary disease.
• Broaden consumer and health care providers' knowledge and understanding of the value of respiratory therapists in providing safe, competent and cost-effective care.

The complete version of the Association's Strategic Plan is available to AARC members online at www.aarc.org/members_area/resources/strategic.asp.

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INDICATION FOR GLASSIA

GLASSIA is an Alpha$_1$-Proteinase Inhibitor (Human) (Alpha$_1$-PI) indicated for chronic augmentation and maintenance therapy in adults with clinically evident emphysema due to severe congenital deficiency of Alpha$_1$-PI (alpha$_1$-antitrypsin deficiency). GLASSIA increases antigenic and functional (anti-neutrophil elastase capacity, ANEC) serum levels and antigenic lung epithelial lining fluid levels of Alpha$_1$-PI.

The effect of augmentation therapy with any Alpha$_1$-PI, including GLASSIA, on pulmonary exacerbations and on the progression of emphysema in alpha$_1$-antitrypsin deficiency has not been conclusively demonstrated in randomized, controlled clinical trials.

Clinical data demonstrating the long-term effects of chronic augmentation and maintenance therapy of individuals with GLASSIA are not available.

GLASSIA is not indicated as therapy for lung disease in patients in whom severe Alpha$_1$-PI deficiency has not been established.

DETAILED IMPORTANT RISK INFORMATION FOR GLASSIA

HYPERSENSITIVITY

- GLASSIA is contraindicated in immunoglobulin A (IgA) deficient patients with antibodies against IgA or individuals with a history of severe immediate hypersensitivity reactions, including anaphylaxis, to Alpha$_1$-PI products.
- Hypersensitivity reactions have been reported in patients following administration. Patients should be closely followed and vital signs monitored continuously. Discontinue the infusion if hypersensitivity symptoms occur and administer appropriate emergency treatment.

TRANSMISSION OF INFECTIOUS AGENTS

- GLASSIA is derived from pooled human plasma and may carry a risk of transmitting infectious agents such as viruses, the variant Creutzfeldt-Jakob disease (vCJD) and theoretically, the Creutzfeldt-Jakob disease (CJD) agent. Despite manufacturing steps designed to minimize the risk of viral transmission, such products may still potentially transmit human pathogenic agents.

USE DURING PREGNANCY

- GLASSIA should not be given to pregnant women unless clearly needed, as reproduction studies have not been done in animals or humans.

ADVERSE REACTIONS

- The serious adverse reaction observed during clinical trials was exacerbation of chronic obstructive pulmonary disease (COPD). The most common adverse reactions occurring in >0.5% of infusions in clinical trials were headache and upper respiratory infection

Please see GLASSIA Brief Summary of Full Prescribing Information on the adjacent page.

References: 1. GLASSIA [Alpha$_1$-Proteinase Inhibitor (Human)] Prescribing Information. Westlake Village, CA: Baxter Healthcare Corporation. **2.** ASHP guidelines on preventing medication errors in hospitals. American Society of Health System Pharmacists website. http://www.ashp.org/s_ashp/docs/files/MedMis_Gdl_Hosp.pdf. Accessed June 18, 2013.

March 2014 USBS/341/14-0009

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GLASSIA [Alpha$_1$-Proteinase Inhibitor (Human)]

Injection Solution - For Intravenous Use Only

Brief Summary of Prescribing Information. Please see package insert for full prescribing information.

INDICATIONS AND USAGE

GLASSIA is an Alpha$_1$-Proteinase Inhibitor (Human) (Alpha$_1$-PI) indicated for chronic augmentation and maintenance therapy in adults with clinically evident emphysema due to severe congenital deficiency of Alpha$_1$-PI (alpha$_1$-antitrypsin deficiency). GLASSIA increases antigenic and functional (anti-neutrophil elastase capacity, ANEC) serum levels and antigenic lung epithelial lining fluid levels of Alpha$_1$-PI.

- The effect of augmentation therapy with any Alpha$_1$-PI product, including GLASSIA, on pulmonary exacerbations and on the progression of emphysema in Alpha$_1$-PI deficiency has not been conclusively demonstrated in randomized, controlled clinical trials.
- Clinical data demonstrating the long-term effects of chronic augmentation and maintenance therapy of individuals with GLASSIA are not available.
- GLASSIA is not indicated as therapy for lung disease in patients in whom severe Alpha$_1$-PI deficiency has not been conclusively established.

DOSAGE AND ADMINISTRATION

- **For Intravenous Use Only.**
- Use aseptic technique for all preparation and administration steps.
- Dose = 60 mg/kg body weight intravenously once weekly.
- Administer at a rate not to exceed 0.2 mL/kg body weight per minute, depending on patient response and comfort.
- Dose ranging studies using efficacy endpoints have not been performed.

CONTRAINDICATIONS

GLASSIA is contraindicated in immunoglobulin A (IgA) deficient patients with antibodies against IgA or in individuals with a history of severe immediate hypersensitivity reactions, including anaphylaxis, to Alpha$_1$-PI products.

WARNINGS AND PRECAUTIONS

Hypersensitivity Reactions

GLASSIA may contain trace amounts of IgA. Patients with selective or severe IgA deficiency and with known antibodies to IgA, have a greater risk of developing severe hypersensitivity and anaphylactic reactions. Monitor vital signs continuously and observe the patient carefully throughout the infusion. Discontinue the infusion if hypersensitivity symptoms occur and administer appropriate emergency treatment. Have epinephrine and other appropriate supportive therapy available for the treatment of any acute anaphylactic or anaphylactoid reaction.

Transmissible Infectious Agents

Because this product is made from human plasma, it may carry a risk of transmitting infectious agents, such as viruses, the variant Creutzfeldt-Jakob disease (vCJD), and theoretically, the Creutzfeldt-Jakob disease (CJD) agent. This also applies to unknown or emerging viruses and other pathogens. The risk of transmitting an infectious agent has been minimized by screening plasma donors for prior exposure to certain viruses, by testing for the presence of certain current virus infections and by inactivating and removing certain viruses during the manufacturing process (see *Description* [11] in full prescribing information for viral reduction measures). Despite these measures, such products may still potentially transmit human pathogenic agents.

All infections thought by a physician possibly to have been transmitted by this product should be reported by the physician or other healthcare provider to Kamada Ltd. at 1-866-GLASSIA or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

No seroconversions for hepatitis B or C (HBV or HCV) or human immunodeficiency virus (HIV) or any other known infectious agent were reported with the use of GLASSIA during the clinical trials.

ADVERSE REACTIONS

The serious adverse reaction[1] observed during clinical trials with GLASSIA was exacerbation of chronic obstructive pulmonary disease (COPD).

The most common adverse reactions (>0.5% of infusions) in clinical trials were headache (6 of 960 infusions or 0.6%) and upper respiratory infection (8 of 960 infusions or 0.8%).

[1]An adverse reaction is any adverse event which met any of the following criteria: (a) an adverse event that began within 72 hours following the end of product infusion, or (b) an adverse event considered by either the investigator or sponsor to be at least possibly related to product administration, or (c) an adverse event for which causality assessment was missing or indeterminate.

Adverse Reactions[1] Occurring in > 5% of Subjects During the First 12 Weeks of Treatment

	GLASSIA No. of subjects: 33	**Prolastin** No. of subjects: 17
Adverse Event (AE)	**No. of subjects with adverse reactions[1] (AR) (percentage of all subjects)**	**No. of subjects with adverse reactions[1] (AR) (percentage of all subjects)**
Cough	3 (9%)	4 (24%)
Upper respiratory tract infection	3 (9%)	0 (0%)
Headache	3 (9%)	3 (18%)
Sinusitis	2 (6%)	1 (6%)
Chest discomfort	2 (6%)	0 (0%)
Dizziness	2 (6%)	0 (0%)
Hepatic enzyme increased	2 (6%)	0 (0%)

Postmarketing Experience

The following adverse reactions have been identified during post-approval use of GLASSIA. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

- Respiratory, Thoracic and Mediastinal Disorders: Dyspnea
- Gastrointestinal Disorders: Nausea
- General Disorders and Administration Site Conditions: Fatigue

USE IN SPECIFIC POPULATIONS

Pregnancy

Pregnancy Category C

Animal reproduction studies have not been conducted with GLASSIA. It is also not known whether GLASSIA can cause fetal harm when administered to pregnant women or can affect reproductive capacity. GLASSIA should be given to a pregnant woman only if clearly needed.

Nursing Mothers

It is not known whether Alpha$_1$-PI is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when GLASSIA is administered to a nursing woman.

Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

Geriatric Use

Clinical trials of GLASSIA included 11 subjects of 65 years of age or older. This number of subjects was not sufficient to determine whether they respond differently from younger subjects. As for all patients, dosing for geriatric patients should be appropriate to their overall situation. Safety and effectiveness in patients over 65 years of age have not been established.

PATIENT COUNSELING INFORMATION

- Inform patients of the early signs of hypersensitivity reactions, including hives, generalized urticaria, chest tightness, dyspnea, wheezing, faintness, hypotension, and anaphylaxis. Advise patients to discontinue use of the product and contact their physician and/or seek immediate emergency care, depending on the severity of the reaction, if these symptoms occur.
- Inform patients that GLASSIA is made from human plasma and may contain infectious agents that can cause disease (e.g., viruses and, theoretically, the CJD agent). Explain that the risk of GLASSIA transmitting an infectious agent has been reduced by screening the plasma donors, by testing the donated plasma for certain virus infections, and by a process demonstrated to inactivate and/or remove certain viruses during manufacturing (see *Warnings and Precautions*). Symptoms of a possible virus infection include headache, fever, nausea, vomiting, weakness, malaise, diarrhea, or, in the case of hepatitis, jaundice.
- Inform patients that administration of GLASSIA has been demonstrated to raise the plasma level of Alpha$_1$-PI, but that the effect of this augmentation on the frequency of pulmonary exacerbations and on the rate of progression of emphysema has not been established by clinical trials.

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On the Cover

Thank You, Members!

On the cover of *AARC Times* this month we feature AARC members from around the world.

You can turn to our annual report article in this issue to read how the Association has served members and respiratory care patients over the past year. If you have not recently checked out the benefits, services, and accomplishments of your professional organization, take another look, because AARC benefits are constantly changing to meet the needs of respiratory care professionals. To find complete information about membership benefits and how your Association serves you, visit our website at www.aarc.org.

Members are the lifeblood of the AARC. Thank you! ■

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Clinical Perspectives

Post-Sedation Noninvasive Monitoring

by Lori D. Conklin, MD

The number of adult procedures performed in the United States utilizing moderate-to-deep sedation has been increasing steadily.[1] Advances in medical technology, as well as anesthetic medications, have made otherwise unpleasant procedures more attractive to patients. However, procedural sedation is not without risk, particularly in the elderly population. The purpose of this article is to outline the types of procedures commonly requiring sedation, discuss common procedural sedation techniques and post-procedural sedation-related complications, outline current clinical practice guidelines including current recommendations for noninvasive monitoring, describe the role of the respiratory therapist both during and after the procedure, and discuss current technology and equipment used by the RT for post-procedural noninvasive monitoring.

about the author...

Lori D. Conklin, MD, is the associate professor of anesthesiology for the University of Virginia Health Care System in Charlottesville, VA. She also serves on the AARC Board of Medical Advisors.

Procedural sedation in remote locations

Advances in medical and surgical technology have resulted in the ability to perform more complex procedures outside of a traditional operating room environment. Gastrointestinal endoscopy, colonoscopy, endoscopic ultrasound, and endoscopic retrograde cholangiopancreatography (ERCP) procedures being performed with moderate-to-deep sedation have increased.[2] In addition, cardiovascular procedures such as cardioversions with/without concomitant transesophageal echocardiography, cardiac ablations, vascular interventional radiology procedures, magnetic resonance imaging (MRI) evaluations, and radiotherapy for cancer treatments are being performed more frequently under moderate-to-deep sedation. Additionally, U.S. emergency departments are experiencing increased patient volumes (with procedural sedation cases becoming more frequent secondary to scientific advances), more constraints placed on operative time, and other hospital-driven cost-containing measures.[1,3]

Patients undergoing procedural sedation in non-operative environments tend to have underlying and often significant comorbidities in addition to their procedural diagnoses. Closed-claims analysis of patient characteristics following remote anesthetic procedures discovered these patients were more likely to be elderly (age >70 years), morbidly ill (ASA 3–5), and emergent in nature.[1] For example, in 2013, 5,913 orthotopic liver transplants were performed in the United States, with many of these patients requiring preoperative and/or postoperative procedural sedation during gastrointestinal interventions.[4] It is well documented that patients with cirrhosis requiring procedural sedation are more prone to sedation-related complications, such as hypoxia and hypotension, and midazolam has been reported to precipitate hepatic encephalopathy in cirrhotic patients.[5]

Patients undergoing procedural sedation for cardiac interventions, including electrophysiology procedures and cardioversions, typically have more complicated comorbidities while being subjected to longer and more complex interventions in the cardiac catheterization lab. Hemodynamic changes, cardiac dysrhythmias, and airway compromise must be monitored to ensure patient safety.[6]

In an emergency room environment, the patients may be younger. However, substantial risk can still be present since the majority of the procedural sedation cases involve emergent fracture/dislocation reductions

in patients whose NPO (nothing by mouth) status may not coincide with the American Society of Anesthesiologists (ASA) recommended guidelines.[7] Conversely, those patients who have been NPO for long periods of time awaiting their procedure may be dehydrated, thereby perpetuating the transient hypotension that often occurs following propofol administration.

Common procedural sedation techniques and post-procedural sedation-related complications

The ASA has defined "sedation and analgesia" as varying levels of consciousness ranging from minimal sedation to general anesthesia. It is imperative for patient safety that the practitioner responsible for administering procedural sedation understand each sedation-analgesia level, recognize when a patient has progressed to a deeper level, and intervene appropriately.[8]

Non-operating room procedural sedation should still adhere to standard ASA equipment and monitoring guidelines. It is recommended that those individuals involved in administering procedural sedation ensure the following items are readily available:[9]

- a reliable source of oxygen,
- functioning suction,
- a bag valve mask ventilation device capable of delivering at least 90% oxygen via positive pressure ventilation,
- appropriate drugs for sedation/analgesia and unforeseen emergencies,
- adequate monitoring equipment based on the most current ASA guidelines,
- an adequate light source,
- sufficient space,
- proper electrical outlets,
- a telephone or other two-way communication device,
- immediate availability of an emergency cart with resuscitation medications and defibrillator,
- adequate support staff for the anesthesia care provider, and
- an adequate post-sedation recovery area.

Current procedural sedation medication selection has evolved over the past several years, and it is important for adjuvant members of the anesthesia care team to have at least a cursory familiarity with the drugs used. Previously a benzodiazepine (midazolam) and narcotic (fentanyl) combination was commonly used. Now, current medication selection trends have been molded by patient desires for a more pleasant and complete sedation experience, increased procedure complexity requiring enhanced sedation and larger drug dosages, and prolonged recovery times following increased drug administration.[10] These changes have resulted in an increased number of requests by consultants for an anesthesiologist to manage the procedural sedation. For example, in colonoscopies, requests for anesthesia services increased from 11% in 2000 to 23.4% in 2006 in Medicare patients and from 13.6% in 2003 to 35.5% in 2009 in commercially insured patients.[11]

Once the anesthesia care team became involved, medication selection converted from solely a benzodiazepine/narcotic base to a more

Table 1. Procedural Sedation Drug Selection

	Drug	Effects
IV Anesthetics	Propofol	Dose-dependent respiratory depression Anti-emetic properties Pain with injection Hypotension
	Dexmedetomidine	Minimal ventilatory depression Anxiolytic, sedative, and analgesic properties Bradycardia
	Ketamine	Minimal ventilatory depression Analgesic properties Increased secretions
Analgesics	Fentanyl	Dose-dependent respiratory depression Rapid onset of action Short duration
	Remifentanil	Very rapid onset of action Extremely short half-life Very little respiratory depression No residual analgesic properties
Anxiolytics	Midazolam	Rapid onset Amnestic properties Anxiolysis Dose-dependent respiratory depression particularly when combined with opioids

balanced sedation technique combining an intravenous anesthetic with an analgesic agent with/without an anxiolytic[12] (see Table 1). Emergency departments also began implementing a similar technique.[7]

The fact that consulting physicians are requesting anesthesia services for more complex offsite sedation procedures underscores the importance of maintaining patient safety. Once an anesthetic moves from a familiar, well-staffed, consistent operating room environment into a remote location, opportunities for sedation-related complications increase. The anesthesia team may be working with unfamiliar support staff who are unaware of how complicated procedural sedation can be as medications are titrated to provide a narrow balance between adequate comfort levels and over-sedation resulting in a potentially fatal outcome. Additionally, equipment used in remote locations may not be the same as what is present in the main operating room suite. The anesthesia cart may not be adequately stocked, a discovery that can lead to disastrous outcomes if not recognized before certain items are desperately required. Finally, should a situation arise where help is needed and requested, valuable time can be lost awaiting the arrival of additional anesthesiologists.[13]

Hypoxia and hypotension are the most common complications associated with procedural sedation. In one study involving endoscopic procedures, cardiopulmonary adverse events were responsible for 50% and 60% of procedure-related morbidity and mortality.[2] Since the majority of medications used to provide adequate sedation and analgesia are associated with respiratory depression, these findings should not come as a sur-

prise. Insidious airway obstruction can hasten marked hypoxia, hypotension, hypercapnia, loss of consciousness, and eventual cardiac arrest. Therefore, adequate monitoring must be diligently implemented and accurately documented in order to deliver a safe anesthetic.

Current clinical practice guidelines for noninvasive monitoring

In 2002, the ASA updated its practice guidelines for sedation and analgesia.[8] Although the focus of these guidelines was sedation/analgesia provided by non-anesthesiologists, the practicality encompasses all physicians who participate in procedural sedation cases. One of the first recommendations was the performance of an adequate pre-procedure airway assessment since positive pressure ventilation could always be necessary should the patient unexpectedly progress into a deeper sedation level or experience unanticipated hypoxemia.[8] Table 2 lists a thorough pre-procedure airway assessment.

Another noninvasive monitoring technique involves constant assessment of the patient's level of consciousness/sedation. This can be achieved easily by talking to the patient. If appropriate responses to questions are elicited, the patient is spontaneously breathing and adequately oxygenating. Should the patient fail to respond to verbal stimulation, a light touch can be used to demonstrate arousability. If the patient does not respond to either verbal stimulation or light touch, the patient may be approaching a level of deep sedation or general anesthesia requiring intervention by the anesthesia care provider.[8]

Patients undergoing procedural sedation should be monitored continuously for adequate oxygenation. The importance of this vital sign is underscored by the fact that one of the most common complications associated with procedural sedation is hypoxia.[2] Oxygenation levels can be determined using pulse oximetry with audible and appropriate alarm levels.[8] The patient's color can also be assessed to assist with monitoring oxygen saturation levels, particularly if the pulse oximetry fails to record an accurate measurement secondary to hypothermia, peripheral vascular disease, or even dark nail polish.[14]

The patient's ventilatory function should also be continuously monitored during procedures utilizing moderate and deep sedation via observation or auscultation.[8] While hypoxia is associated with increased morbidity and mortality, hypercarbia can be just as devastating. Elevated carbon dioxide levels are associated with acidosis, cardiac dysrhythmias, catecholamine release and hypertension, and eventual loss of consciousness.[15] The ASA currently recommends that noninvasive CO_2 monitoring using capnography be documented unless precluded or invalidated secondary to patient characteristics, procedure type, or faulty equipment.[14]

Table 2. Pre-Procedure Airway Evaluation

History

- Difficult intubation
- Awake intubation
- Obstructive sleep apnea
- Advanced rheumatoid arthritis, Down's syndrome, Pierre-Robin syndrome

Physical Examination

- Large body mass index
- Short neck
- Large neck circumference
- Limited neck extension secondary to kyphosis or "buffalo hump"
- Micrognathia indicating decreased hyoid-mental distance
- Small oral aperture
- Macroglossia
- Retrognathia
- Mallampati score

All patients receiving an anesthetic, including moderate and deep sedation, should undergo noninvasive monitoring to ensure adequate and sufficient circulatory function.[14] This language was modified from the ASA "Practice Guidelines for Sedation and Analgesia by Non-anesthesiologists" published in 2002.[8] Current standards for basic anesthetic monitoring clearly state that every patient receiving an anesthetic shall have his/her circulatory function continuously monitored via an electrocardiogram and evaluated at least every five minutes using arterial blood pressure measurements and heart rate determination.[14] However, a caveat was inserted giving the attending anesthesiologist the latitude to override this requirement by documenting a valid reason on the patient's medical record.[14]

The role of the RT during and after procedural sedation

Modern organized medicine has undergone a dramatic shift into a complex, multifaceted system or active process involving numerous individuals simultaneously

functioning to achieve a common goal: safe, high-quality patient care. However, creating an environment in which all patient care providers function as a single unit or team has been challenging.

Past medical models were based on an entrenched hierarchy in which the physician served as a form of dictator, often demanding other health care providers comply to his/her treatment plan with little regard for outside opinion. Medical schools have not traditionally instructed their students in leadership skills, yet it is becoming increasingly evident that today's physician needs to understand and emulate effective leadership behaviors[16] in order to provide their patients with a more safe, satisfactory, and efficient health care experience.

The RT can expect to function as an integral part of the anesthesia team during procedural sedation cases. Respiratory therapists, through classwork and routine job requirements and responsibilities, are prepared to manage risks specific to the cardiopulmonary system occurring in patients undergoing moderate sedation. RTs are uniquely qualified to assist with airway management in patients experiencing hypoxia, hypercapnia, and/or unanticipated increased sedation levels, thereby allowing the physician to concentrate on patient physiology and prepare for other potential adverse events and necessary interventions.

A unique aspect surrounding the training of RTs involves the intense exposure and experience they receive during their education in the usefulness of noninvasive capnography as another "vital sign." As we all know, at the most basic level, capnography refers to the study and measurement of exhaled carbon dioxide.[17] What anesthesiologists may fail to appreciate is the depth of knowledge RTs possess regarding the clinical application of capnography, particularly during moderate and deep sedation. Technological advances in the accuracy and size of noninvasive carbon dioxide monitoring has expanded its usefulness to almost all aspects of health care. Capnography is unique in that it can function both as a continuous measurement of patient ventilatory function via a numerical response and as a diagnostic monitoring device secondary to changes in the shape of the waveform (similar to an electrocardiogram).[17] Additionally, capnography can also give the health care provider an indication of adequate cardiac output (i.e., if CO_2 levels are decreasing, gas exchange is not sufficient warning of a potential cardiac arrest) and thereby alert the anesthesia team member of the necessity for an emergent intervention.

The implementation of capnography during remote anesthesia procedural sedation cases has been increasing in recent years for several reasons.[18] First, according to the ASA Closed Claims database,[1] the most common mechanism of injury arising from anesthesia care in remote locations is an adverse respiratory event (44%), with 21% of these cases involving inadequate oxygenation/ventilation. Secondly, hypoxic events are less likely to occur if capnography is used in conjunction with pulse oximetry. Since capnography provides real-time carbon dioxide/ventilation analysis, changes in respiratory status can be detected instantly, whereas changes in oxygenation can go undetected for a longer length of time.[17] One study found that hypoxic changes were discovered 12–271 seconds after capnographic changes were documented.[17] Since RTs routinely use capnography, they have a great deal of experience accurately interpreting capnograms during sedation cases.

Respiratory therapists are important, vital members of the postoperative health care team. An estimated 12–14 million Americans have been diagnosed with COPD,[19] with many of these patients requiring surgical interventions. The skill and knowledge RTs have in COPD treatment can assist the primary team in adequate post-sedation medication selection and delivery should a patient experience an exacerbation while in the recovery room. Understanding advances in aerosolized medications and their delivery systems ensures RTs maintain useful roles in the post-anesthesia care unit environment.

Another area in which RTs play an important role is obstructive sleep apnea (OSA). Research has clearly demonstrated obesity trends within the United States have been steadily increasing over the past 25 years.[20] As a result, the number of patients undergoing procedural sedation cases with an underlying diagnosis of OSA has also increased. More frequently, patients are presenting to the preoperative holding area with some form of continuous positive airway pressure (CPAP) device they have been instructed to bring for use following their procedure. RTs are well trained in maintaining and operating these devices, as well as ensuring patients receive the appropriate settings necessary to maintain adequate oxygenation/ventilation. Along these same lines, post-sedation education is crucial since the majority of medications used during the procedure are known to cause respiratory depression, as are the postoperative pain medications. It is imperative that patients understand the importance of using their CPAP machine the night of surgery to avoid any unrecoverable apneic episodes.

RTs trained for leadership

In conclusion, advances in medical and surgical technology have resulted in the ability to perform more com-

plex procedures outside of a traditional operating room environment. Many of these cases will be performed under moderate-to-deep sedation, necessitating the use of noninvasive monitoring. The training received by respiratory therapists allows them to serve as leaders in many aspects regarding procedural sedation and noninvasive monitoring both during the procedure and in the recovery room environment. ■

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Challenges of Managing Chronic Hypoxemia: Continuity of Care from Hospital to Home

by Kent L. Christopher, MD, RRT, FCCP, FAARC

In the *AARC Times* April 2014 issue I discussed how oxygen delivery technology in the hospital is quite different than what is intended for home use. I also noted that durable medical equipment (DME) suppliers are voicing concern about Centers for Medicare and Medicaid Services (CMS) reimbursement cuts under competitive bidding and bundled capped rental for DME oxygen. The two-year period after the capped rental places burdens and responsibilities upon beneficiaries regarding management of their DME equipment, repairs, and other services. DME suppliers are cutting costs to make ends meet, and physicians are looking to CMS to uphold its part of the bargain by making certain beneficiaries requiring home oxygen have access to what is medically necessary.

Additionally, CMS never reimbursed for home clinical care services previously provided by RTs employed by DME suppliers. In parallel to reimbursement cuts, RTs have been rapidly disappearing from homes of our patients requiring DME oxygen.

The changing face of health care

U.S. health care is changing rapidly. For physicians and hospitals alike, a new "pay for performance" model is replacing the traditional "fee for service" payment process. Physician payment is moving away from how many patients are seen, or how frequently they are seen, to how well they are managed. The hospital model is a "penalize for below-standard performance" scenario. Financial penalties are incurred for a growing list of adverse events and excessive 30-day readmission rates for certain diagnoses. Health care reimbursement is becoming value based, or driven by outcomes achieved relative to the cost of achieving them. This focus will be across the continuum of care.

about the author...

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An estimated 1.4 million patients have chronic hypoxemia requiring home oxygen at an annual direct cost of greater than $3 billion.[1] A few individuals begin long-term oxygen therapy (LTOT) through the outpatient setting, but most are prescribed LTOT upon hospital discharge. So, how does the RT positively influence value (outcomes related to cost) with regards to management of patients with chronic hypoxemia? This is a difficult question to answer. There is an absence of continuity of care from hospital to home, since there is no established reimbursement structure allowing the RT a physical presence in the home for clinical management of chronic hypoxemia.

Expanding the role of the hospital respiratory therapist

Hospital reimbursement penalties for 30-day readmissions will include COPD in October 2014. Since most patients are initially prescribed home oxygen upon discharge, and since the majority of patients with chronic hypoxemia have COPD, hospitals will be penalized if untreated or inadequately treated hypoxemia precipitates a COPD readmission. In fact, recent CMS interpretive guidelines for discharge planning[2] specifically identify the role of respiratory therapy in a multidisciplinary approach to a well-designed discharge planning process. CMS notes that the team approach helps ensure all of the patient's post-discharge needs are addressed in the plan, increasing the likelihood of successful recovery and avoidance of complications and readmissions.[2]

The hospital RT can make an impact through increasing involvement in assisting the physician in the assessment of hypoxemia and regulatory documentation of home oxygen need. Under the direction of the

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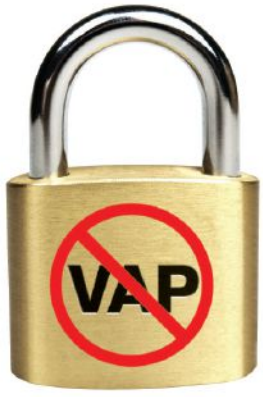

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physician, the RT can initiate the disease management process through patient education about the basics regarding the nature of their underlying respiratory disease, the deleterious effects of chronic hypoxemia, the beneficial effects of compliance with the prescribed LTOT on avoiding chronic hypoxemia sequelae, and improving both quality of life and survival. The RT educator must also appreciate that the "bad news" of going home on what will likely be life-long oxygen stirs different emotional and psychological concerns that vary widely in type and magnitude among individuals. Furthermore, as has been recently reported, COPD patients are at higher risk for developing mild cognitive impairment.[3] This could clearly present a major roadblock to the very important information you are attempting to convey. As such, during discharge preparation, too much information may be as counterproductive as too little. In fact, a number of questions are best addressed and lingering concerns effectively resolved at some point after discharge when the patient has had sufficient time to adjust to LTOT. Do you feel knowledgeable, experienced, and comfortable in assisting the physician in this educator role of presenting the proper informational content on this topic at the appropriate time? If not, you may wish to acquire those attributes.

Though the hospital-based RT is well suited to address inpatient oxygen therapy technology, knowledge and clinical experience with respect to home oxygen technology require some additional expertise. In fact, it is in the best interest of the patient that the hospital RT performing the discharge assessment and planning has sufficient knowledge and experience to proactively participate in determination of the appropriate oxygen system. The AARC's online COPD Educator Course is an excellent resource in this regard (www.aarc.org/education/copd_course).

The DME supplier is responsible for informing the patient about the safe operation and maintenance of the equipment. Due to the wide variability in quantity of oxygen administered based on a given intermittent flow device and interaction with individual patients and their activity, it is recommended that the patient be objectively evaluated on the system they will be using.[1] Again, the hospital RT is in the best position to objectively determine and educate patients on their stationary and portable device settings required to achieve the targeted SpO_2 (oxygen saturation as measured by pulse oximetry) identified during use (rest, exercise, sleep) as prescribed by the physician.

The role of the RT in outpatient pulmonary rehabilitation programs

A number of respiratory therapists have careers in outpatient pulmonary rehabilitation. Pulmonary rehabilitation is an excellent setting for the patient with chronic hypoxemia to receive education and monitoring for LTOT. Though Medicare reimbursement is unfortunately less than that for cardiac rehabilitation, up to 72 lifetime sessions may be covered.

The role of the RRT in outpatient physician practices

Congressional approval of H.R. 2619, The Medicare Respiratory Therapist Access Act, would provide coverage of pulmonary self-management education and training services in physician practices for beneficiaries with COPD and some additional chronic respiratory diseases by RRTs who hold either a bachelor's degree or other advanced degree in a health science field. RRTs would provide care under the direct supervision of the physician, who would bill Medicare for those services. The presence of RRTs in physician outpatient practices would improve access of patients to an unparalleled level of continuity of care for management of chronic hypoxemia. ■

DISCLOSURE

The author licensed patents on transtracheal oxygen therapy to Transtracheal Systems Inc. in the past and may possibly receive financial gain in the future.

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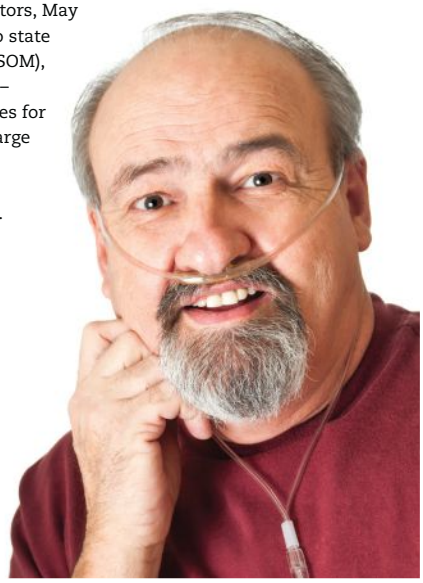

Chronic Disease Manager

Enhancing the Immune System To Help Treat Pulmonary Infections

by Karen L. Gregory, DNP, RRT, FAARC

Infectious agents are a major pathogenic cause of exacerbations in patients with chronic obstructive pulmonary disease (COPD) and asthma.[1,2] The range of potential pathogens known to cause pulmonary infections has risen as a result of antimicrobial-resistant pathogens, immunosuppressed patients, prolonged survival, and improved diagnostic assays.[3] Respiratory infections are associated with symptomology in all ages and may also impact the development and severity of COPD and asthma. Approximately 70%–80% of COPD exacerbations are due to respiratory infections.[4]

The immune system is a structure of cells, tissues, and organs serving as a defense mechanism to combat pathogenic injury. Early host responses are mediated by innate immunity, and late responses involve the adaptive immune system. Innate immunity recognizes microbes through pattern-recognition receptors that include physical and chemical barriers, antimicrobial peptides, phagocytic cells, cytokines, and various blood proteins.[5] The innate immune system protects the host between the microbe exposure and initial adaptive response. Mucociliary escalators and alveolar macrophages may eliminate less virulent microbes. The adaptive immune system has specific T-cell and B-cell receptors that recognize a microbial pathogen. Enhancing these protective responders may lead to reduced pulmonary infections and decreased exacerbation of pulmonary disease.

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Common pulmonary infections

Various factors lead to the development of pulmonary infections including poor health, community-acquired infections, and health care–related infections. Acute lower respiratory infections cause more deaths and are the largest burden of disease in the United States.[6]

Bacterial infections have been deemed the primary infectious cause of exacerbations, but recent literature reflects viral upper respiratory tract infections may also be an associated risk factor.[7] Bacteria are present in approximately 50% of exacerbations. *Haemophilus influenzae*, *Moraxella catarrhalis*, and *Streptococcus pneumoniae* are the bacteria most frequently isolated bronchoscopically from patients having a COPD exacerbation.[8] *Pseudomonas aeruginosa* and *Enterobacteriaceae* are also commonly isolated periodically from patients with severe COPD.[8] (See Table 1.)

Respiratory exacerbations originating from viral etiology are associated with patients who have frequent, severe exacerbations with prolonged recovery time. Viral infections induce inflammation of the airway epithelial cells, causing induction of inflammatory mediators, muscarinic receptor stimulation, and epithelial damage. Rhinoviruses are the most common viruses associated with an exacerbation of COPD.[8] Influenza, parainfluenza, coronavirus, and adenovirus are common, especially during an exacerbation.[8] Respiratory syncytial virus and human metapneumovirus are more recently associated with exacerbations. (See Table 2.) Incompetent host defenses allow microbes to thrive, causing adverse outcomes.

Treatment

Functional impairment is a prime predictor of the bacteria responsible for acute infective exacerbations.[1,9] Multi-drug resistant bacteria poses a significant chal-

Table 1. Major Respiratory Bacteria Associated with COPD Exacerbation

Haemophilus influenzae
Moraxella catarrhalis
Streptococcus pneumoniae
Pseudomonas aeruginosa
Enterobacteriaceae

Table 2. Major Respiratory Viruses Associated with COPD Exacerbations

Rhinovirus
Influenza and parainfluenza
Respiratory syncytial virus
Adenovirus
Coronavirus

lenge in the treatment of pulmonary infection. Literature shows empiric antimicrobial therapy using two antimicrobials is considered superior coverage for potential pathogens causing gram-negative infection.[1] Sputum purulence is an indicator of bacterial infection during a COPD exacerbation and guides treatment selection. *H. influenzae*, *M. catarrhalis*, and *S. pneumoniae*, *Pseudomonas* spp. can be identified by expectorated sputum obtained before initiating therapy.[10] (See Table 3.)

Symptomatic treatment is used for most viral infections. Anti-viral agents may be useful in some conditions. Oseltamivir may be therapeutic when clinical signs and symptoms of influenza are present during a known influenza epidemic.[7] Currently, clinical treatment is limited for viral-induced exacerbations. Bronchodilators and corticosteroids are considered the mainstay of treatment for exacerbations of COPD and asthma, despite the etiology.

Enhancing the immune system

Clinical associations exist between nutrition and the immune system in promoting pulmonary health and wellness. Literature reveals the immune system cannot function under circumstances of malnutrition.[11] Nutritional deficits can result in immunosuppression and poor function of the immune system. Exercise contributes to improved cardiovascular functions,[12] induces increased blood neutrophil counts, and decreases lymphocyte counts that lead to immunosuppression.[13] In addition, adequate sleep is imperative for promoting a strong immune system. Early identification and an appropriate treatment must be employed to reduce complications.

Table 3. Multi-Drug Resistant Bacteria

Methicillin-resistant *Staphylococcus aureus*
Pseudomonas aeruginosa
Acinetobacter
Multi-drug resistant *Enterobacteriaceae*

Prevention strategies

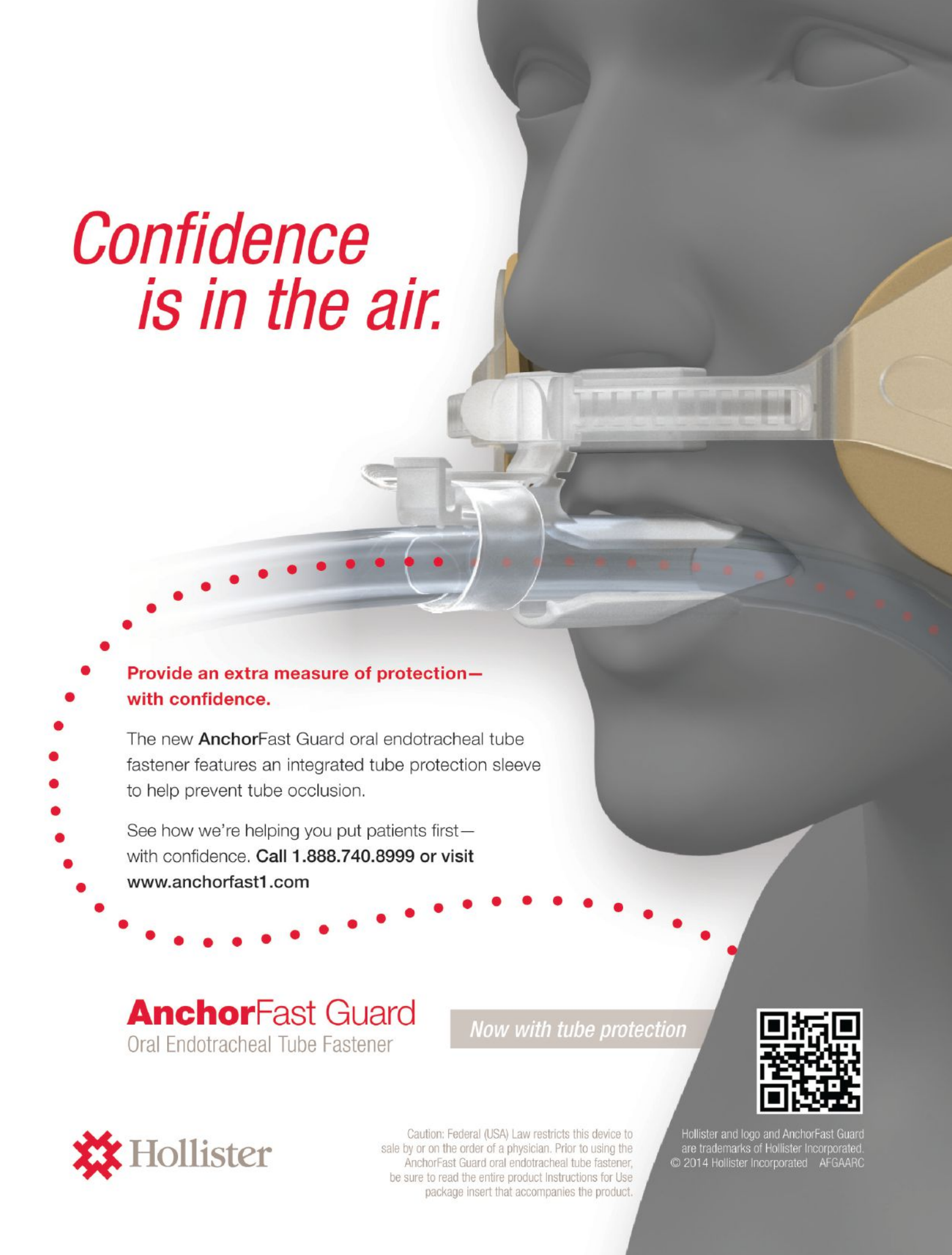
Prevention is the key to enhancing the immune system. Patients with pulmonary disease should receive the influenza vaccine annually and the pneumococcal polysaccharide vaccine once with a booster greater than five years after the first dose.[10] The Advisory Committee on Immunization Practices (ACIP) recommends for adults only one single revaccination with PPSV23 ≥ five years after the first dose.[14]

Prophylactic antibiotic therapy requires a risk-versus-benefit evaluation in carefully selected patients, considering the adverse effects of possibly promoting antibiotic resistance. Patients must be closely monitored during a respiratory exacerbation and medical treatment regimen changed as indicated. Multiple factors influence the development of healthcare-associated infections, including ventilator-associated pneumonia.

Respiratory therapists play a vital role in achieving excellence in clinical practice. Knowledge of pulmonary immunity and management and treatment of lung infections will equip RTs with skills to achieve successful clinical outcomes. Emphasis must be on using evidence-based practice, identifying risk factors, and implementing appropriate practice modifications to promote best practice.

Improving immune system function

Pulmonary infections are a public health problem that is accelerated by the emergence of multi-drug resistant pathogens. Preventing infections caused by harmful organisms pose significant challenges for health care professionals. Evaluating patient nutrition, sleep pattern, lifestyle, and providing education are keys to decreasing the risk of pulmonary infections. Enhancing defenses and improving function of the immune system rather than targeting and eradicating organisms may be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the best approach to achieving successful clinical outcomes. ■

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Ventilation for Life

Spontaneous Breathing Trials in the LTACH Setting

by Loveland Hobson, BBA, RRT

With the aging of the population and clinical progression in critical care, the incidence of chronic critical illness is expected to rise in the coming years. In fact, over the past 25 years that chronic critically ill (CCI) patients have been studied, these patients have already accounted for approximately 6% to 10% of all patients treated in short-term acute care hospitals (STACHs).[1] Traditionally these patients spent their entire acute care episode in a STACH due to the lack of post-acute care facilities (PACFs) properly equipped to manage this complex patient population. PACF by definition includes long-term acute care hospitals (LTACHs), which are defined by the Centers for Medicare and Medicaid Services as acute care hospitals with a mean length of stay equal to or greater than 25 days.

Defining the CCI patient comes with a great deal of controversy. The two most commonly used definitions are the duration of mechanical ventilation (MV) and patients requiring tracheostomy.[1] The advantage of the latter is that the patients are identified by a code, simplifying the extraction of information from a secondary database.[1] However, the great variability in the indication of tracheostomy and its tendency to be performed increasingly early may contribute to the selection of patients with different evolutions than those of chronic patients.[2] To best describe or define prolonged MV, a recent consensus conference defined patients with cases requiring the need for prolonged invasive MV as those requiring at least 21 days of MV,[3] perhaps shedding some light on the CCI definition.

Characteristically, LTACHs provide care for patients who are no longer dependent on services provided by a STACH but who still have significant ongoing complex needs. These complex medical cases require prolonged recovery time and an intensity of treatments, as well as services and physician involvement provided by a multidisciplinary team. In the post-intensive care setting, these LTACHs act as specialized hospitals caring for the patients previously defined as those requiring prolonged mechanical ventilation (MV) as well as those with other types of chronic critical illness.[4] Recently with the trend of early discharge, STACHs are reporting reductions in their overall length of stay, partially due to the PACF's ability to admit the CCI patient.[5,6]

about the author...

Loveland Hobson, BBA, RRT, is the director of pulmonary services, wound care, and neurophysiology for Wellmont Health System – Bristol Regional Medical Center in Bristol, TN.

Unique challenges encountered in caring for and liberating patients from mechanical ventilation

As health care providers caring for and liberating CCI patients from MV, the multidisciplinary team will need to be equipped to anticipate or identify several key factors, including:

- Adequate nutrition and dehydration
- Respiratory complications
- Nosocomial infections
- Anxiety and pain evaluation
- Need for physical activity
- Depression
- Ethical concerns.

Caring for CCI patients presents enormous and diverse challenges. Astute assessment, monitoring, and intervention are necessary to prevent or treat compounding complications. By using expert knowledge, paying attention to details, and upholding ethical principles, the skilled therapist will ensure patients in this population experience the best outcomes possible.[7]

Among the unique challenges previously mentioned in caring for and liberating the CCI patient from MV is the necessity for more focused patient-family education. Existing evidence suggests that many intensive care unit (ICU) families lack information that could assist them in making appropriate decisions as surrogates and in coping with their own psychological distress. Brochures, booklets, and other printed material are practical and relatively inexpensive tools that will help meet the informational needs of patients and families.[8]

Liberating mechanical ventilation in all care settings

When a patient fails a spontaneous breathing trial (SBT), two very important questions should be asked. First, what caused the SBT failure and are there reversible factors that can be corrected? Second, how should subsequent ventilatory support be managed? Although a failed SBT often reflects persistent respiratory-system mechanical abnormalities, a failed SBT should prompt a search for causes or complicating factors such as adequacy of pain control, appropriateness of sedation, fluid status, bronchodilator need, control of myocardial ischemia, and other disease processes that can affect discontinuation attempts.[9] Once the complicating factors limiting success of the SBT have been controlled, the respiratory therapist should resume SBTs as soon as the recovery period has been achieved and the patient is clinically stable to tolerate SBTs again.

The weaning stage of MV is described as that time when the patient's physiological status is stable and progressive liberation from MV is possible. Various mechanical ventilator modes and methods are used to ensure an expeditious process. In the area of weaning, evidence indicates that it is not the mode used but rather the method — specifically the consistent approach of the therapists and the use of protocols suited for their care setting.[9]

Liberating mechanical ventilation between all care settings (ICU, LTACH, and SNF)

In a major evidence and technology report prepared for the Agency for Healthcare Research and Quality by the McMaster University Evidence-based Practice Center, differences in clinicians' intuitive threshold for reduction or discontinuation of MV were cited as having a greater impact on failure to wean than do weaning modes. When clinicians set a high threshold, many patients who could tolerate weaning remained on MV longer than necessary.[10]

In all care settings (ICU, LTACH, and skilled nursing facility) the respiratory therapist should be knowledgeable of their facility-specific ventilator weaning protocols and should be properly trained to manage the patient specific to their care setting. The patient who remains ventilator dependent despite maximal medical/surgical therapy and aggressive attempts to remove MV is becoming more and more of a challenge for the respiratory therapist. Therapists who are highly educated in management of the CCI patient will be vastly more successful in the post-acute setting due to their ability to maintain continuity of care.

Respiratory therapists' role in SBT trials

In recent studies, up to 20% of medical ICU patients met the 21-d U.S. Health Care Financing Administration definition of prolonged mechanical ventilation,[11] rapidly increasing the need for PACFs with highly trained respiratory therapists capable of managing the CCI patient admitted to their facility for ventilator weaning. Directors and managers of respiratory care departments across the care continuum must reexamine their programs and provide the necessary training elements to properly equip their therapists to treat a more complex patient type.

Financial pressures, coupled with the concept that an aggressive ICU mindset might not be optimal for the CCI patient, have led to the creation of PACFs with ventilator weaning programs that are potentially more cost effective.[11] With this pendulum shift in the care continuum, RTs must prepare using a variety of clinical knowledge to adequately maximize the efforts of SBTs. Ventilator weaning protocols should be care setting-appropriate with established criteria for SBTs and should include the multidisciplinary team, patient, and family. ■

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Portable Sleep Studies and the Role of the Respiratory Therapist

by Jessica Schweller, MS, RRT, CNP, RN

Currently, home portable sleep studies are invading the world of sleep and are starting to become the preferred form of testing by many insurance companies. With the ease of testing, cost effectiveness, and ability for the patient to complete testing at home, patients are also in favor of this alternative form of testing. Health care spending is being scrutinized at this time, and insurance companies are trying to reduce costs by providing a more economic option for their patients with regards to sleep testing. Depending on the insurance carrier and type of plan, in-lab polysomnography may not be a covered option, leaving home sleep testing (HST) as the only option for sleep diagnostic testing. As a result, sleep centers across the United States have lost significant revenue leading to unprofitability and pending closure of the sleep center.

Home portable sleep studies cost less than a laboratory study. The patient has the ability to either complete the testing at home or in the setting of their choice, and fewer leads are being monitored. Medicare reimbursement for an in-lab study is approximately $697 for a diagnostic study and about $750 for a titration. Comparatively, Medicare reimbursement for a home portable sleep study is about $182, which is a cost savings of about $1,261.[1] Due to increasing deductibles and co-payments, many patients are electing for a home portable study to save out-of-pocket expenses. Private payers such as Anthem Blue Cross/Blue Shield, Aetna, Cigna, and United Healthcare have been instrumental in requiring home portable testing over in-lab testing.

The quality of studies has been shown to be equal to in-lab studies,[2,3] but they do not come without issues. Reliability may be a concern as these studies are unattended by clinicians. Some portable testing is completed by outside facilities that are contracted by the insurance carrier to provide HST. These companies mail the unit to the patient and require the patient to complete the testing with instructions provided. There is no face-to-face interaction with a practitioner to explain the process of applying the test during sleep. Leads may be displaced or incorrect placement of equipment may cause invalid testing. As a result, multiple tests may be required to achieve a valid study. Portable monitors also offer auto-scoring features that are utilized by some providers, which may lead to variability in scoring. A board-certified sleep physician is required to officially score the study and finalize the report.

One other concern with HST is that sleep time is not recorded and the unit of measure is total recording time. This may overestimate the amount of sleep the patient achieved. It tends toward a false-negative result as the number of apneas and hypopneas is divided by a longer sleep time, thereby diluting the respiratory disturbance index (RDI).[4]

Types of HST devices

There are four types of sleep studies. A Type I study is an in-lab, technician-attended polysomnography. A Type II study is similar to the Type I, but the difference is that it is unattended. A Type III device measures four physiologic measures, including two respiratory variables. This is the type of portable testing covered by Medicare and most insurance companies. A Type IV test measures one to three variables, and it may include arterial tonometry, oximetry, snoring, and body position. It should allow for direct calculation of apnea-hypopnea index or respiratory disturbance index.[2] Depending on the insurance carrier, the billing code for a Type III study is 95806 (or G0399 for Medicare) and for a Type IV study is 95801 (or G0400 for Medicare).

about the author...

Jessica Schweller, MS, RRT, CNP, RN, is a sleep nurse practitioner in the Lung and Sleep Center at The Ohio State University in Columbus, OH.

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Who gets a portable study?

Nancy Collop and her colleagues have developed recommendations on which patients' portable studies should be completed.[2] First, portable studies should be used in conjunction with a comprehensive sleep evaluation. Next, only patients with a high pretest probability of having sleep apnea should be considered for home portable testing. This will help to eliminate the likelihood of a false-positive result. Testing should also not be used for screening in the general, asymptomatic population. Patients who are excluded from home portable testing include those with cardiac arrhythmias, congestive heart failure, moderate-to-severe pulmonary disease, or neuromuscular disease. Also, patients who are being evaluated for parasomnias, periodic limb movement disorder, or narcolepsy should be excluded from a home portable study. Portable study is recommended for patients for which in-lab testing is not appropriate because of immobility, safety, or critical illness. HST may also be used to monitor the effectiveness of positive airway pressure, oral appliances, oral airway surgery, or weight loss.[2] Peer-to-peer evaluations are sometimes completed for patients in special circumstances in which a home portable study is required but not recommended. Medicare is reimbursing for home portable studies; however, many states' Medicaid programs do not. If the patient has a negative HST but a strong likelihood of having sleep apnea, an in-lab baseline study is recommended.

After the HST, some insurance plans may cover only PAP therapy with auto-titrating continuous positive airway pressure (auto CPAP or APAP), excluding in-lab CPAP titration studies. Following up with a sleep provider is also encouraged to assess the efficacy of the CPAP device, and the recommendation is to set the pressure based on the 90th or 95th percentile pressure as seen on the unit download. Overnight pulse oximetry may be completed while on auto CPAP to assess for continued desaturations despite adequate CPAP pressure. In-lab titration studies may be declined by insurance providers after a portable diagnostic study.

In the HomePAP Study, two groups of patients were compared. The first group were patients who underwent an in-lab study followed by a titration study and then set up with CPAP. The second group underwent a home portable study and were then set up with auto-PAP afterwards. The significant point to the study was the cost difference, as the savings was about 25% less in the home group. Compliance and daytime sleepiness were similar in both groups.[3]

The role of the respiratory therapist

With home portable studies emerging as the preferred method of sleep testing by many insurance carriers, respiratory therapists have an opportunity to be involved in this field. Portable testing is being conducted through independent testing facilities, sleep centers, physician offices, primary care practices, dental clinics, and so on. This has opened a door for RTs interested in sleep to start a portable program in many settings. These tests are set up during the day with the patient taking the unit home to sleep, giving the RT the opportunity for more flexibility in their work schedule. Also, educating patients on the type of testing being completed and what to expect afterwards allows the therapist to get more involved with both the patient and the management aspect of sleep. As more and more insurance companies require portable diagnostic sleep testing, the opportunity for RTs to get involved in home testing will increase. ■

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The ARCF: A Best-kept Secret

by Thomas J. Kallstrom, MBA, RRT, FAARC

One of the best-kept secrets of the American Association for Respiratory Care is, unfortunately, the fact that few practicing respiratory therapists know that there is a not-for-profit foundation that helps support our professional interests, respiratory therapists, respiratory therapy students, researchers, and patients. It is called the American Respiratory Care Foundation (ARCF). It is affiliated with the AARC and is a 501(c)(3) organization. The Foundation has existed for decades and in this time has awarded hundreds of thousands of dollars to deserving awardees.

Early this year, the ARCF conducted a survey of AARC members and found that almost half were unaware of the ARCF and that over 65% were unaware that the ARCF awarded scholarships and fellowships. One of the take-home points to the survey was that the members urged the ARCF and AARC to better communicate to the respiratory care community that they exist and can be a resource to them.

If you are a respiratory therapist who takes pride in the education that you provide to your patients, you may be interested to learn more about the Mike West MBA RRT Patient Education Achievement Award. Established in 2012, this award is named for Mike West, a Registered Respiratory Therapist who recognized the importance of educating patients to help them manage chronic pulmonary diseases and the profound impact such self-management has on patient respiratory quality of life. Mike West made it his quest throughout his career to ensure that patients, caregivers, and industry had the highest understanding of respiratory disease and the best solutions for treating these diseases. Mike passed away two years ago, and this living tribute to the value of RTs who educate our patients speaks to the value that we play in making them better self managers of their pulmonary health.

Other examples include the William F. Miller MD Postgraduate Education Recognition Award and the Gareth B. Gish MS RRT Memorial Postgraduate Education Recognition Award, both of which are given to respiratory therapists seeking to further their education by attaining an advanced degree. The AARC has gone on record that all practicing RTs should continue their education post graduation.

Some of the other philanthropic activities of the ARCF include funding for respiratory therapists and clinicians who have been identified as leaders in the profession. These include clinical research fellowships and abstract awards, undergraduate and post-graduate awards, research grants, community awards, and achievement awards. I would encourage you to go to www.arcfoundation.org to learn more about the ARCF and to view interviews with past RT recipients who benefited from the ARCF.

Membership update

As you know, the AARC is the only organization that represents the sole interests of the respiratory care profession. The efforts put forward by the AARC include advocacy at a state and national level. Our government affairs staff work to assure that the respiratory therapist and our patients are not overlooked when new legislation is introduced or when we introduce legislation (such as H.R. 2619, our Medicare Respiratory Therapist Access Act). This work is accomplished in large part by our volunteers and executive office staff, which includes three dedicated staff members.

Because of our membership numbers, we have been recognized by others — including the federal government

about the author...

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

— in ways that we can assist in national health care and education. Examples include representation of the National Heart, Lung, and Blood Institute's National Asthma Education and Prevention Program (NAEPP). It is the NAEPP that has developed the expert panel report for the diagnosis and management of asthma. Recently, the U.S. Department of Health & Human Services and the Centers for Disease Control and Prevention asked the AARC to do a survey of ventilator usage in the United States. This allowed the government to determine what parts of the country may need access to stockpiled ventilators. We are currently working with them to educate respiratory therapists on how to operate the stockpiled ventilators in the event of a national emergency.

The AARC has over 200 low-cost continuing education hours, of which over 50 hours of free education credits via live webcasts and non-traditional courses, are available to members. As a member, you have access to resources that can help you develop your skills and provision of care at your place of employment. Included are safety checklists, COPD best practices, clinical practice guidelines, a nutrition assessment and treatment guide, aerosol guides, and a portable oxygen concentrator guide. We continue to develop new products that assist the respiratory therapist.

Of course, as a member, you have access to other discounts in car and malpractice insurance to name a few. Our members can communicate and share their questions and ideas with others in specialty sections and roundtables. It is here that practices are shared on a large scale. Recently, we started another community called COPD Best Practices Community on AARConnect where members can share protocols, processes, and outcomes in their hospital-based programs that seem to position the respiratory therapist as a leader in reducing hospital admissions.

Of course, being a member allows you to receive the Respiratory Care Journal and *AARC Times*, both monthly publications. If you choose to receive them electronically, your annual membership fee drops to $78.

Membership in the AARC is by far the best deal for students and the practicing therapist. Graduating students even get a sizable discounted rate when taking the registry exam because they are members. When compared to the cost of membership, AARC membership costs dwarf that of other allied health professional organizations of which many do not provide the level of support and advocacy that the AARC does.

Today, for every member of the AARC, two therapists are not. I urge you to help us educate non-members about the AARC and to bring them in as new members. We are only as strong as our numbers, so it is essential that all respiratory therapists at least be given an opportunity to learn more about the AARC and what we can do for them. Once they see this, they will see the value to them and to the profession and our patients by joining us as members. ■

The Foundation has existed for decades and in this time has awarded hundreds of thousands of dollars to deserving awardees.

Federal and International Tobacco Issues

by Cheryl West, MHA

The May 2014 Government Advocacy column focused on general issues occurring at the state and local level on tobacco control and prevention issues. While most of us are aware of our own state and local efforts to constrain tobacco consumption and the gain in momentum for funding of cessation and prevention policies, there are still ongoing efforts at the federal level to regulate tobacco. Lest you believe these efforts are unique to the United States, be assured that regulation of tobacco is certainly an international endeavor as well.

Federal initiatives aim to reduce smoking and prevent deaths

For several decades, the AARC has been part of a Washington, DC-based coalition of health organizations referred to as Tobacco Partners. This important public health policy coalition is administered by the not-for-profit Campaign for Tobacco-Free Kids, which is jointly funded by the American Heart Association, the American Lung Association, and the American Cancer Society. While it might seem that the big federal battles have been won (i.e., smoking ban on airlines and in federal buildings, advertising aimed at attracting youth, age limitations on the sale of tobacco products, placement of vending machines), efforts to keep the ground that has been gained and advance prevention and control issues continues to this day. There is more to be done in the tobacco arena, but much of the current energy of the Tobacco Partners is focused on preventing the very powerful tobacco industry from thwarting, diminishing, and derailing the victories that have already been won.

Family Smoking Prevention and Tobacco Control Act: One of the most far-reaching federal legislative victories of the Tobacco Partners and like-minded health organizations came in 2009 when Congress passed the Family Smoking Prevention and Tobacco Control Act, which gives the U.S. Food and Drug Administration (FDA) the authority to regulate the manufacturing, marketing, and sale of tobacco products. A great recap of the law can be found at www.tobaccofreekids.org/research/factsheets/pdf/0352.pdf?utm_source=factsheets_finder&utm_medium=link&utm_campaign=analytics/.

Passing this law took years of hard, sustained work; and the legislation was vigorously opposed by the tobacco industry. As with any law, the power and impact lies in the regulations that spell out in detail exactly how the provisions of the law will be implemented. Unfortunately, that does not always meet with success.

For example, the law requires bigger, bolder warning labels on cigarettes. When the FDA published proposed rulemaking on the topic and sought public comments as to which combination of pictures and labels would have the most impact on "giving pause" to the purchaser of the cigarette pack, AARC worked closely with its Tobacco-Free Lifestyle Roundtable in developing our comments. However, when the FDA announced the final warning labels and graphics based on the public's input, it met with intense opposition by the tobacco industry, including filing a lawsuit to prevent the new labeling from moving forward. This provision should have been in place in 2012, yet the legal maneuverings by the tobacco industry have put a hold on implementing this particular requirement.

Another provision of the law gives the FDA the authority to regulate cigars, including those infused with flavoring. Pushback from the tobacco industry began immediately as proposed rules were issued. This time,

about the author...

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

though, opposition wasn't from filing a lawsuit but with legislation (H.R. 792 and S. 772) introduced by supporters in Congress who would limit the FDA's authority to regulate "traditional large and premium" cigars. The classification of these cigars generally means "any roll of tobacco that is wrapped in 100% leaf tobacco," contains no filler, and meets certain weight requirements. The AARC joined the Tobacco Partners in sending a letter to all members of Congress asking them to oppose moving the legislation forward. Thus far, there has been no action on either of the bills, but the Tobacco Partners are always monitoring the situation, and we would be ready to respond if, indeed, there appeared to be movement on the legislation.

Regulations to implement other provisions of the law are continuing to move forward. AARC has signed on to comments on proposed regulations governing warning labels on smokeless tobacco products, as well as addressing how the FDA should classify menthol cigarettes. Of particular concern is whether menthol should be viewed as a "flavored" cigarette.

With respect to the latter issue, the AARC and 23 other public health and advocacy organizations that are part of the Tobacco Partners, called for a ban of menthol as a characterizing flavor in cigarettes based on available scientific evidence and public health standards. These criteria demonstrate that if menthol is banned, it would decrease the number of youths who are thinking about starting to smoke, increase cessation, and save lives. The FDA received 174,575 total comments on the issue; final rules have not yet been published.

The next big issue facing the FDA is what to do about e-cigarettes. Currently, the FDA only regulates e-cigarettes that are marketed for therapeutic purposes. For those who are not clear as to what these are, the FDA describes them as "battery-operated products designed to deliver nicotine, flavor, and other chemicals" that are "turned into an aerosol that is inhaled by the user." Many of them are marketed to look like conventional cigarettes.

Because e-cigarettes have not been fully studied, the FDA does not have enough information at this time to know the safety or impact of the vapor they produce or whether they offer any benefits. Be assured, though, we will be hearing more about these products in the near future because there is no federal age restriction on how old you have to be to buy them. The tobacco industry is now ramping up the marketing of candy-flavored e-cigarettes that are gaining popularity among middle and high school students. One of the favorite flavors is "gummy bear."

Aside from FDA regulatory issues, the AARC also participated in a Tobacco Partners' letter to the U.S. Department of Housing and Urban Development to support the agency's efforts to encourage broader adaption of smoke-free policies in federally assisted housing.

Surgeon General's Report on Smoking and Health: In January of this year, public health advocates celebrated the 50th anniversary of the Surgeon General's report that first raised public awareness of the hazards of smoking and its consequences with the release of its 2014 report, "The Health Consequences of Smoking – 50 Years of Progress." In the first report, only lung cancer was associated with smoking. The new report raises the list of smoking-related health issues to 13. A number of initiatives have been spawned as a result.

To coincide with the Surgeon General's latest report, leading public health and medical associations that are spearheaded by the Campaign for Tobacco-Free Kids, the American Lung Association, the American Heart Association, the American Cancer Society, and others, held a press conference at The National Press Club in Washington, DC, to announce a call to end the tobacco epidemic with the slogan "Enough Is Enough." The AARC was present to lend its support to three goals called for by this initiative:

- Reduce smoking rates, currently at about 18%, to less than 10% within 10 years.

Despite significant progress since the first Surgeon General's report, smoking remains the single largest cause of preventable disease and death in the United States.

- Protect all Americans from secondhand smoke within five years.
- Ultimately eliminate the death and disease caused by tobacco use.

One of the most powerful actions taken as a result of the latest Surgeon General's report is the decision by CVS Caremark to stop selling tobacco products at more than 7,600 stores throughout the country. Consequently, the AARC and other Tobacco Partners signed on to an open letter to other large retailers, especially those with pharmacies, asking them to follow the lead of CVS and quit selling tobacco. Only time will tell if others are willing to take the same bold move.

Respiratory therapists know the value of tobacco-cessation counseling. With a call from the Surgeon General to do more to increase the progress in controlling tobacco, once again the Tobacco Partners stepped up to the plate. A few months ago, a sign-on letter was sent to Secretary Kathleen Sebelius of the U.S. Department of Health and Human Services asking the department to issue a clear definition of a comprehensive tobacco-cessation benefit in either regulations or through guidance to ensure that health insurance plans provide coverage mandated by the Affordable Care Act to help smokers and other tobacco users quit.

A problem that appears to be surfacing is the lack of consistency among the plans in following the list of recommendations from the U.S. Preventive Services Task Force that indicate both counseling sessions and FDA-approved medications are effective tobacco-control interventions and, when combined, have an even greater impact than either component alone. The jury is still out on whether the department will move forward with the Tobacco Partners' request.

If you would like to learn more about these and other tobacco issues, an outstanding resource is the Campaign for Tobacco-Free Kids website at www.tobaccofreekids.org/. This site can provide you with facts, figures, position statements, research, fact sheets — just about anything and everything you might need or want to know to stay informed or bolster our own tobacco control advocacy efforts.

International tobacco control and prevention initiatives take proactive role

You might be surprised at the number of nations across the world that ban smoking in some fashion and/or regulate the sale and promotion of tobacco products. Countries from Togo to China to Peru and nearly every place in-between either have or are setting prohibitions, albeit some countries' actions are more comprehensive than others.

Between 2005–2008 tobacco global control and prevention efforts really sped up when the World Health Organization Framework Convention on Tobacco Control's international treaty was agreed upon and countries began implementing the treaty's guidelines. To date, over 168 countries have signed the treaty.

The Campaign for Tobacco-Free Kid's webpage at www.tobaccocontrollaws.org/ provides a list of countries and their laws or pending legislation that address tobacco-control issues.

As with many federal issues, the current tobacco-control efforts tend not to make national news or spark the interest of the media, except in cases where there is national news like the release of the Surgeon General's report. The vigilant monitoring and response to efforts to undermine initiatives to move forward with tobacco-control and prevention issues is the mission of the Tobacco Partners and the Campaign for Tobacco-Free Kids. AARC is proud to continue our decades-long partnership to further these efforts. ■

Arbitration, Let's Play Arbitration!

by Anthony L. DeWitt, JD, RRT, FAARC

"There's a new kid in town (I don't wanna hear it…) there's a new kid in town…."

— Henley/Frey/Souther, "New Kid in Town"

So you open up your phone bill and a little piece of paper falls out that says, "Changes to Your Subscriber Agreement" and in the fine print you see that if you continue to use your phone, you're agreeing to settle any and all disputes with your wireless carrier through the process of arbitration. So what, exactly, does that mean?

Arbitration is the "new kid in town" when it comes to alternative dispute resolution. It is a way of avoiding the courts and getting quicker (and sometimes less costly) justice. The Federal Arbitration Act and the Uniform Arbitration Act, adopted by a majority of the states, provides that private parties may exempt themselves from the courts and take their disputes to arbitration.

The process

Arbitration is a procedure where the two parties who disagree about a legal problem do agree on who should hear the case. Contracts will usually call for either one arbitrator (who acts like a judge), or a panel of arbitrators (one chosen by each party, and those two then choose a third) to hear the dispute. The dispute is presented to the arbitrators by individuals (lawyers are not required but routinely used), and the rules of evidence are usually relaxed somewhat.

The American Arbitration Association has a set of rules applying to arbitration procedures they conduct that describe not only how the arbitrators are appointed but also how a party goes about getting evidence from the other party. Unlike a court proceeding, discovery rights are normally very limited in an arbitration proceeding. Decisions about what is and what is not discoverable are made by the arbitrators, not by a judge.

This is why trial lawyers have routinely criticized the process of arbitration. They view it as a "defendant friendly" venue, and sometimes it is (although it doesn't have to be). This criticism is usually voiced by objecting to arbitration as a dispute resolution procedure, and then a court must decide whether the issue can be handled through the courts or through arbitration.

If the court decides to compel arbitration, that decision can't be appealed. If, however, the court decides against compelling arbitration, that can be appealed — and it can be appealed immediately. While that may sound a little unfair, the system in practice works quite well. The majority of determinations made by courts that a proceeding should not be compelled are upheld. Very few arbitrated cases are overturned by courts for issues of whether the dispute was properly brought before an arbitrator.

Arbitration is, of course, at its heart an arbitrary procedure. One to three people decide who is right and who is wrong. There are usually no specific requirements about who can be an arbitrator (although in some states, arbitrators must have legal training). If an arbitration award is made, either party can move to have the court enter that arbitration award as a judgment (or set it aside because it is incorrect), and the judgment can be appealed. If a judgment is entered after arbitration and an appeals court decides that it was improperly referred to arbitration, it can be sent back to the courts. If it finds that the arbitration was properly conducted, it can affirm the award.

about the author…

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

More and more employers are asking employees to sign arbitration agreements as a part of the hiring process. In essence, they're asking employees to give up their right to go to court in exchange for being hired by the firm. In some cases, this can be a good thing because arbitrators are often as fair as judges, and the streamlined procedure keeps down legal fees. However, it can also be problematic if the arbitration procedure is itself flawed.

The issues

Courts consider a contract "unconscionable" if it is too one-sided. Many times arbitration agreements are exactly that. The arbitration agreement may require that a specific arbitration firm be used or that a specific arbitrator be used. It may require that the consumer pay the costs of arbitration up front. It may impose legal fees and costs on the consumer. Clearly, if the defendant alone gets to determine who is to hear the case and has no risk of paying for the procedure, that involves some procedural unfairness that often winds up causing courts to decide against enforcing the arbitration agreements.

Sometimes the fees associated with arbitration (which can be as high as a $750 filing fee) are themselves so outrageous that when the dispute is over a $45 bill (and the consumer has filed suit in a small claims court) that a court will simply refuse to enforce the arbitration provision. Some courts have refused to enforce arbitration agreements signed by patients when checking into a nursing home when the claim for wrongful death is brought by the next of kin. The theory in this situation is that the next of kin did not agree to have their recovery provided for by state law limited by the terms of an agreement they never signed.

I routinely advise clients to strike through arbitration agreements because I believe that courts are better suited for deciding legal issues than private arbitrators. However, I am far from unbiased on this issue, and anyone facing an issue of arbitration should investigate both the pros and cons of signing an arbitration agreement. Arbitration agreements in some contexts are under attack. The Arbitration Fairness Act currently sponsored by Sen. Al Franken would eliminate an employer's ability to force an employee to sign an arbitration agreement. While the statute has not passed and is unlikely to pass in the current climate in Washington, DC, there are at least some of those in Congress who oppose forced arbitration.

If you are faced with an arbitration contract and want to know whether to sign, the best thing to do is consult an attorney in your state for an opinion. ■

2013 AARC Annual Report of Activities and Services

AARC: *Building the*

The Association positions the RC profession for success in the new era of health care reform

RT Brand

These days brands have gone personal, which means just about everyone from your favorite cereal company to the teenager next door has one. The respiratory care brand is defined mostly by how the AARC represents the profession both to its own constituency and the outside world; and if the Association's 2013 activities and services are any indication, it's growing in value every day.

by Debbie Bunch

There's no denying health care is in a state of flux as provisions in the Affordable Care Act drive hospitals and other providers away from the traditional model of treating illness once it occurs to one of preventing illness whenever possible and managing chronic conditions so they don't become acute exacerbations.

Whether it's accountable care organizations, population health, medical homes, patient satisfaction, or readmission reduction, facilities are working overtime to rise to the occasion; and once the dust settles, we'll likely see some winners and some losers in the fallout. The AARC spent 2013 working to ensure RTs would be among the winners.

"With the advent of health care reform, it's never been more important to equip therapists with the tools they need to succeed and to raise awareness of the vital role respiratory therapists play in the nation's health care system," says AARC President George Gaebler, MSEd, RRT, FAARC. "The AARC took that goal to heart in 2013 through programs and services to facilitate the professional development of therapists and promote the RT brand to policymakers and the public alike."

2013 At a Glance

JANUARY

- Membership Growth Campaign kicks off, with prizes for quarterly winners
- HHHFNC IRB (Institutional Review Board) Research Protocol released to members

FEBRUARY

- First quarter prizes awarded in membership campaign

MARCH

- COPD Foundation announces its support for the Medicare Respiratory Therapist Access Act

We Have a Bill!

With the realization that the American health care system is rapidly transitioning to one in which greater value will be placed on the ability to keep patients out of the hospital, the AARC began work on legislation in 2012 designed to cover self-management education services for Medicare patients with chronic respiratory conditions when furnished by qualified respiratory therapists in the physician office setting.

The premise was simple: There aren't enough hours in the day for busy physicians to spend the 30 minutes to an hour required to truly educate each patient about their disease process and how to manage it. So nothing makes better sense than to employ RTs in the physician office setting to deliver these self-management services to patients.

The Medicare Respiratory Therapist Access Act (H.R. 2619), introduced in Congress in 2013 by Congressman John Lewis (D-GA), has gained, through intense lobbying efforts on the part of AARC members all across the country, steady support from House of Representatives members. When enacted, the bill will allow Medicare patients with pulmonary disease to receive self-management services and education specifically from respiratory therapists in physician offices. Since then, 28 representatives have signed on as co-sponsors.

Interest in the bill was subsequently boosted by the announcement that COPD will be added to the Readmissions Reduction Program this October; and by our most recent Lobby Day on Capitol Hill in March, that interest had mushroomed exponentially. The bill was well received during legislative visits made by AARC Political Advocacy Contact Team (PACT) members, with many members of Congress pledging their support in the coming months, according to AARC Federal Government Affairs Committee Co-Chair and President-elect Frank Salvatore, Jr., MBA, RRT, FAARC.

"Our PACT members went above and beyond to educate their Congress members about the bill and the role it could play in bringing down the costs of care for chronic lung conditions, particularly COPD," says Salvatore. "Now that COPD is being added to the Readmissions Reduction Program, AARC members could not help but take notice as all of them hail from home districts with hospitals that could be severely penalized for excessive readmissions for this diagnosis."

Building the RT Brand:
Advocacy

GRASSROOTS SUPPORT

Grassroots support is essential to the passage of any legislation, and AARC members made sure the Medicare Respiratory Therapist Access Act had plenty of support last year. Here are just a few examples:

Louisiana member Melissa Smith, RRT, got the ball rolling in her state in April, when she heard that Sen. David Vitter (R-LA) was hosting a town hall meeting in Plaquemine around the time the Louisiana Society for Respiratory Care (LSRC) was to convene for its annual meeting in Baton Rouge. A few quick phone calls later and Louisiana PACT representative Doug McIntyre, MS, RRT, FAARC; LSRC President Raymond Pisani, BS, RRT-NPS; and AARC executive director and CEO Thomas J. Kallstrom, MBA, RRT, FAARC, were in a car headed for a one-on-one session with the senator. Pisani heard back from the senator's staff almost immediately. "They asked that we keep them in the loop of any further developments on this issue," he says.

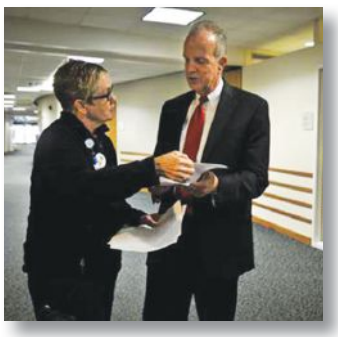
LSRC President Pisani got back into the act in September by meeting again with Sen. Vitter and then with two members of the House from his state who are also physicians, Rep. Charles Boustany, MD (R-LA) and Rep. Bill Cassidy, MD (R-LA). Pisani reports both physicians were receptive. "Dr. Boustany was very pleasant and listened to everything I had to say and agreed that Medicare needed to be looked at and that this bill was interesting to him," says Pisani. "Dr. Cassidy was very receptive and remembered speaking to me at another event."

When Congress recessed for its August break, AARC executive office leaders had their own face-to-face meeting with Rep. Kenny Marchant (R-TX), the legislator representing the district in which the AARC Executive Office is located. Marchant expressed an interest in the bill and how it would help vulnerable respiratory patients in his district.

Other AARC members across the country took advantage of the August recess as well to make hometown visits to their members of Congress. In the course of just a couple of weeks, Eric Anderson, BS, RRT, had a one-on-one with Rep. Derek Kilmer (D-WA); Brian Cayko, MBA, RRT, met with Rep. Steve Daines (R-MT); Mary Roth, RRT, AE-C, CPFT, sat down with Rep. Mark Pocan (D-WI); and Theresa Gramlich, MS, RRT, CPFT, and Rocky Hardy, BSRT, RRT, had a session with Rep. Tim Griffin (R-AR). Those meetings resulted in an increased interest in the bill as well as a new co-sponsor when Rep. Kilmer signed on in September. "Congressman Kilmer's daughter suffers from asthma, and he appreciated the disease management approach for keeping his daughter symptom free," notes Anderson.

Brian Cayko met with Rep. Steve Daines (R-MT)

In October, Karen Schell, DHSc, RRT-NPS, RPFT, took advantage of a pre-scheduled visit to her hospital by Sen. Jerry Moran (R-KS) to ask her administrators if she could speak to the senator about H.R. 2619. They said yes, but due to tight scheduling it would have to be a "walk and talk" as Sen. Moran made his way from one part of the facility to another. That was fine with Schell. "I had about three minutes with him to cover our talking points and give him a copy of the bill and our one-page fact sheet with my contact information for him to read on the plane," she says. That may not seem like much, but she said it was enough to familiarize him with the legislation and set the stage for future conversations.



Karen Schell met with Sen. Jerry Moran (R-KS).

2013 At a Glance

APRIL

- AARC comments on proposed Social Security Administration rule to evaluate respiratory disorders claims
- AARC Webcast compatibility with iPhone, iPad, and iPod Touch announced

MAY

- New CRCE transcript introduced
- AARC Exam Prep kicks off
- The Association hosts a webcast on public release of the Medicare database showing disparities in billable charges between hospitals and the opportunities this information creates for RTs
- COPD Best Practices Repository launched
- DRIVE4COPD contest announced
- Palliative Care Roundtable forms
- AARC supports DMEPOS (durable medical equipment) legislation
- Disaster Fund activated for victims of Oklahoma tornado
- Second quarter prizes awarded in membership growth campaign

Building the RT Brand: **Public Relations**

Driving the Message Home

Launched by a pharmaceuticals company in 2010 and transitioned to the COPD Foundation a couple years later, the national DRIVE4COPD campaign has probably done more in less than four years to raise awareness of the nation's third-leading cause of death than all other attempts to spread the word combined. Thanks to the active participation of respiratory therapists from the outset, it's also played a major role in letting more people know who RTs are and what they do as professionals.

In keeping with the "we know a good thing when we see it" philosophy of public relations, the AARC decided to continue and even step up its commitment to the DRIVE4COPD campaign last year by hiring a dedicated respiratory therapist to oversee AARC volunteer efforts on behalf of DRIVE across the nation. Jason Moury, BS, RRT, came on board in December 2012 to recruit members to staff the big events supported by the DRIVE campaign as well as to assist AARC members who want to conduct screening events in their own communities.

"The DRIVE campaign wouldn't be where it is today without the support of the AARC and its members, and respiratory therapists wouldn't be enjoying the greater visibility the campaign has fostered for them without the DRIVE campaign," says Moury. "So it just makes sense to invest our volunteer efforts in this national effort to educate the public about the disease."

Overall, 140 AARC members participated in more than 160 events in 49 states last year, including 13 big events covering health expos, NASCAR races, a country music festival, a Veterans of Foreign Wars conference, and the AARP's Life @ 50+ extravaganza. More than 14,600 people were screened, and they all left with a greater understanding of the role RTs play not only in the care of people with COPD but in the health care system as a whole.

With the full backing of the COPD Foundation and its myriad sponsors, the DRIVE campaign is a first-rate operation with state-of-the-art resources and materials. By hooking its public relations star to this national campaign, the AARC is helping to ensure respiratory therapists gain a greater presence in the minds of the general public while at the same time bringing much-needed education about COPD to people in need.

COPD Survey Asks 5 Easy Questions

The DRIVE4COPD campaign centers around a COPD screener that asks people to answer five questions about their respiratory health. Those who answer "yes" to two or more may be at risk for the condition.

That simple strategy has been credited with identifying thousands of people who were in the early stages of COPD and didn't know it. However, the DRIVE events that AARC members work at throughout the year encompass much more than just screening. Volunteer therapists apply their patient education skills as well to teach people who are deemed at high risk about the disease and what they can expect when they go to their primary care physicians for further testing. AARC members in Colorado did just that during a PespiCo event in February of 2013.

"The people who scored at least two received most of my attention," says Grace Noynay, BS, RRT, who was a student in the RT program at Pickens Technical College at the time. "I sat down with those at high risk, explaining in detail the COPD disease process and how visiting their primary provider can help aid them with their specific diagnosis of COPD." Her instructor, Jamie Sahli, BS, RRT, AE-C, says the ability to talk to a qualified therapist is invaluable. "The questionnaire was simple to administer yet opened up the opportunity for quality dialogue," she says.

Members on hand at the AARP's Life @ 50+ event in Las Vegas in May of last year reported the booth was active and crowded from the opening day until virtually the last minute of the convention. Says Anthony Everidge, BA, RRT-NPS, the RT program director at the Pima Medical Institute, "At times the line to do testing was quite long — we may have been one of the most popular booths on the convention floor."

Volunteers at all these events invariably go home with some heartwarming stories to tell. Student member Maria Abalos, who took part in the AARP event, remembers one older woman in particular who came to the booth with obvious COPD signs. "She was truly engaged every step of the way through testing and explanations," says Abalos. "After we completed her spirometry, I could see the relief in her eyes and the gratitude on her face that this small service was provided to her." ■

2013 At a Glance

JUNE

- Updated AARConnect app introduced
- "Tobacco Cessation Guide" made available to members

JULY

- "A Guide to Portable Oxygen Concentrators" debuts
- AARC announces launch of digital advertising program
- Rep. John Lewis introduces H.R. 2619 into the U.S. House of Representatives
- Tennessee RTs network with high school students at Health Occupations Students of America (HOSA) conference
- AARC announces addition of closing ceremony to AARC Congress

Building the RT Brand:
Professional Development

10 New Tools To Boost Your Career

The overriding mission of the AARC is to encourage and promote professional excellence among respiratory therapists, and every year the Association adds new programs and services to its roster of meetings and publications to do just that. Here are 10 that debuted in 2013.

1 **HHHFNC IRB RESEARCH PROTOCOL:** The evidence on heated-humidified high flow nasal cannulas (HHHFNC) is lacking, and there's no better clinician to remedy that situation than the respiratory therapist who uses this technology in the care of patients at the bedside. Developed by experts in the area, this research protocol has been vetted by a third-party Institutional Review Board (IRB) and can be used as is to launch studies in this area or customized to fit a particular institution's needs.

2 **COPD BEST PRACTICES REPOSITORY:** With COPD expected to join heart attack, heart failure, and pneumonia in the Readmissions Reduction Program this October, the Association knew hospitals across the nation would be looking for new and innovative ways to improve patient education, discharge planning, and ongoing care management for these patients. The COPD Best Practices Repository was established to help AARC members across the country share their programs and discuss what works and what doesn't when attempting to keep COPD patients healthy and out of the acute care setting. The online discussion group is housed on AARConnect and is open to any member who would like to participate.

2013 At a Glance

AUGUST

- Third quarter prizes awarded in membership campaign

SEPTEMBER

- Association partners with CDC to share Strategic National Stockpile ventilator training resources with RTs
- "Respiratory Care Education Annual" becomes online-only
- Disaster Fund activated for victims of Colorado flooding
- Association holds inaugural ACCS prep course in Las Vegas, NV

OCTOBER

- AARC participates in COPD Readmissions Summit

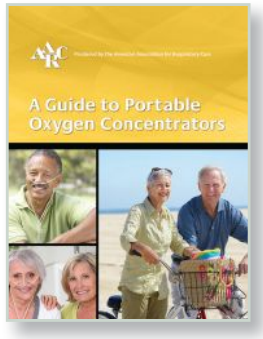
3 **PALLIATIVE CARE ROUNDTABLE:** Another new online discussion group debuted last year as well, with the formation of the AARC Palliative Care Roundtable. Also open to any member, the Roundtable provides a dedicated place for discussions surrounding end-of-life care, with an emphasis on the RT's role and responsibilities in this area (http://connect.aarc.org/viewdiscussions/alldiscussions/).

4 **AARC EXAM PREP:** Designed to assist RTs in preparing for the CRT and written RRT exams, this comprehensive program includes four National Board for Respiratory Care (NBRC) practice exams that form the basis for a personalized study program that can serve as a roadmap as users work their way through 28 hours of instruction. Test-taking tips are included, and users can also earn CRCE for watching the videos (www.AARC.org/education/exam_prep/).

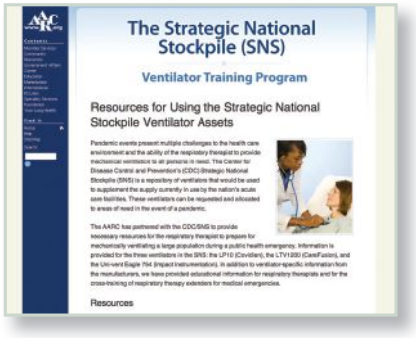
5 **TOBACCO-CESSATION GUIDE:** "Why Quit Using Tobacco?" is a stop-smoking guide for patients developed by the AARC's Tobacco-Free Lifestyle Roundtable to assist respiratory therapists as they offer cessation information and guidance to patients in the inpatient or outpatient setting (www.AARC.org/headlines/10/12/tobacco_cessation/).

Building the RT Brand:
Professional Development

10 New Tools To Boost Your Career cont.

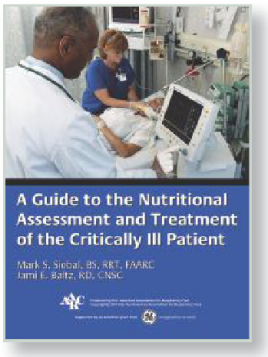


6 **A GUIDE TO PORTABLE OXYGEN CONCENTRATORS:** POCs have revolutionized home care for patients with chronic respiratory conditions, but variability between devices can leave even clinicians confused. This guide fleshes out the details not only for patients, but also for busy therapists who need to know which POC would be best suited to which patient (www.AARC.org/resources/oxygen_resources/).



7 **SNS TRAINING RESOURCES:** In the event of a manmade or natural disaster with a large respiratory component to care, hospitals will likely be forced to turn to ventilators in the Strategic National Stockpile (SNS) to meet their community's needs. Through an ongoing partnership with the Centers for Disease Control and Prevention, the AARC has made training resources on the SNS ventilators available on our website (www.AARC.org/resources/sns_vent_training/) to help RTs get up to speed on the operation of these devices before they have to put them into operation.

8 **ACCS PREP COURSE:** The NBRC launched the Adult Critical Care Specialty (ACCS) exam in 2012, and therapists interested in taking the test asked for a prep course to help them prepare. To help those sitting for the exam, the AARC held an inaugural offering of the ACCS Prep Course in Las Vegas in September. A second session will take place July 13–14 just before the Summer Forum in Marco Island, FL (www.AARC.org/education/meetings/accs_14/).



9 **A GUIDE TO THE NUTRITIONAL ASSESSMENT AND TREATMENT OF THE CRITICALLY ILL PATIENT:** Designed to prepare RTs for their growing role in indirect calorimetry monitoring and testing in the critical care unit, this guide offers an understanding of the nutritional implications that drive metabolic testing and the treatment recommendations that come as a result of the extrapolated data (www.AARC.org/education/nutrition_guide/).

10 **AARC LEADERSHIP INSTITUTE:** 2013 ended with the imminent release of this major new offering from the Association. Debuting shortly after the first of the year, the Institute is designed to provide RTs with the additional knowledge and expertise they need to excel in the areas of management, education, and research. Each online track features modules written by thought leaders in these areas and includes a certificate of completion for those who take all the modules and pass the post tests (www.AARC.org/education/leadership/). ■

2013 At a Glance

NOVEMBER

- Fourth quarter prizes awarded in membership growth campaign
- Project to create Virtual Museum housing the profession's history launched at Congress 2013 in Anaheim

DECEMBER

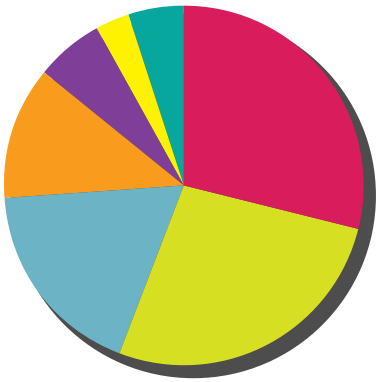
- Disaster Fund activated for victims of Illinois tornados
- "A Guide to the Nutritional Assessment and Treatment of the Critically Ill Patient" becomes available

2013

2013 Annual Financial Report

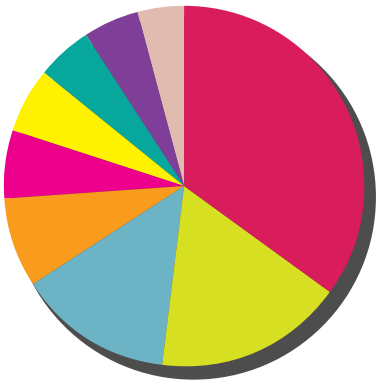
In February 2014, the AARC engaged the public accounting firm Salmon Sims Thomas to conduct an audit of its financial operations. It issued an unqualified opinion stating that the AARC's financial statements were presented fairly and conform with generally accepted accounting principles. In 2013, AARC's total revenues (excluding investments) were $10,452,000; total expenses were $10,204,000. Figures 1 and 2 highlight the sources of 2013 revenues and expenses. Net assets at the end of 2013 were $22,355,000. ■

Figure 1. Total Revenues in 2013 *(Excluding Investments)*



- Convention and Meetings — 29%
- Member Dues — 27%
- Publications and Advertising — 18%
- Grants — 12%
- Education — 6%
- Marketing — 3%
- Other — 5%

Figure 2. Total Expenses in 2013



- General and Administrative — 35%
- Publications and Advertising — 17%
- Convention and Meetings — 14%
- Grants — 8%
- Member Services — 6%
- Marketing — 6%
- Officers, Board, Committees — 5%
- Contributions to State Societies — 5%
- Education — 4%

— 2014 —

Since 1947, the AARC has been leading the effort to advance the respiratory care profession and promote quality respiratory care. Collaborating with our 50 state organizations, we have successfully advocated for the profession at the federal, state and local level.

A SALUTE to Our CORPORATE PARTNERS

The combined efforts between the respiratory care profession and manufacturers in seeking ways to improve the quality and outcomes of our patients make us natural partners in today's healthcare continuum.

As health care budgets shrink and patient care becomes increasingly complex, our mutual challenges become greater. The synergy of the corporate partner concept is an effective way to address those needs utilizing our combined skills and resources.

AARC

AARC CORPORATE PARTNERS

- CareFusion
- Masimo
- Covidien
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- Maquet Getinge Group
- Teleflex
- Boehringer Ingelheim
- Forest Laboratories, Inc.
- Ikaria — Advancing Critical Care
- Sunovion — Healthy bodies, healthy lives

ALL IN THE FAMILY

AARC members explain what it means to share a profession with the ones they love

by Debbie Bunch

The CBS-TV show "Blue Bloods" features an extended family full of police officers; and when they all gather around the dining room table for their big Sunday dinners, the conversation just naturally turns to the job.

The AARC members featured on the following pages know what it means to talk shop with close family members, too. They all have husbands, wives, mothers, fathers, brothers, sisters, or even cousins who are also respiratory therapists, and they wouldn't trade the experience for the world.

FOR BETTER OR WORSE

Keith and Dawn Croft met in the barracks at Fort Sam Houston, TX, back in the early 1990s and began dating a few months later. She was in training to become a respiratory therapist, and he was working in the dental clinic. However, as is the case with a lot of military couples, deployment kept the two apart for several years; and, in Dawn's case, a stint in the United Arab Emirates during Desert Storm led to a fear of commitment when she returned. When they were finally reunited in 1994, she says she immediately knew he was the one. They married in 1996, and by 1999 Keith had decided to join Dawn in the respiratory care profession. Today they both work as staff therapists at Children's Healthcare of Atlanta and can't imagine being married to anyone but another RT.

"We have been able to support each other during transitioning in new jobs, coping with end of life, and studying for RRT exams," says Dawn, RRT-NPS. "I am blessed to have a partner who understands on every level my frustrations over night-shift sleep deprivation, the loss of a patient, and workplace conflicts."

Keith, an RRT, says he especially appreciates having his very own "go-to" person whenever he needs help on the job. "My wife is a brilliant respiratory therapist — and no, she did not pay me to say that," he says with a smile. "I have her on speed dial and do not hesitate to use her as a sounding board when I have exhausted all means in solving a problem."

The connection was especially poignant about 12 years ago when Keith became very attached to a child in his care. "When I was home on maternity leave with our daughter, Caroline, Keith lost a patient that he was the 'primary' RT for," recalls Dawn. The family asked him to give the eulogy at the boy's funeral, and the experience was heart wrenching. "That was the greatest pain I have felt since coming into this profession, and I know that I only made it through due to the loving and professional support of my wife," says Keith.

Of course, there have been many lighter moments related to their shared profession as well. Dawn recalls one involving their son Kyle, who is now studying political science in college. "Apparently we talked a lot of 'shop'; because when we stopped at a Texaco station when Kyle was four years old, he asked if we put blood gas in the car," she says. ■

Dawn and Keith Croft serve as each other's "go-to" person on the job.

TWICE AS NICE

Identical twins Lorraine Bertuola and Loretta Hill came to the profession at very different times in their lives — Lorraine learned about it from a college classmate and has been an RT for 30 years now, while Loretta worked for many years as a florist and only recently went back to school to become a therapist. However, their passion for the profession is as identical as their genetic makeup.

"I knew Loretta would be an excellent respiratory therapist because she is a smart, kind, and compassionate person," says Lorraine, BA, RRT, director of clinical services at Respiratory Health Services in Middletown, DE. "I encouraged her to join a profession that I am passionate about…. It took a number of years, but timing is everything when it comes to making a career change."

It took a while for Loretta Hill (left) to join twin sister Lorraine Bertuola in the profession, but she's glad she did.

Loretta says her sister convinced her she would love respiratory care and gave her the confidence she needed to get through her RT program. "She was correct, I love my job," says the CRT at Lourdes Specialty Hospital in Burlington County, NJ. "I could not think of a more rewarding career than respiratory therapy."

Sharing a profession has brought the two even closer together, particularly since they both work in the long-term care setting. "It is interesting to hear Loretta's stories from work," says Lorraine. "It takes me back to when I was a new therapist."

Continued on page 50

SISTERHOOD

As the youngest child in a family of four boys and two girls, Dora Cardillo, BS, RRT-NPS, CPFT, a clinical supervisor at St. Vincent Healthcare in Billings, MT, had no intention of following in the footsteps of her big sister Rachel Oberheu, RRT, director of cardiopulmonary services and the sleep disorders lab at Delta County Memorial Hospital in Delta, CO. "I wanted to have my own career!" she recalls now.

After three years of science courses in college and no career choice in sight, however, she decided to give the profession a closer look. "Finally, I called my sister and asked about her career in respiratory therapy," she says. "I ended up going to the same RT program, living in the same dorm, and following her into the same incredible career, which I have never regretted."

"During all of these years and demands, Dora has been a great encourager when at times I've been weary from the toll of serving in a critical care career," says Rachel. "We share a great sense of humor and can make each other laugh, and we pray for each other as we serve."

Continued on page 50

Sisters Rachel Oberheu (left) and Dora Cardillo love being able to pick up the phone and share their professional experiences.

FAMILY BUSINESS

Respiratory care is always the center of attention when Maureen and Jessica Koeth (left) and Leanne and Mary Scherer (right) get together.

Leanne Scherer may have grown up with a mom who was a respiratory therapist, but it wasn't until the extended family was gathered for a brunch after her grandfather's funeral that she found out what being an RT could really mean.

"We were eating when my uncle started turning red and then blue. We thought he was choking," she recalls. Everyone froze, except her mom. "Next thing I know my mom jumped over the table, put him to the floor, and put him on his side," says the student RT at Genesee Community College in Batavia, NY. Mary Scherer, RRT, CPFT, recognized the signs of a seizure in her brother and quickly grabbed a spoon and put it between his teeth, then turned it to open his airway.

By then, someone had dialed 911 and an ambulance was on its way. As Leanne says, "If my mom hadn't opened his airway, he would have died. It was very inspiring to watch her keep her cool under an emergency situation, especially when it was her brother."

"Speaking respiratory"

Mary Scherer's quick thinking may have inspired her daughter, but Leanne wasn't the first one in the family to be impressed by this Registered Respiratory Therapist at the Buffalo VA Medical Center in Buffalo, NY. Sister-in-law Maureen Koeth, RRT, RPFT, credits Mary with guiding her into the profession as well.

"As a teenager I was working as a nurse's aide and knew I wanted to work in health care," says Maureen, who now works at Roswell Park Cancer Institute, also in Buffalo. "Mary suggested respiratory, I looked into it, and never looked back. I love my career." Over the years she says the two have shared everything from ups and downs in patient care to babysitters for their kids when they were growing up. "It is great to discuss your day with someone who can relate to what you do and why and how you do it."

"Our families are very close, and we live down the street from each other," says Mary. "If we have problems or questions about anything, we can ask each other." Because of that close relationship, the sisters-in-law say their kids grew up "speaking respiratory." So it should be little surprise that Maureen's daughter, Jessica, is also a therapist.

Not for them

Of course, getting the younger generation into the profession was never a given. In fact, both girls readily admit that they really had no intention of following in their mothers' footsteps until they got to college. "As kids, we went to work with both of our respective moms and aunts on many occasions," says Jessica, who recently graduated from Genesee and is now an RRT at Rochester General Hospital in Rochester, NY. "Besides the excitement of the hospital, eating in the cafeteria, and saying hi to all the employees and patients in the hall, I don't ever remember becoming an RT crossing my mind," she says, recalling her childhood.

That changed when she started taking general health studies courses in college, and her aunt suggested she look into the RT program at Genesee. "The rest," she says, "is history."

Leanne remembers hearing enough about respiratory care during dinnertimes spent with her aunt and cousin. "As kids, both of our families would eat dinner together almost every night while our dads worked evening shifts — which meant listening to our moms vent about everything from tests they did that day, patients passing away, and emergency situations to new ventilators and their co-workers."

Continued on page 50

Twice as Nice continued from page 48

"We talk about our experiences often," agrees Loretta. "It is helpful to me to have the insights Lorraine has to give me as a seasoned and knowledgeable therapist."

As the newcomer with a twin sister who's been in the profession for a while, Loretta has experienced a little of the "mistaken identity" common among twins as well. "On my way to my first AARC Congress, I boarded a plane from Philadelphia to San Antonio and a man stopped me and started talking to me. I did not know who he was," she recalls. "He thought I was Lorraine and introduced me to his wife." Loretta kindly explained to him that she was not Lorraine, but her twin sister Loretta. "We laughed about it!" ■

Sisterhood continued from page 48

For Dora, having a sister who was a number of years ahead of her in the profession meant she always had someone to turn to in school; and the connection also came in handy when she worked in England as an RT educator in an adult ICU. "I didn't have Internet access to professional resources, yet I needed to know current best practices. Rachel was invaluable in sending information to me."

Throughout it all, they say their AARC membership has given them the chance to get together at the AARC Congress, and they even competed in a Sputum Bowl in Montana at one point many years ago. "We had great laughs, but we bombed," recalls Dora with a grin.

Perhaps the most touching moments to come out of their shared career, however, occurred as they cared for their parents at the end of their lives. "As RT siblings, it was an honor and privilege to utilize our God-given talents to help care for our precious parents who had very complex medical issues," says Rachel. "Mom and Dad are both gone now, yet we have wonderful memories of being able to lovingly care for them at a level we never could have without a critical care background." ■

Family Business continued from page 49

When Leanne started college, she fully intended to graduate with a degree in business management; but after taking a job in an office setting, she realized sitting behind a desk all day just wasn't for her. "My mom loved her job, so did my aunt, and at this point Jessie was in the program and loving it," she says. After meeting with a counselor at Genesee whom she calls the "best advisor" a student could have, she joined the family business, too.

Pride in the profession

Now that their daughters are in the profession, Maureen says she and Mary are enjoying the chance to play elder statesmen to the younger generation. "We now find ourselves reliving the course work, reviewing for boards, and problem solving with our kids as we launch our next generation as therapists," says Maureen. "It has renewed our pride in the profession."

"I am glad my daughter and niece joined the profession because Maureen and I love what we do," says Mary. "It's nice our children like it and that we can talk to them about respiratory and they understand what we are talking about."

As for the girls, they say it's been great to be on the inside looking out rather than the outside looking in, as they were when they were kids. "I love being able to visit home and talk about work, where we both understand exactly what's going on in our stories," says Jessica. "I go over to my aunt and cousin's house to catch up, and within minutes our conversation turns to respiratory work and questions my cousin has as she's going through school."

As the student RT in the family, Leanne believes she may be reaping the biggest rewards of all. "It's awesome having respiratory therapists as family members because we all share the same love for what we do," she says. "It's also nice because if I need help understanding something, I have three of my own personal tutors at any time." ■

PAR FOR THE COURSE

With four married couples who are all RTs plus six other staff members with either parents or children who are therapists at other facilities, family ties are "par for the course" at Maine Medical Center (MMC) in Portland. George Blaisdell and his son Greg, Ashley Cain and her dad Gary, Chris Salamone and his dad Gary, and husband and wife Amanda Albee and Chet Scamman represent eight AARC members among the group.

George's kid

George Blaisdell, CRT, RPFT, a pulmonary function technologist at MMC who has been in the profession for more than 40 years, recalls bringing Greg into work with him when he was a child. Those early experiences definitely helped set the stage for his son's own 23-year career in the profession.

"When someone asks me about my career and how I got into it, I always have to say it's because of my dad," says the younger Blaisdell, an RRT at Southern Maine Health Care in Biddeford who also works in the pulmonary function technology (PFT) lab. "The first time I ever saw a pulmonary spirometer I was approximately five years old." Greg was fascinated with the device and even built a spirometer for a class he was taking in junior high. When it came time to enroll in college, however, he decided to study engineering. When employment opportunities for that field appeared to be cratering in his part of the country, he decided to follow his dad into respiratory care instead. "A lot, if not all, of the clinical site supervisors, knowing my dad, would refer to me as 'George's Kid,'" he recalls. "It got so common that I worried it might be written that way on my diploma."

Greg Blaisdell (right) turns to his dad George whenever he has questions about PFTs.

Now the two share work experiences on a regular basis. "My son and I often talk about ways of performing tests; and with me being in the field for 40 years, I can pass on how things have changed over time," says George.

As for Greg, he says he's still called "George" on occasion by pulmonologists at his hospital who trained at MMC with his father; but that's OK with him. "I think it's kind of an honor to be mistaken for my dad, because if I am, that must mean I'm doing as good a job as he does."

A good team

For Amanda Albee and Chet Scamman, both Registered Respiratory Therapists and staff therapists at MMC, sharing a profession along with a marriage has been a positive experience. "We help each other out, and it is really beneficial to have someone I know will be 100% honest with me when I ask, 'What do you think about this?'" says Amanda. "We make a good team."

The fact that they both work in the same hospital is icing on the cake. "We know each other's strengths and weaknesses, so we can utilize each other for help clinically," says Chet. "If there is something one of us needs more experience with… we think of the other to help build our skills. It's unlike anything we've ever experienced."

They even share the night shift, which puts them on the same sleeping schedule — no small advantage for a married couple. The best part, says Amanda, is she gets to have "lunch" with her spouse nearly every night. But both she and Chet emphasize they aren't attached at the hip

Husband and wife Amanda Albee and Chet Scamman make it a point to have lunch together nearly every night.

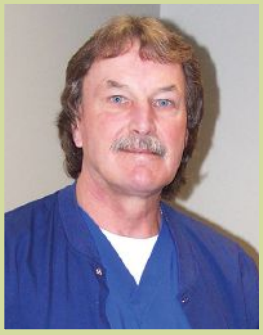
while they're at work, saying they should be sick of each other by now. "It's a very good point; but the truth is, MMC is a very big hospital," she says. "It's not like we are around each other all the time."

"We could go all night and see each other only at lunch if it's busy," says Chet.

Proud to be an RT

Ashley Cain, RRT, says getting the chance to shadow her father as he went about his day as an RRT clinical specialist at Cary Medical Center in Caribou, ME, helped her decide to join the profession. "One of the things that interested me the most was when he performed a PFT," she recalls. "I remember finding PFTs fascinating and realizing that being a respiratory therapist isn't just performing tasks but educating patients on their lung disease and building trust and a relationship with them."

Ashley Cain is proud to be following in her dad Gary's footsteps.



She has put that insight to work for her in her staff therapist job at MMC, and she continues to tap into her dad's expertise to learn more about caring for patients with pulmonary disorders. As for his part, Gary enjoys watching his daughter take on more responsibilities and blossom as an RT.

The two especially enjoy catching up with each other at the annual conference sponsored by the Maine Society for Respiratory Care (MeSRC). "It is not only another opportunity to get together with my father, who lives almost six hours away, but it gives me a chance to show him how proud I am to be a respiratory therapist and be part of a great conference year after year," says Ashley. "I love listening to the lectures and then getting together and discussing them and how our practice or protocols differ."

After Chris Salamone (right) saw how much his dad Gary was enjoying his new career, he decided to join him.

Second choices win out

Chris Salamone, RRT, has attended the MeSRC conference with his dad Gary every year since he became a respiratory therapist and says sharing that experience with so many other MMC employees who also have family member RTs adds to the fun. "It's nice to have other people in the MMC RT department with relatives in the field — people who know that the job really becomes a 24/7 topic of conversation both at work and in the family environment," says the staff RT. "Especially since I'm relatively new to the field, it's exciting for me to see that others who have had this family bond for years or even decades still treat it with the same enthusiasm."

That bond is particularly poignant for him and his father, an RRT at St. Mary's Regional Medical Center in Lewiston, ME, because of the roundabout way they came to the profession. "My father went back to respiratory school after my sister and I graduated college the first time," explains Chris. "It was nice to see him change gears, after spending over 25 years at FedEx to put us through school."

After Gary went to work as an RT and Chris saw how much he was getting out of his new career, he started having second thoughts about his own first choice. "I was glad he went back to school after being out for so long and putting his body through such a grind for us," says the younger Salamone. "Then I realized, 'Wait a minute! He seems like he gets much more enjoyment and satisfaction out of his new job than I do mine!'"

Chris says that refreshing change in attitude was certainly the biggest factor in his decision to join the profession, too. ■

Industry Update

Featuring information on products and equipment from manufacturers

CPAP Masks

The D100 Nasal and Full Face CPAP Masks from DeVilbiss Healthcare were created with comfort, durability, and simplicity in mind. Available in 3 sizes and designed with 4-point adjustable headgear for a secure, customized fit, the masks can be easily adjusted to achieve an effective seal, leading to improved patient compliance. The lightweight, molded silicone cushion and 3 sizes of forehead pads included with every mask provide the patient with maximum comfort for extended use. www.DeVilbissHealthcare.com

New Gel Cushion Option

With its "one-click" design and new gel cushion option, the Amara from Philips Respironics delivers the performance and ease of use that contribute to patient success. Both Amara silicone and gel cushions interchangeably snap into one modular frame. With either silicone or gel cushion in place, Amara is smaller and lighter weight than the industry's leading full face mask, has 60% fewer parts, and can fit 95% of patients. www.philips.com

▶ Press releases and photos on new products are welcome. Send to Marsha Cathcart, AARC Times editor, at cathcart@aarc.org.

Industry Watch

BI presents data from tiotropium studies

Boehringer Ingelheim data from Phase 3 studies of tiotropium delivered via the Respimat® inhaler were presented at the 2014 American Academy of Allergy, Asthma & Immunology meeting in San Diego. Results from the Phase 3 GraziaTinA-asthma® study showed tiotropium delivered via the Respimat inhaler improved FEV_1 in patients with mild asthma who remained symptomatic while receiving low-dose inhaled corticosteroid treatment. In patients with moderate asthma who remained symptomatic while receiving medium-dose ICS therapy, the addition of once-daily tiotropium reduced airflow obstruction independently of allergic status. The addition of once-daily tiotropium in the Phase 3 PrimoTinA-asthma® trials improved lung function responses independently of concomitant use of a leukotriene receptor antagonist in patients with severe asthma, according to the company.

Better Rest Solutions partners with EasyBreathe.com

Better Rest Solutions (BRS) has entered into a strategic partnership with EasyBreathe.com, which supplies sleep apnea products to customers throughout the U.S. The partnership will expand access to BRS's SoClean® 2 CPAP Cleaning and Sanitizing Machine while at the same time giving EasyBreathe.com the opportunity to add a high-demand product to its inventory. "The SoClean 2 is a great addition to EasyBreathe.com's CPAP product line," says Nick Weiss, CEO of EasyBreathe.com.

GSK reports phase III study results

According to GlaxoSmithKline plc, a phase III study of mepolizumab, an investigational IL-5 antagonist monoclonal antibody, met its primary endpoint of reduction in the frequency of exacerbations in patients with severe eosinophilic asthma. Patients remained on their current asthma maintenance therapy throughout the study and were randomized to receive either mepolizumab 75 mg intravenous, 100 mg subcutaneous, or placebo every four weeks. They report that both mepolizumab treatment arms showed statistically significant reductions in the frequency of clinically significant exacerbations of asthma compared to placebo. Adverse events were similar across all treatment groups.

Stu Novitz joins B&B Medical Technologies

Respiratory sales and marketing management veteran Stu Novitz has joined B&B Medical Technologies as vice president of sales and marketing. Novitz, who is expected to help expand the company's growing international presence and strengthen its current distributor network, comes to the company from Clement Clarke, where he spearheaded the company's efforts to extend its reach into the North American medical markets. "We are very excited to hire someone of Stu's caliber and experience," says B&B President and CEO Mike Wilkes.

BD Diagnostics announces clearance for RSV assay

BD Diagnostics has received 510(k) clearance and a Clinical Laboratory Improvement Amendments waiver from the FDA for nasopharyngeal swab specimens on the BD Veritor™ System for Rapid Detection of Respiratory Syncytial Virus. The first commercially available rapid CLIA-waived RSV test system that incorporates a digital result, the new assay is cleared for use in physician offices, hospitals, and other patient-care settings.

Global nebulizer market expected to grow

A new report from TechNavio predicts the global market for nebulizers will grow by 6.17% by 2018, driven in large part by the increasing incidence of respiratory diseases. The report notes the market has been influenced by the growing adoption of portable nebulizers as well, but suggests the presence of nebulizer substitutes could pose a challenge to future growth.

ResMed unveils new brand

"Changing lives with every breath" is the new tagline accompanying a refreshed ResMed brand that aligns its appearance in the marketplace with its global focus on innovation benefiting patients' lives, according to a spokesman for the company. ResMed CEO Mick Farrell was quoted as saying, "Our new brand speaks clearly to our partners — from physicians, to home care providers, to patients — that ResMed is the industry leader because we are steadfastly focused on changing lives with every breath."

Nonin pulse oximeter wins award

The Nonin Bluetooth® Smart Model 3230 Finger Pulse Oximeter received the 2014 Bluetooth Breakthrough Award in the product category at the Mobile-Focus Global media event at the Mobile World Congress® in Barcelona, Spain. The award, which is sponsored by the Bluetooth Special Interest Group (SIG), recognizes products launched in 2013 that were judged to have a large market appeal and be innovative, easy to use, convenient, and reliable. More than 200 entries were received. "Nonin Medical's Model 3230 finger pulse oximeter is a great example of how Bluetooth Smart is revolutionizing health care and empowering people to live better," says Bluetooth SIG Chief Marketing Officer Suke Jawanda.

Kristin Chenoweth helps raise asthma awareness

Award-winning singer and actress Kristin Chenoweth is teaming up with the Asthma and Allergy Foundation of America and Teva Respiratory in a new campaign called "Know Your Count." The campaign will raise awareness of the seriousness of asthma and the need for patients to keep track of how many doses of medication are left in their rescue inhalers. Chenoweth, who has suffered from asthma for more than 10 years, notes, "To ensure I'm prepared in the event of an asthma attack, I count on my rescue inhaler with a dose counter to help me keep track of my remaining doses."

InterMune reports positive results for IPF drug

According to InterMune Inc., top-line data from ASCEND, a Phase 3 trial evaluating pirfenidone in patients with idiopathic pulmonary fibrosis, found pirfenidone significantly reduced IPF disease progression as measured by change in percent predicted FVC from baseline to week 52. Significant treatment effects were also demonstrated on both of the key secondary endpoints, the change in six-minute walk test distance and progression-free survival. Based on the strength of these findings, InterMune is planning to resubmit its New Drug Application for pirfenidone to the FDA by the third quarter of this year.

Companies launch first inhalation drug for agitation

Alexza Pharmaceuticals Inc. has announced the U.S. commercial launch of ADASUVE® (loxapine) inhalation powder 10 mg by its commercial partner, Teva Pharmaceutical Industries Ltd. ADASUVE is the first and only orally inhaled medicine for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults. The drug is administered through the company's proprietary Staccato® single-use, hand-held drug delivery technology system, which provides rapid systemic delivery to the lung by inhalation of a thermally generated aerosol of loxapine, a first-generation antipsychotic.

STS teams with Duke to develop data link

The Society of Thoracic Surgeons (STS) has entered into a new collaboration with the Duke Clinical Research Institute (DCRI) to facilitate a link between STS clinical data and CMS claims data. The link will enable participants and researchers using data from the STS National Database to track long-term patient outcomes such as hospital readmission rates, reinterventions, and long-term survival. They believe it will ultimately lead to improved patient care.

Brief submissions and photos for this column may be sent to Marsha Cathcart, *AARC Times* editor, at cathcart@aarc.org. ■

RC Currents

IN THE NEWS

Lobby Day on Capitol Hill Garners New Co-Sponsors for H.R. 2619

The AARC's Political Advocacy Contact Team (PACT) recently visited senators and representatives on Capitol Hill, where their efforts resulted in the addition of eight co-sponsors for the Medicare Respiratory Therapist Access Act.

Original bill sponsor John Lewis (D-GA) has been joined by these fellow Democrats: Bruce Braley (IA), Gene Green (TX), Ann Kirkpatrick (AZ), Ed Pastor (AZ), Mark Pocan (WI), Nick Rahall (WV), and Bennie Thompson (MS). In addition, Republican Tom Latham from Iowa has signed on, making this bill one with bi-partisan support.

Go to http://beta.congress.gov/bill/113th-congress/house-bill/2619/cosponsors to see if your congressman is already sponsoring our bill. If not, contact them, voice your support, and ask them to co-sponsor H.R. 2619. Helpful AARC links for calling or emailing your representative and senators are available at www.aarc.org/advocacy/lobby_week/. ■

AARC Gains Place at "Social Determinants of Health" Table

An innovative health strategy is gaining new momentum, and the AARC sent its associate executive director-education to a major conference to ensure the respiratory therapy voice is heard as it develops. Shawna Strickland, PhD, RRT-NPS, FAARC, attended a two-day meeting hosted by the Association of Academic Health Centers (AAHC) in conjunction with the Centers for Disease Control and Prevention and several major universities.

"Social determinants of health (SDH) are non-biological factors that impact a person's health," explains Dr. Strickland. "Issues such as living environment, pollution, access to health care, work environment, access to healthy food, access to walking/biking paths, and other factors can affect whether a person is healthy or not." The idea is to address these issues in the places where people are most often found, and that means going out to their homes, their workplaces, their schools, their churches, and other locations where people normally gather to help them make positive changes in their regular environments to prevent illness. "We are dependent upon our health care team members to bring their specific expertise to the table to provide comprehensive care for the patient and community," says Dr. Strickland. "Interdisciplinary education is a huge factor in moving forward with addressing both biological factors affecting health and SDH."

In addition to looking at ways to expand the use of SDH, the conference also touched on policy barriers that are keeping the concept from moving forward. A recurring theme at the meeting was the fact that the current reimbursement framework is based on paying physicians for encounters or procedures designed to treat symptoms rather than educational sessions aimed at getting to the root cause of the illness and embracing wellness.

Dr. Strickland points out that the Medicare Respiratory Therapist Access Act (H.R. 2619) is designed to address just that problem. "When we help others learn how to ensure their living, working, learning, and playing environments are healthy, we can help improve the quality of life and perhaps prevent unnecessary hospitalizations and readmissions," says Dr. Strickland. ■

"NEW MEMBERS" COLUMN NOW ONLINE

The "New Members" column can now be accessed at www.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. Any current member may object to a new membership by filing a written objection with the AARC Executive Office at info@aarc.org within 30 days. ■

Maryland/DC Society Volunteer Goes the Extra Mile

Recently, when more than 130 members of the AARC PACT made their way to Washington, DC, to lobby members of Congress about the Medicare Respiratory Therapist Access Act, Carolyn Williams, RRT, went above and beyond to get the message across. Williams, from the Maryland/DC Society for Respiratory Care, brought eight fellow therapists, 13 students, and two patient advocates along for the ride. With such a large contingency in DC for this year's Lobby Day, Williams and her group were able to meet with legislative staff members from eight of their 11 legislative offices, which included two senators, five representatives, and the Washington, DC, delegate to Congress.

Carolyn Williams says she and her colleagues were pleased with the visits they were able to make during Lobby Day and hopeful that H.R. 2619 will soon have some new co-sponsors. While she'll continue to keep track of the bill's progress through these legislative offices, this long-time AARC member is already preparing for her next AARC volunteer activity — the USA Science & Engineering Festival.

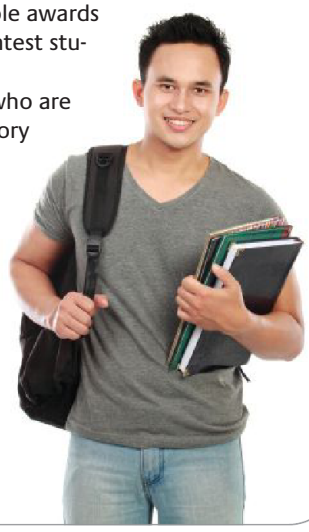
Designed to inform K-12 school students about careers in science and engineering, the event is expected to draw more than 250,000 students and parents, along with more than 5,000 teachers, and is considered a premier opportunity for the AARC to get the word out about opportunities available in respiratory care. For more information, log on to www.aarc.org/headlines/14/04/pact/. ■

Enter the 2014 AARC Photo Contest

AARC Times is looking for creative AARC members to enter our annual AARC Photo Contest. Finalists will receive a free one-year membership renewal and have their photo entered into our Photo-of-the-Year Contest with the chance of it being chosen and featured on the cover of *AARC Times*. For information on how to enter, select the *AARC Times* icon on www.AARC.org and click on the "Photo-of-the-Year Contest" link. Deadline to submit photos is **Nov. 14, 2014**.

Educators: Help Recognize Outstanding Students

The American Respiratory Care Foundation is accepting applications for its undergraduate and postgraduate Education Recognition Awards now through **June 15** 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 AARC Congress 2014, to be held Dec. 9–12 in Las Vegas, NV.

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/. For more information, contact April Lynch at lynch@aarc.org.

Call for Open Forum Abstracts for AARC Congress 2014

The AARC invites you to submit abstracts for the Open Forum at AARC Congress 2014. Considered by many to be the premier event at the AARC Congress, the Open Forum is your opportunity to gain recognition for your research in cardiorespiratory care by submitting an abstract for presentation at the Congress and having it published in Respiratory Care. New in 2014: three different ways you can present your poster at AARC.

See http://rc.rcjournal.com/site/open_forum/2014_call_for_abstracts.xhtml for more details. The deadline to submit abstracts for the Open Forum is **June 1**.

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.ircouncil.org/fellowship/. The fellowships take place in the fall just prior to AARC Congress 2014, scheduled this year for Dec. 9–12 in Las Vegas, NV. For more information, contact April Lynch at lynch@aarc.org.

TRANSITIONS

Lisa Trujillo, DHSc, RRT, has received the 2014 John A. Lindquist Award from Weber State University in Ogden, UT. Trujillo, who serves as an assistant professor in the RT program, was honored for her work in Ghana, where she has helped to provide free health services, medical education, and community health education to the country's underserved. She has also worked with the University of Ghana to begin the first respiratory therapy program in the country.

You can submit news about AARC members by going to www.AARC.org/transitions. ■

RT Student Members: 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.

Have you advocated for respiratory therapy in your state capitol or on Capitol Hill? Maybe you and your RC student friends have collaborated to build a house with Habitat for Humanity. Perhaps you witnessed a lifesaving event outside the hospital setting or experienced something that took your breath away. Whatever the story, we are interested in seeing it.

If you have a story to tell, please contact *AARC Times* Editor Marsha Cathcart at cathcart@aarc.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! ■

ARCF Now Accepting Applications for the 2014 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. 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 U.S. host cities and concludes with attendance and acknowledgement at AARC Congress 2014, Dec. 9–12 in Las Vegas, NV.

Learn more and apply by **June 1** at www.irccouncil.org/fellowship/. For more information, contact April Lynch at lynch@aarc.org. ■

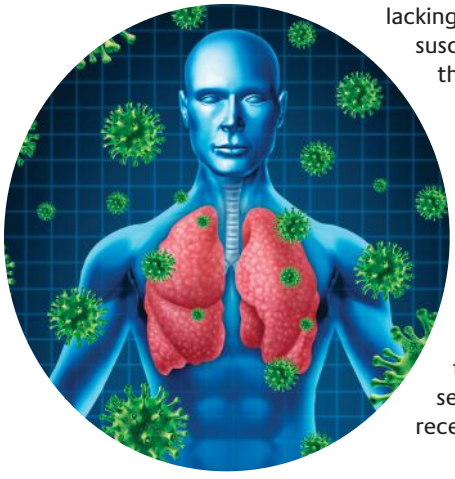
Read the Rest of the Story at www.AARC.org

- **Summer Forum 2014 Program** — www.aarc.org/education/meetings/summer_forum_14/
- **AARC hosts live critical care course** — www.aarc.org/education/meetings/accs_14/

Neutrophils Need Help Fighting Infections

New research out of Rutgers New Jersey Medical School and the Fred Hutchinson Cancer Research Center in Seattle, WA, may be changing conventional thinking regarding the role of neutrophils in ridding the lungs of deadly infections.

In a study involving mice infected with the environmental fungus *Aspergillus fumigatus*, they found the immune cells actually required the assistance of other immune cells known as monocytes to get the job done. While neutrophils still ingested *A. fumigatus* spores in the lungs of the mice, they were not able to deal the final death blow without an assist from monocytes. In fact, mice lacking inflammatory monocytes were just as susceptible to deadly *Aspergillus* infection as those lacking neutrophils.



The researchers believe neutrophils, which are the first to arrive at the site of an infection, may have contained the fungus initially, but the inflammatory monocytes were necessary for sustained control. If this finding is replicated in humans, it could open the door to new treatments for boosting the function of inflammatory monocytes to help fight lung infections in the clinical setting. The study was published in a recent issue of *PLOS Pathogens*. ■

ATS Releases New CPGs for Treating Patients with Sickle Cell Disease and PH

New treatments for sickle cell disease have prolonged the lives of many patients, but with longer life has come an increased risk of developing pulmonary hypertension (PH). The American Thoracic Society has developed a new set of clinical practice guidelines designed to assist clinicians caring for these patients.

The CPGs were published in the March 15 edition of the *American Journal of Respiratory and Critical Care Medicine*. They include ways to determine mortality risk from PH, along with recommendations on treatments that should and should not be offered to patients depending on their individual clinical characteristics.

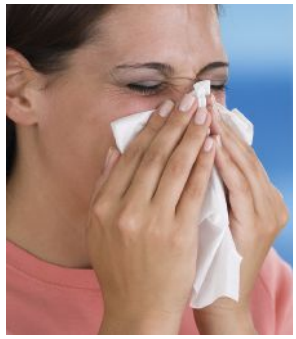
"As our understanding of sickle cell disease develops, so will our ability to detect disease earlier and to tailor treatment approaches," said Guidelines Committee Chair Elizabeth S. Klings, MD. ■

NIH Study Finds There's No Getting Away from Allergies

New research from investigators at the National Institutes of Health is turning a time-honored belief among allergy specialists on its ear.

"Before this study, if you would have asked 10 allergy specialists if allergy prevalence varied depending on where people live, all 10 of them would have said yes, because allergen exposures tend to be more common in certain regions of the United States," study author Darryl Zeldin, MD, was quoted as saying. His study of allergy prevalence across the country finds that's just not true.

Publishing online in the *Journal of Allergy and Clinical Immunology* in February, Dr. Zeldin and his colleagues looked at blood serum data compiled from about 10,000 Americans in the 2005–2006 National Health and Nutrition Examination Survey. The overall prevalence of allergies did not differ between regions of the country. This led the authors to conclude people who are prone to allergies will be allergic to something no matter where they live.



The only exception was children ages one to five. Kids in this age group were more likely to develop allergies if they resided in one of the southern states. The greater prevalence seen there was linked to dust mite and cockroach allergies.

For everyone else, risk factors for having allergen-specific IgE antibodies in their blood included being male, being a non-Hispanic black, and avoiding pets. While socioeconomic status (SES) did not predict allergies, those in higher SES groups were more likely to be allergic to dogs and cats while those in lower SES groups were more commonly allergic to shrimp and cockroaches. ■

How the Brain Fights Smoking Cessation

It's no secret that smokers have a difficult time kicking the habit, with most relapsing at least once after a quit attempt. Two new studies suggest the problem may lie in the brain.

University of Pennsylvania investigators conducted brain scans on 37 healthy smokers ages 19–61 using functional magnetic resonance imaging in two different sessions: 24 hours after biochemically confirmed abstinence and after smoking as usual. Imaging showed a significantly weaker connectivity during abstinence between the brain network responsible for inward thought and the brain network responsible for executive control. This weakened connectivity was linked to increases in smoking urges, negative mood, and withdrawal symptoms, suggesting weaker internetwork connectivity caused by nicotine withdrawal may make it more difficult for people to quit. The study was published in a recent issue of *JAMA Psychiatry*.

Using neuroimaging techniques, researchers from the University of Montreal compared the emotional reactions of 30 smokers as they looked at aversive smoking-related images such as lung cancer; other aversive images, such as an old man on his deathbed; and smoking-related images portraying smoking in a positive light. The brains of the smokers were activated more by images showing smoking in a positive light than by images showing it in a negative light, and they were more affected by non-smoking related negative images than smoking-related negative images. The study appeared in the April edition of *Progress in Neuro-psychopharmacology & Biological Psychiatry*.

CDC CONSIDERS MICRONEEDLE FLU PATCH

Increasing the number of people who receive the annual influenza vaccine has been an uphill battle. Georgia Tech researchers working in conjunction with investigators from Emory University and the Centers for Disease Control and Prevention believe a self-administered microneedle patch may be the answer.

In the first study of its kind, the researchers tested the use of the patch in 91 people recruited from the metropolitan Atlanta area. Results showed the participants were able to successfully apply the simulated patch to themselves; and after undergoing both simulated vaccine administration using the patch and a conventional injection, 65% said they would be vaccinated using the patch. That compared to 46% for the conventional injection.

Since fewer than half of Americans are vaccinated against the flu every year, the investigators note this would be a significant improvement. "If this holds for the population as a whole, that would have a tremendous impact on preventing disease and the cost associated with both influenza and the vaccination process," said co-author Paula Frew. She and her colleagues published their findings in a recent issue of *Vaccine*.

Health Facilities Fall Short on Hand Hygiene

Good hand hygiene is considered essential in reducing hospital-acquired infections. A recent study conducted by investigators from the Columbia University School of Nursing and the World Health Organization (WHO), however, finds about one in five U.S. health care facilities are not placing hand sanitizer dispensers at every point of care.

The researchers surveyed 168 facilities in 42 states and Puerto Rico to gauge their compliance with WHO hand hygiene guidelines. Alcohol-based sanitizer was continuously available at every point of care in only 77.5% of the facilities. In about one in 10 facilities, commitment to support hand hygiene improvement was lacking among senior leaders such as the CEO, medical director, and director of nursing. The study appeared in the *American Journal of Infection Control.*

Heavy Smokers May Apply

British researchers publishing in the March edition of T*he Annals of Thoracic Surgery* find lung transplant recipients do about as well with donor lungs from heavy smokers as they do with lungs from lighter smokers or non-smokers.

The study included 237 lung transplant patients who were divided into three groups: non-smoking donors (53%), donors with a history of less than 20 pack-years of smoking (29%), and donors with a history of more than 20 pack-years of smoking (18%). Patients who received lungs from smoking donors, regardless of pack-years, had similar early or mid-term outcomes compared with patients who received lungs from donors who never smoked.

"Based on our results, history and extent of donor smoking do not significantly affect early and mid-term patient outcomes following lung transplantation," said study author Anton Sabashnikov, MD, who believes that while this does not eliminate the need for long-term follow-up, donor lungs from heavy smokers should be considered for patients needing lung transplantation as they may provide a valuable avenue for expanding donor organ availability. ■

FDA Proposes New Rules to Regulate E-Cigarettes and Other Tobacco Products

Read Proposed Rule in Federal Register — http://www.gpo.gov/fdsys/pkg/FR-2014-04-25/pdf/2014-09491.pdf

The AARC was represented on a conference call on April 24 in which the U.S. Food and Drug Administration (FDA) announced its proposal to "deem" all categories of products that meet the statutory definition of "tobacco product" to be subject to the FDA's regulatory authority under the Family Smoking Prevention and Tobacco Control Act.

Anne Marie Hummel, AARC's regulatory director, participated in the call in which the FDA explained that the "deeming" authority proposes to add e-cigarettes, pipes, cigars, nicotine gels, dissolvable products, and waterpipe smoking (also known as hookah, shisha, and narghile) to the list of products subject to the FDA's regulatory authority. Currently, the FDA regulates cigarettes, cigarette tobacco, roll-your-own tobacco, and smokeless tobacco. Accessories such as hookah tongs, bags, charcoal burners, cigar foil cutters, and other such items that are not used to consume a deemed tobacco product would not be subject to the proposed rule. The FDA will allow a 75-day comment period and is seeking specific input on several proposed options as well as comments on the overall proposal.

"This is something the AARC would stand behind," says AARC President George Gaebler, MSEd, RRT, FAARC. "We believe this proposal to expand FDA's regulatory authority over tobacco products is an important step in protecting the public's health, especially in light of the recent Surgeon General's report on 'The Health Consequences of Smoking — 50 Years of Progress.'"

As a member of the Tobacco Partners Coalition, spearheaded by the Campaign for Tobacco-Free Kids, the American Lung Association, and the American Cancer Society, the AARC looks forward to reviewing and providing comments on this significant proposal. Read the proposed rule in the Federal Register at www.gpo.gov/fdsys/pkg/FR-2014-04-25/pdf/2014-09491.pdf. ■

Classifieds

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Calendar of Events

AARC & State Society Programs

May 28–30 Oak Brook Terrace, Illinois

46th Conference & Exposition, Respiratory Care

Contact: www.isrc.org or Audrea Hardwicks-Williams, (773) 827-5855

July 13–14 Marco Island, Florida

AARC Adult Critical Care Specialist Course

Contact AARC, (972) 243-2272, www.aarc.org/education/meetings/accs_14/

July 14 Marco Island, Florida

AARC Pre-Summer Forum Programs: NBRC Item Writing Workshop, CoARC Meet the Commission, AARC Pre-Course: How Viable Is Your Respiratory Care Program? Assessing Quality and Sustainability of RC Education

Contact AARC, (972) 243-2272, www.aarc.org/education/meetings

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July 15–17 (Tuesday–Thursday) Marco Island, Florida

AARC Summer Forum

Contact AARC, (972) 243-2272, www.aarc.org/education/meetings

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July 29 Bedford Heights, Ohio

Ohio Society for Respiratory Care's State Meeting

Contact: jgh578@aol.com

September 16 Rapid City, South Dakota

South Dakota State Respiratory Conference

Contact: Sandy Brown, (605) 328-2436

December 9–12 (Tuesday–Friday) Las Vegas, Nevada

AARC Congress 2014

Contact AARC, (972) 243-2272, www.aarc.org/education/meetings

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Submissions for the next available issue are due June 19.

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

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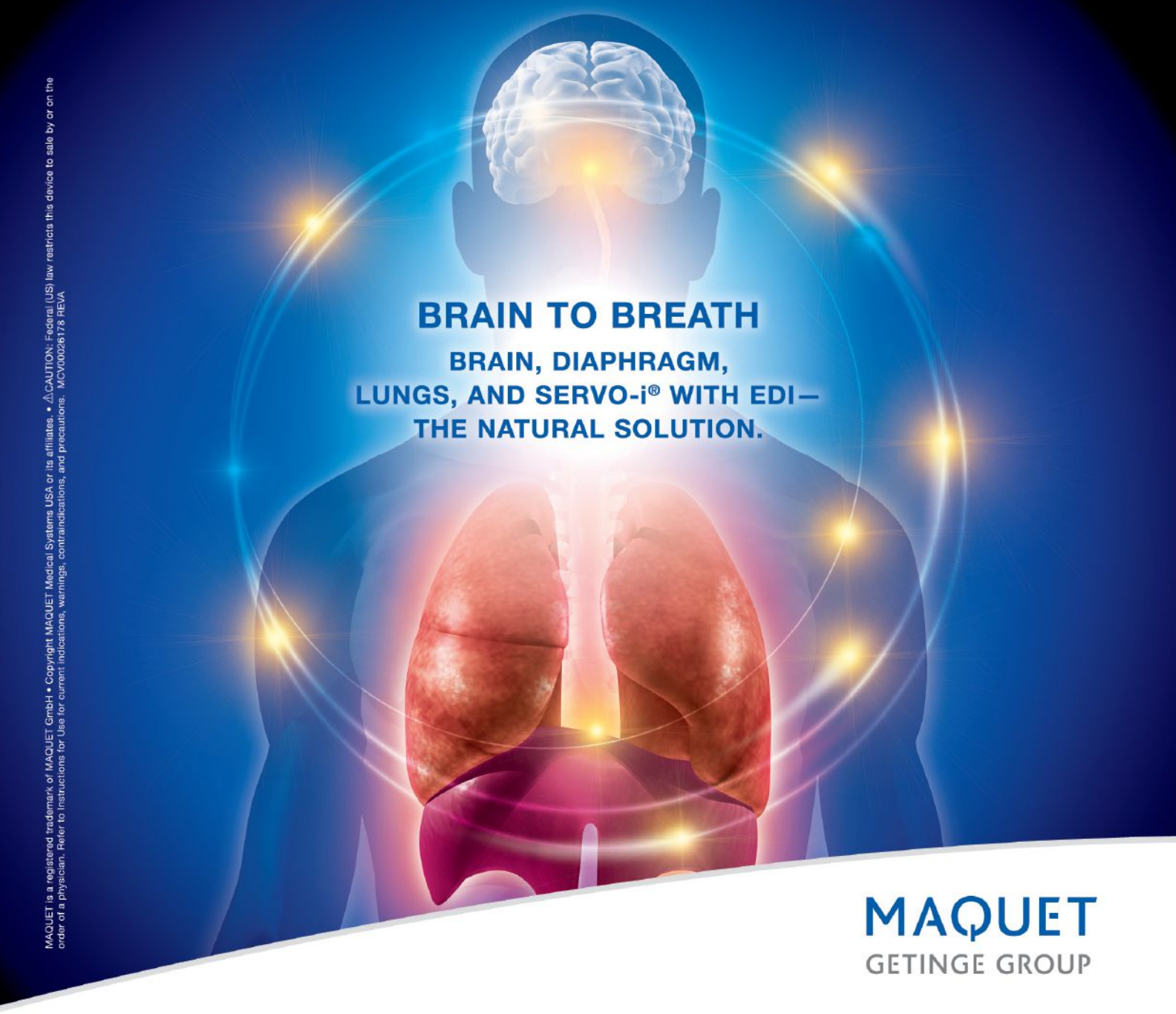

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1. Piquilloud L, Vignaux L, Bialais E, et al. Neurally adjusted ventilatory assist improves patient-ventilator interaction. *Intensive Care Med.* 2011 Feb;37(2):263-71.
2. Sassoon CSh, Caiozzo VJ. Bench-to-bedside review: Diaphragm muscle function in disuse and acute high-dose corticosteroid treatment. *Critical Care.* 2009;13(5):221.
3. de la Oliva P, Schüffelmann C, Gómez-Zamora A, et al. Asynchrony, neural drive, ventilatory variability and comfort: NAVA versus pressure support in pediatric patients. *Intensive Care Med.* 2012 May;38(5):838-46.

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 [1]EMMA Users Manual.
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