AARC Times
An Official Publication of the American Association for Respiratory Care
May 2015 Vol. 39, Issue 5 www.aarc.org $11.50

E-Cigarette Update

What We Know, What We Don't

Join Us in Phoenix

July 13-15 for AARC Summer Forum

HUDSON RCI®

Hudson RCI®

Neptune®

Heated Humidifier with ConchaSmart® Technology

Introducing ConchaSmart® Technology

AUTO SETTINGS & ADJUSTABLE MODE :: LOW WATER NOTIFICATION :: CONCHASMART COLUMN

Practical solutions to help improve outcomes and manage costs

It's our mission to make breathing easier. The Neptune Heated Humidifier with ConchaSmart Technology offers one smart, practical solution for all of your humidification needs.

- Auto Settings or Adjustable temperature and gradient control – your choice
- Auto Settings allows you to pre-set and lock desired settings
- Low water notification indicates when replacement is needed
- One ConchaSmart Column for all patients and therapies to simplify your workflow

Call your Teleflex representative at 1.866.246.6990 today to find out more, or visit Teleflex.com/ConchaSmart.

Teleflex, ConchaSmart, HudsonRCI and Neptune are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.
©2014 Teleflex Incorporated. All rights reserved. MC-000045

Teleflex®

Table of Contents

May 2015
Volume 39, Issue 5

Introducing the New AARC Strategic Plan

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

Bookmark this page: http://www.aarc.org/member_services/mission/.

American Association for Respiratory Care

Editor
Marsha Cathcart, BA

Managing Editor
Douglas Laher, MBA, RRT, FAARC

Assistant Editor
Karen Singleterry, BS

Contributors
Debbie Bunch, BA
Sheila Henegar

Manager of Marketing and Production
Jeanette Chawdhury, MBA

Graphic Designers
Joyce Havins
Kelly Piotrowski
Brittany Allen

Advertising Rates and Media Information
Contact: phil.ganz@aarc.org
Phil Ganz, 48 Abbey Woods Ln., Ste. 100, Dallas, TX 75248
Voice (972) 991-4994
Fax (888) 206-9006

Advertising Materials
Send production materials for AARC publications to Binkley@aarc.org or AARC
9425 N. MacArthur Blvd., Ste. 100
Irving TX 75063 c/o Beth Binkley
Voice (972) 243-2272
Fax (972) 484-2720

AARC Times and Respiratory Care — official publications of the AARC

Daedalus Enterprises, Inc.
9425 N. MacArthur Blvd., Ste. 100
Irving, TX 75063
(972) 243-2272
Fax (972) 484-2720

Director of Business Development
Dale L. Griffiths, BA

Publisher
Thomas J. Kallstrom, MBA, RRT, FAARC

Printed in USA

Meet the AARC Staff

Douglas Laher

Associate Executive Director
laher@aarc.org

Kathy Blackmon

Conventions and Meetings Coordinator
blackmon@aarc.org

Annette Phillips

Exhibits Coordinator
aphillips@aarc.org

Crystal Maldonado

Programs Coordinator
maldonado@aarc.org

April Lynch

ARCF Administrative Coordinator
lynch@aarc.org

— 2015 —

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 CORPORATE PARTNERS

CareFusion

Masimo

Covidien

monaghan

Philips Respironics

Dräger

Maquet Getinge Group

Teleflex

Boehringer Ingelheim

Actavis

Ikaria Advancing Critical Care

Sunovion Healthy bodies, healthy lives

ResMed Changing lives with every breath

Tampa, Florida • November 7-10

Join the Best in Respiratory Care for 4 days
at the Tampa Convention Center

- 200+ Educational Sessions covering over 10 different specialty sections
- 3 days face-to-face with 200+ exhibitors in the respiratory care industry
- Direct access to original research projects and their authors

Also Attend the 3 Pre-Congress Sessions
on November 6

Topics include Chronic Hypoxemia, Adult & Pediatric Mechanical Ventilation, and Vascular Line Insertion.

Visit Our Facebook Congress Page:
c.aarc.org/go/congress

To Learn More Visit:
c.aarc.org/go/meetings

* CRCE credits apply to most sessions. AARC Congress is an educational meeting of the American Association for Respiratory Care.

Information Contacts:

AARC Membership or Other AARC Services: American Association for Respiratory Care • 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063 • (972) 243-2272 • Fax (972) 484-2720 • www.aarc.org

Respiratory Therapist Credentialing & Registration: National Board for Respiratory Care • 18000 W. 105th St., Olathe, KS 66061-7543 • (913) 895-4900 • Fax (913) 895-4650 • www.nbrc. org

Accreditation of Education Programs: Commission on Accreditation for Respiratory Care • 1248 Harwood Rd., Bedford, TX 76021-4244 • (817) 283-2835 • Fax (817) 354-8519 • www.coarc.com

Grants, Scholarships, Community Projects: American Respiratory Care Foundation • 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063 • (972) 243-2272 • Fax (972) 484-2720 • www.arcfoundation.org

AARC Times **(USPS 491-930)** (ISSN 0893-8520) is a monthly publication of Daedalus Enterprises, Inc., for the American Association for Respiratory Care.

Copyright© 2015 by Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706. All rights reserved. Reproduction in whole or part without the express written permission of Daedalus Enterprises, Inc., is prohibited. The opinions expressed in articles, departments, or editorials are those of the author and do not necessarily reflect the views of Daedalus Enterprises, Inc., or the American Association for Respiratory Care.

Periodicals Postage: Paid at Irving, TX, and at additional mailing offices. POSTMASTER: Send form 3579 to *AARC Times*, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706.

Change of Address: Six weeks' notice is required. AARC members should include their membership number when submitting an address change. Nonmember subscribers should provide old mailing label and new address. Send changes to *AARC Times*, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706. Periodicals postage paid at Irving, TX.

Article and Feature Contribution: *AARC Times* welcomes AARC member contributions of feature articles and information for the regular departments. All materials should be submitted via email to Editor Marsha Cathcart at cathcart@aarc.org. Letters from members will be considered for publication if they relate to specific articles appearing in *AARC Times* within the last three months. Editorials may be published if they are of interest to the AARC membership. The editor reserves the right to edit letters and articles without changing their meaning in order to suit legal and space requirements.

Subscriptions: Individual subscriptions are available for $90 per year (12 issues) in the United States or Puerto Rico; $125 per year in all other countries. Airmail postage is an additional $134 per year. Non-member Institution subscription $140 per year. Member rates available at www.AARC.org. Single copies, current and back issues, if available, are $11.50. Write *AARC Times*, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Daedalus Enterprises, Inc.

Oxygen Safety in the Home… A Growing Concern

by Kimberly S. Wiles, BS, RRT, CPFT

According to the Centers for Disease Control and Prevention, over 15 million people report that they have been diagnosed with COPD.[1] One of the treatments that has shown significant improvement in survival is long-term oxygen therapy.[2] The exact number of people receiving home oxygen is unknown. In a 2006 study done for the American Association for Homecare, Morrison Informatics, Inc. noted that more than 1 million Medicare recipients use this therapy.[3] Oxygen therapy is beneficial to respiratory-compromised patients, but it can also pose a hazard if safety precautions are not implemented and followed. According to the National Fire Protection Association, an estimated 182 home fires in the United States involve oxygen therapy equipment each year, resulting in 46 deaths. An additional 1,190 thermal burns involving oxygen therapy equipment require treatment each year in emergency rooms, with nearly half resulting in hospital admissions — yet the majority are not reported to fire officials.[4]

Technically, fire is defined as a "rapid oxidation process, which is a chemical reaction resulting in the evolution of light and heat in varying intensities."[5] In order for the reaction to occur, three components are required: a heat source, fuel, and oxygen. The heat source triggers the chemical reaction between the fuel and oxygen. If there is an increase in oxygen above room air, the fire will burn faster and hotter. Increased oxygen levels also lowers the temperature at which things will ignite, which may include hair, clothing, furniture, facial oils, etc. Another contributing factor is the materials the delivery devices (i.e., masks, cannula) are made of. These can be highly flammable and cause serious injury to the facial area as well as the inhalation of toxic smoke.

about the author…

Kimberly S. Wiles, BS, RRT, CPFT, is vice president of respiratory services at Klingensmith HealthCare in Ford City, PA.

In March of 2001, The Joint Commission issued a Sentinel Event Alert, Lessons Learned: Fires in the Home Care Setting.[6] The alert discussed the root causes in 11 reported sentinel events over a four-year period (1997–2001) involving persons injured or killed as a result of a home fire that occurred in patients receiving supplemental home oxygen therapy. In all cases, cigarette smoking was determined to be the contributing factor. As a result, this led to The Joint Commission adding the "identification of safety risks" to its National Patient Safety Goals. The agency reviewed compliance data of this goal and found that 1 in 10 organizations were not in compliance with this goal. After The Joint Commission did an analysis of survey findings, conducted focus groups, and reviewed current literature, it approved modifications to the National Patient Safety Goal NPSG.15.02.01 on risks associated with home oxygen use for accredited home care organizations, which became effective on Jan. 1, 2015.[7] These modifications include:

- Periodic reevaluation of fire risks in the home
- Implement strategies to improve compliance with oxygen safety precautions when unsafe practices are observed in the home
- Expanded rationale explaining the importance of assessing home safety risk
- Assessment of functioning smoke detectors
- Documentation of steps taken to reduce patient risk and communicating the risk.

With more attention being placed on oxygen safety in the home, one would hope that oxygen fires in the home will dramatically decline.

Transitioning from hospital to home

Upon initiating oxygen therapy in the home, assessment of the patient's smoking history and education on oxygen safety needs to begin prior to discharge. The respiratory therapist is the ideal professional to obtain this information and begin the discussion of oxygen safety in the home with the patient upon discharge. Oxygen is a drug. When a new drug is prescribed, risks associated with its usage need to be discussed. Not only is it essential to discuss risks with the patient, it is equally important to communicate any potential risks to the home care providers. If the patient is identified as a smoker, this is a prime opportunity to offer smoking-cessation information to the individual.

Initiating oxygen therapy in the home

Home assessment: A thorough home assessment is one of the most important tasks that should be completed prior to initiating long-term oxygen therapy in the home. This assessment is not only essential during initiation but is just as important on any subsequent visit to the home by any home care professional. Key factors in a home assessment for oxygen safety consist of the following:

- *Presence of functional smoke detectors* — It is not required to test the detectors, especially if the situation may put the employee at risk. This can be a verbal response by the patient. If the detectors are not present or not functioning, education regarding the importance should be conducted.

- *Evacuation route* — In the event of a fire, there should be a clear path to exit the home. Educating the patient and other family members of the evacuation plan is a way to proactively address fire safety.

- *Oxygen-in-use signs* — The use of signs is twofold. It is to warn individuals entering the residence that smoking is prohibited as well as to alert emergency personnel if a fire is present. In the event of a fire, the signs inform the emergency personnel that oxygen is in use and to proceed with caution to remove the oxygen source if the situation permits.

- *Presence of fire extinguishers* — A fire extinguisher is a necessity but is even more important when home oxygen is in use. The patient and/or family members need to understand the importance of having one available. The extinguisher needs to be functional and be located in close proximity to the oxygen system in the event of a fire.

- *Smoking materials* — Identifying a smoker sometimes can be challenging. Many patients may not be truthful when asked if they or anyone living in the home smokes. If the patient says they quit smoking one week ago, then there is a chance that the patient may light up again. For this reason, education on the hazards associated with smoking needs to be addressed regardless if the patient states they are a smoker or not. Smoking is a very powerful addiction, and very few individuals are able to overcome the addiction and remain smoke free. This is where the RT's keen sense in problem identification comes into play. If there are ashtrays in the home, matches, lighters, or other smoking materials lying around, this is problematic and needs to be addressed with the patient.

- *Safe storage of oxygen canisters* — Oxygen must be stored in a well-ventilated area away from any heat source. There is a lot of variability in the recommended distance that oxygen should be kept away from heat sources. Many manufacturers will specify in product manuals, but in some cases there is not a specific standard as to the appropriate distance. A well-ventilated area is important for oxygen storage. Some oxygen systems will continually ventilate and the oxygen will accumulate, causing an oxygen-enriched atmosphere, and thus pose a fire hazard. It is also essential that oxygen cylinders are secured from falling. The home care company should provide devices to properly secure the cylinders.

Strict requirements regulate the use and storage of medical oxygen in health care facilities, yet few regulations apply in the home environment. Finding the balance between preserving the patient's privacy and protecting safety is a multidisciplinary challenge.

Identifying risk: Information obtained during the home assessment can be vital in understanding risk. The RT and the oxygen providers are morally and ethically obligated to fully inform patients and their families of the risks and benefits of oxygen therapy as well as to communicate that risk to other members of the health care team. Some may argue that "safe smoking" should be taught in the home. Is there such a thing? Unfortunately, this can be misinterpreted. Educating the patient to remove the oxygen prior to smoking is not enough. Many patients tend to remove the oxygen without turning off the source, and the environment continues to be enriched with oxygen and pose a hazard. Clothing and furniture may be saturated with oxygen and act as an accelerant.

Instituting a "no smoking" contract may be beneficial in communicating risk and holding the patient and/or family member accountable. Ultimately, if the patient or a family member continues to smoke, the risk of unsafe oxygen use may lead to a difficult decision of equipment removal. Depending on the severity of the risk, the physician may determine that the patient's safety is more of a concern than the physical benefit. If the patient lives in a multiple home dwelling, the risk is exponentially higher since there are others at risk. In some instances, legal advice may be necessary to help determine if oxygen removal is warranted.

RTs on the forefront: The respiratory therapist's role in safety management of the long-term oxygen therapy patient begins at initiation of the therapy and continues beyond the acute care setting. The RT has the opportunity to intervene by providing access to smoking-cessation education, risk management, and home safety education. Educating, evaluating, communicating risk, and implementing safety protocols are the drivers to providing oxygen safely in the home. ■

REFERENCES

1. Centers for Disease Control and Prevention. Chronic obstructive pulmonary disease among adults — United States, 2011. MMWR 2012:61(46)938–943.
2. Nocturnal Oxygen Therapy Trial Group. Continuous or nocturnal oxygen in hypoxemic chronic obstructive lung disease: a clinical trial. Ann Intern Med 1980; 93(3):391–398.
3. Morrison Informatics, Inc. A comprehensive cost analysis of Medicare home oxygen therapy. A study for the American Association for Homecare. Available at: http://www.bipac.net/cqrc_test/MorrisonResearch.pdf *Accessed Feb. 18, 2015*
4. National Fire Protection Association website. Ahrens M. Fires and burns involving home medical oxygen. Available at: www.nfpa.org/research/reports-and-statistics/demographics-and-victim-patterns/medical-oxygen *Accessed March 3, 2015*
5. European Industrial Gases Association. Fire hazards of oxygen and oxygen enriched atmospheres. IGC Doc 04/00/E, Brussels, 2000.
6. The Joint Commission. Sentinel Event Alert. Lessons learned: fires in the home care setting. Mar. 1, 2001, Issue 17.
7. Joint Commission website. Revisions to NPSG.15.02.01 on home oxygen use. Available at: http://www.jointcommission.org/assets/1/18/S1_NPSG.15.02.01.pdf *Accessed Feb. 18, 2015*

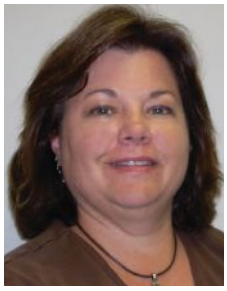
Assessment of Older Adults with Diminished Cognitive Capacity

by Debbie Koehl, MS, RRT-NPS, FAARC

The topic of this article leads someone to think that it would be an easy topic to write and research. During the research process, it was noticed that assessing cognitive capacity in older adults is not as easy as it seems. Unfortunately, there is not one single tool or guideline that clinicians can use to evaluate their patients.[1,2] Health care providers (HCPs) must use their clinical and practical life skills to assess their patients, seek additional advice, and help manage patients with diminished cognitive ability. This article is an overview of what a clinician should look for, plus ways on how to help a patient.

Over the past several years, there has been an increased interest in assessing cognitive capacity in the aging population.[2,3] This has occurred as the population is aging, and the problems associated with aging populations have grown as well. To begin looking at this assessment, it is important to understand the definition of cognition. Cognition includes thinking, learning, and memory.[1] When cognition is impaired, it can be caused by disease, disuse, or aging. Cognitive capacity can also be evaluated by many domains.[1–3] Clinicians often worry about whether patients have the capacity to make clinical decisions regarding their care; this is only one aspect that diminished cognitive ability can affect. Cognitive ability affects many domains, including independent living, financial management, testamentary capacity (wills), research consent, sexual consent, voting, and driving.[2] Currently, when HCPs discuss this in clinical practice, they need to differentiate between a patient's decision-making capacity versus their competency, which often refers to a court decision.[3] When this area overlaps, it can become complicated to assess.

about the author...



Debbie Koehl, MS, RRT-NPS, FAARC, is coordinator of the pulmonary rehabilitation program at Indiana University Health in Indianapolis, IN.

There are several diseases that HCPs can easily think of that can cause diminished cognition, including Alzheimer's disease and other dementias. Also, one cannot rule out Parkinson's disease, diabetes, cardiac and pulmonary diseases, as well as the problems associated with strokes.[1] RTs often take care of patients with not only one disease but many other comorbid diseases. Their ability to assess these patients is important as a member of the health care team; their observations of these patients could be very helpful to primary care and specialty practitioners. RTs can be found working clinically in both acute and chronic care settings. RTs who work in chronic care settings such as pulmonary rehabilitation or rehab facilities may be exposed to patients over a longer period of time. With repeated exposure to patients, they may be able to "sense" issues in cognitive abilities that may not show up in the acute care setting. However, neither clinical setting should be ruled out for assessing patients.

Acute care and chronic care

As mentioned above, cognitive impairment can occur in both acute and chronic care settings. Older adults who are hospitalized or admitted to nursing homes have shown signs of cognitive impairment. In the long-term care setting, this could range from 44%–69% of all patients.[2] While in the acute care setting, however, impaired cognition may be more transient. Older adults with dementia have been found to have impairments in understanding.[2] Delirium can also occur in the clinical setting. Many patients can develop delirium during their hospital stay. Clinically, HCPs need to realize that delirium can be reversed if it is

caused by surgery or medications. Delirium often can be confused with dementia or depression. In patients who are over the age of 70, there are risk factors that may predispose them to dementia. This includes self-reported alcohol abuse, poor cognitive status, visual impairment, depression, poor functional status, malnutrition, metabolic abnormalities, infections, non-cardiac thoracic surgery, or abdominal aneurysm surgery.

Patient assessment

So how does an RT or another HCP assess these patients so they can further help or understand them? Unfortunately, there is not one "tried and true" method; but there are observations everyone can make in the clinical setting that are useful. First, it is important to understand areas of cognition.[1]

Orientation — Is the patient oriented and alert? Do they know who they are, where they are, or understand time and situation.

Attention — Can the patient maintain or sustain attention? Can they focus on one task, or can they divide their attention between more than one task?

Memory — Memory assessment can include eight different types of memory: short-term, long-term, primary, working, prospective, episodic, semantic, and procedural memory. Not all types of memory are affected by aging. Most memory problems have to do with more complex tasks, and patients develop compensatory techniques and adaptive measures to help with memory (notes, reminders, repetition).

Crystallized and fluid intelligence — Crystallized intelligence tends to remain strong in those who are aging; this includes language comprehension, educational qualifications, and life and occupational skills. Fluid intelligence includes the speed and accuracy of information processing; this processing may slow as a patient ages.

Learning — Older adults can learn but may need to have the information presented to them in a variety of ways, including verbal, written, and demonstration.

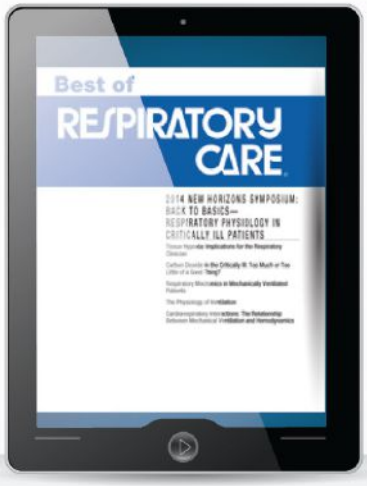
Understanding these cognitive areas can help therapists assess their patients clinically. As people age, they do slow down; but dementia with advanced age is not part of the aging process.[1] Signs and symptoms of diminished cognitive functioning in people can include:

- Memory issues, including the date, time, and year; repeating questions/statements in the same day, exhibiting decreased sense of direction
- Difficulty with understanding and communicating through language
- Difficulty with problem solving and high-level cognitive skills

The RT's ability to assess patients with cognitive problems is important as a member of the health care team. Our observations could be very helpful to primary care and specialty practitioners.

- Impaired visual spatial skills
- Behavioral disturbances such as depression, anxiety, wandering, and neglect of personal hygiene.

Clinicians should be aware of these signs and symptoms in their patients, and it should prompt a conversation with other health care providers to ascertain whether they have observed some of the same problems. Unfortunately, as discussed previously, there is not one "tried and true" evaluation that is used to assess cognitive impairments. Consultation with a geriatric specialist may be helpful with the assessment.[4] Clinical assessments may need to be correlated with neuropsychiatric testing. One such test is the Mini-Mental Status Examination; but, unfortunately, research associated with this test only shows limited correlation with various disease groups.[3] This is one of only several tests that can be administered to assess cognition. These tools can help with approaches to rehabilitation, suggestions for caregivers, and proposing ways to manage cognitive decline.[1]

The Best of RESPIRATORY CARE eBook
"Respiratory Physiology in Critically Ill Patients"
$2.99
Previously published and now available in electronic format.


More eBooks are coming soon!
http://c.aarc.org/go/ebook1

Dealing with the patient

In the short term, what can RTs/HCPs do when dealing with a patient with cognitive issues? They can do the following:

- Make the information presented interesting and apply it to the patient's life.
- Use all the senses (hearing, reading, seeing).
- Use repetition.
- Use cuing.
- Have the patient work with or manipulate the information, if possible.
- Stress importance of the information you provide, as patients will remember what they feel is important.
- Have patients paraphrase what you have said back to you.

Respiratory therapists interact with many patients on a daily basis. If it is noticed that patients have impaired cognitive abilities, being aware of the signs and symptoms and being prepared to discuss these concerns with other members of the health care team is imperative. On a personal note, within our pulmonary rehabilitation program, we have noticed cognitive problems with patients and have taken the staff's concerns to the patient's health care team for further evaluation. As health care providers, everyone needs to realize that diminished cognitive function can put an elderly patient at risk for adverse outcomes or injuries.[4] So being that advocate for the patient and keeping them safe is extremely important. Further research into this growing area of assessment is needed. ■

REFERENCES

1. Robnett RH, Chop WC. The cognitive and psychological changes associated with aging. In: Gerontology for the healthcare professional, 3rd ed. Burlington MA: Jones and Bartlett Learning; 2015:103–145.
2. Moye J, Marson DC. Assessment of decision-making capacity in older adults: an emerging area of practice and research. J Geronotol B Psychol Sci Soc Sci 2007; 62(1):P3–P11.
3. Pachet A, Astner K, Brown L. Clinical utility of the mini-mental status examination when assessing decision-making capacity. J Geriatr Psychiatry Neurol 2010; 23(1):3–8.
4. Culo S. Risk assessment and intervention for vulnerable older adults. B C Med J 2011; 53(8):421–425.

The Danger of Professional Complacency

by Thomas J. Kallstrom, MBA, RRT, FAARC

Over the past two issues of this column we have focused on leadership and the need to step out of our comfort zone while making simple or courageous decisions that can impact our patients. I would like to round out this discussion by looking at something that we cannot allow to be a part of our personal *modus operandi*. The danger is professional complacency, which is a sad reality in today's workplace. One would like to think that it does not exist in medicine when, in fact, it does in all walks of society and business. However, it is especially concerning when patient outcomes are at stake and, thus, it is on us to do something about it.

With the expectations of health care practitioners at seemingly an all-time high demand, we have been seeing signs of stress in the health care system. The result often is burnout. Expectations that our staffs perform at high levels of productivity or the constant need to do more with less are just two examples of the many stressors facing managers and staff. Being confronted with ever-increasing demands makes it understandable that stress on the clinician and system is reaching its breaking point. Simply ignoring this is not the answer.

about the author...

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

Third Annual Patient Safety, Science & Technology Summit

This takes us to an event that happened earlier this year, the Third Annual Patient Safety, Science & Technology Summit. Leadership from the AARC was in attendance at this fast-paced and critically important gathering of leaders from medicine, industry, hospital administration, payers, regulatory agencies, and government. This movement has as a goal to have zero preventable deaths by 2020. I would encourage you to go to http://patientsafetymovement.org and review the summary of the 2015 meeting.

One of the sessions that stood out this year dealt with the culture of safety. Sobering data was presented that indicates that while patient safety is our goal, we are not heading in the right direction. In fact, a Statistical Brief from the Agency for Healthcare Research and Quality (AHRQ) shows that between 2004 and 2008 there was a 52% increase in drug-related adverse outcomes in the inpatient setting.[1]

Let's look at something even closer to home. Ventilators and ventilator alarms are something that we all deal with in the ICU. While alarms are there to protect our patients, there is compelling evidence that, in fact, complacency and lack of attention to ventilator alarms is causing large numbers of unanticipated ventilator-associated adverse events. Many years ago the AARC and The Joint Commission wrote a white paper called "Preventing Ventilator-related Deaths and Injuries."[2] Of note is the fact that the root causes of many ventilator-associated events are directly tied to clinician inattention to alarms. Below is a breakdown pointing out specific areas of concern that contribute to the problem.

Staffing
Inadequate orientation/training process (87%)
Insufficient staffing levels (35%)

Communication breakdown
Among staff members (70%)
With patient/family (9%)

Incomplete patient assessment
Room design limits observation (30%)
Delayed or no response to alarm (22%)
Monitor change not recognized (13%)

Equipment
Alarm off or set incorrectly (22%)
No alarm for certain disconnects (22%)
Alarm not audible in all areas (22%)
No testing of alarms (13%)

Distraction
Environmental noise (22%)

Mark R. Chassin, MD, FACP, MPP, MPH, president and CEO of The Joint Commission, has made understanding and reducing patient errors his mission throughout his career. Looking closer, he explains that one of the most pervasive safety problems in hospitals relates to their failure to be sensitive to operational red flags. He goes on to say that health care workers at all levels routinely observe unsafe conditions, behaviors, and practices; but they very often fail to bring those problems to the attention of managers. Several factors contribute to this gap. Poor communication is a common condition in health care. Transitions from one care setting to another (handoffs) add to the risk of error due to the incomplete or inaccurate communication of crucial patient information. When caregivers come to expect poor communication, they become desensitized to its hazards.[3]

A sobering analysis

This is a very sobering analysis of heath care and one that we must change. How can we as a profession make sure that we become part of the solution? It is essential that your department be a part of all leadership efforts that specifically deal with patient safety in your hospital. We need to be at the table and be up to date and well-versed on the patient safety literature with specific attention to AHRQ, Centers for Disease Control and Prevention, U.S. Food and Drug Administration, and Advancing Safety in Healthcare Technology. Another resource is the AARC's Patient Safety Roundtable. This newly formed roundtable has been growing in numbers and daily presents contemporary issues that revolve around patient safety issues. If you are not yet a member of this group, I encourage you to join it today on AARConnect.

The AARC recognizes the need to be engaged and has committed to continue its work with the Patient Safety Movement as well as The Joint Commission and other federal agencies in an effort to bring preventable adverse events and deaths down to zero. This is something we must own and take responsibility for. The AARC is committed to work with our members so that together we can make a difference. Lets all be a part of it. ■

REFERENCES
1. Classen DC, Resar R, Griffin F, et al. 'Global trigger tool' shows that adverse events in hospitals may be ten times greater than previously measured. Health Aff 2011; 30(4):581–589.
2. The Joint Commission website. Preventing ventilator-related deaths and injuries. Available at: www.jointcommission.org/assets/1/18/sea_25.pdf *Accessed Mar. 23, 2015*
3. The Joint Commission website. Chassin MR, Loeb JM. High-reliability health care: getting there from here. Available at: www.jointcommission.org/assets/1/6/Chassin_and_Loeb_0913_final.pdf *Accessed Mar. 23, 2015*

Ventilation for Life

PEEP and Recruitment Maneuvers

by Carl R. Hinkson, MS, RRT-ACCS, FAARC

Today's respiratory therapist must be familiar with the management of positive end-expiratory pressure (PEEP) and its impact on oxygenation, lung injury, and patient outcomes. The RT's role of identifying ideal PEEP levels and performing recruitment maneuvers is invaluable in preventing iatrogenic lung injury and maintaining patient safety in complex patient care situations.

The use of positive end-expiratory pressure (PEEP) is ubiquitous in ventilator management because it is generally agreed that low levels of PEEP are useful in preventing alveolar collapse. In sicker patients, a lack of adequate PEEP levels may lead to repetitive opening and closing of the alveoli. This is commonly referred to as atelectrauma, which may contribute to ventilator-induced lung injury (VILI).

Whereas the ARDSNet trial demonstrated that a tidal volume targeted at 6–8 mL/kg of predicted body weight (with plateau pressure ≤ 30 cm H_2O) reduced mortality, the best method to determine PEEP has eluded clinicians.[1] In the armamentarium of today's clinicians, there exist several different approaches to determining the best PEEP level and preventing alveolar de-recruitment. It should be noted that so far no one approach has been proven to be superior to another; however, a Cochrane Review of high PEEP versus lower PEEP showed that strategies that lead to higher levels of PEEP being used in acute respiratory distress syndrome (ARDS) patients showed a trend toward better survival.[2] Over the years, several approaches and opinions about the best methods have emerged. We present some strategies here.

Recruitment maneuvers

Recruitment maneuvers are intended to reduce VILI and improve oxygenation by re-establishing collapsed alveolar units. This is accomplished by inducing a period of sustained hyperinflation. Two general approaches to accomplishing recruitment maneuvers are continuous positive airway pressure (CPAP) at a higher level for a predetermined length of time (e.g., a CPAP of 40 cm H_2O for 40 seconds), or setting the PEEP at a high level and ventilating the patient with pressure control at a higher level for two-to-three minutes.[3] Arnal et al showed that in early-onset ARDS patients, most of the recruitment occurs during the first 10 seconds of a sustained inflation recruitment maneuver, whereas hemodynamic impairment is significant after the tenth second of the maneuver.[4]

Because of the deleterious impact the recruitment maneuver may have on the cardiovascular system, the patient should be hemodynamically stable before any procedure is attempted. Also, patients should be relatively sedated because of the discomfort associated with the procedure. One of the arguments against recruitment maneuvers is that the benefits of improved oxygenation are short lived. One way to sustain improvement in oxygenation is by performing a decremental PEEP trial after the recruitment maneuver. After the recruitment maneuver, you can place the patient in a conventional mode with a high level of PEEP. Slowly decrease the PEEP until you reach a previously agreed upon endpoint, such as a decrease in saturations or improvement in compliance.[5,6]

The timing of recruitment maneuvers is controversial. Opinions vary from when patients are first diagnosed with ARDS to only being used as a rescue maneuver in situations of refractory hypoxemia. The respiratory therapist should know about this procedure, how it is to be performed in their own institution, under what circumstances it is to be performed, expected outcomes such as improvements to P/F ratio, and to be watchful of any hemodynamic compromise before, during, and after.

about the author...

Carl R. Hinkson, MS, RRT-ACCS, FAARC, is assistant manager of respiratory care at Harborview Medical Center in Seattle, WA.

Stress index

The stress index method evaluates the shape of the pressure-time waveform during constant-flow volume-control ventilation based on the equation:

$$P_{TP} = a \cdot t^b + c$$

where P_{TP} is transpulmonary pressure (pressure at the airway opening minus pleural pressure) and t is time. The coefficients a, b, and c are constants.[6] The coefficient a represents the slope of the pressure-time waveform at $t = 1$ s, and the coefficient c is the pressure at $t = 0$. The coefficient b is a dimensionless number (called the stress index) that describes the shape of the pressure-time waveform. For values of the coefficient $b < 1$, the pressure-time waveform will present a downward concavity, indicating that compliance increases with time (i.e., alveolar recruitment during the breath, indicating inadequate PEEP). Values of coefficient $b > 1$ produce an upward concavity, indicating that compliance decreases with time (i.e., overdistention due either to PEEP being too high, tidal volume being too large, or both). Values of the coefficient $b = 1$ indicate a straight pressure-volume waveform and a constant compliance. In theory, the stress index can be used to select optimal PEEP (to avoid atelectrauma) in conjunction with optimal tidal volume (to avoid volutrauma) by making PEEP and tidal volume changes that yield stress index values close to 1.0. A clinician can also review the waveforms during PEEP adjustments (see Figure 1).

Esophageal manometry

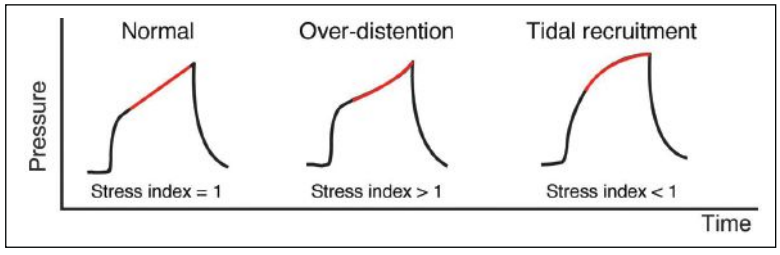
Esophageal pressure monitoring involves inserting a balloon-tipped catheter 40–60 cm into the esophagus. The pressure measured in the esophagus (P_{ES}) is used as a surrogate for plural pressure in the equation for transpulmonary pressure ($P_{TP} \approx P_{AW} - P_{ES}$). End-expiratory transpulmonary pressure is calculated by subtracting the esophageal pressure from the airway pressure.[7] Under the theory described by Talmor et al, the end-expiratory pressure should be equal to zero. If the value is negative, the lungs are under-recruited. PEEP is increased until the end-expiratory transpulmonary pressure is equal to zero.[8]

PEEP/FiO_2 table

Positive end-expiratory pressure was set according to a PEEP/FiO_2 table in the ARDSNet trial (see Table 1). This simple approach required the RT to adjust the PEEP and/or fraction of inspired oxygen (FiO_2) if saturations or arterial partial pressure of oxygen (PaO_2) fell outside the study parameters. If saturations fell below 88%, the respiratory therapist would move one box to the right of the table.[1] As the patient improved and oxygenation improved, the RT would move one box to the left of the table. The PEEP/FiO_2 table places the responsibility of monitoring oxygenation and adjusting ventilator settings upon the RT.

Two studies have evaluated using higher levels of PEEP with the PEEP/FiO_2 table. The ALVEOLI study from the ARDSNet group compared a low-PEEP, high-FiO_2 versus a high-PEEP, low-FiO_2 table. The LOVS trial again compared a low-PEEP, high-FiO_2 table with a high-PEEP, lower FiO_2

Figure 1. Normal Stress Index, Stress Index with Over-distention, and Stress Index with Tidal Recruitment



SOURCE: Hess DR. Respiratory mechanics in mechanically ventilated patients. Respir Care 2014; 59(11):1773–1794.

Table 1. Example of the PEEP/FiO_2 Table Used in the ARDSNet Trial

FiO_2	0.3-0.4	0.4-0.5	0.5-0.6	0.7	0.7	0.7-0.9	0.9	0.9	1.0
PEEP	5	8	10	10	12	14	16	18	18–24

table. The ALVEOLI study showed no benefit in mortality.[9] The LOVS trial also failed to demonstrate a mortality benefit. However, in the LOVS trial, patients within the high PEEP arm had improved oxygen indices, fewer hypoxemic deaths, and less use of rescue therapies.[10]

By setting the PEEP appropriately and preventing the damage that occurs with the repetitive opening and closing of the alveolar units, we have the opportunity to demonstrate our value for our patients. As respiratory therapists, we should be familiar with all the different methods to setting ideal PEEP. Our knowledge of physiology and our role in the ICU environment places us in the ideal position to advocate for our patients. ■

REFERENCES

1. The Acute Respiratory Distress Syndrome Network. Ventilation with lower tidal volumes as compared with traditional tidal volumes for acute lung injury and the acute respiratory distress syndrome. N Engl J Med 2000; 342(18):1301–1308.
2. Santa Cruz R, Rojas JI, Nervi R, et al. High versus low positive end-expiratory pressure (PEEP) levels for mechanically ventilated adult patients with acute lung injury and acute respiratory distress syndrome. Cochrane Database Syst Rev 2013; 6:CD009098.
3. Kacmarek RM, Villar J. Lung recruitment maneuvers during acute respiratory distress syndrome: is it useful? Minerva Anestesiol; 77(1):85–89.
4. Arnal JM, Paquet J, Wysocki M, et al. Optimal duration of a sustained inflation recruitment maneuver in ARDS patients. Intensive Care Med 2011; 37:1588–1594.
5. Girgis K, Hamed H, Khater Y, Kacmarek RM. A decremental PEEP trial identifies the PEEP level that maintains oxygenation after lung recruitment. Respir Care 2006; 51(10):1132–1139.
6. Kacmarek RM, Villar J. Management of refractory hypoxemia in ARDS. Minerva Anestesiol; 79(10):1173–1179.
7. Hess DR. Respiratory mechanics in mechanically ventilated patients. Respir Care 2014; 59(11):1773–1794.
8. Talmor D, Sarge T, Malhotra A, et al. Mechanical ventilation guided by esophageal pressure in acute lung injury. N Engl J Med 2008; 359(20):2095–2104.
9. Brower RG, Lanken PN, MacIntyre N, et al. Higher versus lower positive end-expiratory pressures in patients with the acute respiratory distress syndrome. N Engl J Med 2004; 351(4):327–336.
10. Meade MO, Cook DJ, Guyatt GH, et al. Ventilation strategy using low tidal volumes, recruitment maneuvers, and high positive end-expiratory pressure for acute lung injury and acute respiratory distress syndrome: a randomized controlled trial. JAMA 2008; 299(6):637–645.

Your Patients *Can* Self-Manage Their COPD.

Advise your patients to take control with the COPD Toolkit.

- Offers text, video, teach back & game plans
- Show me versus tell me approach

Cambium TECHNOLOGIES

The COPD TOOLKIT is a disease self-management program for patients that includes:

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

AARC

Available now in the AARC Store.

http://c.aarc.org/go/toolkit

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

Anti-Social Media

by Anthony L. DeWitt, JD, RRT, FAARC

"Did you see in the newspaper yesterday how that little baby was beaten and abused by his parents?"

"No, but I saw it in the ER. The child was covered with bruises. It was a tragedy."

Unless you're speaking to a co-worker, congratulations, you've just violated the Health Insurance Portability and Accountability Act (HIPAA), likely violated state medical records confidentiality provisions, and quite likely, your state's Respiratory Care Practice Act. Ouch!

Tom didn't give it a second thought

Recently, Tom had some downtime on a day off and was reading his local newspaper online. He saw an article about a terrible car wreck and how a 19-year-old boy had lost his life in the tragedy. In the comment section, which identified him as TomTomPi, a moniker known to his fellow therapists at the hospital, he made the following comment:

"If you've never been present in an emergency room when a trauma comes in, I can tell you, it's nothing pretty. There is a lot of blood and a lot of screaming by distraught family members. Most of the time, there's nothing we can do when people are just too far gone, like this one was."

Tom never gave it a second thought. He believed he was contributing to the dialog. He believed that his identity was safe. He believed that nothing he said identified the patient or gave away patient information.

He was wrong. His last line sealed his fate. He was commenting on a trauma code he had been involved in, and those who read the newspaper knew it. They reported it to the human resources department. The hospital had no choice but to terminate him and report him to the state board for RC licensure. He had violated patient confidentiality in a particular, spectacular way.

In the workroom, on the telephone between other therapists, and in the ER itself, it is perfectly appropriate to comment upon and be a part of the grieving process that comes with the loss of a young life. Once you leave the grounds of the hospital, even if you are terribly upset about it, you cannot discuss what you saw and what you did with anyone other than a professional member of the clergy, your counselor, or your attorney. Making a public comment in the newspaper is absolutely and strictly forbidden.

Hospitals can terminate employment for any reason, for no reason, but not for an unlawful reason. If other breaches of confidentiality did not result in termination, then a case can be made that termination for this violation might not be appropriate. Generally speaking, however, if an employee gives it cause (as Tom did), there is simply no going back. The hospital, in order to protect itself from liability from an angry family, must show that it took immediate and decisive action. It must fire an employee who violates patient confidentiality.

Is a report to the state board necessary? In most cases, the answer would be yes. Under the law of California, the answer is definitely yes. California demands that therapists fired for cause be reported. In Tom's case, this is both an ethical as well as a legal problem for him. Other than protecting himself by testifying in a lawsuit by a patient, or talking to someone for the purpose of grief counseling or adjustment disorders relating to the trauma, he can't reveal specifics about what happened. Indeed, a smart counselor will not even write down identifying patient information in order to protect Tom.

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.

Social media comments

Most therapists love what they do. Most feel, rightly so, that they are the unsung heroes in the hospital environment. They work hard, help patients, and doctors and nurses get all the glory. On their Facebook pages they may relate the things about their job that bother them. Even this is not a good idea. A hospital could just as easily fire a therapist for saying "we were terribly understaffed today at Our Lady of Perpetual Billing" as it could for relating patient information. A comment on social media that could be read as critical of the hospital would be something a hospital would certainly consider in reaching a termination decision.

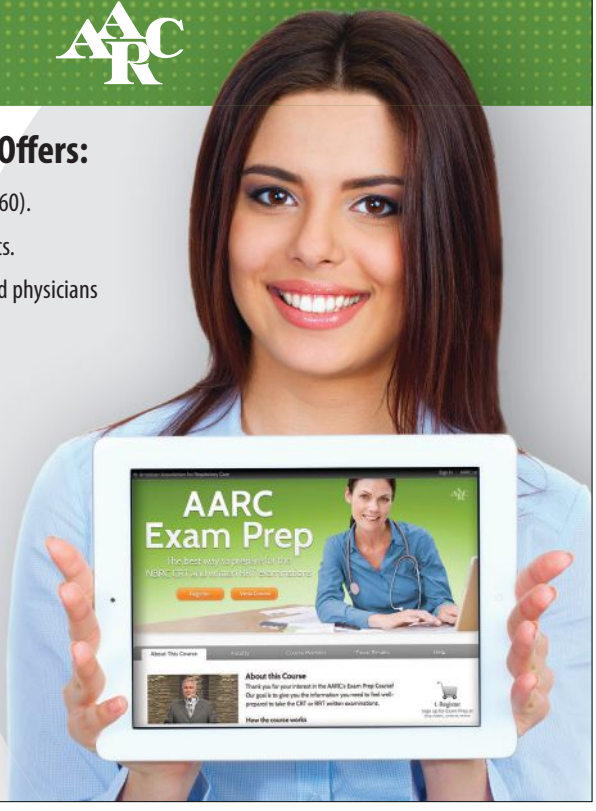
The best policy for anyone on Facebook is that less is more. Frequently I find myself wanting to post something about a bad judicial decision or a breach of ethics by an opposing attorney. There are many things a lawyer could comment about in the media that do not reveal confidential information, But it is best NOT to do it. In most cases, it ends badly.

Recently, in response to a comment about bullying where a child committed suicide, a friend of mine made a Facebook comment that I thought nothing about. I had taught my children that "sticks and stones can break my bones, but words can never hurt me." I had monitored my children's emotional state very carefully and guarded them like the precious loved ones they were. So when I read my friend's comment, which related to the fact that the mother had not been aware of her child being bullied, my friend's reply to the effect that the mother had "failed her child" did not strike me as particularly inappropriate. It seemed to me like a fair, if somewhat insensitive, comment on the kinds of things that parents should be aware of when their child is in school. The post was the kind of thing that most of us, from time to time, do without thinking. If we thought about it, we might think, "Gee, that kid's mom could see that." However, he did not think that; and when the mother did see it and commented on his post, he was aghast and felt ashamed.

In an Internet age, it is sometimes impossible to put the genie back into the bottle. For this reason, it is always a good idea not to post a quick comment to Facebook or other social media. It is far better to hold your comments. The job you save could be your own. ■

RECENT GRADS, PREPPING FOR NBRC EXAMS?

AARC Exam Prep to the Rescue.



This Online NBRC CRT and RRT Exams Prep Course Offers:

- Free access to NBRC CRT and/or written RRT practice exams (a value of up to $160).
- A personalized study prescription based on your actual NBRC practice test results.
- Over 28 hours of video instruction from top educators, respiratory therapists and physicians (including PDF handouts).
- Tips for developing excellent test-taking skills.
- Study materials addressing all 17 categories in the NBRC CRT/RRT test matrix.
- Option to view study modules as many times as you want. View all modules or just those recommended from the prescription.
- Accessibility for 365 days.
- Opportunity to earn continuing education credit (up to 27.15 hours of CRCE®).

AARC MEMBER PRICE $295 *Member Savings* *$50*
Nonmember Price $345

For details and registration, visit c.aarc.org/go/examp

The AARC Exam Prep Course is an educational program of the American Association for Respiratory Care. NBRC™ is a trademark of The National Board for Respiratory Care.

Understanding the Psychosocial Needs of the Teen CF Patient

by Jill Gorlach, RRT

Cystic fibrosis (CF) is the most common autosomal recessive disorder in Caucasians. About 1 in 2,500 live births is affected with CF. Cystic fibrosis affects most organ systems, with the respiratory and gastrointestinal systems being the most severely affected. CF is a progressive disease with a life expectancy that has improved dramatically from 14 years of age in 1969 to 32 years in 2000. Children born with CF after 2000 are expected to survive well into their 50s. The usual cause of death in the CF patient is respiratory failure.[1]

about the author...

Jill Gorlach, RRT, is a respiratory care practitioner at Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL.

Daily challenges

The teen with cystic fibrosis faces many challenges in their day-to-day lives. Teenagers have different needs than younger CF patients. Teens are focused on their appearance and body image; they compare themselves to their peers and are more aware and notice that they are different from their friends. Teens with CF are faced with a challenge to balance and manage their health by taking treatments and medications while trying to remain "normal" with other activities at school or with friends. Teenagers try to juggle all of this, and life becomes very strenuous.

It is very common for the teen with CF to become depressed or experience anxiety, and having a chronic illness is associated with an increased risk of suicide attempts. This has negatively impacted their heath and adherence to treatment. Many CF teens resort to negative behaviors such as alcohol, tobacco, and drug use in order to forget that they have the burden of dealing with a chronic illness or to try to fit in with their peers. These social behaviors have a negative impact on their health and result in a rapid decline in the teen's lung function.[2]

Teens with cystic fibrosis can become overwhelmed with everything that they have to do each day in order to stay healthy. They often feel that they are missing out on activities at school, with friends, and in life. Many teens with CF become rebellious and begin to skip treatments and medications in an effort to feel more like a normal teen.

While some teens with cystic fibrosis feel burdened, others feel that they are invincible and that nothing they do will hurt them. They are trying to find their independence and seek a way toward a normal life. Directing them toward practicing positive behaviors is essential for their health.

A respiratory therapist's impact on a teen with cystic fibrosis can be very powerful; RTs can be role models for CF patients. The RT is there for the CF patient for treatments and education on new therapies. For a teen with CF who sometimes doesn't adhere to the treatment schedule, scare tactics are not a good approach to achieve compliance. Identifying the reasons or barriers to why the teen is noncompliant with the treatments is important.[3] The RT and the teen can work together to find ways to make their treatment schedule work to include behaviors that keep them healthy and enjoying the benefits of a positive social life with their friends and other activities. Setting smaller, attainable goals is a good way to approach the teen.

Team partners

The RT and the teen with cystic fibrosis can be partners on the team. The RT should assess the CF patient, discuss the types of airway clearance the teen is using, and introduce new time-saving, effective techniques that can be very useful for the teen's very busy life. Education that was formerly aimed at the parent is now focused on the teen to learn all about their care. This empowerment sometimes gives the teen confidence to do extra and dedicate more time to their health and well-being.

The teen with CF needs to have RTs who are dedicated to being open to talking about all areas of the patient's health. The RT needs to be willing to assist the teen through this very challenging time in the patient's life. It's a good idea to offer choices — not make demands. The RT can offer advice about what could be done, but it is also good to allow the teen to make suggestions, give ideas, and try them. Making mistakes is part of growing and learning. When the teen makes a poor choice related to their care, there should be consequences so the teen can benefit from the mistake. Consequences are not intended to make the teen feel bad or guilty. They should be carried out calmly and make sense to the teen.

The teen with cystic fibrosis has many challenges to endure; but with the help of family, a great medical team, and a caring respiratory therapist, the teen with CF may be able to get through these troubling years and find that there can be a high-quality, meaningful life ahead for them. ■

REFERENCES

1. Cystic Fibrosis Foundation website. Patient registry annual data report 2012. Available at: www.cff.org/uploadedFiles/research/ClinicalResearch/PatientRegistryReport/2012-CFF-Patient-Registry.pdf *Accessed March 18, 2015*
2. Blackwell LS, Quittner AL. Daily pain in adolescents with CF: effects on adherence, psychological symptoms, and health-related quality of life. Pediatr Pulmonol 2014; Sept. 3 [Epub ahead of print].
3. Ernst MM, Johnson MC, Stark LJ. Developmental and psychosocial issues in cystic fibrosis. Pediatr Clin North Am 2001; 58(4):865–885.

Current Topics in Respiratory Care

An 8 DVD Series

Replaces the Legacy Professor's Rounds DVD Series

Earn Up to 8 CRCE

2015 DVD PROGRAMS:

- Ebola: From Sierra Leone to Sin City – Item # CT20151
- Managing Ventilation and Oxygenation in the Critically Ill Patient – Item # CT20152
- Respiratory Therapy 2015 and Beyond: Applied Adult Acute Care Case Studies – Item # CT20153
- Management of the 2015 Asthmatic: Phenotyping and Managing Refractory Asthma – Item # CT20154
- Advances in Respiratory Monitoring and Outcomes – Item # CT20155
- Ethics: A Case Based Discussion – Item # CT20156
- What Have We Learned about Noninvasive Ventilation in the Past 20 Years? – Item # CT20157
- Ventilating Trauma Patients: ARDS and Traumatic Brain Injury – Item # CT20158

INDIVIDUAL PROGRAMS

Member $89 Non-member $99

(Members Save $10) Plus shipping and handling

PROGRAM SERIES (8 DVDs) *Order Item #CT2015S*

Member $459 Non-member $499

(Members Save $40) Plus shipping and handling

BEST VALUE

Learn more about each topic: http://tiny.cc/current_topics

2015 Capitol Hill Advocacy Day

by Cheryl West, MHA

Telehealth services are an integral part of the health care system today and have gained recognition and the attention of Congress in the past couple of years. There are various legislative initiatives underway that provide some type of Medicare expansion of telehealth services. While they have similarities, the Medicare Telehealth Parity Act, which AARC is strongly supporting, is the only bill that specifically adds respiratory therapists as covered practitioners and respiratory care as a covered service.

The AARC/State Societies' 2015 Hill Advocacy Day brought together 140 RTs from 44 states and the District of Columbia to meet with members of Congress to push for support of the Telehealth Parity Act. We were joined by several pulmonary patients, pulmonary organizations, and local area RT students.

Prior to "Hill Day" we launched the Virtual Lobby Week where we asked RTs and RT supporters from around the country to send emails to their members of Congress via the AARC's Capitol Connection (http://capwiz.com/aarc/issues/?style=d). The RT community responded with over 19,000 emails sent to their legislators asking for support for the Telehealth Parity Act. Thank you! This was immensely helpful to the RTs who held meetings with members of Congress.

Below are a few stories from the RTs who went to DC to advocate on behalf of the profession and the pulmonary patient.

about the author...

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

The day began early for our four Florida PACT members, but we were running once we arrived in the nation's capital. First stop was at Sen. Bill Nelson's office, whose staffer is a son of an RT. We had two students as part of the team, and they were in awe of the majesty of Washington, DC! We had appointments crisscrossed and up and down through the three house buildings (the size of football fields). We logged in over 12,000 steps — more than six miles. PACT on!

— *Sheryle Barrett, BA, RRT, Boynton Beach, FL*

On behalf of the patients we serve and our profession, I was very honored to travel to Washington, DC, to meet with our congressional staff members to share with them the importance of the Medicare Telehealth Parity Act. During one such visit, a member of Congress shared that his daughter had been recently diagnosed with Stage 4 lung cancer. He stated that while she was receiving excellent care, he and his staff inquired about what a respiratory therapist could do to help.

I shared with him there are many things an RT can do to assist an individual in his daughter's situation during any stage of her illness. Whether that be breathing medication recommendations (if applicable), breathing techniques to reduce respiratory muscle fatigue, energy conservation, relaxation, or helping ensure the comfort of breathing with positioning and posture, as well as very important topics such as ways to minimize the risk of pneumonia and utilizing proper equipment in the hospital and home to ensure all this and more. I simply stated: "Having a respiratory therapist on your daughter's health care team can ensure a professional with the expertise of respiratory care is focusing on her respiratory needs with collaboration of her entire health care team." The congressman and his staff expressed their appreciation for the information on what an RT can do to help anyone with illness. I simply expressed that we are here to serve patients, families, health care providers, and the community at large. I was

honored that he shared such a personal story and conveyed to him that my thoughts are with him and his daughter and family.

— *Carrie Black Bourassa RRT,*
Saint Paul, MN

2015 AARC Capitol Hill Day was a memorable experience for three government affairs representatives from California. They were prepared for a very busy day with 23 congressional and two Senate appointments and soon realized it was also going to be an exciting day. From the first meeting to the last, there were engaging conversations and advocacy opportunities. The congressional and Senate staffers were cordial, informed, and interested in the respiratory care profession as well as the Medicare Telehealth Parity Act.

Robby Nijjar, MBA, RRT, said: "I met with several informed people who genuinely cared about respiratory therapy, health care, and the telehealth bill. I also had several opportunities to shake hands and speak with the 'movers and shakers.' Everyone was approachable and receptive. The highlight of my day was meeting with Congressman Mike Thompson (writer of the telehealth bill)." The meeting was attended by Thomas Kallstrom, MBA, RRT, FAARC, the AARC's executive director and CEO.

Thomas Kallstrom, California Rep. Mike Thompson, Robby Nijjar, and Russell McCord

Elissa Williams; Karen Schell (right); and COPD patient advocate Edna Fiore at Kansas Rep. Lynn Jenkins' office with Colin Brainard, legislative aide.

Russell McCord, BSEd, RRT-NPS, RPFT, said: "I enjoy scheduling the appointments, but walking the halls of Congress and the Senate is exhilarating. Waiting for my first appointment, California Rep. Devin Nunes gave me a nod as he walked into his office. I also had the pleasure of AARC President Frank Salvatore Jr., MBA, RRT, FAARC, sitting in with my first and third meetings. Hurrying to my next appointment, I came face to face with House Speaker John Boehner. Later in the day, I walked side by side with DC's Rep. Eleanor Holmes Norton. When Congress was called for a vote, the elevator I was in suddenly filled when representatives Sanford Bishop Jr., Charles Rangel, James E. Clyburn, and David Scott. Riding the underground train from the Senate building to the congressional building was amazing. At the end of the day, standing with Rep. Mike Thompson — who will re-introduce the Medicare Telehealth Parity Act — was a perfect moment."

Ricardo Guzman said: "This was my fourth time advocating for our profession, and the experience was as rewarding as the first. Knowing that we shared with lawmakers our value as a profession and as an integral member of the health care team made it worth all the time and effort invested. I was honored and grateful to have represented (along with my colleagues Russ and Robby) the CSRC and the AARC in this important endeavor of promoting the telehealth bill and our inclusion in it."

Capitol Hill Day provided a great opportunity to advocate for the profession, discuss the current and emerging issues, and become part of the solution. Plans are already being discussed for next year, and the trio from California is enthusiastic about upcoming advocacy opportunities.

Making our mark

The respiratory community made its mark on Congress with the Hill Advocacy Day, but our work is not done. As Congress moves forward with its legislative work, we still must keep the telehealth parity issue on their "must do" agenda. We will keep AARC members informed via this column and through the AARC's website. Plus, we still need and ask everyone to keep sending your emails through Capitol Connection (http://capwiz.com/aarc/issues/?style=d). The more they hear from the RT community and the professions' supporters, the better the chances are to pass changes to the Medicare program that will enhance access to respiratory therapists. ■

E-CIGARETTES:

WHERE DO WE GO FROM HERE?

by Jay Taylor, AS, RRT, TTS

It is my goal in this article to update the respiratory therapy world about the current status of e-cigarettes (a term often replaced by the younger generation with "vaping," "e-cigs," and "e-juice"). A friend from a public health unit in Fargo, ND, said that while teaching a class for minors who received a ticket for possession of tobacco products, she would always ask what products they use. In a recent group, she asked if they used e-cigs. Two of the three said no; but the remaining one said, "No, I use my vape." So, the term "vape" is now apparently a verb *and* a noun. We also hear young people say that they don't use e-cigs but love their e-hookah pen. So, as with many tobacco products, confusion reigns supreme. Thus, we need to keep up with terminology if we are going to be a voice.

History of e-cigarettes

The earliest e-cigarette can be traced to Herbert A. Gilbert,[1] who patented a device in 1963 that was described as a smokeless non-tobacco cigarette that involved "replacing burning tobacco and paper with heated, moist, flavored air." This device heated the nicotine solution and produced steam. He did receive a patent for his invention (US 3200819 A),[2] but it was never commercialized.

In 2003, a Chinese pharmacist and inventor, Hon Lik, who worked as a research pharmacist for a company producing ginseng products, created his own version of an e-cigarette.[3,4] Hon had quit smoking after his father, also a heavy smoker, had died of lung cancer. He used a piezoelectric ultrasound-emitting element to vaporize a pressurized jet of liquid containing nicotine that was diluted in a propylene glycol solution. His design produced a smoke-like vapor that could be inhaled and would provide a vehicle for nicotine delivery into the bloodstream via the lungs. He also proposed using propylene glycol to dilute nicotine and then placing it in a disposable plastic cartridge that serves as a liquid reservoir and mouthpiece.

Hon patented the modern e-cigarette design in 2003. Electronic cigarettes using a different design were first introduced to the Chinese domestic market in May 2004 as an aid for smoking cessation and replacement. Many versions made their way to the United States and were sold mostly over the Internet by small marketing firms. The company that Hon Lik worked for, Golden Dragon Holdings, changed its name to Ruyan and started exporting its products in 2005–2006 before receiving its first international patent in 2007. There had been discussions about banning them in China several years ago, but they are still legal.

The international tobacco companies, realizing that the development of a potential new market (that would continue the addiction to nicotine) could render traditional tobacco products obsolete, have become increasingly involved in the production and marketing of their own brands of e-cigarettes and in acquiring existing e-cigarette companies. Big-name tobacco companies, including Lorillard Inc., manufacture Blu and recently acquired SKYCIG based in the United Kingdom. The Altria Group (formerly known as Philip Morris) recently acquired a brand called Green Smoke, while already marketing their own brand, MarkTen. Reynolds American also has an entry in the race with its VUSE product.

Research and data needed

These products claim to be safer than regular tobacco cigarettes and may indeed be so, but the wide variability of ingredients from brand to brand and product to product make it impossible to substantiate this statement. The problem is that there is no real research or data available from trusted sources that can make this claim. No data: no endorsement! While the U.S. Food and Drug Administration (FDA) stated in 2011 that it planned to regulate the e-cigarette as a tobacco product, no rules or regulations have been issued. According to the National Conference of State Legislatures (www.ncsl.org), on April 25, 2014, the FDA released proposed regulations for "Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act." These regulations would include electronic cigarettes and other alternative tobacco and nicotine products.[5]

Lack of data isn't the only problem. Good data and research is the tool that tobacco experts use when helping tobacco users to quit their addiction. However, beyond the lack of data lies the problem of regulation. Young people are experimenting with e-cigarettes much the same as they did with traditional cigarettes for many years. There's nothing to stop them from acquiring these products.

Many states are making the purchase of these products illegal for those under the age of 18. However, has that ever stopped kids before? They don't have to go to their local gas station or mall kiosks to get these as they can order them over the Internet with no problem. Also, the National Conference of State Legislators (www.ncsl.org/research/health/alternative-nicotine-products-e-cigarettes.aspx) says at least 41 states and one territory currently prohibit sales of electronic cigarettes or vaping/alternative tobacco products to minors.[5] Michigan's bill to prohibit e-cigarette sales to minors was vetoed by the governor in January because he seeks a tougher law.

One might want to believe that these products are really meant only for adults and that the purchase by kids isn't really an issue. In fact, these products are being marketed directly to kids. How else could you explain the flavorings that are available: apple,

banana, blueberry, bubblegum, cotton candy, cherry, chocolate, grape, strawberry, melon, peach (plus literally thousands more flavors and flavor combinations created by Internet dealers). One site, Crazy Vapors, advertises nicotine levels of 6 mg, 12 mg, 18 mg, and 24 mg. Let's add to that mix the design of some e-cigs. Some look like a Hello Kitty toy; and one even resembles an asthma inhaler, possibly so kids could use it in school.

Regulation and research needed

The AARC has made it clear, as of April 2014, how they feel about e-cigarettes. "In line with its mission as a patient advocate and in order to ensure patient safety, the American Association for Respiratory Care (AARC) opposes the use of the electronic cigarette (e-cigarette). Even though the concept of using the e-cigarettes for smoking cessation is attractive, they have not been fully studied and the use among middle school children is increasing year after year. There is no evidence as to the amount of nicotine or other potentially harmful chemicals being inhaled during use or if there are any benefits associated with using these products" (see www.aarc.org/app/uploads/2014/08/ElectronicCigarette.pdf).

According to the Centers for Disease Control and Prevention (CDC), more than 40 states have enacted laws prohibiting the sale of electronic nicotine delivery systems (ENDS), including e-cigarettes, to minors. However, 10 states and the District of Columbia still permit such sales, according to a report published by the CDC in the Dec. 11, 2014, issue of *Morbidity and Mortality Weekly Report* (MMWR).[6]

More than 16 million children 17 and under reside in states not covered by these laws. The latest data from the National Youth Tobacco Survey showed 4.5% of all high school students and 1.1% of all middle school students had used e-cigarettes within the past 30 days in 2013.[6]

More from the recent CDC study:

- The number of never-smoking youth who used e-cigarettes increased from 79,000 in 2011 to more than 263,000 in 2013.
- Among never-smokers who had used e-cigarettes at least once, 43.9% had an intention to smoke conventional cigarettes.
- Among never smokers who had never used e-cigarettes, 21.5% had an intention to smoke conventional cigarettes.
- Of all students who had never smoked a cigarette, 90% reported some level of exposure to advertising or promotions for cigarettes or other tobacco products.

The CDC also reports that calls to the poison center regarding nicotine jumped from an average of one call per month in September 2010 to 215 calls per month in February 2014. These calls were usually made in reference to the refillable portion of e-cigarettes, called "e-juice."[7]

The first Surgeon General's report on smoking and health came out in 1964. At that time, there averaged about 42% overall smokers (varying between sexes and race). Smoking rates among adults and teens are now less than half what they were in 1964; however, 42 million American adults and about 3 million middle and high school students continue to smoke.[8]

About the Author

Jay Taylor, AS, RRT, TTS, is a retired respiratory therapist and tobacco education coordinator and has been appointed by the North Dakota governor as an advisor. He also continues to lecture on tobacco use and prevention and is active in his community promoting clean air standards.

While it may seem that we are winning the war on tobacco, the "new kid on the block" has snuck in by the back door to continue to feed nicotine dependency and addict newer and younger users. Regulation and research are sorely needed. Common sense will tell you that these products aren't good for anyone except "big tobacco" and individual manufacturers.

What can we do?

So, why is this important to the average RT? It's important because we aren't just there to treat disease. Prevention of disease states is and always has been our cause. I would love to see the end of the tobacco use crisis, wouldn't you?

What can we do? After you do your research and are comfortable discussing this issue, write letters to local newspapers and magazines; call in to radio programs where the topic of "smoker's rights" are being discussed (there really are no smoker's rights); get involved with local public health offices and clinics and volunteer for committees that continue to work against any further normalization of tobacco and tobacco products; and contact your local legislators and urge them to get this situation under control. ■

REFERENCES

1. Ashtray Blog: An Electronic Cigarette Blog website. The history of the electronic cigarette. Available at: www.ecigarettedirect.co.uk/ashtray-blog/2012/05/history-electronic-cigarette.html *Accessed March 17, 2015*
2. Free Patents Online website. Smokeless non-tobacco cigarette. Available at: www.freepatentsonline.com/3200819.html *Accessed March 17, 2015*
3. Los Angeles Times website. Demick B. A high-tech approach to getting a nicotine fix. Available at: http://articles.latimes.com/2009/apr/25/world/fg-china-cigarettes25 *Accessed March 17, 2015*
4. About.com website. Bellis M. Who invented electronic cigarettes? Available at: http://inventors.about.com/od/estartinventions/a/Electronic-Cigarettes.htm *Accessed March 17, 2015*
5. National Conference of State Legislatures website. Alternative nicotine products: electronic cigarettes. Available at: www.ncsl.org/research/health/alternative-nicotine-products-e-cigarettes.aspx *Accessed March 17, 2015*
6. Centers for Disease Control and Prevention website. More than 16 million children live in states where they can buy e-cigarettes legally. Available at: www.cdc.gov/media/releases/2014/p1211-e-cigarettes.html *Accessed March 17, 2015*
7. Centers for Disease Control and Prevention website. Notes from the field: calls to poison centers for exposures to electronic cigarettes — United States, September 2010–February 2014. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/mm6313a4.htm *Accessed March 20, 2015*
8. U.S. Department of Health & Human Services website. The health consequences of smoking — 50 years of progress: a report of the Surgeon General. Available at: www.surgeongeneral.gov/library/reports/50-years-of-progress/fact-sheet.html *Accessed March 17, 2015*

2015 AARC Summer Forum Programs

Phoenix, AZ

AARC Summer forum
Where Challenges Become Opportunities

2015 AARC Pre-Summer

Sunday, July 12 | Phoenix, AZ

NATIONAL BOARD FOR RESPIRATORY CARE (NBRC)

7:00 am – 11:00 am

NBRC Workshop: Develop Problems for the New Clinical Simulation Examination

Robert C Shaw Jr PhD RRT FAARC, NBRC Assistant Executive Director

Specifications for simulation problems will be described. After the training period, participants will have opportunities to develop some problems while following the specifications. There is no pre-registration for the 50 seats available for this session.

COMMISSION ON ACCREDITATION FOR RESPIRATORY CARE (CoARC)

12:00 noon – 1:30 pm

Meet the Commission

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

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

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

AMERICAN ASSOCIATION FOR RESPIRATORY CARE (AARC) Pre-Course

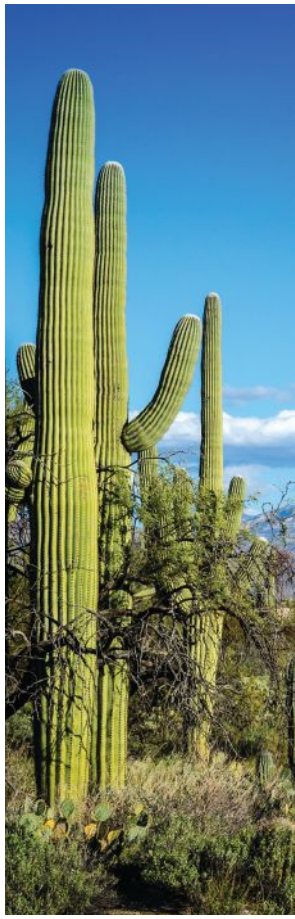
1:00 pm – 4:55 pm

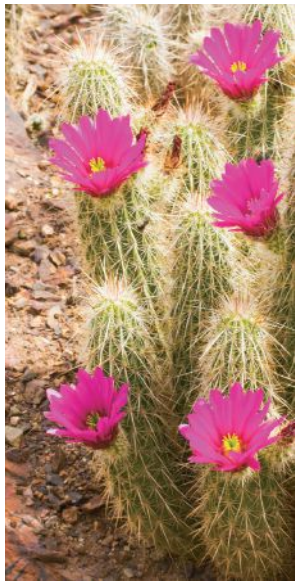
Course capacity is limited. Pre-registration is required. Deadline: Monday, June 22, 2015, or when course is full. Approved for 3.49 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

Focus on the Future: Respiratory Therapy Program Administration

Respiratory therapy program planning and development is a vital aspect of the role of the program's key personnel but it can be one area for which they are least prepared. This pre-course provides direction and hands-on experience in identifying components of an academic program plan, evaluating outcomes measures, determining expectations for academic achievement, and succession planning for respiratory therapy education programs.

AARC Summer forum
Where Challenges Become Opportunities





Forum Programs

1:00 pm – 1:30 pm

Academic Program Planning and Development

Bill Galvin MSEd RRT CPFT AE-C FAARC, Gwynedd Valley PA

Respiratory therapy program planning and development is a purposeful, strategic, and perpetual activity. Preparing graduates who are ready to enter the workforce or articulate to higher levels of academic achievement can be challenging for key personnel of respiratory therapy programs. This opening session will frame and shape some of the key issues and challenges faced by personnel of respiratory therapy programs.

1:35 pm – 2:25 pm

Outcomes Measures: Not Just a CoARC Requirement

Thomas V Hill PhD RRT FAARC, Athens GA

Outcomes measures are incorporated into the CoARC Annual Report of Current Status. This session will discuss the role of measuring program outcomes; methods of documenting outcomes, including information from the NBRC School Summary Report; and implications of the results. After a brief discussion of the above-mentioned points, the participants will work in small groups with sample NBRC School Score Reports to identify information that CoARC expects to be documented. Once documented, participants will evaluate outcomes and identify potential curriculum revisions followed by a discussion of the recommended changes.

2:25 pm – 2:35 pm

Break

2:35 pm – 3:25 pm

Academic Expectations: Developing a Cut Score

Robert C Shaw Jr PhD RRT FAARC, Olathe KS

Key personnel are responsible for the standards they create within an education program. When consequential student outcomes are linked to test results, key personnel should be prepared to justify the cut score. The criticality of using the criterion-referenced cut score will be emphasized. Participants will be divided into small groups while they (1) interact with a set of test items, (2) organize data based on their comparisons of the items to the criterion, and (3) produce a result that translates into a defensible cut score. The procedure modeled during the workshop can be applied to teacher-testing scenarios within programs.

Galvin, Bill

Hill, Thomas

Shaw, Robert

AARC Pre-Summer (continued)

Sunday, July 12 | Phoenix, AZ

3:30 pm – 4:20 pm

Succession Planning for Respiratory Care Education Programs

Bradley A Leidich MSEd RRT FAARC, Harrisburg PA

Succession planning is a necessary step for the continued success of an organization including an education program. This presentation will address (1) benefits of succession planning, (2) the components of a plan, and (3) barriers to development and implementation of a plan for a respiratory therapy education program. The participants will engage in small group discussions on this topic to develop a best practice list to be shared with course attendees.

4:25 pm – 4:55 pm

Best Practices for Academic Program Development

Ellen A Becker PhD RRT-NPS FAARC, Chicago IL

Participants will have opportunities to discuss recruitment and retention of qualified faculty, encouraging professionalism among students and faculty, and degree requirements. This presentation will present the compiled results of the feedback to provide recommendations for the improvement of respiratory care education.

AMERICAN ASSOCIATION FOR RESPIRATORY CARE (AARC)

5:30 pm – 7:00 pm

Welcome Reception

Stressed from a long day of travel? Apprehensive that it's your first Summer Forum and you aren't sure what to expect? Or perhaps you're just eager to reconnect with old friends? Regardless, you'll not want to miss the AARC Summer Forum Welcome Reception. Enjoy beverages and light snacks as you network with colleagues from around the country and mingle with AARC Corporate Partners. Interact with leadership from the AARC, CoARC, and NBRC. There's no better way to kick off 3 days of learning than by attending this opening event. Attendance is limited to registered attendees only.

Trustees from the American Respiratory Care Foundation will be in attendance to raise awareness about the mission and vision of the ARCF and answer your questions.

Leidich, Bradley

Becker, Ellen

2015 Summer Forum

Monday, July 13 | Phoenix, AZ

See pages 46-49 for registration form and fees, hotel reservation information, and travel discounts. Approved for up to 15.55 hours of continuing education credit (CRCE).

AARC Summer forum
Where Challenges Become Opportunities

GENERAL SESSION

8:00 am – 8:35 am

Douglas S Laher MBA RRT FAARC

AARC Associate Executive Director/
Presiding

The State of the Profession

Frank R Salvatore Jr MBA RRT FAARC, Danbury CT

In this Keynote Address, President Salvatore will update the audience on the goals, priorities, and strategic focus of the Association in 2015 and throughout his presidency. Attend this presentation and better understand the current and future direction of the profession. This is your opportunity to hear from the president of the AARC regarding topics that are important to you!

EDUCATOR TRACK

8:40 am – 4:10 pm

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

ASSOCIATE DEGREE OR BACCALAUREATE DEGREE: HOW DID WE GET THERE AND WHERE DO WE GO FROM HERE?

8:40 am – 9:05 am

Outcomes Associated with Program Type: What Does the Evidence Say?

Kathy S Myers Moss PhD(c) RRT-ACCS, Columbia MO

This presentation will provide an overview of the methods and results of 40 years of outcomes-based research in respiratory care and other health professions, and will describe the challenges associated with this research.

Salvatore, Frank

Myers Moss, Kathy

9:10 am – 9:45 am

Current Implications for Respiratory Care Education

Ellen A Becker PhD RRT-NPS FAARC, Chicago IL

This presentation will summarize recent program type-related actions taken by the AARC, CoARC, and NBRC and describe how educators might respond in the midst of ongoing policy discussions.

2015 AARC Summer

Monday, July 13 | Phoenix, AZ

9:50 am – 10:25 am

Are You Up to the Challenge? Transitioning Graduates to a Degree Advancement Program

Monica A Schibig MA RRT-NPS CPFT, Columbia MO

This presentation will provide an overview of the challenges faced by graduates of associate degree programs in transitioning to RT degree advancement programs and the potential refinements that can be made to the associate level programs to better facilitate the transition.

10:25 am – 10:55 am

Exhibitor Break

10:55 am – 11:30 am

Tobacco-Infused RT Education: Not Just Smoke and Mirrors

Georgianna G Sergakis PhD RRT RCP, Columbus OH

Tobacco education in RT is not just an add-on anymore. Infusion of tobacco dependence education and counseling into the RT curriculum should be the standard. We will discuss innovative and practical ways to address this growing niche in respiratory care and self-disease management.

11:35 am – 12:10 pm

Teaching Geriatrics: Creating Sensitivity in the Digital Age

Georgianna G Sergakis PhD RRT RCP

Millennial students comfortable in the digital age often need to be "plugged-in" to the needs and challenges of the aging population they will treat in the clinical environment. This presentation will review activities and strategies to provide a "status update" for future clinicians regarding the aging patient population.

Schibig, Monica

Sergakis, Georgianna

12:10 pm – 1:10 pm

Lunch (on your own)

TECHNIQUES AND TOOLS TO ASSURE CONSISTENT AND QUALITY CLINICAL EDUCATION

1:10 pm – 1:45 pm

Inter-Rater Reliability: A CoARC Site Visitor's Perspective

Monica A Schibig MA RRT-NPS CPFT, Columbia MO

This presentation will provide an overview of CoARC standard 3.11 related to inter-rater reliability. Using the perspective of a CoARC site visitor, the presenter will identify inter-rater reliability exemplars.

Forum

1:50 pm – 2:25 pm

Improving and Demonstrating Inter-Rater Reliability: Use of Video Assignments

Kathy S Myers Moss PhD(c) RRT-ACCS

Linda Lair MS RRT RPFT, Columbia MO

This presentation will provide a detailed description of the use of video assignments as a means of improving and demonstrating inter-rater reliability. The presenters will describe the priorities and the perspectives of program key personnel, clinical faculty, and students to highlight the multidimensional benefits to the creation of video assignments. Additionally, the presenters will illustrate the movie production and review process.

2:25 pm – 2:55 pm

Exhibitor Break

SIMULATION SYMPOSIUM

2:55 pm – 3:30 pm

Using Clinical Simulations from Day One

David L Zobeck MBA RRT CRT, Lancaster PA

The use of various clinical simulations from the first semester throughout the program shows the students how the information from their courses is used in patient care. The intent is to develop the process of critical thinking and decision making from the very beginning.

3:35 pm – 4:10 pm

Combining Written Clinical Simulations with High-Fidelity Mannequin Simulations

David L Zobeck MBA RRT CRT

Use of high-fidelity mannequin clinical simulation has been found beneficial in developing decision making and critical thinking skills, but it lacks some of the elements that are found in the written clinical simulation. Using PowerPoint, a simplified form of written simulation was designed to be used during a clinical simulation with a mannequin.

AARC Summer forum
Where Challenges Become Opportunities

Myers Moss, Kathy

Lair, Linda

Zobeck, David

2015 AARC Summer

Monday, July 13 | Phoenix, AZ

MANAGER TRACK

8:40 am – 4:10 pm

Cheryl A Hoerr MBA RRT FAARC

Chair, AARC Management Section/ *Presiding*

MANAGEMENT SECTION MEMBERSHIP MEETING

8:40 am – 9:05 am

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

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

ENGAGEMENT – THE KEY TO YOUR SUCCESS AS A LEADER

9:10 am – 10:25 am

Part 1: Shaking the Engagement Tree – Hiring Engaged Therapists

Garry W Kauffman RRT FAARC MPA FACHE, Winston-Salem NC

One of the keys to ensuring an engaged RT staff and your success as a manager is to hire engaged applicants. How can a hiring manager ensure that engaged candidates are identified and selected? This lecture will share techniques and new innovative methodologies for enhancing employee engagement during the advertising, interviewing, and onboarding processes.

Part 2: No Low Hanging Fruit Allowed – Creating an Engaged Staff

Cheryl A Hoerr MBA RRT FAARC, Rolla MO

Disengagement in the workplace is a costly and frustrating problem facing RT managers. Patient satisfaction, quality care, staff retention, and productivity have all been shown to be better in organizations with a higher percentage of engaged employees. This presentation will share some of the management actions that have been proven to promote and sustain therapist engagement.

Part 3: Cultivation and Sustainable Growth – Manager Engagement

Karen S Schell DHSc RRT-NPS RRT-SDS RPFT AE-C CTTS, Emporia KS

Before department managers can engage their staff, the managers themselves must be engaged with their organization and their own work. This presentation will share techniques for managers to increase their own engagement and, in doing so, provide a role model for success to their staff.

10:25 am – 10:55 am

Exhibitor Break

10:55 am – 11:30 am

Why Take the Stairs When You Can Take the Elevator? Succession Planning and Building Your Own Career Ladder

Laura Hartman RRT-NPS, St Petersburg FL

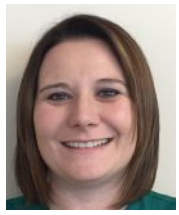
Garry W Kauffman RRT FAARC MPA FACHE, Winston-Salem NC

Increasingly, seasoned leaders are leaving management positions secondary to internal promotions, middle-management reductions, and advancement outside their organizations.


Kauffman, Garry


Hoerr, Cheryl


Schell, Karen


Hartman, Laura


Farmer, Connie

Forum

As a result, a knowledge and experience gap will exist if current leaders do not intentionally plan for their successors. This two-part lecture is for both seasoned managers interested in creating opportunities for their staff, as well as for younger leaders in positions where no succession plan exists.

11:35 am – 12:10 pm

Are You Doing More for Less? Building an Interdisciplinary Professional Ladder for High Performers

Connie Farmer BS RRT-NPS, St Petersburg FL

Do you have high performers who have maximized both their competencies as well as their annual salary? Are you looking for ways to motivate professional development in your staff? Are you seeking an integrated, multidisciplinary approach to retention? This session will describe a unique program built to reward employees who contribute beyond normal expectations. The LEAP program demonstrates amazing results that will provide advancement opportunities for your staff and recognition of your value to your organization.

12:10 pm – 1:10 pm

Lunch (on your own)

1:10 pm – 1:45 pm

The Consultants Are Coming – This Is Your Chance To Shine!

Lauren Whitlock, Senior Consultant, Deloitte Consulting

This presentation will focus on what to expect when consultants are engaged by your health system's leadership and what you can do as respiratory therapy leader to make the evaluation of your department as painless as possible. This session will follow a "Hospital" through an example consulting engagement and highlight common successes and pitfalls. By the end of this session, you'll understand not only how consultants evaluate a department but also how to actively engage in the assessment process in a positive way. You'll be able to actively participate in your next experience with consultants rather than be an anxious spectator.

1:45 pm – 2:15 pm

Exhibitor Break

CONSULTING WORKSHOP: PREPARATION, INTERACTION, AND FOLLOW-UP: WHAT YOU NEED TO THRIVE AND DEMONSTRATE YOUR VALUE

2:15 pm – 4:10 pm

Lauren Whitlock, Senior Consultant, Deloitte Consulting

Bruce Couillard RRT, Specialist Leader, Deloitte Consulting

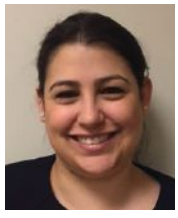
Garry W Kauffman RRT FAARC MPA FACHE, Winston-Salem NC

Building on the morning's lecture, the workshop will use your hospital's data and qualitative information in a mock consulting engagement. The workshop is divided into three parts:

Part I: Review what you should be doing in your day-to-day operations before a consulting engagement.

Part II: Review your hospital's data and what would stand out to a consultant both positively and negatively.

Part III: Discuss what you can do after a consulting engagement to maximize your performance metrics, minimize your chances of having your department evaluated in the future, and position yourself as a valued leader in your organization.



Whitlock, Lauren

Couillard, Bruce

2015 AARC Summer

Tuesday, July 14 | Phoenix, AZ

EDUCATOR TRACK

8:00 am – 12:15 pm

Ellen A Becker PhD RRT-NPS FAARC

Chair, AARC Education Section/ *Presiding*

COARC SYMPOSIUM

8:00 am – 8:35 am

Succession Planning for Key Program Personnel

Bradley A Leidich MSEd RRT FAARC, Harrisburg PA

Robert P DeLorme MEd RRT-NPS, Lawrenceville GA

The AARC Human Resource Survey identified a large number of practitioners and educators who will be retiring over the next several years. These findings support the need for programs to recruit, evaluate, and select qualified candidates for key personnel positions, and facilitate their transition. The speakers will describe the components of an effective succession plan and also share their experience in managing such transitions in their programs.

8:40 am – 9:10 am

Articulation Agreements

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

Opportunities for practicing therapists to earn advanced education credentials are essential to moving the profession forward. The speaker will describe the key components of successful articulation agreements, how to address potential obstacles, and identify various models currently in practice.

9:15 am – 9:50 am

Interprofessional Education

Pat Munzer DHSc RRT FAARC, Topeka KS

The speaker will describe the value of Interprofessional Education and the benefits to students and institutions, with the objective of cultivating collaborative practice for providing more patient-centered care. Various models for facilitating this process will be described, along with the opportunities and obstacles of each model.

9:50 am – 10:20 am

Exhibitor Break

CLASSROOM MANAGEMENT: CULTURE, BEHAVIORS, AND LEGALITIES

10:20 am – 10:55 am

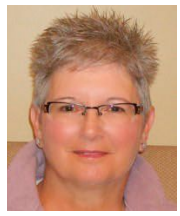
Classroom Culture in 2015

Jennifer Keely MEd RRT-ACCS, Columbia MO

Teaching in today's respiratory care classroom can present some unique challenges. This presentation provides an overview of factors contributing to the development of classroom culture. It will identify and provide general management strategies.

Leidich, Bradley

DeLorme, Robert



Munzer, Pat

Keely, Jennifer

Forum

11:00 am – 11:35 am

Student Mental Health Concerns in the Classroom

Sara Parker MPH RRT-NPS AE-C, Columbia MO

This presentation affirms the complexity of classroom management by addressing mental health and behavioral issues affecting classroom dynamics. The presenter will briefly describe clinical and nonclinical diagnoses, including attention deficit, hyperactivity, dyslexia, perfectionism, and self-esteem issues.

11:40 am – 12:15 pm

Family Educational Rights and Privacy and Other Legal Concerns

Linda Lair MS RRT RPFT, Columbia MO

This presentation offers the perspective of program key personnel to facilitate classroom decorum, while also giving attention to federal regulatory consideration and the need to anticipate potential lawsuits or student appeals procedures. Time permitting, the symposium will conclude by inviting additional classroom decorum examples from the audience.

12:15 pm – 1:15 pm

Lunch (on your own)

MANAGER TRACK

8:00 am – 12:15 pm

Cheryl A Hoerr MBA RRT FAARC

Chair, AARC Management Section/ *Presiding*

8:00 am – 8:35 am

Preceptor Training – How To Prepare and Support Your Staff To Be Successful Preceptors

Karen S Schell DHSc RRT-NPS RRT-SDS RPFT AE-C CTTS, Emporia KS

Getting your staff up to speed as preceptors is a challenge whether you are a new manager or a seasoned leader. Picking the right person for the preceptor position, educating them, and providing the time they need is critical to allowing them to successfully grow the new staff. Instruction and design of the preceptor course that you can implement in your department will be provided to ensure that you are successful in your department and organization.

8:40 am – 9:10 am

Preparing Your Department for Patient/Family-Centered Care

Keith Hirst MS RRT-NPS RRT-ACCS, Boston MA

This presentation will define and provide strategies for implementing the 4 principles of Patient/Family-Centered Care into your department and organization. Information will be shared to provide attendees with the knowledge and skills to manage and sustain Patient/Family-Centered Care success within your department and your health care organization.

Lair, Linda

Schell, Karen

2015 AARC Summer

Tuesday, July 14 | Phoenix, AZ

9:15 am – 9:50 am

Using Social Media as a Way To Connect to Patients

Jason Moury MPH RRT, Winchendon MA

"Using Social Media to Connect to Patients"? Are you reading this correctly? Yes, the use of social media can be a great way to connect with our patients, but it does not come without potential issues. This presentation will provide information about how to utilize social media without violating HIPAA regulations, and subsequently, lose your job. Examples of proper use and improper use will be demonstrated, as well as basic steps to utilizing social media to better understand your patients and families, educate them, and increase their engagement with your respiratory care services and health care organization.

9:50 am – 10:20 am

Exhibitor Break

10:20 am – 10:55 am

Effective Transitions – Reducing Readmissions by Partnering with Post-Acute Care Resources

Cheryl A Hoerr MBA RRT FAARC, Rolla MO

It is widely accepted that chronic illness is responsible for 75% of total health care costs, and poor disease management has been identified as the primary contributor to rehospitalizations. This presentation will share the details of a readmission prevention strategy that has been successful as a result of the collaborative efforts of acute care, home health, physician clinics, and long-term care facilities.

11:00 am – 11:35 am

Care Transition: An Intervention Model To Reduce 30-Day Readmissions for COPD

Alan Greene RRT, Nashville TN

As a follow-up to the previous presentation, this presentation will provide details of proven, innovative programs to reduce readmissions for our COPD patients. This program has been demonstrated to be widely successful because it utilizes respiratory therapists in both traditional and novel ways. RTs are key in this program, which has resulted in improved outcomes related to hospitalizations, reducing 30-day readmissions, and improving quality of life for the COPD population. If you are looking for new ways to demonstrate the value of your staff and your value as an operational leader, you'll want to learn how you can apply this methodology in your department.

11:40 am – 12:15 pm

Measuring Outcomes: What's Working, Does It Make a Difference, and Is It Worth It?

Sarah L Varekojis PhD RRT, Columbus OH

With the implementation of health care reform initiatives, health care systems are being held accountable for their outcomes in ways we could never have imagined just a few short years ago. RT roles are also

Moury, Jason

Hoerr, Cheryl

Greene, Alan

Varekojis, Sarah

evolving and expanding to include disease management and other areas of advanced practice. However, unless we have accepted processes to measure the value of our interventions, we will not be able to advance these new roles. Measuring meaningful outcomes is one way to demonstrate benefit to the institution, to the patient and/or family, and to the value of expanding RT roles and your value as an operational leader.

12:15 pm – 1:15 pm
Lunch (on your own)

GENERAL SESSION

1:15 pm – 1:50 pm

Douglas S Laher MBA RRT FAARC

AARC Associate Executive Director/
Presiding

RESPIRATORY CARE AT THE CROSSROADS: ADAPTING TO NEWER CARE-DELIVERY PARADIGMS

Patrick J Dunne MEd RRT FAARC, Fullerton CA

At the five-year anniversary of the signing of the Affordable Care Act, there are growing examples of newer care-delivery models being incorporated into the traditional fee-for-service model. One area in particular is the growing awareness of the need to overhaul how the health care system deals with chronic medical conditions. This lecture will review the essential elements of the Chronic Care Model and the new role it portends for respiratory care.

EDUCATOR TRACK

2:00 pm – 4:55 pm

Ellen A Becker PhD RRT-NPS FAARC

Chair, AARC Education Section/
Presiding

EDUCATION SECTION MEMBERSHIP MEETING

2:00 pm – 2:35 pm

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

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

2:40 pm – 3:00 pm
Exhibitor Break

Dunne, Patrick

AARC Summer forum
Where Challenges Become Opportunities

2015 AARC Summer

Tuesday, July 14 | Phoenix, AZ

WRITING AND RESEARCHING

3:00 pm – 3:35 pm

Evaluating the Evidence: What Every Student Should Be Taught and Every Therapist Should Do

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

Reading, evaluating, and discussing medical literature is essential for providing state-of-the-science respiratory care. This lecture will provide a logical grading algorithm for evaluating medical data that can be used by students, faculty, and practicing therapists when discussing therapeutic strategies with other health care professionals.

3:40 pm – 4:15 pm

"No, You Can't Cite Wikipedia and You Can't Use 'lol', 'OMG'…!" Teaching Students To Write for the Profession

Jennifer L Keely MEd RRT-ACCS, Columbia MO

This presentation will address the development of respiratory therapy students' ability to write for the profession through the use of a literature review assignment that is broken down into manageable sections over the course of a semester. An assignment template will be made available to attendees to adapt for use in their own institutions.

4:20 pm – 4:55 pm

Incorporating Research into Clinical Practice

Ellen A Becker PhD RRT-NPS FAARC, Chicago IL

Performing the literature search and writing the research paper is only a small part of the research process. Incorporating your work into clinical practice is the ultimate goal of the process. The presenter will share her experiences and her expertise in mentoring students to apply their research to daily practice.

Joyner, Robert

Keely, Jennifer

Becker, Ellen

MANAGER TRACK

2:00 pm – 4:00 pm

Cheryl A Hoerr MBA RRT FAARC

Chair, AARC Management Section/ *Presiding*

WORKSHOP: ESTABLISHING CHRONIC RESPIRATORY CARE SERVICE

2:00 pm – 4:00 pm

Establishing Chronic Respiratory Care Service: Developing a Path and Process to Implementation

Patrick J Dunne MEd RRT FAARC, Fullerton CA

Garry W Kauffman RRT FAARC MPA FACHE, Winston-Salem NC

This workshop is linked with the plenary lecture by Mr. Dunne that set the stage for why we must take the stage, to lead our organization from our historical episodic care to one that integrates care across the health system continuum. In a designed, highly interactive work session, attendees will help determine: the role RT Departments must play in chronic respiratory care, the extent the role of an RT department should have in chronic disease care in general, what RTs involved in chronic care should be called (e.g., COPD Care Manager/Coordinator, COPD Navigator, Disease Manager), the metrics best suited to monitor and report chronic care efforts, and the strategies for a successful transition. At the conclusion of this workshop, the RT leader will have the knowledge and tools to embellish their current disease state program - or for those seeking to create a program, how to do so and demonstrate your value to your organization as an effective and visionary leader.

Dunne, Patrick

Kauffman, Garry

2015 AARC Summer

Wednesday, July 15 | Phoenix, AZ

GENERAL SESSION

7:00 am – 7:55 am

Bill Galvin MSEd RRT CPFT AE-C FAARC/*Presiding*

AGENCY UPDATES

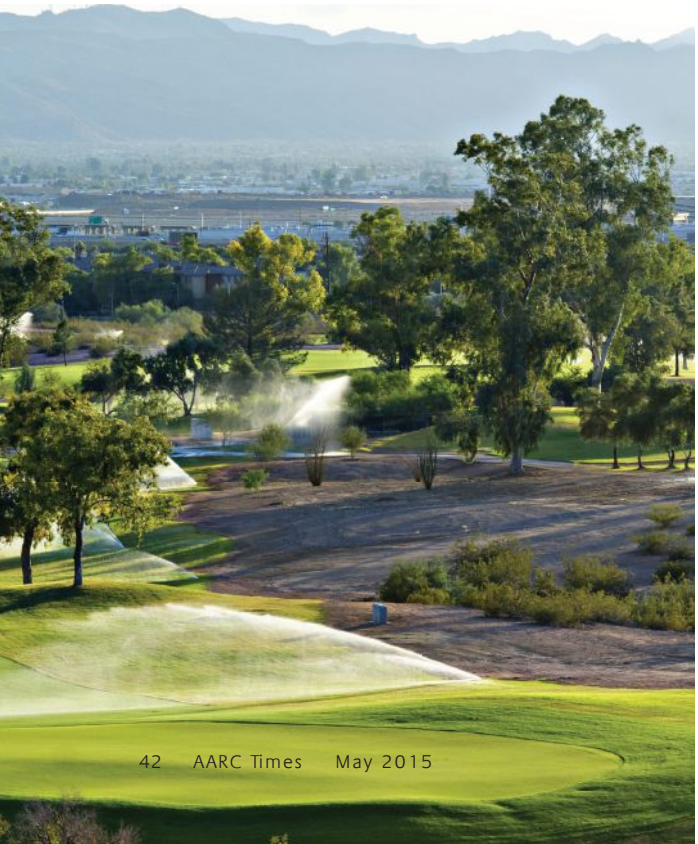
Frank R Salvatore Jr MBA RRT FAARC – AARC President

Michael T Amato MBA – ARCF Chair

Kathy J Rye EdD RRT FAARC – CoARC President

Carl F Haas MLS RRT CPFT FAARC – NBRC President

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



EDUCATOR TRACK

8:00 am – 12:05 pm

Ellen A Becker PhD RRT-NPS FAARC

Chair, AARC Education Section/ *Presiding*

Jimmy A Young Memorial Lecture

Presented by the National Board for Respiratory Care

8:00 am – 9:30 am

Criterion Validation of the Therapist Multiple-Choice Examination and the Clinical Simulation Examination – Results from the 2013 Studies

Robert C Shaw Jr PhD RRT FAARC, NBRC Assistant Executive Director and Psychometrician

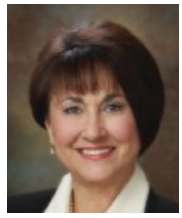
Two studies were done in 2013. Results were intended to document whether, and by what magnitude, test scores were related to the clinical performances of respiratory therapists. Highlights from the two studies will be shared.

9:30 am – 9:45 am

Break

Salvatore, Frank

Amato, Michael



Rye, Kathy

Haas, Carl

Shaw, Robert

Forum

CULTIVATING PROFESSIONALISM IN THE RC GRADUATE

9:45 am – 10:20 am

OMG! Will I Ever Get Them Ready for a J.O.B.? lol

Pam Halfhill MS RRT, Lima OH

Graduates have met the academic rigor of your program, but have you prepared them to be a true professional? The development of core curriculum items such as cultural competency, professionalism, and academic attainment is critical to student success after graduation. How can we make sure our students are as competent in their professional skills as they are in their technical skills?

10:25 am – 11:00 am

Do You Really Want Me To Hire Your Students? A Manager's Perspective

Garry W Kauffman RRT FAARC MPA FACHE, Winston-Salem NC

While respiratory care programs focus on meeting CoARC standards addressing placement of their graduates, what educators do not know is what happens within the offices of hiring RT managers, with respect to selection of prospective candidates for their departments. This presentation will provide the perspective from not only one manager's 30+ years of experience in hiring graduates, but also the combined thoughts of managers throughout the country, as gleaned from a national survey of RT leaders regarding what characteristics, competencies, and behaviors are demanded of RTs to be successful in their department and organizations.

DR. FRED HELMHOLZ EDUCATION LECTURE SERIES

Presented by the Commission on Accreditation for Respiratory Care

Thomas V Hill PhD RRT FAARC/ *Presiding*

11:05 am – 12:05 pm

Professional Volunteerism

Kerry E George MEd RRT-ACCS FAARC, Ankeny IA

The speaker will describe the importance of faculty participation in professional activities as a volunteer, including service to the professional, accrediting, and credentialing organizations, and avenues for program faculty to serve. The speaker will also share his experience with creating a culture that encourages and facilitates these activities within an educational program.

Halfhill, Pam

Kauffman, Garry

George, Kerry

2015 AARC Summer

Wednesday, July 15 | Phoenix, AZ

MANAGER TRACK

8:20 am – 11:45 am

Cheryl A Hoerr MBA RRT FAARC

Chair, AARC Management Section/ *Presiding*

8:20 am – 8:55 am

Leader or Hurdler? RT Leadership Trends and How To Move Forward Despite the Obstacles

Frank R Salvatore Jr MBA RRT FAARC

With the need to innovate and move RT departments into meeting the needs of our patients, providers, payors, and accreditation/regulation/legislation, department leaders need to adapt their leadership style. The lecture will use one organization's experiences to demonstrate leadership style and tactics that need to be adapted to advance the value of respiratory care services and your role as an RT leader.

9:00 am – 9:35 am

Developing a Pediatric Specialty Team in a Community Hospital

Claire Aloan MS RRT-NPS FAARC, Rochester NY

Overview the selection and training of pediatric specialists in a community hospital setting, including member selection, competency development, and use of specialty training programs such as STABLE, PALS, and NRP.

9:35 am – 9:50 am

Break

9:50 am – 10:25 am

LTACHs – New Rules and New Opportunities

Zachary Gantt RRT, Livingston TN

Long-term acute care hospitals (LTACHs) have been preparing for impending changes and are now dealing with changes in reimbursement from CMS. Along with financial change, come changes to the eligibility requirements for admission to the LTACH. It is important for not only those working in the LTACH setting to know these changes, but also those working in short term acute care Hospitals (STACHs). Both STACH and LTACH RT leaders need to understand the new system in order to maximize collaboration between organizations by facilitating the timely and effective transition of patients between the levels of care.

10:30 am – 11:05 am

RT Unit-Based Council – Engaging the Team

Gary Wickman BA RRT FAARC, Everett WA

In a recent survey among hospital executives, "employee engagement" was listed as one of the most noted challenges facing senior executives. And, RT leaders can't be much different with this challenge. If you are interested in improving your employee engagement (note: "Satisfaction" is meaningless!), this lecture will review one method to engage the team to participate in quality and work life improvement, with the result being a more highly engaged RT team and a more successful RT leader.

Salvatore, Frank

Gantt, Zachary

Wickman, Gary

Forum

11:10 am – 11:45 am

Tips for Making It Right When You Make a Mistake

Dana Evans MHA RRT-NPS, St Louis MO

Being in charge does not make you infallible. In fact, most of us would admit that the higher up the ladder you go, the more opportunities you have to make mistakes. What we need to learn as leaders is not that we won't make mistakes but what we can do to avoid making a difficult situation worse. The presentation will discuss methods for owning up to your mistakes, how to make it right with the affected person, and how to remain respected by your staff, your peers, and your boss in the process.

CLOSING CEREMONY

12:10 pm – 12:45 pm

Douglas S Laher MBA RRT FAARC, AARC Associate Executive Director/ ***Presiding***

Summer Forum 2015: Justifying the Experience (and Expense)

Patrick J Dunne MEd RRT FAARC, Fullerton CA

The "wrap-up" session will review the salient "take home" message of Summer Forum 2015. By reflecting on the actionable items proposed by presenters to address current school and workplace challenges, the postive cost-benefit for attending will emerge.

Evans, Dana

Dunne, Patrick

2015 AARC Summer

AARC Summer Forum 2015 Registration Form • Phoenix, AZ

Monday-Wednesday, July 13-15, 2015

INTERNET: **Go to www.AARC.org to register online and to receive a confirmation.**
or MAIL: **Send this form to AARC Summer Forum, 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063-4706 U.S.A. Full payment must be included with your registration form.**
or FAX: **If paying by American Express, MasterCard, or VISA, you may fax your registration form to 972-484-2720.**

PLEASE PRINT

First/Last Name for Badge _____

Credential (check up to three to be printed after your name): ☐ RRT ☐ CRT ☐ PhD ☐ MA ☐ MD ☐ Other_____

AARC Member # _____ **E-mail Address** _____@_____

Employer _____

Preferred Mailing Address ☐ **Home or** ☐ **Business** **Daytime Phone ( )** _____

_____

City _____ **State** _____ **Zip** _____

Pre-Course

Focus on the Future: Respiratory Therapy Program Administration
Sunday, July 12, 1:00 pm - 4:55 pm

Course capacity is limited. Pre-registration is required. Deadline: June 22, 2015 or when course is full.

CHECK ONE:	By May 15	By June 12	On-Site
AARC Active/Associate Member	☐ $75	☐ $85	☐ $90
Non-member	☐ $125	☐ $135	☐ $140
Student***	☐ $15	☐ $15	☐ $15

*** Must be registered for the Summer Forum

Summer Forum

Monday, July 13, 8:00 am - Wednesday, July 15, 12:45 pm

CHECK ONE:	By May 15	By June 12	On-Site
AARC Active/Associate Member	☐ $299	☐ $324	☐ $349
Non-member*	☐ $439	☐ $449	☐ $459
Student	☐ $49	☐ $49	☐ $49

Spouses may register on-site for $25.

Method of Payment

Check or Money Order enclosed ☐

Charge my ☐ **VIsa** ☐ **MasterCard** ☐ **American Express**

Name of Card Holder (print) _____

Credit Card # _____

Expiration Date_____ **Signature** _____

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

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

No invoices will be issued. Cancellations must be in writing. There will be either a 25% or $50 handling fee, whichever is less, for cancellations received by June 22, 2015. No refunds will be made thereafter.

Site and Travel Information

Save with Discounted Transportation and Lodging

Site

All AARC Summer Forum meetings will be held at the JW Marriott Phoenix Desert Ridge Resort & Spa, 5350 E. Marriott Drive, Phoenix, Arizona, 85054; phone 480-293-5000.

Benefits for AARC Attendees Staying at the JW Marriott Phoenix Desert Ridge

- **$50 one-time resort credit** for guests staying a minimum of 5 nights or longer. Credit must be consumed during the event dates and can be used at the following outlets: Meritage, Stonegrill, Tuscany, Twenty6, Starbucks, Revive Spa, Wildfire Golf Club and Golf/Spa Gift Shops. Credit not applicable to room rate.
- **Complimentary high speed Internet** in all guest rooms.
- **Complimentary wireless Internet** in the lobby.
- **Complimentary access to the fitness center**, excluding REVIVE Spa.
- **10% discount on 50-minute REVIVE spa treatments**; excludes Salon services. Identify yourself as an AARC attendee when you call for an appointment.
- **Complimentary self-parking** for all AARC attendees.
- **Four acres** of swimming pools, Lazy River with waterslide, whirlpools and poolside dining.
- **Play championship golf** at Wildfire Golf Club, home to the LPGA Founders Cup.

Hotel Reservations

- **Cut-Off Date** for the AARC's special sleeping room rate is Monday, June 22.
- **Call** 1-888-236-2427 or 480-293-5000. Refer to **"AARC Summer Forum."** Discounted rates are available only through these phone numbers.
- **Online** at https://resweb.passkey.com/go/AARCSummerMeeting.
- **Room Rate:** $132 plus 12.27% tax single/double occupancy. Deposit required.

Airline Discounts

Discounts are valid for Phoenix Sky Harbor International Airport (PHX). Discounted fares also apply to family and friends. The airport is approximately 30 minutes from the hotel.

DELTA

- **Online** at www.delta.com. Select Advanced Search and enter NMKA4 in the Meeting Event Code box.
- **Call**, or have your travel agent call, Delta Meeting Network at 800-328-1111 (booking fee added). Refer to meeting code NMKA4.

UNITED

- **Online** at www.united.com. Enter ZTHV345145 in the Offer Code box (receive an additional 3% off and no booking fee).
- **Call** United Meetings at 800-426-1122 (booking fee added). Refer to Z code ZTHV and Agreement Code 345145.

Ground Transportation

Airport Shuttle/Sedan/Taxi Services

Transtyle Transportation is the preferred provider for the JW Marriott Desert Ridge. Two options are offered for service from the Phoenix Sky Harbor International Airport. All sedan and SUV rates quoted below are for up to 4 people per vehicle. Reservations are required. Call 800-410-5479 or 480-948-6131.

- **Will Call Service:** Choose a sedan at $65 one way or an SUV at $85 one way. After collecting your luggage from baggage claim, call 480-948-6131 for directions to meet the driver.
- **Meet & Greet Service:** Choose a sedan at $90 one way or a SUV at $110 one way. You will be greeted at the bottom of the ramp in Terminal 2 or at the bottom of the escalator in Terminals 3 and 4 by a chauffeur holding a name sign. The chauffeur will assist in collecting your luggage before going to your vehicle.

The Meet and Greet for an International flight will be charged as a 2 hour minimum, not at the standard discounted rate.

SuperShuttle is offering a fare discount of $2.00 off one-way or $4.00 off round-trip for the shared-ride service from Phoenix Sky Harbor Airport to the JW Marriott Desert Ridge. The round-trip total cost is $42.00 per person. To receive the discount, tickets must be pre-purchased online at tinyurl.com/SuperShuttle-AARC-PHX at least 48 hours in advance. Additional coupons cannot be combined. The van can make up to two additional stops in route to and from the JW Marriott Desert Ridge and the airport.

There is a $2.00 booking fee when calling 800-258-3826 to make a reservation. There is no booking fee for online reservations.

Taxi

Rates remain the same regardless of the number of passengers or number of bags. The minimum fare is $15; the average fee is $59 - $63 each way. The first mile is $5. Each additional mile is $2.30. Each hour of a traffic delay is $23. There is an airport surcharge of $1 each way.

The following taxis are contracted to pick up passengers at the Phoenix Sky Harbor Airport: Apache Taxi, AAA/ Yellow Cab, Mayflower Cab.

Forum

Rental Cars

Discounts are available for pick-up at Phoenix Sky Harbor International Airport. Hertz also has a rental desk at the JW Marriott Desert Ridge (advance reservations required).

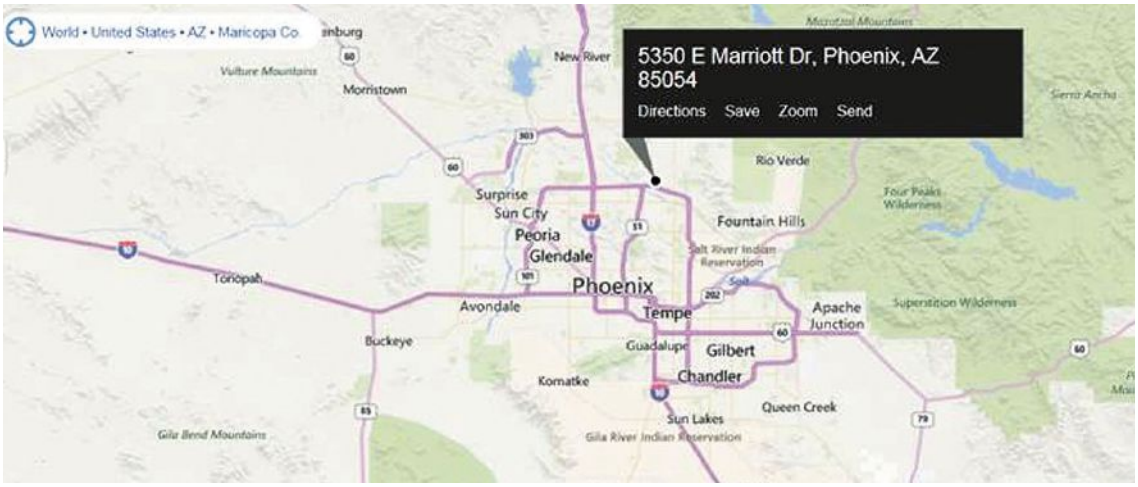
- **Online** at www.budget.com. Click the "Use an offer code" box. Enter "U064639" in the "Offer Code" box.
- **Call** 800-842-5628. Refer to Discount Offer Code U064639.

- **Online** at www.enterprise.com. Enter Discount Rate Code L9D0194 in the "Optional" code box. On the following page enter AME in the Sign In Box.
- **Call** 800-736-8222. Refer to Discount Rate Code L9D0194.

- **Online** at www.hertz.com. Enter 049T0011 in the Convention Number (CV) discount box.
- **Call** 800-654-2240 or 405-749-4434. Refer to Convention Discount Code 049T0011.

What to See and Do

- Phoenix: visitphoenix.com/things-to-do/index.aspx
- Frank Lloyd Wright in Scottsdale: tinyurl.com/Frank-Lloyd-Wright-Scottsdale
- Flagstaff: flagstaffarizona.org/things-to-do/
- Arizona Wine Trails: arizonawine.org
- Grand Canyon: nps.gov/grca/planyourvisit/index.htm
- Scenic Rail Tours: tinyurl.com/AZ-Scenic-Rail-Tours
- Petrified Forest: nps.gov/pefo/index.htm
- Phoenix: visitphoenix.com/things-to-do/index.aspx
- Painted Desert: arizona-leisure.com/painted-desert.html
- Monument Valley Navajo Tribal Park: navajonationparks.org/htm/monumentvalley.htm
- Arizona: visitarizona.com



A JEWEL in the SAND

Summer Forum 2015 heads to the JW Marriott Phoenix Desert Ridge Resort & Spa

Inspiring views and unparalleled accommodations await attendees July 12-15

Located on 316 stunning acres in the middle of the Sonoran Desert in North Phoenix, the AAA 4-Diamond JW Marriott Phoenix Desert Ridge Resort & Spa will welcome this year's attendees at the AARC Summer Forum with beautiful vistas and luxurious accommodations, making it the perfect place not only for the meeting but for a summer get-away with friends and family.

The rooms:

The ambiance begins in the rooms themselves. With choices that range from the standard guest room all the way up to a two-bedroom suite, there is something for everyone, regardless of whether you're bringing your family along or not. All feature either private balconies or patios that look out onto desert vistas, mountain landscapes, or garden views. Plus, there is complimentary in-room high-speed Internet and all the comforts you need between the educational sessions. Like the rest of the resort, all the rooms in the Desert Ridge Resort & Spa are smoke free too, ensuring a happy and healthy environment for all.

The dining:

In addition to a host of nearby restaurants, the resort features several onsite dining options sure to appeal to any palate. Start your morning with a sumptuous breakfast buffet — or just a latte and pastry from the onsite Starbucks — then enjoy some American or regional Southwestern fare at Stonegrill for lunch or dinner. Splash Bar & Grill is also a great place to grab a quick bite at lunch, with a casual menu of salads, burgers, sandwiches, and delicious appetizers.

For a special meal, head over to Roy's Pacific Rim for some Hawaiian fusion cuisine by famed Hawaiian restaurateur Roy Yamaguchi, or reserve a table at the Wildfire Golf Club's Meritage Steakhouse and enjoy a great meal while gazing out at the stunning views across the golf course. Roy's is a great place to get together with friends and colleagues during happy hour too — as is Twenty6, a lounge featuring the signature JW Marriott wine program and charcuterie. If healthy eating is your thing, try the Revive Spa Bistro for fresh organic creations in serene indoor and outdoor settings.

The spa:

As the day winds down, take some time to pamper yourself at the Revive Spa, where you'll have your choice of spa treatments in separate male and female indoor relaxation rooms complete with private patios or out in the fresh air of the coed outdoor lounge. A tap pool lined by towering palms and seven private cabanas offers a great place to kick back and relax, too. *Conde Nast Traveler* magazine has named the Revive Spa one of the top 10 resort spas in the country, and the *Mobile Travel Guide* ranks it among America's best spas as well.

The pools (and more):

With four outdoor pools, guests at the Desert Ridge Resort & Spa will have trouble picking their favorite. The Lazy River offers a peaceful ride down a flowing stream followed by a fun splash down a water slide. The Mesa and Sidewinder promise sumptuous relaxation, while the Wildfire is great for families, with its children's pool area.

If you're looking for more ways to get active, you can hit the state-of-the-art fitness center, and the resort also has a Family Escape program with morning sessions, family times, special activities, and night parties. Bike rentals, a jogging fitness trail, sauna, and tennis courts are also available.

JW MARRIOTT®
PHOENIX DESERT RIDGE

What's nearby:

The Desert Ridge Resort & Spa is a vacation wonderland in and of itself; but if you decide to go off the premises, you'll find a wealth of activities within a short drive away. Desert Ridge Marketplace is located right across the street and features 1.2 million square feet of retail space offering great shopping and dining in a unique outdoor setting complete with unique water features. The nearby McDowell Sonoran Preserve offers hikers of all abilities the chance to get up close and personal with some of the most beautiful landscapes on the face of the earth. If you have a musical bent, you won't want to miss the Musical Instrument Museum, featuring instruments played by everyone from Johnny Cash and Elvis Presley to John Lennon and Taylor Swift. Concerts are held on a regular basis as well, and there are a number of special programs just for kids — including an Experience Gallery where young and old alike can try their hand at playing a variety of instruments.

It all adds up to a great place to come together with colleagues from around the world to discuss the latest developments in respiratory care management and education. Plus, if you decide to bring along your family, you're certain to enjoy a vacation that you'll all remember for a lifetime! ■

RC Currents

IN THE NEWS

The Bill Lamb Award

As a former speaker of the AARC House of Delegates, Bill Lamb, BS, RRT, CPFT, FAARC, has been recognized by his colleagues as someone who always goes the extra mile for his profession. So when the House decided to establish a new award aimed at honoring those who represent the profession and organization at a high level, they could think of no better person to exemplify the award than Lamb himself.

"The Bill Lamb Award is an award that recognizes the untold stories of a respiratory therapist that goes above and beyond the service of excellence, volunteering, and mentoring others," says Angela Butler, BS, RRT-NPS, CPFT, delegate from Rhode Island, "an individual who has taken the extra time to inspire others and set the pathway toward professionalism." The inaugural award went posthumously to Jerry Bridgers, CRT, at AARC Congress 2014 in Las Vegas for the many years he spent as a member of the House of Delegates and as a member of the Association's Political Advocacy Contact Team.

You can nominate a deserving member of the profession for the Bill Lamb Award through your AARC state society. Each state society then picks a nominee to send on to the House of Delegates Volunteering Mentoring Committee, and committee members deliberate on the winner during their summer House meeting. The award will be bestowed during the House meeting held in conjunction with the AARC Congress next fall. For more information about the award, visit http://c.aarc.org/state_society/ and scroll down the page until you see "The Bill Lamb Award." ■

ARCF Now Accepting Applications for the 2015 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 ARCF. Since 1990, health professionals from more than 50 countries have shared experiences, knowledge, and lasting friendships through this exceptional program.

The three-week program takes each participant to two host cities in the United States and concludes with attendance and acknowledgement at AARC Congress 2015 to be held Nov. 7–10 in Tampa, FL.

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

The AARC Needs You To Volunteer for Your Profession

by Frank Salvatore, MBA, RRT, FAARC
AARC President

As president of the AARC, I realize it's important to receive vital assistance from my colleagues — Association members — in order to achieve everything the Association, its membership, and the patients we care for need. I am now asking you to volunteer your time and expertise to our professional organization.

Having RT volunteers not only facilitates our growth as a profession and Association but also presents all volunteers with the opportunity to develop and advance their leadership skills, increase their professional contacts, and give back to the profession and to the patients we serve.

There are many people like you who need and use the professional tools the AARC provides. Why not get in on the ground floor and collaborate with your colleagues to develop new tools to help RTs continually improve and grow as respiratory care professionals?

We need you to volunteer your expertise and skills to work on various committees and do the important work of the Association. There is enormous momentum and potential for our profession right now. No one individual can accomplish everything we need to do, but I know that dedicated RTs supporting the AARC's efforts can make vast strides for assuring quality patient care in the continuum of care and securing the respiratory therapist's rightful place in the changing health care system.

AARC members always help keep a constant flow of creativity and energy for what we can do together. We need everyone's input. With the ever-increasing responsibilities RTs have, we need you to help identify your educational and informational needs so we can meet them.

This is your Association, and now is the time to volunteer. We look for a balance of experienced and new members on all our committees. It is this special mixture that enables the AARC to continue being the vital professional organization it always has been by mentoring in new talent. It also ensures the future of the RT in the health care environment as we witness some of the most sweeping changes in history.

Please consider this a friendly challenge — and think about how you can help your Association, the profession, and the patients we serve. Take time now to network with your fellow AARC members — perhaps someone active in your state society — whom you believe could contribute special talents or services to the AARC. Encourage them to volunteer so that we can capitalize on the vast amount of expertise available in our Association membership.

You can write to me at the AARC Executive Office: 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063; kuykendall@aarc.org. Tell me how you would like to serve and provide a copy of your résumé so I can consider how to best use your talents.

I am confident we can keep reaching milestones in the respiratory care profession if we all work together. Thank you for supporting your professional organization, the AARC! ■

Check Out the AARC New Members List Online

The "New Members" column can be accessed at http://c.AARC.org/new_members. Current AARC members are encouraged to check this site on the first of each month to view the names of individuals who have been approved as "Active Members" of the Association. 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. ■

Educators: Help Recognize Outstanding Students

The American Respiratory Care Foundation (ARCF) is accepting applications for its undergraduate and postgraduate Education Recognition Awards now through **June 15** and is asking RC educators to help get the word out to their students. So check 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 2015, to be held Nov. 7–10 in Tampa, FL.

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. ■

Enter for a Chance To Win a Free Membership Renewal

AARC Times is looking for creative AARC members to enter our annual AARC Photo Contest. Finalists will receive a **free** one-year membership renewal with the chance of their photo being chosen and featured on the cover of the April 2016 *AARC Times*. For information on how to enter, go to www.AARC.org/resources/publications/aarc-times and click on the "Photo of the Year Contest" link. Deadline to submit photos is **Nov. 10, 2015.** ■

APPLY BY
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.arcfoundation.org/international/fellows/city_host.cfm. The fellowships take place in the fall just prior to AARC Congress 2015, scheduled this year for Nov. 7–10 in Tampa, FL.

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

Submit Your Open Forum Abstract for AARC Congress 2015 by May 1

The AARC invites you to submit abstracts for the Open Forum at AARC Congress 2015. 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. We now have three different ways you can present your poster at AARC. See https://aarc2015.abstractcentral.com for more details. The deadline to submit abstracts for the Open Forum is **May 1, 2015.** ■

AARC Leaders Attend Meetings

Throughout the year, AARC leaders and members of the Executive Office staff attend meetings of the Association's state societies as well as other special meetings. In addition to making AARC representatives available for speaking engagements at meetings, the Association funds a special program to help some state societies partially pay for the travel costs of the speakers. Below are some activities AARC representatives are involved in.

Frank R. Salvatore, Jr., AARC President

- Presenting AARC Update at the Connecticut Society for Respiratory Care Conference in Southington, CT, on May 6
- Presenting AARC Update at the Illinois Society for Respiratory Care Conference May 27 in Oakbrook Terrace, IL

George Gaebler, AARC Past President

- Speaking twice at the New York/ New Jersey Managers and Educators Conference in Round Top, NY, on June 4–5, including the keynote address: "The Respiratory Care Profession and the Need to Survive," and "Preparing Department Managers to Employ Survivor Skills in the Changing Health Care Environment"

Thomas J. Kallstrom, AARC Executive Director/CEO

- Participating in Allergy & Asthma's Capitol Hill Day in Washington DC on May 6
- Speaking at COPD9 in Chicago, IL, June 5–6

Shawna Strickland, AARC Associate Executive Director of Education

- Speaking at the Nebraska Society for Respiratory Care's state conference in Lincoln, NE, May 14–15

AARC and Edison Nation Promote Innovation in Aerosol Therapy

The AARC and Edison Nation Medical, the premier health care innovation marketplace, encourage AARC members to submit ideas that improve aerosol therapy for patients.

Edison Nation Medical brings 12+ years experience working with individuals and small businesses to commercialize their innovation ideas. Do you have a great product idea for improving aerosol therapy? Submit your idea today! If your idea is selected for development, you will receive an advance of $2,500, 50% of licensing royalties, and be named as the inventor on any patent application.

To learn more or to submit your idea, go to www.aarc.org/resources/programs-projects/edison-nation-medical-innovation-search/. ■

One Team, One Fight

When SMSgt James Woods, MAEd, RRT, joined the Air Force's Critical Care Air Transport Team (CCATT) back in 2000, he and the other RTs, RNs, and physicians who took on the task of transporting critically injured soldiers in the battlefield pretty much learned on the job. Today, as superintendent of the CSTARS program at the University of Cincinnati in Ohio, he makes sure CCATT team members have the training they need to succeed in the challenging environment of military transport before they ever set foot on one of the military planes used to deliver soldiers to definitive care. "CSTARS stands for The Center for the Sustainment of Trauma and Readiness Skills," says the AARC member. "There are three CSTARS sites within the United States, but Cincinnati is the only platform that trains and validates the clinical skills of the CCATT members before they are allowed to deploy."

The brainchild of Jay Johannigman, MD, the training program came into being because military medical centers around the country did not routinely participate in the high-volume trauma care delivery necessary to adequately train members of these elite teams. "There was a vital necessity to maintain a skilled medic force capable of caring for the battlefield injuries that were being presented to our field hospitals," says SMSgt. Woods.

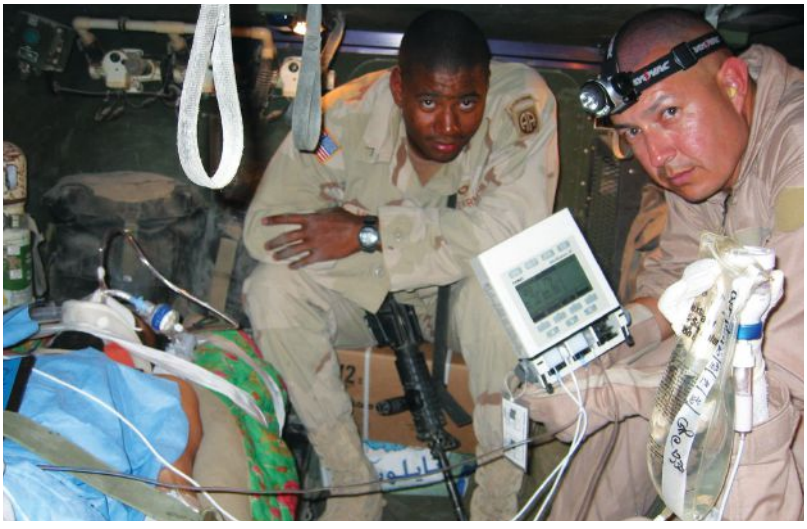
AARC member CMSgt(ret) Dario Rodriquez, Jr., MS, RRT, FAARC, was the first RT on board, and SMSgt. Woods says he helped to pave the way for the training now provided to therapists going through the program.

RTs are nominated for the training by supervisors on bases with a deployment position for a CCATT team. Then candidates are interviewed by a clinical validation committee to determine whether they are qualified for the training. RTs who are accepted go through the program side by side with their physician and nursing colleagues. "Everyone gets the same exact lectures, and they are all expected to pretty much have the same proficiency level on every piece of equipment that we use," explains SMSgt. Woods.

Lectures and tabletop demonstrations included in the program are based on CCATT and Joint Trauma System clinical practice guidelines, and the importance of communication between team members is stressed throughout the instruction. "The teams learn quickly that situational awareness and communication is key in the back of a plane, especially when it is loud and dark," says SMSgt Woods. "Our goal is to make our simulations as realistic as possible so that our teams are prepared for anything before they leave for deployment." About 12–16 training classes are held each year at the University of Cincinnati with five therapists, five nurses, and five physicians per class. Everyone on the CCAT teams is required to go through the training once every two years.

SMSgt. Woods credits his fellow therapists on the training team — TSgt RRT Tyler Britton, TSgt Wesley Fujan, SSgt Jensen de Nijs CRT, and SSgt Erin Seley — with making the training what it is and says his physician and nursing colleagues are equally responsible for the success they have seen. "We truly embody the 'One Team, One Fight' concept."

Training CCAT team members, however, isn't the only thing that goes on at CSTARS in Cincinnati. Since its inception, the program has conducted more than 30 research studies aimed at determining the most optimal ways to care for injured soldiers. AARC member Richard Branson, MSc, RRT, FAARC, clinical professor of surgery at the University of Cincinnati, has been an integral member of the research team from the outset. "We have completed two



Team members hunker down in the back of a Humvee.

Time is vital in military medical transport.

trials in Afghanistan evaluating the impact of aeromedical transport — takeoff and landing — on intracranial pressure (ICP)," he says. "We demonstrated how ICP can be increased with the G forces during acceleration and deceleration."

Other studies have evaluated ventilators and oxygen devices and how their performance may be altered by altitude, and investigators have also completed a study on the aeromedical evaluation of the "walking wounded." "We found that in a number of patients with non-life-threatening injuries, significant hypoxemia was seen at normal cruising altitude — a surprising finding that has resulted in a change in oxygen delivery practices on transport," says Branson.

Right now the team is working on studies to determine: the impact of takeoff and landing on ET tube cuff pressures and how automated cuff pressure control may be a solution; the accuracy of noninvasive hemoglobin monitoring via pulse oximetry with changes in oxygenation; negative pressure during exhalation on cardiac output, ICP, and lung function in a large animal model of trauma; and the impact of aeromedical transport on caregivers. In the last decade, the group has been awarded more than $20 million in research grants.

Preparing respiratory therapists, nurses, and physicians to care for critically injured soldiers and ensuring they have the evidence-based science they need to deliver the most effective care is a job both Branson and SMSgt. James Woods believe is paramount to the health and safety of military personnel on the battlefield. They also believe the RTs' membership on the CCATTs speaks volumes to the critical role therapists can play in military medicine.

"No other enlisted career field deploys their young airmen on flight teams where they are the go-to person for many different things, and they don't have a "lifeline" to call back to if they don't know the answer," emphasizes SMSgt. Woods. "I believe that, especially in the Air Force Medical Service, we are the only enlisted career field that demands so much of our young airmen." ■

Airway management is a key responsibility of RTs on the team.

Moving on Up

AARC President Frank Salvatore, Jr., MBA, RRT, FAARC, has been promoted to administrator of ancillary services for the Greater Hudson Valley Health System in New York. In addition to having direct responsibility for respiratory care, sleep medicine, wound care, and hyperbaric medicine at Catskill Regional and Orange Regional Medical Centers, Salvatore has been charged with developing a strategic plan to further integrate and strengthen existing services system-wide. ■

Charles J. Gutierrez, PhD, RRT, CPFT, FAARC, has been promoted to assistant professor in the division of pulmonary, critical care and sleep medicine, Morsani College of Medicine, at the University of South Florida. He has also been named a neurorespiratory research scientist at the HSR&D/RR&D Center of Innovation on Disability and Rehabilitation Research in Tampa, FL. Among other projects, Dr. Gutierrez and his team are developing a Mobile Pulmonary Function Testing Laboratory to evaluate and treat military veterans with amyotrophic lateral sclerosis who live in underserved, rural areas of Florida.

You can submit news about AARC members "moving on up" by sending to cathcart@aarc.org. ■

Strange
But True...

Suicide may be in the air: University of Utah researchers found a significantly higher risk of suicide among people who were exposed to certain air pollutants over the previous two or three days. Men experienced a 25% increase following short-term exposure to nitrogen dioxide and a 6% increase following short-term exposure to fine particulate matter. The odds of suicide increased 20% in people between the ages of 36 and 64 who were exposed to nitrogen dioxide and 7% in those who were exposed to fine particulate matter. ■

National Health Observances

- **National Asthma and Allergy Awareness Month**; May; Asthma and Allergy Foundation of America; (800) 727-8462; info@aafa.org
- **Air Quality Awareness Week**; April 27–May 1; National Oceanic and Atmospheric Administration; (301) 713-1867; www.airquality.noaa.gov
- **World No Tobacco Day**; May 31; Stop Illicit Trade of Tobacco Products; www.who.int/campaigns/no-tobacco-day/2015/event/en/

Contribute to Our "Transitions" Column

The AARC "Transitions" column is now devoted to sharing news about the passing of AARC members.

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

As Seen on *AARConnect*

Have you looked at what your colleagues are talking about on the *AARConnect* discussion lists? You might find an interesting tidbit you can use in your area of respiratory care or maybe answer a question someone has asked. Here is an example of a dialogue we found on *AARConnect* while preparing this edition of the magazine.

AARConnect . . .
maximizing your membership

I would like to know how many institutions either hold or have the patients hold their cheeks when performing "MEP" maneuvers, and do you feel that holding the cheeks makes a difference in the obtained data. I have read the ATS documentation, yet it doesn't address the protocol of performing the test unless I have overlooked it.

Asia Munlin, BS, RRT-NPS, RPFT
Riley Hospital for Children at IU Health
Indianapolis, IN

We have our patients gently squeeze their cheeks during the plethysmography maneuvers, as per the manufacturer's instructions, but not during MIP/MEP.

Devin Sareen, MHA, RRT, RPFT
Advanced Pulmonary & Critical Care
Springfield, VA

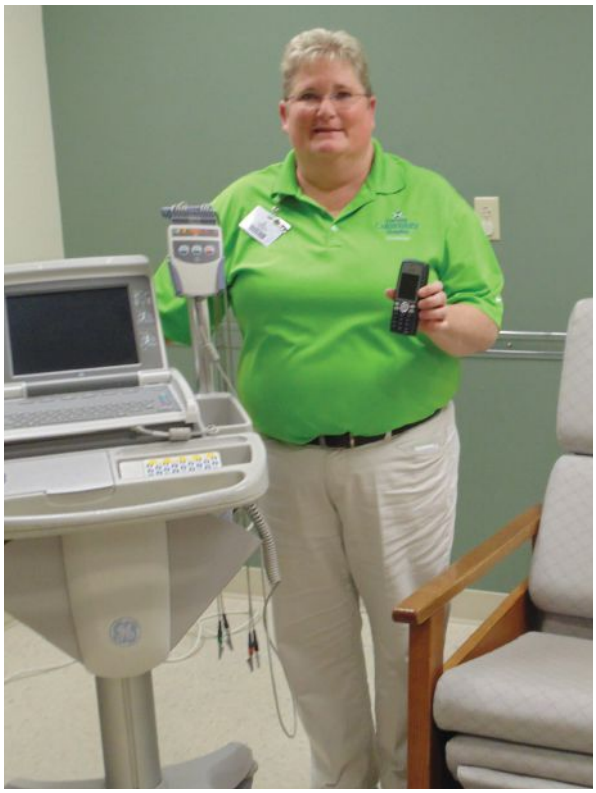
We do not have patients hold their cheeks for MIP and MEP. We sometimes have them assist with holding the mouth seal. Overall MIP and MEP data is difficult to reproduce, often due to fatigue. We also have these patients do cough peak flows as another assessment tool.

Bruce Brown, RRT, AE-C
Nemours Children's Clinic
Orlando, FL

We instruct patients to hold their cheeks for the MEP maneuver. I checked my policy (that is based on an ATS template) and did not find a specific recommendation for the practice. There is a caution about watching for cheek/facial muscle artifact on both the MIP and MEP. I believe I read an article some time ago that recommended cheek hold for MEP, but I can't reference it. Anyway, it seems reasonable to hold cheeks for MEP, and I use it in conjunction with holding the lips against the mouthpiece to minimize leak.

Michael Holbert, RRT, RPFT
Good Samaritan Regional Medical Center
Corvallis, OR

RT's Idea To Use "Chest Pain Phone" Reduces EKG Response Times



Valerie Roark put a simple cell phone to work saving lives in her hospital.

On Jan. 23, a man walked into the emergency department at 74-bed Daviess Community Hospital in Washington, IN, complaining of chest pain and other symptoms of a heart attack. Within seconds of arrival, he was sent for an EKG; and 20 minutes later, he was on his way to Memorial Hospital and Health Center in nearby Jasper for a heart catherization.

That incredible response time can be traced directly to AARC member Valerie Roark, BS, RRT, who decided that her hospital's already stellar six minute-response time could be significantly improved with the addition of a simple cell phone (the American Heart Association and American College of Cardiology Foundation guidelines call for an EKG within 10 minutes of arrival with chest pain).

"Our goal for entering our door to the patient receiving care on the table in the cath lab is 90 minutes — and we run under 90 minutes consistently," says the cardiopulmonary department manager. "If we can get the patient here, get the diagnosis by EKG in four minutes, it stands to reason the patient will get to the cath lab sooner as well."

Roark came up with the idea to equip the RT on call for emergent EKGs with a cell phone after seeing the phones pay off during pulmonary function testing and in the sleep center. "In the PFT lab there is usually the PFT therapist and the patient in the room. Should a patient have an unexpected event during their test, the therapist can reach in a pocket and call for help immediately, without leaving the patient's side," she explains. The same scenario plays out in the sleep lab. If a patient exhibits signs of distress during testing, the therapist can call for help and not have to leave the patient's bedside to go into the tech office to make the call.

The RT pitched the idea for a dedicated EKG phone to her administrators, and they thought it was a great idea. Now an RT carries the chest pain phone — sometimes called the "bat phone" by the staff — and the emergency department unit clerk or nurse uses that number to alert the therapist to an incoming patient by ambulance or one who, like the gentleman in the example at the top of this story, simply walks in off the street with chest pain. "We trialed the phone the last two weeks of June using one of the existing wireless phones in the department — and results showed significant improvement, decreasing response time from 6.1 minutes to 3.1 minutes," says Roark. "The third phone was purchased the first week of July."

She and her team ended 2014 with an average response time of 3.8 minutes, an improvement of 2.6 minutes over the average time of 6.4 minutes in 2013. That statistic is derived by comparing the documented arrival time in the ED with the actual time stamp printed on the EKG tracing.

Roark credits the successful use of the dedicated phone to reduce EKG response times to her RTs who carry the phone, but she says the ED staff members who dial the number when needed have also played a big role in the accomplishment. She says if they hadn't bought in to calling with the wireless phone and had kept using the paging system, they wouldn't have the great outcomes they have today. ■

Is Sustained Lung Inflation a Good Idea for Preemies?

A new study out of Italy finds preterm infants deemed at high risk for respiratory distress syndrome who receive sustained lung inflation and positive end-expiratory pressure in the delivery room are less likely to need mechanical ventilation in the first 72 hours of life. However, other outcomes related to the treatment suggest it may not be ready for primetime.

The randomized controlled study was conducted among 294 infants born between 25 and 29 weeks gestation who were assigned to either sustained lung inflation followed by CPAP or CPAP alone immediately after birth. Compared to infants in the intervention group, an unadjusted odds ratio of 0.62 was noted for mechanical ventilation in the first 72 hours of life in infants in the CPAP-only group. At 36 weeks gestation, 39% of infants in the intervention group had developed bronchopulmonary dysplasia versus 35% in the CPAP-only group. A slightly higher mortality rate was seen in intervention infants as well, 15.4% versus 12.8%.

The authors concluded more study is needed to investigate the effectiveness of sustained lung inflation in improving outcomes in preterm infants. The research appeared in a recent issue of *Pediatrics*. ■

Healthy Diet May Protect the Lungs

Investigators from the United States and France who examined the role diet may play in COPD risk have concluded that people who consume a healthy diet are less likely to develop the condition. The finding held true even when results were adjusted to consider smoking, body mass index, and other factors.

The research is based on findings from the "Nurses' Health Study" and the "Health Professionals Follow-Up Study." The first study followed 73,228 women between 1984 and 2000. The latter study followed 47,026 men between 1986 and 1998. Researchers used the "Alternate Healthy Eating Index 2010" (AHEI-2010) to measure dietary quality. Higher scores indicated a greater intake of vegetables, whole grains, polyunsaturated fats, nuts, and omega-3 fatty acids, and a lower intake of red and processed meats, refined grains, and sugary drinks, along with moderate alcohol consumption. Those with the highest AHEI-2010 scores were about a third less likely to develop COPD than those with the lowest scores. The study was published in *BMJ* earlier this year. ■

Uncovering Work-related Asthma

According to researchers from the National Institute for Occupational Safety and Health who analyzed results from the Asthma Call-Back Survey conducted between 2006 and 2010 among more than 50,000 employed adults with asthma in 40 states and the District of Columbia, only about 15% of respondents reported being willing to discuss possible work-related asthma triggers with their doctors, despite the fact 46% had asthma that was possibly work-related. The authors suggest beginning the discussion with these two questions:

1. Are there airborne exposures at your workplace that cause you to cough, wheeze, or have shortness of breath?
2. Do your symptoms improve when away from your job (on weekends or on vacation)?

"Work-related asthma is under-diagnosed and under-recognized," study author Jacek Mazurek, PhD, MD, was quoted as saying. "A thorough occupational history is critical to, first, establishing a diagnosis of work-related asthma, and then putting measures in place to prevent further exposure or to treat it." The study was published in a recent issue of the *Annals of Allergy, Asthma, and Immunology*. ■

ICU Patients Can Communicate

The idea that ICU patients on mechanical ventilation are too sick to communicate with their caregivers may be wrong, report Ohio State and University of Pittsburgh investigators publishing in a recent issue of *Heart & Lung*. They found 53.9% of 2,671 mechanically ventilated patients treated at two facilities were indeed able to communicate with assistance.

The authors defined ability to communicate as being alert and responsive to verbal communication by clinicians for at least one 12-hour shift while receiving mechanical ventilation for two or more days. They believe their findings call for implementation programs to facilitate communication between patient and clinician at the bedside and for outcomes to be collected to measure the effectiveness of various interventions. "We need to change the culture of care teams in the ICU to better address communication support needs," according to co-author Mary Beth Happ. ■

Empowering Families Can Help Keep Discharged Patients Out of the Hospital

Empowered families may be more likely to keep recently discharged patients at home, find University of Colorado researchers (writing in the *Journal for Healthcare Quality*) who looked at 83 patient-family caregiver teams that participated in an enhanced care transitions intervention (CTI). The four-week program was facilitated by transition coaches and consisted of a hospital visit, a home visit, and three follow-up telephone calls.

The program led to significantly improved medication safety, more collaboration in resolving discrepancies and errors, and greater confidence in taking responsibility for implementing the discharge care plan. "With high levels of satisfaction, the enhanced CTI model appears to have applications to local and national efforts aimed at improving the hospital transition experience," according to author Eric A. Coleman, MD, MPH. ■

Improving Lung Transplantation

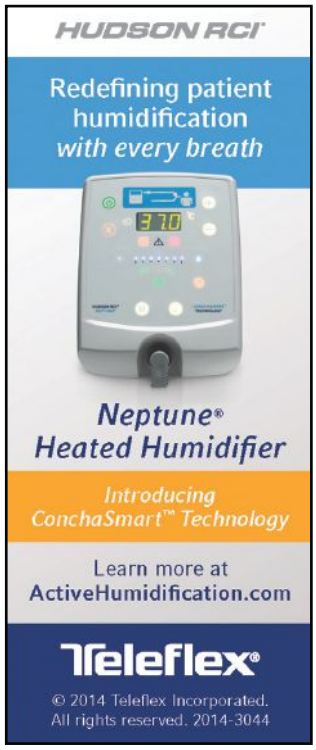
By combining elements of different approaches to reducing antibodies in lung transplant patients into one universally applicable protocol, researchers from Toronto General Hospital are giving new hope to patients with excessive antibodies against the donor tissue.

Lead author Dr. Kathryn Tinckam noted that investigators followed 340 patients after lung transplant for about five years to observe how well the new approach works, dividing them into three groups: those who were highly "sensitized" with antibodies to the lung donor, those with antibodies that were not specific to the lung donor, and those with no antibodies. No difference in survival rate was noted at five years between the group with the most antibodies and the group with none. Infections, rejection, and function of the donor organ were similar as well.

The author of the study said, "We've leveled the playing field for those people who are difficult to match with a donor and would likely not get a transplant and die." The research appeared in the *American Journal of Transplantation* earlier this year. ■

Industry Update

Featuring information on products and equipment from manufacturers



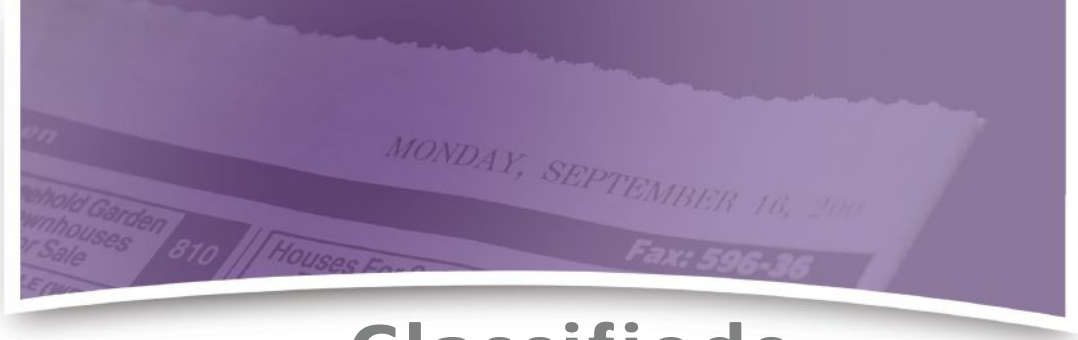
Noninvasive Ventilator

The Breathe NIOV System from Breathe Technologies is a one-pound, noninvasive mechanical ventilator that can be used in home and institutional settings. The device utilizes novel venturi principle technology in a comfortable facial interface that can be worn while talking and exercising. The patient interface and air/oxygen path components utilize injection-molded Makrolon® 2858 polycarbonate. This grade is suitable for ETO and steam sterilization at 121° C. and is biocompatible according to many ISO 10993-1 test requirements, making it an ideal choice for medical devices. It is available in transparent and opaque colors. www.breathetechnologies.com

CPAP Mask

The Quest™ Full Face CPAP Mask from DeVilbiss Healthcare is available in five sizes and was designed with a membrane inside the cushion and a series of flanges around the cushion's base to provide a secure seal for a wide array of facial profiles. With swivel port micro-vent holes to reduce noise and no obstructive forehead bar, the Quest mask delivers practical, comfortable therapy. It is also equipped with 4-strap headgear with multiple quick-release points. www.devilbisshc.com

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



Classifieds

ADVERTISING SECTION

United States

Sales Rep Opportunities

Biomedical Electronics Services & Technologies (B.E.S.T Corporation) has serviced hospitals in the greater Chicago-land area and surrounding states for over 30 years. B.E.S.T represents numerous medical and biomedical manufacturers, and also repairs/rents/sells durable medical equipment. For more information on our company, please visit our website at www.ebestonline.com.

Due to our continued success, we are expanding our service areas to new markets. B.E.S.T is looking for *self-motivated independent sales reps* throughout the United States. Previous sales experience is preferred. If interested, please email your resume to George Kacmarek at info@ebestonline.com.

***AARC Times* Classified Advertising Information & Requirements:**

Classified Word Advertisements

AARC Members: $50 for 50 words or less; each additional word, $1. Free Internet placement. Nonmembers: $60 for 50 words or less; each additional word, $1.20. Listings are categorized by state. Following the state listings are United States/International, For Sale/For Rent, Miscellaneous, and Situations Wanted. All copy should be typed double-spaced. All ads will be set in 8-point type. To calculate the cost per advertisement, a "word" is considered to be one or more letters, numbers, or special characters with a space before and after.

Ads are featured on the AARC website for one month after publication. Ad may only be placed on the website with an insertion order for placement in an AARC publication. Ad is noncancelable after placement on the website. NOTE: ***AARC Times*** reserves the right to refuse any advertisement not directly relevant to respiratory care. ***AARC Times*** does not endorse any advertiser, its positions, practices, services, or products.

We reserve the right to make editorial changes for reasons of clarity and consistency. Every effort is taken to avoid mistakes, but ***AARC Times*** cannot be responsible for clerical or printing errors. **Deadline for Ad Placement/Cancellation** Deadline for ad placement and written cancellations for the next available issue is April 17. Blind ads available. **For Recruitment Advertising Information, Contact AARC Respiratory Jobs** • Respiratory.Jobs@aarc.org (972) 243-2272 • Fax (972) 484-2720 • 4925 N. MacArthur Blvd.,Ste. 100, Irving, TX 75063

Recruitment Display Advertisements

For Recruitment Display Ad Rates, go to www.aarc.org/marketplace/media_kit/media_planner_2015.pdf, or contact AARC Respiratory Jobs • Respiratory.Jobs@aarc.org • (972) 243-2272 • Fax (972) 484-2720 • 4925 N. MacArthur Blvd., Ste. 100, Irving, TX 75063

Brodstone
MEMORIAL HOSPITAL

Brodstone Memorial Hospital, a private non-profit critical access hospital, located in South Central Nebraska is seeking a qualified Respiratory Therapist to join our team. Experience preferred in the following areas:

- Adult, Pediatric, and Neonatal Care
- Advanced Airway Management, including invasive and non-invasive ventilation
- Sleep or neurodiagnostic studies
- Pulmonary Rehabilitation
- Pulmonary Function Testing
- Cardiac Monitoring

The ideal candidate will work closely in an interdisciplinary team. Candidate must have, or be able to obtain, CRT or RRT credential and licensure in the state of Nebraska. New graduates encouraged to apply. Competitive wages with education or relocation benefits negotiable. For more information visit www.brodstonehospital.org, or contact Roy Palmer Cardiopulmonary Director at (402) 879-4432 ext.170 or rpalmer@brodstone.org. Brodstone Memorial Hospital is an EEO Employer.

Become a Better Therapist with www.AARC.org/Resources

Calendar of Events

AARC & State Society Programs

May 27–29

Oak Brook Terrace, Illinois

47th Annual Conference & Exhibition of the Illinois Society for Respiratory Care

Contact: Audrea Hardwicks-Williams, (773) 827-5855, stricdeck@gmail.com, www.isrc.org

Other Meetings

May 15–20

Denver, Colorado

ATS 2015: Pulmonary, Critical Care, and Sleep Medicine

Contact: http://conference.thoracic.org/2015/

Submissions for the next available issue are due April 17.

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

Advertiser Index

To advertise, contact: Phil Ganz, 48 Abbey Woods Ln., Ste.100, Dallas, TX 75248, Voice (972) 991-4994, Fax (888) 206-9006, phil.ganz@aarc.org. Or contact Beth Binkley, Advertising Assistant, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063-4706, (972) 243-2272, Fax (972) 484-2720, binkley@aarc.org.

Expand your potential – complete your degree online.

Earn your BS in Health Science Studies

As a respiratory care professional, it's hard to find time for career enhancement. That's why Quinnipiac's School of Health Sciences offers an online Bachelor of Science in Health Science Studies program, designed specifically to help those with Associate's degrees to complete their degrees and move forward. The degree, completed entirely online, can help prepare you for upward mobility, further graduate work, or even a move to a different field – without having to take time off from your busy schedule.

QUINNIPIAC UNIVERSITY *Online*®

For course descriptions and more information, visit www.quinnipiac.edu/online/aarc or call 1-855-466-2903

Radius-7™

Patient Mobility Promotes Healing[1]

Radius-7 for the Root® Patient Monitoring and Connectivity Platform helps promote patient mobility while still enabling continuous monitoring.

Each Radius-7 comes with two rechargeable, "hot-swappable" modules with short-range communication to Root.

- Breakthrough Measurements
  - Masimo SET® Measure-through Motion and Low Perfusion™ pulse oximetry
  - rainbow Acoustic Monitoring™ (RRa®)
- Small, lightweight, and wearable for untethered monitoring and ambulation
- Integration with Patient SafetyNet* for seamless surveillance monitoring

877.4.MASIMO | www.masimo.com

Caution: Federal law restricts this device to sale by or on the order of a physician.

© 2015 Masimo. All rights reserved.

Masimo

1 Needham D et al. *Archives of Physical Medicine and Rehabilitation* Vol 91, Issue 4, PP 536–542, April 2010.

* The use of the trademarks PATIENT SAFETYNET and PSN is under license from University Health System Consortium.