Robert DiBlasi, RRT-NPS, FAARC, presented original research at the 2010 AARC Open Forum.

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AARC Strategic Plan

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

AARC Strategic Objectives

• Validate the science of respiratory care and the value of the respiratory therapist (RT) in providing respiratory care by supporting, conducting, and publishing research information.

• Promote respiratory therapists as the best providers of respiratory care by assuring that the science that clarifies the value and role of the RT is provided to those stakeholders whose decisions and actions need to be guided by that information.

• Promote respiratory therapists and the American Association for Respiratory Care by developing and implementing promotion and marketing campaigns targeted to unique audiences.

• Assure the Association has the resources to meet the needs of its members and that the AARC has the needed financial, volunteer, and staff resources needed to accomplish the implementation of the strategic plan of the Association.

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

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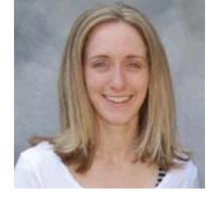

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▶ Sleep and Sleep-Disordered Breathing in the Hospitalized Patient

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▶ Minimizing VAP in 2011– How Respiratory Therapists Can Contribute

Marcos I. Restrepo, MD
Tom Kallstrom, MBA RRT FAARC

Item PR20113
This presentation will describe the best practices for reducing ventilator associated pneumonia and describe key roles respiratory therapists can play in institutional efforts to reduce VAP.

▶ The Role of Safety Checklists in Healthcare: Bother or Necessity?

Timothy McDonald, MD JD
Sam Giordano, MBA RRT FAARC
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This presentation will review the history of the use of checklists and other standardized procedures to improve outcomes in various industries and discuss how they are being adopted for use in healthcare to reduce errors and improve patient safety.

▶ Noninvasive Ventilation of Neonatal-Pediatric Patients: Do We Really Want to Intubate?

Rob DiBlasi, RRT-NPS FAARC
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This presentation will identify clinical circumstances that favor the use of NIV to support ventilation and explore the evidence supporting the use of non-invasive ventilation in neonatal and pediatric patients.

▶ Tracheostomy: Current Practice

Alexander White, MD
Dean Hess, PhD RRT FAARC

Item PR20116
This presentation will review the literature addressing the indications and proper technique for tracheal cannulation, tracheal airway devices, stoma care, as well as changing and decannulation practices. A review of current tracheostomy controversies will be included.

▶ Four Evidence-Based Practices That Should Be Mechanical Ventilation Standards

Dean Hess, PhD RRT FAARC
Rich Branson, MS RRT FAARC FCCM

Item PR20117
This presentation will review the evidence supporting noninvasive ventilation, lung-protective ventilation, ventilator liberation protocols, and ventilator-associated pneumonia prevention.

▶ The Many Faces of PEEP

Rich Branson, MS RRT FAARC FCCM
Dean Hess, PhD RRT FAARC

Item PR20118
This discussion will focus on the application of PEEP not only in the context of ALI/ARDS but also in other applications such as of PEEP for alveolar recruitment (ARDS), counterbalancing auto-PEEP, prevention of micro-aspiration, and facilitating speech.

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Reducing VAP: What the Evidence Tells Us

by Marcos I. Restrepo, MD, MSc, FCCP

Ventilator-associated pneumonia (VAP) is one of the leading causes of morbidity (longer length of hospital and ICU stay by nine days), mortality (as high as 50%), and costs (as high as $40,000 per case) caused by hospital-acquired infections (HAIs) in patients who require mechanical ventilation.[1-3] The diagnosis of VAP is a matter of controversy and requires further discussion, but for the purpose of this review the author considers VAP for every patient who requires it more than 48 hours after endotracheal tube placement and mechanical ventilation. In addition, the patient needs to develop the presence of a new or progressing pulmonary infiltrate by chest imaging and at least two of the three following findings:

- fever or hypothermia,
- increased sputum production with purulent material, and
- the presence of leukocytosis or leukopenia.

In addition, deterioration of the patient's oxygenation will lead to further organ involvement. Therefore, prevention of VAP is a priority for ICU patients who require mechanical ventilation. The strategies that have been evaluated for prevention focus on the main mechanisms associated with acquiring pathogenic microorganisms, such as aspiration and biofilm formation.[4,5] Several evidence-based guidelines have extensively reviewed the multiple interventions tested to prevent VAP.[6-8] However, a detailed description of these interventions goes beyond the interest and extent of this manuscript. I will focus on the most relevant interventions that are widely available and may impact current clinical practice. The interventions are stratified in five large groups (see Figure 1): general preventive measures, avoiding or decreasing the time on mechanical ventilation, prevention of aspiration, endotracheal tube-related interventions, and prevention of infection and colonization.

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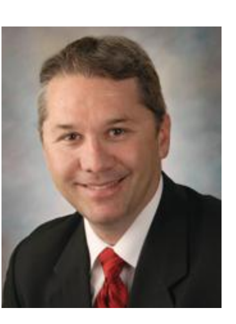

Marcos I. Restrepo, MD, MSc, FCCP, is medical director of the MICU at South Texas Veterans Health Care System, Audie L. Murphy Division. He is also an assistant professor in pulmonary and critical care medicine in the department of medicine at the University of Texas Health Science Center at San Antonio.

General measures

Cross contamination of microorganisms plays an important role in the development of HAIs. Measures that control contamination are necessary to avoid cross transmission between patients, family, and staff.[3,8] Infection-control measures such as universal precautions include effective handwashing, appropriate environmental decontamination, contact isolation, and the use of barrier methods.[3,8] In addition, protocols that include microbiological surveillance and continuous educational programs are essential to maintain the highest level of compliance possible.[3,8] Sharing responsibilities in the multidisciplinary health care team is associated with lower rates of HAIs and VAP.

Specialized training of critical care physicians, registered nurses, and respiratory therapists is associated with better care of hospitalized patients in the ICU.[8,9] Additionally, a low patient:nurse ratio (ideally 1:1) and the patient:RT ratio is critical to minimize the possible cross-transmission events that may occur during a regular day.[8,9] Involving all the members of the health care team, including respiratory therapists, facilitates the success of educational programs and implementation of RT-driven protocols in order to reduce duration of mechanical ventilation and possibly the ICU length of stay.[8,10] Reducing unnecessary patient transfers or trans-

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Figure 1. Preventive Measures of VAP

General Measures

- Infection control measures
- Universal precautions
- Handwashing
- Environmental decontamination
- Barrier precautions
- Contact isolation
- Microbiological surveillance
- Educational programs
- Specialized training
- Nurse:Patient ratio
- Respiratory therapist:Patient ratio
- Avoid unnecessary transportation

Avoiding or Decreasing Time on Mechanical Ventilation

- Noninvasive mechanical ventilation
- Daily sedation vacation
- Spontaneous breathing trials
- Early tracheotomy

Prevention of Aspiration

- Semirecumbent position
- Kinetic beds
- Preferred oro-gastric tubes
- Small bowel feeding tubes

Endotracheal Tube-related Interventions

- Maintain cuff pressure >20 and <35 cm H_2O
- Microcuff technology
- Tapered cuff technology
- Subglottic secretion drainage
- Silver-coated endotracheal tube

Prevention of Infection and Colonization

- Stress ulcer prophylaxis
- Avoidance of transfusions
- Maintenance of glucose levels
- Appropriate use of antibiotics
- Oral care

portation outside of the ICU may decrease the rate of VAP and other ICU complications.[8]

Avoiding or decreasing time on mechanical ventilation

The patient is at risk of developing VAP as long as he/she remains connected to the ventilator, so it is important to avoid the use of invasive mechanical ventilation. The prevention of placing an endotracheal tube with the use of noninvasive mechanical ventilation is recommended in selected patients (e.g., acute exacerbation of COPD, pulmonary edema, etc).[8] In addition, measures that include daily sedation vacations (when the condition permits)[11] followed by spontaneous breathing trials[12] in order to attempt early liberation from mechanical ventilation are associated with shorter duration of mechanical ventilation and may reduce the risk of developing VAP. A multidisciplinary team approach, with the participation of nurses, physicians, and respiratory therapists and non-physicians-driven protocols may assist in the implementation process and the success of these interventions.[8] Finally, early tracheotomy is recommended to avoid extended duration of endotracheal tube use by assisting in the liberation of the ventilator process.[8] However, there is conflicting evidence to support the premise that early tracheotomy improves patient outcomes, particularly VAP prevention.[13] Therefore, the recommendation for early tracheotomy is to avoid prolonged endotracheal intubation, and the timing should be individualized with input from the patient and his/her family.

Prevention of aspiration

Oropharyngeal or gastric aspiration is common in patients with endotracheal intubation or tracheotomy.[8] Microaspiration of secretions (whether from the stomach or mouth) that accumulate above the airway cuff may eventually pass by the cuff at moments of lowered cuff pressure or through the microchannels that form in most of the endotracheal cuffs, even when appropriately inflated.[8] A simple and inexpensive method to prevent aspiration is placing the patient in a semirecumbent position, with the head elevated above 30–45°.[14] Several studies that used a semirecumbent position compared to a supine position showed a lower rate of aspiration of radiolabeled gastric material and a lower rate of VAP.[8] Semirecumbency is highly recommended for several reasons: strong clinical evidence for a reduction in VAP, common sense, easy adoption, and low cost. The use of kinetic beds may assist with the semirecumbency and patient positioning. Kinetic beds are recommended in post-surgical or neurosurgical patients.[8]

Furthermore, studies suggest that sinusitis may increase colonization and further increase the risk of VAP development. Thus, strategies that prevent sinusitis, such as placing oro-gastric tubes instead of nasogastric tubes, may prevent colonization. Avoiding using the nose for tube placement, whether for ventilation or nutrition purposes, is recommended in order to prevent VAP.[8,15] It has also been postulated that large gastric residuals and enteral nutrition may be associated with VAP due to aspiration. Therefore, placement of small bowel feeding tubes and preventing large gastric residuals are also recommended to prevent aspiration. Other measures that prevent aspiration related directly to the endotracheal tube itself will be discussed in the following section.[15]

Endotracheal tube-related interventions

Significant research has focused on preventing aspiration by attempting to keep the cuff pressure above 20 cm of H_2O to avoid fluid leakage, but less

than 35 cm of H_2O to decrease tracheal mucosal damage.[8] However, a study on continuous maintenance of appropriate cuff pressures did not show a reduction in VAP.[8] Other mechanisms such as the development of cuff microchannels that facilitate fluid leakage despite full cuff inflation have led to new cuff model designs. The microcuff technology introduced an innovative polyurethane cuff material with a new elongated shape that prevented leakage in artificial models.[8] A novel tapered cuff, initially developed with polyurethane and now with polyvinyl material, may have similar results.[16] However, in order to not only limit the fluid leakage but also aspirate the secretions that accumulate on top of the balloon, a subglottic secretion drainage technology was bundled with the tapered cuff, resulting in a combined and more comprehensive method of VAP prevention.[17] A different approach was introduced with the use of silver-coated endotracheal tubes that work on the biofilm formation and prevent VAP.[18] A large randomized controlled trial showed a reduction in the rate of microbiologically proven VAP, but not in other relevant clinical outcomes. Therefore, the recommendations are to prevent fluid leakage by maintaining good cuff pressure levels, to use newer technologies to prevent microchannel and biofilm formation, and to drain the subglottic secretions. However, a single endotracheal tube that can accomplish all of these goals is not currently available but may certainly add to the strategies to prevent VAP.

Prevention of infection and colonization

Finally, a large number of interventions have attempted to prevent VAP by stopping colonization. Several strategies are not specific for VAP but are relevant to critically ill patients in general, such as the use of stress ulcer prophylaxis (avoiding the use of proton pump inhibitors), the avoidance of transfusions, the maintenance of glucose levels in a normal range (avoiding hypo- and hyperglycemia), and the use of prophylactic antibiotics. Other interventions such as the use of selective digestive decontamination and probiotics have conflicting data that require further evaluation and are not ready to be recommended in regular practice.[19,20] However, oral care has shown promising results in the prevention of colonization and ventilator-associated pneumonia, particularly in cardiovascular surgery patients, and is widely adopted in clinical practice.[8]

Bundling of interventions

In conclusion, a large number of interventions have been shown to decrease the rate of VAP. Therefore, the use of bundles combining several of these interventions may have a positive impact on patients by reducing and effectively preventing ventilator-associated pneumonia. ■

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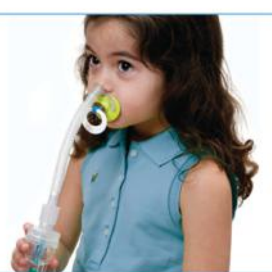

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REFERENCES

1. Chastre J, Fagon JY. Ventilator-associated pneumonia. Am J Respir Crit Care Med 2002; 165(7):867-903.
2. Rello J, Ollendorf DA, Oster G, et al. Epidemiology and outcomes of ventilator-associated pneumonia in a large US database. Chest 2002; 122(6):2115-2121.
3. Tablan OC, Anderson LJ, Besser R, et al. Guidelines for preventing health-care-associated pneumonia, 2003: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee. MMWR Recomm Rep 2004; 53(RR-3):1-36.
4. Craven DE, Steger KA. Nosocomial pneumonia in mechanically ventilated adult patients: epidemiology and prevention in 1996. Semin Respir Infect 1996; 11(1):32-53.
5. Perkins SD, Woeltje KF, Angenent LT. Endotracheal tube biofilm inoculation of oral flora and subsequent colonization of opportunistic pathogens. Int J Med Microbiol 2010; 300(7):503-511.
6. Guidelines for the management of adults with hospital-acquired, ventilator-associated, and healthcare-associated pneumonia. Am J Respir Crit Care Med 2005; 171(4):388-416.
7. Dodek P, Keenan S, Cook D, et al. Evidence-based clinical practice guideline for the prevention of ventilator-associated pneumonia. Ann Intern Med 2004; 141(4):305-313.
8. Diaz LA, Llaurado M, Rello J, Restrepo MI. Non-pharmacological prevention of ventilator-associated pneumonia [Article in Spanish]. Arch Bronconeumol 2010; 36(4):612-620.
9. Needleman J, Buerhaus P, Mattke S, et al. Nurse-staffing levels and the quality of care in hospitals. N Engl J Med 346(22):1715-1722.
10. Ely EW, Meade MO, Haponik EF, et al. Mechanical ventilator weaning protocols driven by nonphysician health-care professionals: evidence-based clinical practice guidelines. Chest 2001; 120 (6 Suppl):454S-463S.
11. Kress JP, Pohlman AS, O'Connor MF, Hall JB. Daily interruption of sedative infusions in critically ill patients undergoing mechanical ventilation. N Engl J Med 2000; 342(20):1471-1477.
12. Girard TD, Kress JP, Fuchs BD, et al. Efficacy and safety of a paired sedation and ventilator weaning protocol for mechanically ventilated patients in intensive care (Awakening and Breathing Controlled Trial): a randomized controlled trial. Lancet 2008; 371(9607):126-134.
13. Terragni PP, Antonelli M, Fumagalli R, et al. Early vs late tracheotomy for prevention of pneumonia in mechanically ventilated adult ICU patients: a randomized controlled trial. JAMA 2010; 303(15):1483-1489.
14. Drakulovic MB, Torres A, Bauer TT, et al. Supine body position as a risk factor for nosocomial pneumonia in mechanically ventilated patients: a randomised trial. Lancet 1999; 354(9193):1851-1858.
15. Heyland DK, Dhaliwal R, Drover JW, et al. Canadian clinical practice guidelines for nutrition support in mechanically ventilated, critically ill adult patients. JPEN J Parenter Enteral Nutr 2003; 27(5):355-373.
16. Lorente L, Lecuona M, Jimenez A, et al. Influence of an endotracheal tube with polyurethane cuff and subglottic secretion drainage on pneumonia. Am J Respir Crit Care Med 2007; 176(11):1079-1083.
17. Dezfulian C, Shojania K, Collard HR, et al. Subglottic secretion drainage for preventing ventilator-associated pneumonia: a meta-analysis. Am J Med 2005; 118(1):11-18.
18. Kollef MH, Afessa B, Anzueto A, et al. Silver-coated endotracheal tubes and incidence of ventilator-associated pneumonia: the NASCENT randomized trial. JAMA 2008; 300(7):805-813.
19. Kollef MH. Prevention of hospital-associated pneumonia and ventilator-associated pneumonia. Crit Care Med 2004; 32(6):1396-1405.
20. de Smet AM, Kluytmans JA, Cooper BS, et al. Decontamination of the digestive tract and oropharynx in ICU patients. N Engl J Med 2009; 360(1):20-31.

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Ensuring Patient Safety in the Sleep Lab

by Shahid M. Ahsan, MD, FACP, FCCP, and Adil Ghafoor

In the last decade, there has been astounding growth in the number of sleep centers in the United States. However, unregulated growth has led to wide variation in the general quality of the sleep centers and patient safety.[1] Compromising patient safety and the safety of sleep lab personnel not only endangers the patients but undermines the significance of sleep medicine and, therefore, safety must be ensured by the sleep centers.[2] Various safety standards have been developed for this purpose. Sleep studies are performed by certified respiratory therapists or certified polysomnography technologists.

Accreditation

The American Academy of Sleep Medicine (AASM) and The Joint Commission (TJC) have been nationally recognized as accreditation bodies for sleep centers and labs. In order for a lab to be accredited, rigorous national and local standards set by these organizations have been established.[3,4] It is the responsibility of the medical director to follow their guidelines. Standards for staff, equipment, facility, quality assurance, patient records and evaluations, data recording, and patient care and policies are just a few categories of standardization.[5] By meeting the standards and protocols required for AASM or TJC accreditation, a sleep lab can ensure and provide optimal care, safety, and treatment for patients. Sleep programs are required to develop policies to meet the AASM/TJC standards.[6]

Hospital-based sleep programs receive accreditation through TJC by being affiliated with a hospital. Free-standing sleep centers and/or sleep labs follow the same accreditation process. Accreditation assures payors and patients that the sleep center (hospital-affiliated or not) meets or exceeds rigorous standards for patient care and safety.[4]

about the authors...

Shahid M. Ahsan, MD, FACP, FCCP, is an assistant clinical professor of medicine at Indiana University School of Medicine in West Lafayette, IN. Adil Ghafoor is a premedical student at Purdue University in West Lafayette, IN.

Quality standards

Quality standards require that the human resources department perform a proper credentialing process prior to recruitment of employees, which includes verifying their licensure and certification. Plus, the human resources department should obtain criminal background checks to ensure the safety of personnel working in the sleep lab as well as for the safety of patients being studied in the sleep lab.

All sleep testing should be performed within a defined testing space. A private testing room ensures the safety and privacy of a patient. The room should be comfortable, with hard walls and a privacy door that opens into a corridor or common use area so that the patient can access the testing bedroom without passing through another patient's room. Moreover, the testing room must not have any impediments to the administration of emergency care. A minimum of 24 inches of available clear space is required on three sides of the bed. The mattress should not be smaller than a hospital bed. Joint Commission standards require emergency care be provided by a predetermined protocol. For example, in the event a patient develops cardiac or respiratory arrest, a proper procedure should be established for calling 911 or transferring the patient to an emergency room. Sleep lab staff should be able to provide basic emergency care (e.g., CPR) during an emergency.

TJC recommends proper plans for infection control. Bathrooms with toilets and a sink should be properly cleaned to prevent transmission of infection. The bed and room should be properly disinfected prior to each sleep study, and contaminated laundry should be properly disposed. A clean face mask should be used on each patient. Cleaning solutions should be used per guidelines established by the manufacturer and the Centers for Disease Control and Prevention. Hand hygiene is required. The patient room, walkways, and floors should be free of any potentially hazardous objects or substances that may cause a patient to fall or be injured. Bathrooms should have a working privacy door, and access to shared bathrooms should not be through another testing bedroom. At least one bedroom and bathroom must be handicapped-accessible (defined by local building regulations or sections 6.3 and 6.4 of the Americans with Disabilities Act).

AASM standards require that control rooms not be less than 40 square feet or 20 square feet per testing bedroom, whichever is larger. The facility must contain two-way communication between the patient room and the control room and/or facility personnel. Video monitoring and recording of patients during testing is required. A written plan for monitoring all patient-related equipment for electrical and mechanical safety is required, with instruction regarding documentation of compliance. Sleep lab personnel should be able to understand all hazards involved in operating sleep lab equipment. There should be a monthly visual inspection of equipment by staff for apparent defects, adhering to recommendations for monitoring and maintenance of recording equipment and electric safety testing by a certified technician or biomedical engineer. It should also include at least an annual testing of ground fault and chassis leakage current. Fire safety codes should also be instituted based on local standards.

When using collodion for scalp electrode application, Occupational Safety and Health Administration (OSHA) requires adequate ventilation with exhaust to the outside of the facility, and any allergies should be identified prior to sleep testing. It is imperative to ensure that electrode application is neat, no collodion or paste is on the patient's face, no wires dangle over the face, and no tape or pins are in the hair.

The facility must provide positive airway pressure (PAP) therapy for sleep apnea, including a remote control device. Sleep lab technicians/RTs should be well versed with the operation of continuous positive airway pressure (CPAP) and bilevel PAP machines, particularly when applying to positive pressure patients with underlying COPD/emphysema, asthma, restrictive lung diseases, and heart diseases. A written CPAP titration protocol is required for the therapist to operate the PAP machines.

Proper-fitting masks (as recommended by various manufacturers) should be applied to the patients during the treatment phase of PAP. Once the CPAP mask is applied, monitor symptoms of any complications of the mask, such as skin abrasions due to tight-fitting mask, aerophagia (swallowing of air), which can result in aspiration, dryness of the eyes if cool air is blowing on them, etc. Claustrophobia is another challenge, particularly if the patient starts to develop anxiety. These difficulties can be prevented if the patient is wearing a properly fitted mask, possibly with nasal pillows, prior to initiating a sleep study.

Transportation of patients to and from reception areas to the testing bedroom or preparation areas is of utmost importance and must meet safety requirements. Whether the patient is walking or is in a wheelchair, ensuring safe transport of patients within the facility is required.

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Staff

All sleep labs and centers must be supported by quality technical and medical staff with primary concern for patient safety. They should be able to recognize signs of distress, shortness of breath, symptoms of dizziness, chest pain, etc. CPR certification coupled with frequent practice also contributes to patient safety. Repetitive practice of emergency scenarios sharpens the emergency response skills of staff, which can be crucial in unexpected situations.[7] It is also important for sleep inpatient staff in hospitals to understand the current state of the patient before testing to avoid complications. Patients may be in need of restroom assistance or need medications that could be brought from home with permission from their primary attending and should be stored properly. A proper procedure should be established as it may be problematic for nursing staff to medicate hospitalized patients who have been transferred to a sleep center while in need of continual medication, jeopardizing patient health.[2] The patients themselves take their medications in the evening, so arrangements should be made to properly store and dispense the medicine per their physician's recommendations. Some patients may require a refrigerator to store their medications.

Medical directors should be board certified in sleep medicine, and physicians working in a sleep lab should be board certified or board eligible in sleep medicine. Leadership meetings must be held periodically to educate staff on policies and procedures. Patient safety is of prime importance in operating a sleep lab, and standards should be developed in each facility. ■

References

1. Surani S, Aguillar R, Aguillar R, Subramanian S. Standardization of quality assurance for sleep technologist: a model. Sleep Breath 2010; 14(1):3-12.
2. Sleep Review, The Journal for Sleep Specialists website. Newman SA. Inpatient sleep testing. Available at: www.sleepreviewmag.com *Accessed Sept. 14, 2010*
3. Hailey D, Tran K. Quality and relevance of evidence in support of guideline recommendations for sleep laboratory investigations. Int J Technol Assess Health Care 2005; 21(4):459-463.
4. Robertson B. Accreditation of sleep disorders programs. Respir Care Clin N Am 2006; 12(1):121-124.
5. American Academy of Sleep Medicine website. Standards for accreditation of laboratories for sleep related breathing disorders. Available at: www.aasmnet.org *Accessed Aug. 27, 2010*
6. Kreimer S. Sleep centers rise and shine. Hosp Health Netw 2007; 81(10):44-48.
7. Sleep Virtual News website. Miller M. Patient safety in the sleep lab. Available at: www.sleepvirtualnews.com *Accessed Sept. 21, 2010*

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Diesel Fumes and the Respiratory Patient

by James E. Ginda, MA, RRT, AE-C

Lifestyle modifications are often necessary in chronic disease management. Respiratory patients are counseled to stop smoking and to recognize and avoid triggers. However, environment is a factor that is often beyond individual control. Beyond staying indoors or reducing outdoor activity on days with known poor air quality, individuals with respiratory diseases may have little control over pollutants in the air they breathe.

While particularly problematic for respiratory patients, air quality is important for everyone. HEPA filtration and respiratory protective equipment are mandated under circumstances where occupational exposure is likely. But what about when exposure to air pollution is likely with activities of daily living? Just like with clean water, the public health solution is not downstream with consumers, but upstream with protecting the public water supply. The public health solution to air pollution is not to issue everyone an N-95 mask, but to keep from putting toxins into the air to the greatest extent possible.

The U.S. Environmental Protection Agency has stated that "Reducing emissions from diesel engines is one of the most important air quality challenges facing the country." They point out that: "Even with more stringent heavy-duty highway engine standards set to take effect over the next decade, over the next 20 years, millions of diesel engines already in use will continue to emit large amounts of nitrogen oxides and particulate matter, both of which contribute to serious public health problems. These problems are manifested by thousands of instances of premature mortality, hundreds of thousands of asthma attacks, millions of lost work days, and numerous other health impacts."[1]

about the author...

James E. Ginda, MA, RRT, AE-C, is a respiratory therapy supervisor and clinical instructor at Kent Hospital in Warwick, RI.

Toxicity of diesel emissions

The smell of diesel fumes and the characteristic black cloud of exhaust from older engines that have not been retrofitted with pollution control devices make one take notice of something bad in the air. Diesel exhaust consists of two major component groups. The first are the gaseous pollutants such as carbon monoxide, nitrogen oxides, sulfur dioxide, and ozone. The second group is the particulate matter, which forms a heterogeneous aerosol of small particles with an elemental carbon core and layers including nitrates, sulfates, metals, and toxics.

Diesel particles can be understood by respiratory therapists familiar with medical aerosol terminology and deposition. The particles in the 10 micron range (PM 10) are the larger particles that deposit primarily in the tracheo-bronchial tree. The fine particles in the 2.5 micron range (PM 2.5) deposit primarily in the small airways and alveoli. With diesel aerosols, there is another group to consider — the ultra-fine particles. These are less than 0.1 microns in diameter, or viral size, and make up a major portion of airborne particulate matter from diesel exhaust.

The level of exposure to airborne toxins, duration of exposure, and genetic variations in individual susceptibility all factor into the respiratory effects of air pollution. Exposure to airborne environmental toxins may result in short-term or long-term ill effects like bronchospasm, inflammation, cytokine release, an invoked allergic response or carcinogenesis. The black carbon in diesel particulate matter has been shown to be a formidable opponent for macrophages, which provide a last line of lung defense at the alveolar level. "More than half of U.S. black carbon emissions come from diesel

engines: 41% from on-road diesels and 16% from off-road diesels."[2]

The clinical and economic impact of diesel exhaust toxicity is substantial. In a review article titled "The Toxicity of Diesel Exhaust: Implications for Primary Care," Krivoshto et al note, "In 2006 the California Air Resources Board estimated that diesel exhaust pollution directly accounts for 2,400 deaths and, annually, nearly 3,000 hospital admissions for respiratory and cardiac-related diseases, at a total cost of $19 billion."[3]

Airway inflammation is a primary concern in asthmatics, and exposure to diesel exhaust particles can affect inflammatory mediator activity. Interleukin-8 (IL-8) is a pro-inflammatory chemokine, and exposure to diesel exhaust particles with varying organic content has been shown to differentially induce expression and promotion of IL-8 in human airway epithelial cells.[4] Another pro-inflammatory mediator is granulocyte macrophage colony stimulating factor (GM-CSF). Diesel exhaust particles stimulate production of GM-CSF along with IL-8 in airway epithelium.[5]

Asthma is one of the leading causes of school absenteeism, with an estimated 12.3 million school days missed in 2003.[6] In one study relating to asthma, O'Connor and Neas et al from the Boston University School of Medicine analyzed data from 861 children with persistent asthma in seven U.S. urban communities. They compared asthma symptom reporting, pulmonary function results, and aerometric pollution data. They found that higher levels of NO_2 and PM 2.5 were associated with asthma-related missed school days, and higher concentrations of NO_2 with increased asthma symptoms. It was interesting that almost all pollutant concentration levels were below the National Ambient Air Quality Standards.[7]

Exacerbation of COPD has been associated with short-term exposure to air pollution, and long-term exposure to traffic-related air pollution may contribute to the development of COPD.[8] In a recent cohort study of 52,799 eligible subjects, COPD incidence was associated with the 35-year mean NO_2 level, and susceptibility was possibly enhanced when there was diabetes or asthma as a comorbid condition.[9] Clearly a paradox exists for patients with respiratory diseases faced with the dilemma of trying to be active outdoors to the greatest extent possible when environmental factors beyond their control influence their lung function and health.

Nowhere to hide

What about leaving it all behind and escaping to the great outdoors for clean, fresh air? Maine is a state known for its outdoor recreational activities. It is home to Mount Kahtadin, the northernmost peak of the Appalachian Trail that runs from Maine to Georgia and home to Acadia National Park on the northeast coast. Over a 10-year period the best visibility was 87 miles and the worst was 16 miles. The reduction in visibility is a result of air pollution in the form of haze.[10] The haze on one of the worst days was composed of sulfates (73%), organic carbon particles (13%), nitrates (6%), elemental carbon (4%), and crustal materials (4%).[11]

In 2005, Maine had the second fastest growing rate of asthma in the nation, affecting 9.4% of the adult population and one out of eight children.[12] In a study of biologically soluble metal ions from particulate matter (PM 10) by researchers from the department of environmental science at the University of Southern Maine in Gorham, a key determination was that most of the PM 10 did not originate from local crustal material.[13] Even when envi-

ronmental aerosols are generated from transportation sources in the northeast corridor and power plants to the south, weather conditions like the location of the jet stream can impact where they end up; and they can still affect respiratory patients many miles away.

Reducing the burden

The diesel engine has been referred to as the economic workhorse of an industrialized society. The good thing about diesel engines is that they last a long time, with the average useful life being nearly 30 years. Unfortunately, that is also the bad thing about diesel engines. The air pollution levels of older technology are the downside of such a long, useful life.

Diesel engines release 10 times the amount of NO_2, aldehydes, and breathable PM compared to unleaded gasoline engines and more than 100 times that produced by catalysed gasoline engines.[14] Diesel retrofits, ultra-low sulfur fuels, and anti-idling ordinances can significantly reduce the level of toxins in the environment and make a difference to respiratory patients now. Respiratory patients do not have time to wait for 30-year replacement cycles.

Healthy People 2020, the latest public health blueprint for America, includes a goal to "reduce air toxic emissions to decrease the risk of adverse health effects caused by airborne toxics."[15] At a time when health care expenditures are at an all-time high and COPD was recently named by the Centers for Disease Control and Prevention as the third leading cause of death in the United States, funding for clean air health initiatives such as the Diesel Emissions Reduction Act pays long-term dividends in the health of the nation. For every $1 invested, an average of $13 is realized in health and economic benefits.[16] This makes it one of the most cost-effective federal programs, and one with bipartisan support.

Respiratory patients may have some control over certain environmental factors (e.g., avoiding secondhand smoke), but there are still others beyond their control (e.g., poor air quality) that may exacerbate breathing difficulties. Respiratory therapists can play an important role in advocating for air quality initiatives. Clean air is not a political issue but rather an important public health issue, particularly for those with chronic respiratory diseases. ■

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REFERENCES

1. U.S. Environmental Protection Agency website. Fuels and engines: EPA national clean diesel campaign. Available at www.epa.gov/oecaagct/tfuel.html *Accessed Feb. 13, 2011*
2. Clean Air Task Force website. Problems of diesel. Available at www.catf.us/diesel/problems/ *Accessed Feb. 13, 2011*
3. Krivoshto IN, Richards JR, Albertson TE, Derlet RW. The toxicity of diesel exhaust: implications for primary care. J Am Board Fam Med 2008; 21(1):55-62.
4. Tal TL, Simmons SO, Silbajoris R, et al. Differential transcriptional regulation of IL-8 expression by human airway epithelial cells exposed to diesel exhaust particles. Toxicol Appl Pharmacol 2010; 243(1):46-54.
5. Takizawa H, Ohtoshi T, Kawasaki S, et al. Diesel exhaust particles activate human bronchial epithelial cells to express inflammatory mediators in the airways: a review. Respirology 2000; 5(2):197-203.
6. Centers for Disease Control and Prevention website. National Center for Chronic Disease Prevention and Health Promotion — Healthy Youth: Asthma. Available at www.cdc.gov/HealthyYouth/asthma *Accessed Mar. 21, 2011*
7. O'Connor GT, Neas L, Vaughn B, et al. Acute respiratory health effects of air pollution on children with asthma in US inner cities. J Allergy Clin Immunol 2008; 121(5):1133-1139.
8. Andersen ZJ, Hvidberg M, Jensen SS, et al. Chronic obstructive pulmonary disease and long-term exposure to traffic-related air pollution: a cohort study. Am J Respir Crit Care Med 2011; 183(4):455-461.
9. Andersen ZJ, Hvidberg M, Jensen SS, et al. Chronic obstructive pulmonary disease and long-term exposure to traffic-related air pollution: a cohort study. Am J Respir Crit Care Med 2011; 183(4):455-461.
10. U.S. Environmental Protection Agency website. Air pollution impacts on visibility in Acadia National Park, Maine. Available at www.epa.gov/oar/visibility/parks/acad_t.html *Accessed Feb. 13, 2011*
11. U.S. Environmental Protection Agency website. Acadia National Park, Maine — Pollutants that contributed to reduced visibility on the worst days in 1997. Available at www.epa.gov/visibility/parks/acad_p.html *Accessed Feb. 13, 2011*
12. Langley-Turnbaugh SJ, Gordon NR, Lambert T. Airborne particulates and asthma: a Maine case study. Toxicol Ind Health 2005; 21(3-4):75-92.
13. Langley-Turnbaugh SJ, Gordon NR, Lambert T. Airborne particulates and asthma: a Maine case study. Toxicol Ind Health 2005; 21(3-4):75-92.
14. Mazzarella G. Effects of diesel exhaust particles on human lung epithelial cells: an in vitro study. Respir Med 2007; 101(6):1155-1162.
15. HealthyPeople.gov website. Environmental health. Available at www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=12 *Accessed Feb. 12, 2011*
16. Diesel Technology Forum website. Diesel Emissions Reduction Act. Available at www.dieselforum.org/policy/retrofit/diesel-emissions-reduction-act *Accessed Feb. 13, 2011*

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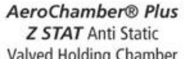
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American Association of Cardiovascular and Pulmonary Rehabilitation

by Debra Koehl, MS, RRT-NPS, AE-C

As section chair of the AARC Continuing Care and Rehabilitation Section, one of my responsibilities is to act as the Association's liaison to the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR). For those of you not working in pulmonary or cardiac rehabilitation, the AACVPR is an organization for cardiac and pulmonary rehabilitation professionals.

The AACVPR's mission statement is: *Founded in 1985, the American Association of Cardiovascular and Pulmonary Rehabilitation is dedicated to our mission of reducing morbidity, mortality and disability from cardiovascular and pulmonary disease through education, prevention, rehabilitation, research and disease management. Central to the core mission is improvement in quality of life for patients and their families.*

The AACVPR's membership includes not only respiratory therapists but many other disciplines as well, including nurses, physical therapists, exercise physiologists, physicians, dietitians, and behavioral specialists just to name a few. These professionals work in the fields of cardiac and pulmonary rehabilitation.

about the author...

Debra Koehl, MS, RRT-NPS, AE-C, is the pulmonary rehabilitation and patient education program coordinator at Clarian Health, Methodist Hospital in Indianapolis, IN, and chairs the AARC Continuing Care-Rehabilitation Specialty Section.

Connecting with like-minded professionals

As the representative to the AACVPR, my role is to represent the AARC and the respiratory therapist at the professional liaison committee of the AACVPR. This committee serves to represent pulmonary patients and organizations. In collaborating with the AACVPR, we can assist them in their strategic initiatives.

At the last meeting in October 2010, we had representatives from American Thoracic Society, American College of Chest Physicians, American Physical Therapy Association, National Association for Medical Direction of Respiratory Care, AACVPR, and of course the AARC. This meeting allows the organizations time to share as well as collaborate on any projects or research occurring or being planned to occur. It also allows us to help represent the needs of pulmonary rehabilitation professionals at the AACVPR annual professional conference.

Ensuring your voices are heard

In representing the AARC, my goal is to make sure the voices and concerns of respiratory therapists are heard. The RT is a vital member of the pulmonary rehabilitation team; and working in this multidisciplinary environment is an excellent way to represent our knowledge, skills, and profession of respiratory care. This year our contribution to the committee was our work being done on the "Uniform Reporting Manual" regarding pulmonary rehabilitation. Not only is it important for respiratory therapists to be able to represent the work that we do in terms of relative value units for measuring productivity, it is also important that other disciplines can as well. We plan to use our relationship with the AACVPR to expand the number of pulmonary rehabilitation professionals surveyed for the project.

Our relationship with the AACVPR is also very important when it comes to our legislative goals. As most pulmonary rehabilitation professionals know, this past year has been one of great legislative gains for pulmonary rehabilitation. This cannot be done in a bubble — it takes a large community to bring about change. For many years the AARC has worked side by side with the AACVPR in

(continued on page 69)

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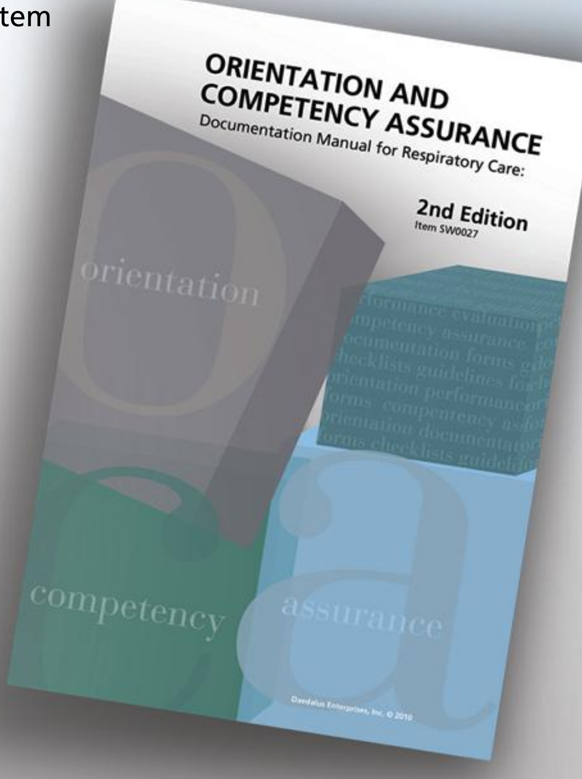

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Going Digital with Advocacy

by Cheryl West, MHA

From time to time it's good to review the wealth of information that might be of interest to the respiratory therapist on the Web, especially when it comes to government policy, rules, and just plain facts. For example, when I first started out with the AARC (a date I will not divulge, but you'll get the picture), if I needed to get a copy of a House or Senate bill, I physically had to go down to Capitol Hill, go to the Document Room, stand in line with my list of bills, and wait for a staff person to wander around a vast room and pull paper copies of the bills for me. Thank heavens those days are long gone!

Now if you want to view or print a piece of legislation, it's as simple as logging on to the Web. For all things Congress and Capitol Hill related, I would suggest going to the Library of Congress's webpage (http://thomas.loc.gov/). Not only can you locate legislation, but this site serves as a portal to both the House of Representatives and Senate websites where, again with a few clicks, you can find the personal web pages of your congressperson or senators.

As for the federal agencies, the websites get better and better every year. On the flip side, the vast amount of information that keeps being added makes navigating them a bit of a chore, so have patience. At the AARC's Government Affairs office we receive the most questions from our members concerning Medicare policy and regulations. The Centers for Medicare and Medicaid (CMS) main page (www.cms.gov) can guide you into the areas you might want to review. A word of caution: Using the search box on the main page often yields links to information that is not necessarily pertinent to what you might be looking for, so try to narrow the field down by linking to sub-topics from the main page. And while the CMS site is aimed at providers and professionals, CMS also has a beneficiary and consumer friendly site that you might want to keep in mind for your patients (www.medicare.gov).

As you know, the state Medicaid programs are a federal/state health insurance program for the poor and disabled. And while CMS also regulates Medicaid, it does so in a far more general fashion than it does with the strictly federal Medicare program. I personally have found using the CMS website for state information on Medicaid yields far less useful data than simply going to the state government site and searching for your state's Medicaid policies from there. More on that below.

about the author...

Cheryl West, MHA, serves as director of government affairs for the AARC. She can be reached at west@aarc.org.

Other government websites

The U.S. Food and Drug Administration (www.fda.gov) has information on tobacco (especially now that it has new powers to regulate tobacco) and a section on medical devices, including respiratory therapy devices and recall notices.

The Centers for Disease Control and Prevention (www.cdc.gov) has an alphabetical pull-down menu where you can find specific information on issues such as asthma (with downloadable and free brochures), COPD, and tobacco. The CDC even has on its main page free greeting cards (Health-e-Cards) you can send.

The Environmental Protection Agency also has specific information on indoor air quality and asthma on this particular site: www.epa.gov/iaq/.

Looking for clinical practice guidelines? Among much other information, go to the Agency for Healthcare Research and Quality (www.ahrq.gov).

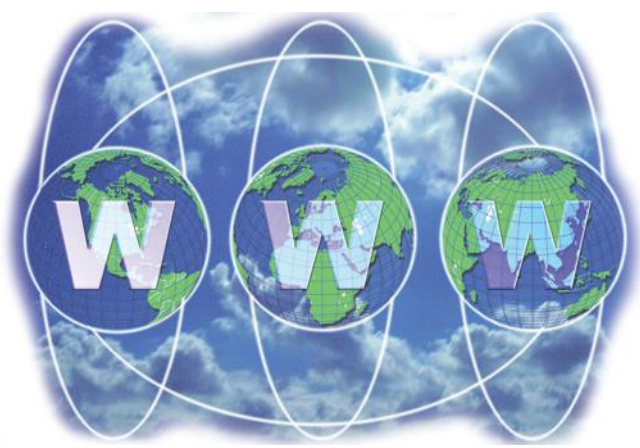
Interested in finding out about health-related grants, loans, and scholarships? Go to the Health Resources and

Services Administration (www.hrsa.gov/index.html). This site will provide information on many professions, plus it can link you to the Bureau of Labor Statistics (www.bls.gov/home.htm) if you're looking for "numbers."

State websites

As for finding information at the state level, whether it is a specific piece of legislation or Medicaid coverage regulations or a press release from the governor, the best starting point is to go to the state government's main site. All the states are pretty much set up the same: that is, from the main page there are links to the legislative, executive, and judicial sites. And the easiest way to get to a state's main page is to plug in your state's two-letter abbreviation in this generic address: www.state.____.us. So, for example, getting to the New York government's main webpage would be www.state.ny.us. As is the case for all websites, some are easier to negotiate than others, so patience, again, is essential.

Finally, if you are looking for respiratory therapy state licensure information, such as how to contact your licensure board, or what is your licensure board's website, or what are your licensure fees and continuing education requirements, the AARC has an informational site for this (www.aarc.org/advocacy/state/licensure_matrix.html#matrix).



Log on!

Fortunately for our generation, the digital age has brought a wealth of information to our desktops or laptops, as the case may be. The answers to those questions that have you bogged down might just be a click away. ■

The Respiratory Catalog

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Patients Can Manage Their Disease, But It Takes Some Heavy Lifting

by Jean M. Rommes

As a COPD patient for the last 10 years, I was quite interested in the announcement of a new column called "Chronic Disease Manager" in the January issue of *AARC Times*. A little history may help you understand my interest in this concept. I was originally diagnosed in 2000, though I'm sure I had COPD probably as early as 1985. I quit smoking in 1992, after 30 years.

From 2000 to February 2003, I pretty much ignored both my COPD and my Type 2 diabetes. However, in February 2003 I was hospitalized with what I'm pretty sure was respiratory failure; and as a result, I decided I needed to do something. Long story short, I got permission from my primary care provider (PCP) to exercise as much as I wanted and embarked on a rigorous exercise and diet program that resulted in losing over 100 pounds in the next 18 months.

Since pulmonary rehabilitation was not available to me, I did it all on my own. In the process, I reduced my medications significantly, got off oxygen completely, was able to put my CPAP machine in the closet (where it still resides), and got a whole new wardrobe.

Light bulb moment

In 2005 I was referred to a pulmonologist because of some nodules that had been found during a CT scan. Thankfully they were benign, but his conversation with me was really illuminating (the light bulb really went on that day); and the thing he said that really resonated with me was that there were "things I could do to manage and control this chronic disease." Then he proceeded to give me the list of things I could do: quit smoking, exercise, get my weight down and keep it down, take my meds, get my flu and pneumonia shots, avoid people with bugs, and get to my doctor whenever I did get something respiratory related. Then he beamed at me and said, "And you've done all of them!"

I was so incredibly empowered by that statement. For the first time, I really understood what my responsibility was and that the only person with that sort of responsibility was me.

One of the problems with COPD is that patients tend to be totally overwhelmed with the loss of function that seems to come on very quickly after the initial hospitalization, essentially bringing on the grieving process, with all the dysfunction that can create. There aren't any meds that reduce symptoms completely, even for a short time. Many are totally put off by the need for supplemental oxygen, embarrassed by it, and sometimes unable to cope with the complications and organization required to continue an "ordinary life" while using it.

I was just lucky that my PCP happened to be fairly knowledgeable about COPD and really encouraged me when I began to take charge of my situation. I know many people who were given the same diagnosis I was and were essentially told to go home, pull up an afghan, and wait for the inevitable. I'm appalled at the waste that represents, so I'm searching for ways to reach medical professionals to try and help them understand that it doesn't have to be like that.

about the author...

Jean M. Rommes is a COPD patient and AARC member from West Des Moines, IA, who serves on the executive board of EFFORTS, a patient-run, online COPD support and advocacy group.

Encourage your COPD patients to participate in the discussions on the EFFORTS website: www.emphysema.net.

Read **More of the Story** about Jean Rommes.

Get the patient on board

This is a long way of saying that I hope the focus of the new column in *AARC Times* is geared toward helping RTs develop the skills they need to help their patients understand that their success in managing their COPD really rests with them, that their medical professionals can support them, but the patients have to do the heavy lifting.

I totally support the idea that managing COPD as a chronic disease is critical; and respiratory therapists can play a huge, if not leading, role in the process. My caveat is that unless you can get the patient on board and actively participating, you will just be tracking the illness, not managing it. The only person who can truly manage the illness is the patient, with the help and support of the medical team. ■

EDITOR'S NOTE

In addition to voicing the patient perspective on COPD at conferences around the country, Jean Rommes was featured in an article and video about people living with chronic conditions in a 2007 issue of the *New York Times*. You can see that video now on www.AARC.org/members_area/aarc_times/index.asp by selecting the link: "More of the Story."

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Professionalism

by Anthony L. DeWitt, JD, RRT, FAARC

"That's not my job."

How many times have you heard that from a fellow therapist? Whether it's helping a nurse turn a patient or running to the pantry to get a patient some ice, every single therapist has a duty to the patient to give that patient their very best. Strictly speaking, ferrying ice to the patient or assisting with a patient transfer is not listed anywhere as a duty of a respiratory therapist. The issue, however, is not what someone puts down in writing defining the scope of practice, the issue is more personal than that: How does the patient feel when they hear a statement like that?

For the last 20 years I've been telling everyone that "people do not sue people they like." While there may be an occasional exception to this rule, for the most part, lawsuits arise not out of a bad act or a bad series of acts, but rather out of how the patient feels about their interactions with hospital staff.

Unless you've worked in a hospital, it is often hard to tell whether the person in the white lab coat or set of scrubs is a nurse, physician, therapist, or dietician. The patient lying in the bed, whose perceptions may be altered at least in part by their medications, often doesn't care. They are often merely pleased to see a human face in their room, and the requests they've saved up for a friendly face often get spoken to the first one who happens by. And while a therapist might reasonably assume that if a patient wanted something they'd press the call button, for most patients it doesn't work that way. "I don't want to bother the nurses, they're so busy," is what you hear if you take the time to listen.

Whenever a manager or a supervisor hears "that's not my job" from an employee, it should be a teachable moment. Although health care executives often wax eloquent about "the health care team," for the most part, that team consists mainly of nurses, therapists, and physicians at the bedside. When any one of them defines their job narrowly so that they are only concerned with their end of things, it has the potential to affect the patient. If a therapist is not committed to patient care, they are doing their department and their patients a disservice by remaining in their job. Every therapist every day should remember that he or she is an ambassador for the profession and that the attitudes they display on any given day are going to be attributed to their peers the next day. Or, said more directly, every department is only as good as its worst therapist.

Therapists have fought a long battle for respect, particularly in the community hospitals where their value has not always been well understood. Advancements in respiratory care, including the development and implementation of clinical protocols, are the result of a lot of hard work by other therapists who pushed hard for changes. Therapists who have too narrow a view of their job and forget that they represent the entire profession do every other therapist harm. Just as every therapist lost a little something when therapist Efren Saldivar pleaded guilty to murder, so too do therapists as a whole lose out when one therapist displays attitudes that are inconsistent with the goals of the profession.

Vince Lombardi once said: "Winning is not a sometime thing; it's an all the time thing. You don't win once in awhile, you don't do things right once in awhile, you do them right all the time. Winning is a habit. Unfortunately, so is losing." Being a professional means bringing your best game to the bedside every day. It means doing the things necessary to make sure that you and your peers are seen as valued members of a health care team. It means giving your best. To do less than that is to dishonor the gift of your profession. ■

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.

A Reminder from Rina

by Sam P. Giordano, MBA, RRT, FAARC

As some of you have noticed over the past several years, the AARC has organized a yearly photo contest among our members. The winning photo is published on the cover of every January issue of *AARC Times*. Not surprisingly, most of you photographers choose your patients as your subjects. This is the most appropriate thing you can do since the purpose of our existence as health care professionals is to help patients.

You might also be interested in knowing that after the cover photo is published, we frame it and hang it on the wall here at AARC's Executive Offices. Those of us who are therapists like to walk past these photos and remind ourselves that we remain focused on helping patients even in our current, non-clinical, jobs. Moreover, the remainder of our staff like to see the patients you serve. It is good for us to see photos of patients every day. It makes us feel good and reminds us of what a privilege it is to be part of a profession that helps so many.

Even though health care professionals must maintain a professional distance from our patients so we can be objective and do what needs to be done for them, but because we often work with patients with chronic conditions, we get to know some of them and their families very well. Indeed, they become our friends.

Rina Goldberg, who was on the cover of the *AARC Times* January 2010 issue, passed away at the very end of last year from mitochondrial disease — just two weeks after her fifteenth birthday. One of our colleagues and members, Bruce Toben, RRT-NPS, CPFT, was Rina's therapist and photographer. Bruce won the contest by taking a photo of himself and Rina, both with smiles. This photo is worth one thousand words. You could see that the therapist-patient relationship was strong between these two. Moreover, when Rina passed, Bruce lost a little bit of himself, too. Sound familiar?

about the author...

Sam P. Giordano, MBA, RRT, FAARC, serves as AARC executive director. He can be reached at (972) 243-2272 or giordano@aarc.org.

Remember "your Rina"

All of us have undergone similar experiences over the years. I still recall the passing of a cystic fibrosis patient over 40 years ago. She was only eight years old at the time but very special to me. I know that it is bittersweet to remember some of our favorite patients, but I think it's important to take time and remember that we often develop special relationships with our patients; and when we do, we not only build the trust necessary between us but also provide comfort and support to their families. This interaction is an act of pure compassion. It doesn't just help patients and their families but also rewards you for being there for them even though, as happens all too often, we lose some of these special patients far too soon.

With all that's happening in the world and in health care, and even when your work grinds you down, make a choice: Choose to remember some of the patients you've helped. You deserve it, and they deserve it. You often make that extra effort for your patients, but nowadays it's much harder to do so.

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Bruce Toben and RT colleagues modified Rina's bi-level PAP machine so she could participate in a walk for the United Mitochondrial Disease Foundation, where she raised over $5,000.

Safety Checklists: Coming Soon to a Patient Hand-off Near You

by Patrick J. Dunne, MEd, RRT, FAARC

If numbers are to be believed, and there is compelling evidence to take these numbers at full face value, the U.S. health care system is notoriously unsafe for the millions of Americans who entrust their lives every day to health care providers. This is especially true in the nation's hospitals, where (according to the seminal report by the national Institute of Medicine) somewhere between 44,000 and 98,000 deaths occur each year due to medical errors.[1] There are also hundreds of thousands of patients who survive a medical mistake only to sustain serious harm or injury. By all accounts, medication errors comprise the biggest cause of medical mistakes, but there are other serious challenges to patient safety as well. These include surgical mistakes, patient falls, nosocomial infections, and gaps in care resulting in miscommunication between clinicians. As mentioned in *AARC Times* recently, there are now several national patient safety initiatives underway, all with an aim to reduce and possibly eliminate iatrogenic harm.[2]

A recent addition to improve patient safety is the use of safety checklists, especially in certain high-risk, critical aspects of care. While a mainstay in the aviation industry for decades, where there is a zero tolerance for error, checklists are relatively new to health care; but their use is steadily growing. Not surprisingly, the first serious use of checklists in health care has occurred in the operating room (OR) where even the slightest errors can be both costly and deadly.[3,4]

The case for safety checklists

Today, checklists are widely used in the OR pre-operatively to ensure that all members of the surgical team agree, one final time, that the right patient is to receive the right procedure on the right site, that the right pre-op medications have been administered, that the right anesthesia is to be administered, and that the right surgical instruments are available. Essentially, these efforts are twofold — to use a checklist for patient safety, but to also foster more effective teamwork between the various individuals involved in the procedure. This dual nature of checklists is underscored by the results of a recently published three-year study in OR safety in 74 Veterans Affairs hospitals. Researchers found that surgery deaths dropped 18% in those facilities that undertook extensive training in building more effective teamwork — training that also included the development and widespread use of checklists.[5] Coincidentally, the latest reported use of checklists to successfully reduce patient harm addresses an important area of respiratory therapy practice — a daily checklist to ensure that all elements of a ventilator-associated pneumonia (VAP) prevention bundle are consistently being followed.[6]

The newest application of checklists, but no less important, is their use when patients are being handed off from one provider to another following transport. Critically ill patients, by their very nature, require continuous physiological monitoring of hemodynamic and respiratory functions. Additionally, many of these patients will also have IV lines and infusion pumps in use, be receiving supplemental oxygen therapy, and in some cases, even receiving mechanical ventilation. Clearly with this patient population, even in the controlled setting of an ICU, there is always the potential for any number of unintended misadventures to

about the author...

Patrick J. Dunne, MEd, RRT, FAARC, is president of HealthCare Productions Inc. in Fullerton, CA. He is also a trustee of the American Respiratory Care Foundation and an AARC representative to the International Council for Respiratory Care.

occur. However, when the patient is being transported from one site of care to another (either temporarily or permanently), the risk is magnified. There is also the issue of miscommunication between providers when the patient is actually handed off following transfer.

As defined by The Joint Commission, a patient hand-off occurs when responsibility for care is transferred from one provider (i.e., the *sender*) to another (i.e., the *receiver*).[7] Examples of patient hand-offs abound, but the most obvious is when patients are physically moved from one institution to another in a ground or air ambulance. However, there are also numerous other instances of intra-hospital transfers, such as from the emergency department (ED) to the OR, or from the ED to the ICU, or from the recovery room to the ICU, or from the ICU to/from the radiology department for certain diagnostic tests. In each of these instances, responsibility for a patient's care is handed off to another provider; and as patient acuity increases, the potential risks associated with any hand-off likewise increase.

Respiratory therapists (RTs) are actively involved in both inter- and intra-hospital patient transport and the ensuing hand-off. I would imagine that a good majority of the patients we transport are receiving continuous monitoring with a portable pulse oximeter to ensure that adequate oxygenation is maintained throughout. Many are receiving supplemental oxygen as well. Accordingly, should a pulse oximeter fail in its purposes (e.g., insufficient battery life), a critically ill patient, especially one with marginal oxygenation to begin with, will quickly suffer the consequences of desaturation since the en-route caregivers might not be made immediately aware. Further, should the alarm limits not be properly set, patients will likewise be harmed as desaturations would not be readily detected. An improperly or loosely attached probe could be equally problematic. There is also the issue of excessive alarm triggering, for whatever reason(s), which compel caregivers to either ignore alarms, mute them, or even turn them off altogether.

AARC developing patient safety checklist

With the foregoing in mind, the AARC is developing its first evidence-based, patient safety checklist for use by respiratory therapists and others responsible for monitoring oxygenation during transport. The checklist will be used to enhance the safety of the hand-off of patients requiring continuous oxygen monitoring with a portable pulse oximeter. As mentioned previously, during transport many of these patients might also be receiving supplemental oxygen to maintain a target arterial saturation. Thus, the importance of accurate pulse oximetry readings throughout the transport episode cannot be understated. While this is important for all patients receiving supplemental oxygen, it is even more so for those patients with higher acuity due to their disease state and/or other medical complications. Patients with higher acuity are often on the cusp of serious cardiovascular decompensation, especially should prolonged periods of arterial hypoxemia be allowed to occur without the knowledge of any member of the transport team.

It certainly is reasonable to expect that when transport begins, both the *sending provider* and *receiving provider* realize the importance of taking time to ensure that the pulse oximeter is indeed working properly, and no doubt this takes place the majority of the time. However, during the rush to get everything ready for a safe and timely transport, especially for the most critically ill and unstable patient, good intentions often go by the wayside. Consequently, should it turn out that the pulse oximeter does not function properly (for whatever reason), the unaware transport team is suddenly faced with the added challenge of now handling a serious hemodynamic crisis without direct access to all of the resources needed for a successful intervention.

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Spectacular Advances

How respiratory care research moves the profession forward

by Debbie Bunch

Medicine has always been referred to as both an "art" and a "science," but until the 20th century, the "art" part of the definition was probably more accurate. While physicians and nurses did study their craft, and there were scientists out there investigating the human body and how it works, most medicine was based on the clinician's own experience in treating patients.

Certainly, the art of medicine still comes into play at the bedside today, because despite the desire to follow proven guidelines, patients don't always fit into a standard mold. But increasingly, both providers and payors are demanding that patients receive care that is based on solid scientific evidence.

How does research make a difference in the way you care for your patients, and what is it going to take to get more respiratory therapists involved? We talked with three leading respiratory therapy researchers to find out — Richard Kallet, MS, RRT, FAARC, director of clinical research and quality assurance in the critical care division of the department of anesthesia at the University of California, San Francisco General Hospital; Arzu Ari, PhD, RRT, CPFT, associate professor in the division of respiratory therapy at Georgia State University in Atlanta; and Robert DiBlasi, RRT-NPS, FAARC, respiratory research coordinator at Seattle Children's Hospital in Washington State.

Studies that resonate

The most important reason for conducting any clinical research study is to improve patient care, so the first thing we asked these investigators to do was to point to some respiratory-related studies that they believe have really changed the way respiratory therapists do their jobs. Their answers should resonate with just about anyone who has delivered standard respiratory care services over the past decade. "The two most important clinical trials that come to my mind are obviously the National Institutes of Health's Acute Respiratory Distress Syndrome (ARDS) Network trial of low tidal-line ventilation and the Spanish Clinical Trials Group study of spontaneous breathing trials for weaning," says Kallet. "Both of these studies have had a tremendous influence on how we approach respiratory care. Although neither were designed by respiratory therapists, the ARDS Network employed a number of RTs as clinical coordinators at several of the participating centers."

Begin With You

Respiratory therapists have added hundreds of studies to the scientific record, but the profession has still only scratched the surface of its potential in the research arena.

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Respiratory Research: The Full-time Experience
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PART III:
Respiratory Research: Documenting the Value of RTs in the Home
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Dr. Arzu Ari, who has a special interest in aerosolized medications, points squarely to research on inhaled epoprostenol sodium in mechanical ventilation published by AARC member Mark Siobal, BS, RRT, FAARC, in Respiratory Care in 2003 and 2004. "Mark is a superb example of a respiratory therapist who found an unmet clinical need and dug in to show that use of epoprostenol sodium can provide a level of efficacy in ventilated patients," she says. "He inspired many RTs and physicians to initiate inhaled prostacyclin therapy for ventilated adults at a time when there were no approved inhaled therapies for treatment of post-cardiac pulmonary hypertension."

A pediatric therapist, DiBlasi believes several recent studies are helping therapists improve care for premature neonates. "Over the last few years, research has been focused on ventilator-support approaches in these babies that are aimed at reducing lung injury and other risks associated with mechanical ventilation," he says. Focusing on gentler, less invasive forms of neonatal respiratory support such as sustained lung inflation and the use of nasal continuous positive airway pressure (CPAP), these studies are leading to better outcomes for preemies across the nation. "If the baby has failed these approaches, there is now some promising data that is useful for clinicians when considering a modality for providing invasive mechanical ventilation as well," notes the AARC member.

What you bring to the table

The studies cited by Kallet, Dr. Ari, and DiBlasi have definitely made a huge impact on patient care; and every researcher dreams of being able to work on a project that produces similarly significant findings. But as they'll all tell you, most research doesn't fall into the "wow" category — it is slow and steady work on narrowly defined topics that adds just one more brick to the scientific foundation. So, why should respiratory therapists invest their time and energy?

Dr. Ari says RTs have a unique set of skills that can add tremendous value to the research team. She gives this example: A senior academic and fellow may have a great research concept but lack the hands-on detailed knowledge to select and use the best devices and methods for implementing the study. RTs add practical realism to study methods in terms of devices, their assembly and use, as well as implementation and patient interaction.

Kallet agrees, noting therapists played a big role in the groundbreaking trials on ARDS. "This was very much in evidence during the NIH ARDS Network trials, where physician investigators routinely relied on RTs to advise them on the technological details of these areas for their study design," he says.

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Open Forum: *THE Place To Get Your Feet Wet*

Publishing a full paper in a peer-reviewed journal is a huge undertaking for a veteran researcher, let alone a novice investigator. But newcomers don't have to tackle a full paper their first time out. Every year at the AARC International Respiratory Congress, the Association hosts a series of Open Forum symposia where everyone from beginning researchers to the biggest names in the profession present abstracts based on their work.

Richard Kallet, MS, RRT, FAARC, who has both presented in these sessions and chaired them, says the main challenge for new researchers is understanding that the forum is an interactive environment where the audience is allowed to ask questions of the researcher. That can be intimidating to some but really shouldn't be cause for concern.

"Both the investigators who chair the sessions and the audience tend to be very supportive," he says. "But anyone who gets involved in research has to understand that to be successful, you have to grow a bit of a thick skin, and you have to be prepared to accept criticism. Once you've gone through the process a few times, it gets much easier and the rewards are wonderful."

Benefits of presenting at the Open Forum abound, agrees Arzu Ari, PhD, RRT, CPFT, noting novice investigators not only get to present the results of their work alongside veteran investigators, they also get to network with these leaders and exchange research ideas and questions that may lead to future studies or even collaborations.

"I would encourage any aspiring RC researcher to submit their abstracts," says Robert DiBlasi, RRT-NPS, FAARC. "Open Forums are a great way to overcome the fear of speaking and to network with RTs and clinicians from all over the world. Beyond that, you may just have the solution to a question that a bedside clinician has been asking themselves for years but never had the time or resources to do the research."

The Open Forum is also a great stepping stone to the ultimate goal of publication, as presenters are often encouraged to submit a full paper on their findings to Respiratory Care.

It is not too late to submit Open Forum abstracts for the 2011 AARC Congress in Tampa, FL, Nov. 5–8, but it is fast approaching. You have until June 1 to submit your abstract at http://aarc2011.abstractcentral.com. ■

WHO: Richard Kallet, MS, RRT, FAARC

Richard Kallet got started in research by volunteering his time to help other investigators with their studies.

WHERE:
University of California, San Francisco Medical Center

WHY HE GOT INVOLVED IN RESEARCH:
My interest began in the mid-1970s after the publication of the optimal positive end-expiratory pressure (PEEP) paper that came out of San Francisco General Hospital. It was a big deal, and it stimulated my interest in becoming a researcher. A few years later, in the respiratory therapy bachelor's program at State University of New York's Upstate Medical Center, I received some training as a research assistant for an anesthesia lab project on minimum alveolar concentrations for anesthetic gases. It was a great experience that I enjoyed immensely. Going to work at San Francisco General Hospital was a dream come true for me. At the time, there was a tremendous amount of critical care research. Within a few years, I was volunteering as a research assistant to Jeff Katz, who along with John Luce and Michael Matthay, became my mentors.

TIME DEVOTED TO THE AREA:
Up until two years ago I was pretty much a full-time researcher. I still work on a few projects that interest me. However, most of my time is now spent on quality improvement in critical care.

FIRST RESEARCH PROJECT:
My very first research project that I spearheaded by myself was measuring dead space in trauma patients, comparing volume and pressure-control ventilation. By the time that I had to close the study because I was starting graduate school, I had enrolled six patients. The data was never published because there was no signal to be found.

WHAT HE'S DONE SINCE:
I'm not sure I can name all the projects I've been involved in one way or another over the years. My primary focus has been on research concerning dead space ventilation, pulmonary edema, patient-ventilator interactions, and ARDS. But I've also been involved in pharmaceutical studies.

WHERE HE'S PUBLISHED:
I've published in several peer-reviewed journals, including Respiratory Care, *Critical Care Medicine*, and the *New England Journal of Medicine*. I've presented my research at the AARC and Society of Critical Care Medicine congresses.

MOST INTERESTING PROJECT:
The research I've loved most has been measuring patient work of breathing during mechanical ventilation in ARDS. It was challenging, totally engrossing, and fascinating. You know something's really good when you look up and realize you've been working on a project for four hours straight without seeming to notice the time.

BIGGEST CHALLENGES AND REWARDS:
It's all very challenging. It's difficult for me to say that any one part of a research project is harder than another. The biggest reward is discovering something new, particularly if it's unanticipated. Of course, the final satisfaction is getting a paper accepted for publication and seeing it in print.

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DiBlasi says therapists are natural "tinkers" and strive to find new solutions to help their patients. "They will bring something to the table that the principle investigators have never thought of and ways to improve a research protocol that, in the long run, could save everybody a lot of time and money." With some institutional training, RTs can also have what it takes to keep a study moving smoothly, identify patients who meet the study criteria, enroll patients into the trial, obtain data, and train other caregivers on the study intervention.

So, how can an RT get involved in clinical research or even conduct a study of their own? According to our three experts, there are really three parts of the equation: overcoming barriers, meeting the right people, and following through all the way to publication.

Removing roadblocks

While it is certainly true that any clinician anywhere can carry out a research study, it's also true that the vast majority of facilities out there today are not geared to clinical research — and for many RTs, that's a significant barrier. "The bottom line is that, if you want to do research, you need to be in an academic environment where research is one of the primary missions," says Kallet. "That's where the action is." His advice to any budding RC researcher is to find a job in a university-affiliated hospital where research is not only taken seriously, but fostered in the staff. "This is very unlikely to happen in a community-based hospital that is not affiliated with an academic institution," he explains. Of course, finding a position in one of these facilities doesn't guarantee success. For one thing, Kallet points out that RTs don't have easy access to formal training for clinical research. "The implication is that it's very unlikely that you can walk up to a clinical investigator and ask for a paying job as a research assistant or coordinator," he says. "You're going to have to prove yourself instead."

Most researchers Kallet knows (and he includes himself in this group) did just that by first becoming highly motivated, master clinicians, and then by volunteering their time on a study being conducted by someone else. "What I'm trying to get at is that becoming a clinical researcher involves a certain amount of sacrifice. Although it appears very glamorous when RC researchers stand up before large audiences and present their studies, what is never apparent is the phenomenal amount of work and dedication that went into those projects."

AARC Research Roundtable:
Your Entry to the World of Investigation

Anyone who is even remotely interested in respiratory care research should make the AARC's Research Roundtable their first destination. This group is available to all AARC members free of charge and includes a dedicated and monitored discussion list where roundtable members talk about everything from their latest research projects to how to conduct a study.

John Davies encourages AARC members to join the Research Roundtable.

"One of the obstacles for the RT who wants to perform research is that we receive only a small amount of training in the area," says Roundtable Chair John Davies, MA, RRT, FAARC. "Therapists who have gotten involved in research generally have had mentors with a wealth of experience, and the Research Roundtable is a forum where multiple mentors are available to give advice and provide some direction to novices."

By connecting with proven investigators around the world, AARC members can find the support they need to navigate the clinical research maze and produce quality projects with valuable clinical impact. Research veterans in the roundtable benefit as well by gaining more direct access to their peers. "The roundtable can help us 'hone up' on our skills, because one person's weakness is another's strength," says Davies, a clinical research coordinator at Duke Medical Center in Durham, NC.

Consider joining the AARC Research Roundtable today (www.AARC.org/community) and the growing cadre of RTs who, as Davies puts it, are increasingly asking "Why are things done this way?" or "What would happen if…" and then setting out to find the answer with a research study of their own. ■

Dr. Ari says the biggest things standing in the way of clinical research for many RTs are: the perception that they don't have the research skills to carry out a project, financial constraints that limit funding, lack of time to devote to the project, administrators who don't support research activities among their employees, and difficulty getting patients involved in studies that rely on a patient population. "No one is born with the knowledge and technical competence required for research," she says. "It all takes time, practice, and persistence."

When it comes to the financial constraints, Dr. Ari suggests therapists look outside the box for answers. For example, the American Respiratory Care Foundation sponsors several research fellowships for therapists interested in studying certain areas. As for the time barrier, Dr. Ari emphasizes that you will most likely have to sacrifice personal time to your project; but that will be more than compensated for by the feeling of accomplishment you'll get upon completion. She feels it is a wonderful way to contribute, potentially change, and advance the profession.

Dealing with reluctant administrators and patients who balk at participating in a study can be tricky — particularly in facilities that aren't connected with a university and thus don't have a research focus. But Dr. Ari is a believer in approaching these people anyway to explain why you want to do the project and what it could mean to the facility (for administrators) and people with respiratory conditions (for patients).

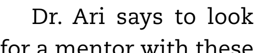
Robert DiBlasi sees lack of formal training in research as a roadblock as well, but emphasizes that you don't have to have a PhD to tackle a project. "Anyone can conduct research, regardless of their background or education," he says. "Some of the best research questions I have ever heard have been from RTs." The key for the therapist is to realize that the process takes time — avoid getting caught up in daydreaming about the fame and fortune that could potentially lie at the end of the road. "RTs who are interested in conducting research for fame or "glam" are in this for all of the wrong reasons. A true appreciation and love for the profession, with the goal of improving the care that we provide to patients, is paramount for achieving success in RC research."

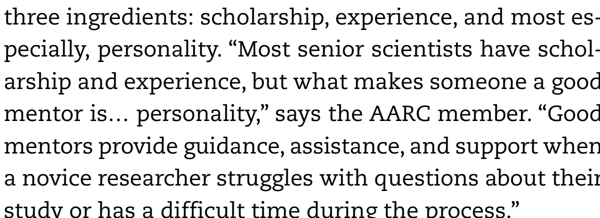
Get a mentor

All three investigators stress the vital importance of finding a mentor to guide you through the research process. "You can have a room full of equipment or a unit full of patients, but without a mentor, the aspiring RC researcher will likely fail. Mentors are critical in explaining the research process and measurement technique, observing and analyzing data, and summarizing data," says DiBlasi.

Richard Kallet suggests targeting the physicians in your facility who are conducting studies that interest you; read up on their work before approaching them with ideas or questions. "I've always found researchers more than willing to spend time talking to others who share their interest. Once you build a relationship with these researchers and have also cultivated a reputation as an earnest, hard-working clinician, it will be much easier to be welcomed into the enterprise," he says.

The best way to get your foot in the door is to volunteer to assist them with a small part of their research, even if it's just performing a menial task. "This is the organic way to become a researcher," continues Kallet. "Through your experience in the lab or at the bedside, and in attending research meetings, you come to appreciate the challenges and creativity involved. Over time, you may begin to see an opportunity to do some spin-off research of your own."





Dr. Ari says to look for a mentor with these three ingredients: scholarship, experience, and most especially, personality. "Most senior scientists have scholarship and experience, but what makes someone a good mentor is… personality," says the AARC member. "Good mentors provide guidance, assistance, and support when a novice researcher struggles with questions about their study or has a difficult time during the process."

Follow the essentials

So let's say you are in the right place (an academic medical center or other facility where research is valued) and you have met the right people (established researchers who are willing to help with your study). Now what? "The most fundamental piece of advice I can give to anyone who's interested in research is to explore the basic tenants of logic and epistemology — the branch of philosophy that studies the nature of knowledge and its

limitations," says Kallet. "From that vantage point, the basic tenants of scientific methodology begin to make a lot of sense."

Dr. Ari notes there are eight essentials of effective research:

1. Frame a research problem
2. Determine supporting knowledge and theory base
3. Formulate specific questions
4. Select a research design
5. Set study boundaries
6. Collect data
7. Analyze data and draw conclusions
8. Report and disseminate conclusions

The biggest pitfall for novice researchers often lies in framing the question. "There is a tendency to try to take on too broad a question that cannot be answered with a succinct study," Dr. Ari says. "Good researchers narrow the field of the research questions so that practical methods can be applied to answer them in a doable study."

Kallet believes novice researchers would do well to spend three or four months just reading the literature on the topic they want to study before even narrowing down their question. "By knowing the literature well, you soon discover what is ambiguous or left unanswered by the previous research," he says. "This may steer you in a slightly different direction than you had originally intended; but it may pay off in huge rewards, as it will help focus your research project on areas of our knowledge that are still sketchy or controversial. In this way, your research will be more useful and more likely to get published."

Robert DiBlasi shares his own first experience in presenting a proposal for a study that he says illustrates what new researchers should avoid. "After five minutes of presenting all of the reasons why I wanted to conduct the study, one of the senior investigators stopped me in my tracks and said, 'What is your hypothesis?'" DiBlasi was wordless. "I simply didn't know how to best answer the question because I never even developed one in the first place. Further, I never even stated my research question, so it was unclear to everyone what I was really trying to accomplish. I spent so much time focusing on study design that I missed that fundamental first step that determines how the experiment will follow."

Framing the question is certainly the first step on the road to success, but the final step — publishing the results — is also an area that causes problems for new researchers. "I was told by one of my mentors that 'you should not conduct the research unless you plan on actually publishing your findings,'" says DiBlasi. "Sharing this work with a larger community not only makes the findings of the research more accessible but it identifies the researcher as a true expert in that particular field. This opens doors for collaboration and funding opportunities."

Dr. Ari and Kallet emphasize that writer's block can hit even the most seasoned investigator, so novice researchers should not feel as if they are the only ones affected. This is where a good mentor can be very valuable, but if human direction is lacking, many good books on medical writing are available that can help get everything flowing.

Spectacular advances await

With a multitude of published studies between them, these three investigators know firsthand how difficult it is to conduct clinical research in respiratory care. But they also share in the vast personal and professional satisfaction that comes from knowing that, in ways big or small, they have added to the scientific record and improved the care of pulmonary patients. "The world of research contributes invaluable information about the benefits and safety of respiratory care modalities and provides clinicians with reliable information about choosing between alternative treatments," says Dr. Ari. "The spectacular advances in our profession will never happen without sharing research findings with the larger community." ■

WHO: Arzu Ari, PhD, RRT, CPFT

Dr. Arzu Ari works nights and weekends to fit research into her busy schedule as a tenured professor.

WHERE:
Georgia State University (GSU), Atlanta

WHY SHE GOT INVOLVED IN RESEARCH:
When I enrolled in the respiratory therapy master's degree program at GSU, I was impressed by Dr. Joseph Rau's (PhD, RRT, FAARC) scholarship and have been interested in aerosol research since then. Both Joe and James B. Fink, PhD, RRT-NPS, FAARC, have served as my role models and mentors.

TIME DEVOTED TO THE AREA:
As a tenured associate professor, I am expected to spend 40% of my time in research, 40% in teaching, and 20% in service. However, since I am passionate about research and my students who are interested in research, 40% of my time is not enough. Therefore, I work most evenings and on the weekends.

FIRST RESEARCH PROJECT:
The study entitled "Performance Comparison of Nebulizer Designs: Constant-Output, Breath-Enhanced and Dosimetric" was my first aerosol research. It was awarded the Allied Health Care Professional Travel Grant in addition to a monetary award given by the European Respiratory Society (ERS). I presented my study at the ERS Congress in Stockholm, Sweden, in 2002, and it was also published as a manuscript in Respiratory Care in 2004.

WHAT SHE'S DONE SINCE:
I have worked on 29 research projects since 2001. While all of them were published as abstracts, I have 17 peer-reviewed papers published in different peer-reviewed journals since 2003. The rest are either under review or in progress. My primary area of research is aerosol medicine, and I am also interested in educational research: specifically, quality improvement in respiratory care education through organizational effectiveness, student admission and retention, and quality of instruction.

WHERE SHE'S PUBLISHED:
I've published in Respiratory Care, *Pediatric Pulmonology*, *Respiratory Care Clinics of North America*, the *Journal of Allied Health*, *Current Reviews in Respiratory Medicine*, the *Respiratory Care Education Annual*, and *Nursing in Critical Care*. I have presented my research at professional congresses of the AARC, ERS, International Society for Aerosols in Medicine, the Turkish Respiratory Society, the Georgia Society for Respiratory Care, and the Maryland Society for Respiratory Care.

MOST INTERESTING PROJECT:
My research on aerosol delivery with high-flow nasal cannula has been the most interesting research project I've conducted so far because of the complexity of aerosol therapy in infants and children. Not only aerosol generators but also interfaces that are used for adults may not be ideal for infants and children as they cannot master the complex steps required for aerosol treatment or tolerate most of the interfaces, such as masks and mouthpieces. In this study, we were able to show that aerosol drug delivery with high-flow nasal cannula is highly efficient and can be a good alternative for newborns, infants, and children.

BIGGEST CHALLENGES AND REWARDS:
Financial constraint is the most challenging part of doing research for me. The biggest reward of completing a project is to see colleagues across the nation and around the world change their practice based on what we found and to hear that our research was helpful in treating their patients with pulmonary diseases. The growth of my students in research and their excitement and passion about conducting more research projects after graduation is also rewarding.

WHO: Robert DiBlasi, RRT-NPS, FAARC

Robert DiBlasi has been doing research full time since 2006.

■ *WHERE:*
Seattle Children's Hospital, Washington State

■ *WHY HE GOT INVOLVED IN RESEARCH:*
I was first introduced to respiratory care research in 2001 by my mentor, John Salyer, MBA, RRT-NPS, FAARC, when we conducted ventilator performance studies at our institution.

■ *TIME DEVOTED TO THE AREA:*
In 2006, I was hired full-time as a respiratory research coordinator by the Seattle Children's Research Institute to conduct clinical research and translational clinical research with a group of pulmonary physiologists and physicians. I also continue to assist the respiratory care department with quality improvement projects, ventilator safety and performance, and aerosol research.

■ *FIRST RESEARCH PROJECT:*
My first study was a bench test related to the behavior of mechanical ventilators with cell phones being used in the ICU. I presented the abstract at an Open Forum and then followed up with a full manuscript that was submitted but was not accepted because it required major revisions and some additional testing. At the time, cellular phone technology was changing and other more interesting projects came along that I felt were more important to patient care. Nonetheless, this was a great first attempt at writing a manuscript. I learned a lot from the reviewers and the whole process.

■ *WHAT HE'S DONE SINCE:*
I have been involved in 25 projects. My clinical research has included advanced lung mechanics measurements and interactions in mechanically ventilated infants with bronchiolitis and larger pediatric patients with pulmonary alveolar proteinosis. I have been involved in studying the patient outcomes following a hospital-wide conversion from jet nebulizers to pressurized metered-dose inhalers/spacers. I have also evaluated aerosol delivery during neonatal and pediatric mechanical ventilation using new aerosol delivery approaches. I am an inventor of a novel method of neonatal noninvasive ventilation that may be useful in supporting a larger fraction of babies who would otherwise fail bubble CPAP. We are preparing for clinical studies in premature infants using this device in resource-limited areas of the world.

■ *WHERE HE'S PUBLISHED:*
I have presented results from these studies at the AARC Congress and the Pediatric Academic Society Meetings. I have published 12 papers in peer-reviewed journals, including Respiratory Care, the *Journal of Respiratory Care and Applied Technology*, *Pediatric Research*, *CHEST*, *Pediatric Pulmonology*, and *Pediatric Critical Care Medicine,* and co-authored seven textbook chapters.

■ *MOST INTERESTING PROJECT:*
My most interesting research projects have been animal studies where we evaluated in juvenile rabbits the physiologic effects of the noninvasive ventilation device that our team invented. We had results that were completely unexpected, and for that to happen in research is very infrequent. It is exciting that our findings and the design of this device may one day result in improved outcomes for premature infants.

■ *BIGGEST CHALLENGES AND REWARDS:*
The most challenging aspect of conducting research is the amount of time that is required to complete a project. It is also very difficult to get everybody engaged or excited about doing research, and lack of enthusiasm and support can stall a project. Completing a research project is an exhilarating accomplishment. It is nice to receive the journal in the mail and see all of your tremendous efforts strewn across the pages.

Respiratory Research: The Full-time Experience

by Debbie Bunch

It's probably fair to say that the vast majority of respiratory therapists who conduct clinical research today do it on the side. Their real jobs are in RC bedside care, management, or education. Even renowned investigators like Robert Kacmarek, PhD, RRT, FAARC, and Respiratory Care Editor in Chief Dean Hess, PhD, RRT, FAARC, hold what most folks would call "normal" positions in the profession. (Dr. Kacmarek is director of the respiratory care department at the Massachusetts General Hospital in Boston, and Dr. Hess is his assistant director.)

But for a handful of therapists with a passion for scientific investigation, research isn't just something to pursue in addition to their regular respiratory care duties. These RTs have landed full-time jobs in research. Robert DiBlasi, RRT-NPS, FAARC, who is featured in our cover story this month, is one of them, and so are Sharolene Goodman, RRT, CCRC, research coordinator at The Children's Hospital in Denver, CO, and Cynthia White, RRT-NPS, AE-C, FAARC, RTIII/researcher in the respiratory care division at Cincinnati Children's Hospital in Ohio.

In for the long haul

For Goodman, the research experience dates back nearly 30 years. "I first started doing research in the early 1980s when I worked with Dr. Jim Good at Porter Hospital in Denver in the ICU," says the AARC member. "We determined work of breathing in mechanically ventilated patients by measuring oxygen consumption and CO_2 production and presented our findings at workshops around the country."

A few years later, Goodman was offered her first full-time position in the area, going to work for AARC member Kent Christopher, MD, RRT, FAARC, at Presbyterian/St. Luke's Medical Center, also in Denver, on studies comparing pulse oxygen delivery with continuous oxygen delivery in patients during rest, while walking on a treadmill, and during sleep. The findings were reported in a landmark paper published in the September 1994 issue of CHEST that she says is still cited today.

Following a position as a research coordinator at the University of Colorado, she landed at Children's, where she currently serves as a certified clinical research coordinator — a credential she earned from the Association of Clinical Research Professionals — in the clinical trials organization. During her long career she has contributed to medical device studies, industry-sponsored pharmaceutical studies, and physician-initiated studies on everything from sputum induction to ear infections.

Seeking answers

A newcomer to full-time research, Cynthia White took on the position last July after completing a year-long Point of Care Scholar program at Cincinnati Chil-

dren's that helped prepare her for the role. She first tested the research waters while serving as an RT at the University of Virginia Medical Center (UVa) in Charlottesville. "Our medical director for respiratory care at UVa strongly encouraged us to write abstracts and think of research questions that came from everyday clinical practice," she says. "As I grew over the years as an RT, this inquiry for science and finding answers became more pronounced."

When the Point of Care Scholar opportunity presented itself, she was on board. "Through this curriculum, I became very good at critically appraising research articles and developing an evidence summary," says the AARC member. "These are basic skills you need to perform a comprehensive literature search prior to conducting research. The program also gave me the opportunity to develop some organizational relationships." Now she's taking her education even further in a master's in respiratory leadership program at Northeastern University.

Over the past year White has gotten involved in several studies, including a trial on the use of neurally adjusted ventilatory assist (NAVA) in the pediatric ICU patient population. "Specifically, I tested the hypothesis that prn [as necessary] sedation requirements were decreased in NAVA compared to pre-NAVA conventional modes of ventilation," she says. "I presented this preliminary data in poster format at the Society for Critical Care Medicine conference in San Diego, CA, in January." A secondary analysis that looked at changes in ventilation at three different time points among patients who were switched to NAVA was presented at the 2010 Open Forum at the AARC Congress in Las Vegas, NV, last December. She received the Carefusion Fellowship for Neonatal and Pediatric Therapists from the American Respiratory Care Foundation for her work on these two abstracts.

White and her colleagues are currently preparing a manuscript based on the first study and hope to publish a full paper soon. They have also applied for a National Institutes of Health grant to perform a more rigorous randomized controlled trial to compare the use of NAVA and the amount of sedation patients receive to conventional modes of mechanical ventilation.

Challenges and rewards

Both Sharolene Goodman and White say working full time in research is challenging but brings a wealth of rewards. "My biggest reward is motivating others," says White. "My biggest challenge is that this is a new position and I often have to create my own path to accomplish my goals." She credits her AARC membership for helping her achieve that. "I have been very fortunate to be active in the AARC for many years. This has allowed me the ability to network with some of the best in the industry and seek out other respiratory therapists who have achieved the things I want to achieve." It is through the AARC, in fact, that she connected with Robert DiBlasi, who invited her to visit his lab at Seattle Children's in January to learn how to use the Ingmar ASL 5000 test

Cynthia White (center) explains some new research data to fellow therapists Kathleen Faulkner, RRT (left), and Tanya Haines, RRT-NPS.

ECHO technician David Goldberg shows Sharolene Goodman some new research software her group hopes to use in a study in the pulmonary hypertension clinic.

lung and assist with some of his animal studies. Now DiBlasi is coaching her on the development of a multiple comparison ventilator study.

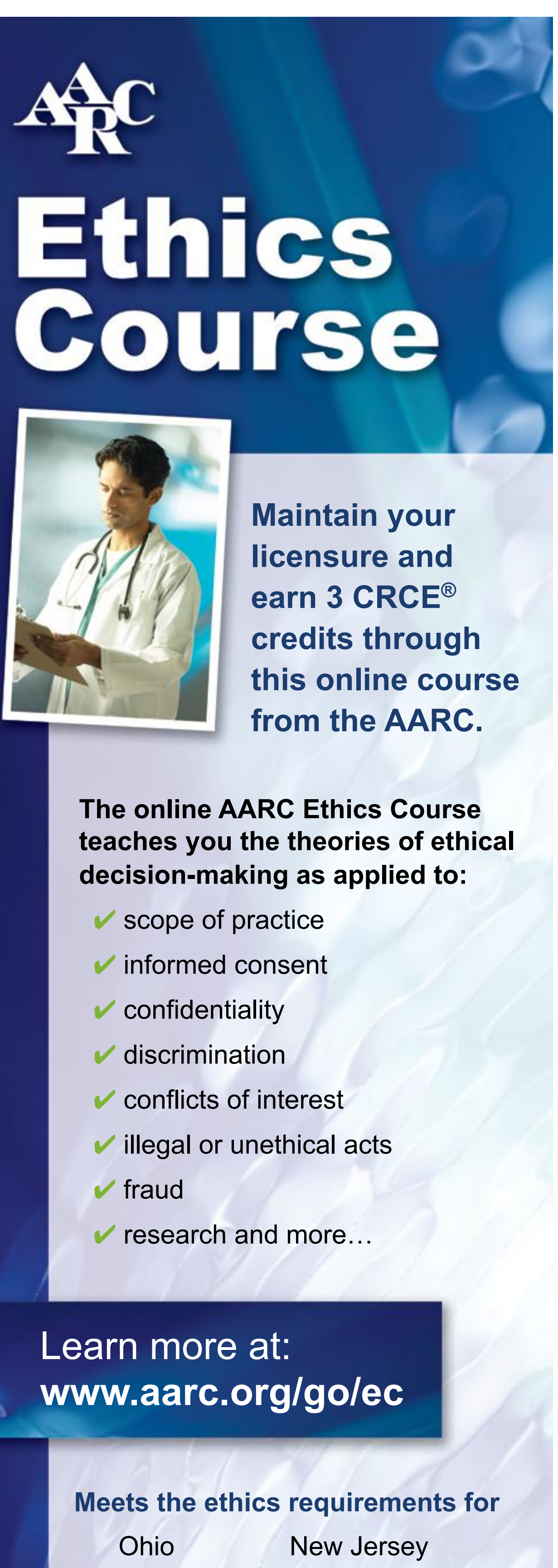
Goodman says her most rewarding research experience has been her participation in over a dozen pulmonary arterial hypertension (PAH) studies with Dr. Dunbar Ivy, chief of cardiology at Denver Children's — work that also ended up having a very personal meaning for her. "Not only have I had the opportunity to care for many wonderful patients with PAH, but some of the medications we studied were eventually approved by the U.S. Food and Drug Administration," she says. "Because of their approval, a couple of these medications were then available to a family member who lived with PAH for over a dozen years. They helped her survive to lung transplant."

"I believe it is very important for respiratory therapists to get involved in clinical research due to the very unique skill sets RTs bring to the table," says White. "For example, patient assessment skills are just as important when doing research on newborn babies with hypoplastic heart disease as they are for the respiratory therapist who is assigned to a ventilator-dependent baby in the neonatal ICU."

You don't know until you ask

White says her number one piece of advice for RTs who would like to follow in her footsteps would be to get a mentor and then do a project and submit it for presentation at the AARC Open Forum (see http://aarc2011.abstractcentral.com). "Getting started leads to more research questions and more learning about the process."

Her colleague in Denver echoes the mentor recommendation. "My advice would be to seek out those physicians who are already doing pulmonary research in your hospital," says Goodman. "If you're not in an academic center, then look for a pulmonologist who has an area of specialized interest. Maybe he or she just needs to know there is a respiratory therapist ready to act as a research coordinator." ■



Respiratory Research:

Documenting the Value of RTs in the Home

by Debbie Bunch

If you're a respiratory therapist who works with COPD patients in the hospital setting, you've probably gotten to know some of them fairly well, and you've enjoyed the chance it's given you to hear their life stories and add a more personal touch to the care you provide. Unfortunately, this level of familiarity is usually the direct result of something no therapist wants to promote: the revolving door of readmissions. You know these patients so well simply because you see them so often.

Back in 2001, AARC members James Clark, CRT, and Anthony Pickston, RRT, from Clark Respiratory and Medical Supply in Catskill, NY, decided to see if their company could keep their patients out of that revolving door by implementing a COPD Patient Management Program (CPMP) led by respiratory therapists. That alone would not make this duo unique, because lots of home care providers have undertaken a similar mission, and with equally good success. What makes these RTs stand out from the crowd is the fact that they also decided to measure their results and share them with the health care community through publication in a medical journal. That paper — "Role of the Management Pathway in the Care of Advanced COPD Patients in Their Own Homes" — appeared in the November 2010 issue of *Care Management Journals*.[1]

First of its kind

"We wanted to better understand the benefit of RT-led patient education on COPD and were surprised that we were unable to locate a study on the topic, so we decided to undertake it ourselves," says Clark, the company's CEO. "Many hours of discussion and planning went into how best to educate our patients about their conditions and measure the results of this additional education."

Along with three co-authors, Clark and Pickston developed the CPMP to include at least three home visits by a respiratory therapist: the first visit takes place within three days of receiving a prescription for supplemental oxygen, the second occurs a month later, and the third 10 months later. During the first visit, one of the five therapists employed by the company assesses everything from the patient's physical status to medication use, diet, and exercise. Follow-up visits allow for more in-depth education on the disease process, breathing exercises, and self-management strategies.

Both RTs believe the program is well worth the time and effort involved, even in this era of dwindling reimbursement for home oxygen services. "Well-educated patients are good for business, reducing costs through problem avoidance and higher levels of customer satisfaction," says Pickston, the company's lead salesman and respiratory therapist. "Home visits by RTs have shown to be the best way to provide respiratory education, since each home care situation is unique."

14.8% reduction in hospitalizations

The study was conducted among 324 GOLD Stage III and IV COPD patients mainly living in rural areas around the quaint and historic town of Catskill. Patients were referred to the CPMP by their physicians. All 324 were seen for the first visit, 206 were seen for a second visit, and 106

Anthony Pickston, RRT, and James Clark, CRT

were evaluated at the third visit. In-between visits patients were followed by phone, and additional in-home visits were made as deemed necessary.

Patients also received a self-management booklet and were encouraged to enroll in pulmonary rehabilitation programs and COPD support groups if these were available in their community. Patients were lost to follow-up for a variety of reasons, including death, switch of oxygen vendor, moving from the area, and physician discontinuation.

Analysis of the data found a significant effect on hospitalizations. "One thing our study revealed was that a lack of patient education on COPD contributed to frequent hospital readmissions, a problem we had observed in many of our COPD patients," says Clark. Specifically, results showed 35.8% of the patients had been hospitalized during the year prior to enrollment in the CPMP. By the end of the 10-month period, that figure had dropped to 21%, for a 14.8% reduction over baseline.

The study also measured this RC disease management program's impact on the patients' understanding of their disease process, knowledge of what medications to take and how to take them, appropriate dietary intake, participation in a daily exercise program, knowledge of breathing techniques, and whether they attended support group meetings. In all cases, the numbers rose over baseline as the patients progressed through the three visits. For example, at the first visit only 52.2% of the patients knew how to correctly use their medications. That increased to 85.8% at the third visit. At baseline, just 17.3% were engaging in daily exercise, versus 41.5% at the end of the study.

The fact that most of the study participants accomplished these goals while living in rural areas is also worth noting. "Although nothing in our study indicates that it is more important for rural patients to have the services of a respiratory therapist than other patients, rural areas do present different challenges to patient care, such as reduced access to other health care services," says Pickston. "Home visits by our respiratory therapists can address some of these different challenges."

"Our findings in the COPD educational pathway study proved that home care visits by clinical/educational respiratory therapists can help to decrease the frequency of emergency room/hospital visits," says Clark. "Feedback from physicians and hospitals has been positive and supportive."

Do it for your patients

James Clark and Anthony Pickston believe their study can help educate health care policymakers and payors alike about the valuable role respiratory therapists can play in keeping COPD patients at home and out of the hospital. "As health care continues toward a more results-oriented, cost-effective model, our study's results would lead us to encourage providers, insurers, and government agencies to gain a better understanding of the value and benefit that respiratory therapists can provide for COPD patients in their homes," says Pickston.

Clark urges his fellow home care providers to follow their example and invest the time and energy in conducting studies of their own. "Studies like ours require patience, diligence, and perseverance, and are in the best interest of patient care," says the company CEO. ■

REFERENCE

1. Ramani AA, Pickston AA, Clark JL, et al. Role of the management pathway in the care of advanced COPD patients in their own homes. Care Manag J 2010; 11(4):249-253.

AARC Hospital-to-Home Project Underway Now

The study conducted by AARC members James Clark and Anthony Pickston on the role of the respiratory therapist in home-based COPD education fits right in with a new initiative underway at the AARC to provide better care coordination for patients being transferred from the acute care hospital to the home setting. The "Hospital to Home Project" is being spearheaded by leadership teams from the AARC's Management and Home Care Specialty Sections and seeks to break down the barriers that often exist between the two levels of care. Stay tuned to your AARC publications and www.AARC.org for updates on this initiative as it develops. ■

They Can Hear Us Now

by Debbie Bunch

Annual PACT trip to Washington, DC, delivers RC message to members of Congress

Legislation to expand access to respiratory therapists gets a big boost from Hill visits.

Marguerite Jenkins expressed her concerns to Deborah Moldover, aide to Sen. Barbara Mikulski.

Every year for the past 11 years, members of the AARC's Political Advocacy Contact Team (PACT) have descended on our nation's capitol to deliver the respiratory care message to their members of Congress. On March 8, more than 120 AARC PACT representatives from 46 states and the District of Columbia made their way to Washington, DC, for a session that included nearly 300 scheduled appointments on The Hill.

These tireless volunteers were met by staff from the AARC Executive Office and members of the AARC leadership team, including President Karen Stewart, MS, RRT, FAARC, who outlined the AARC objectives to participants and congratulated them on their willingness to step up and speak to their senators and representatives on behalf of respiratory patients nationwide. "Without the service of our PACT members, we would not be able to make this annual trek to Washington to educate members of Congress on issues of key concern to the respiratory care profession and, most importantly, the patients we care for every day on the job," she says. "Thanks to their efforts, we were able to bring issues surrounding the safe and effective delivery of respiratory care to the forefront."

Sam Giordano joins April Venes, RRT, and Tony Garberg, RRT (right), with Oregon Representative Greg Walden.

Meeting with Sen. Chuck Grassley of Iowa are Marlene Erven (Alpha One executive director), LuAnne Heemstra, Miriam O'Day, and Anne Stark.

Shutting the revolving door

AARC Director of Government Affairs Cheryl West, MHA, says the group targeted one specific issue this year: support for the AARC's Medicare Respiratory Therapy Initiative. This legislation, which was reintroduced into the House of Representatives by Mike Ross of Arkansas on March 8 as H.R. 941, would revise the Medicare law to permit qualified RTs to provide certain respiratory care services, such as smoking cessation, disease management, and metered-dose inhaler device and medication education, under the general supervision of a physician in the physician's office.

Maine PACT representatives Keith Siegel, RRT, CPFT, AE-C, and John Higgins, RRT, flank Rep. Mike Michaud.

From Iowa, Anne Stark, RRT, Rep. Tom Latham, and LuAnne Heemstra, RRT.

As they did last year, PACT members tied the legislation to the high rate of readmissions for Medicare patients with COPD and pneumonia, explaining to their members of Congress how the services of a qualified respiratory therapist in the outpatient setting could help shut this revolving door by ensuring these patients receive the disease management services they need to properly manage their lung conditions.

The problem is critical to keeping costs under control. "A recent report from the Medicare Payment Advisory Commission, or 'MedPac,' revealed a 9.5% readmission rate for Medicare beneficiaries suffering from pneumonia, at a cost to Medicare of $533 million a year," says West. "The same report found Medicare patients admitted for COPD had a readmission rate of

Members of the MD/DC Society, along with alpha-1 patient Helen Nichols, met with Sen. Benjamin Cardin.

> **"If you put RTs in doctors' offices and clinics, they become physician extenders," explains Cheryl West. "They essentially act as the eyes and ears of the physician, and they serve as the physician's voice too."**

10.7%, at a cost of $345 million a year." Studies have already confirmed the difference that RTs could make if the respiratory therapy legislation were to pass. Research conducted at five Veterans Affairs medical centers, for example, found a 41% reduction in the hospitalization rate for COPD patients who received a brief disease management intervention from a respiratory therapist. Another study published late last year found the hospitalization rate for a group of patients with severe COPD went from 35.8% in the year before being enrolled in a home care program in which an RT delivered patient education to 21% by the end of the 10-month intervention. (See the background story of this study in "Respiratory Research: Documenting the Value of RTs in the Home" in this issue.)

"If you put RTs in doctors' offices and clinics, they become physician extenders," explains West. "They essentially act as the eyes and ears of the physician, and they serve as the physician's voice too, spending the time necessary to help these patients understand their medications and how to take them correctly, and encouraging them to make the lifestyle changes necessary to stay healthy and out of the costly acute care hospital."

Patient advocates put a face on the issue

PACT representatives once again got a big boost in their efforts to deliver that message through the AARC's partnership with patient advocates from the Alpha One Association and the COPD Foundation who accompanied the PACT on their legislative visits. They explained how important it is to them to be able to have qualified respiratory therapists involved in their care. "As respiratory therapists, we can tell our members of Congress how vital we are to the care of chronic lung disease patients, but legislators will always respond to this message more effectively when it's delivered by someone who is struggling with one of these conditions on a daily basis," says AARC Federal Government Affairs Committee Chair Frank Salvatore, MBA, RRT, FAARC. "The patient advocates who joined us did a wonderful job of communicating their need to see respiratory therapists not just in the hospital, but across care settings, helping to support our efforts to pass the Medicare Respiratory Therapy Initiative."

"People who are living with pulmonary disease put a face on the issues we are trying to get across to our legislators and their health staffs, and their words make a big impact," West says. "The folks who came to DC are all veterans in the advocacy arena, and we can't thank them enough for partnering with our PACT members to share the patient perspective."

Priming the pump, preparing the PACT

The AARC made sure all the volunteers — RTs and patients alike — had what they needed to make a big impact during their visits. Right before the PACT headed to Washington, DC, the Association launched a Virtual Lobby Week aimed at generating an all-out push to get RTs, patients, physicians, and supporters from around the country to flood Capitol Hill with email and phone messages asking their members to support the Medicare Respiratory Therapy Initiative legislation. The idea was to lay the groundwork for the PACT visits by showing strong support from "back home" just before the PACT members and patient advocates met with their senators and representatives.

By integrating the Virtual Lobby Week information site

(continued on page 86)

More AARC PACT members in Washington, DC

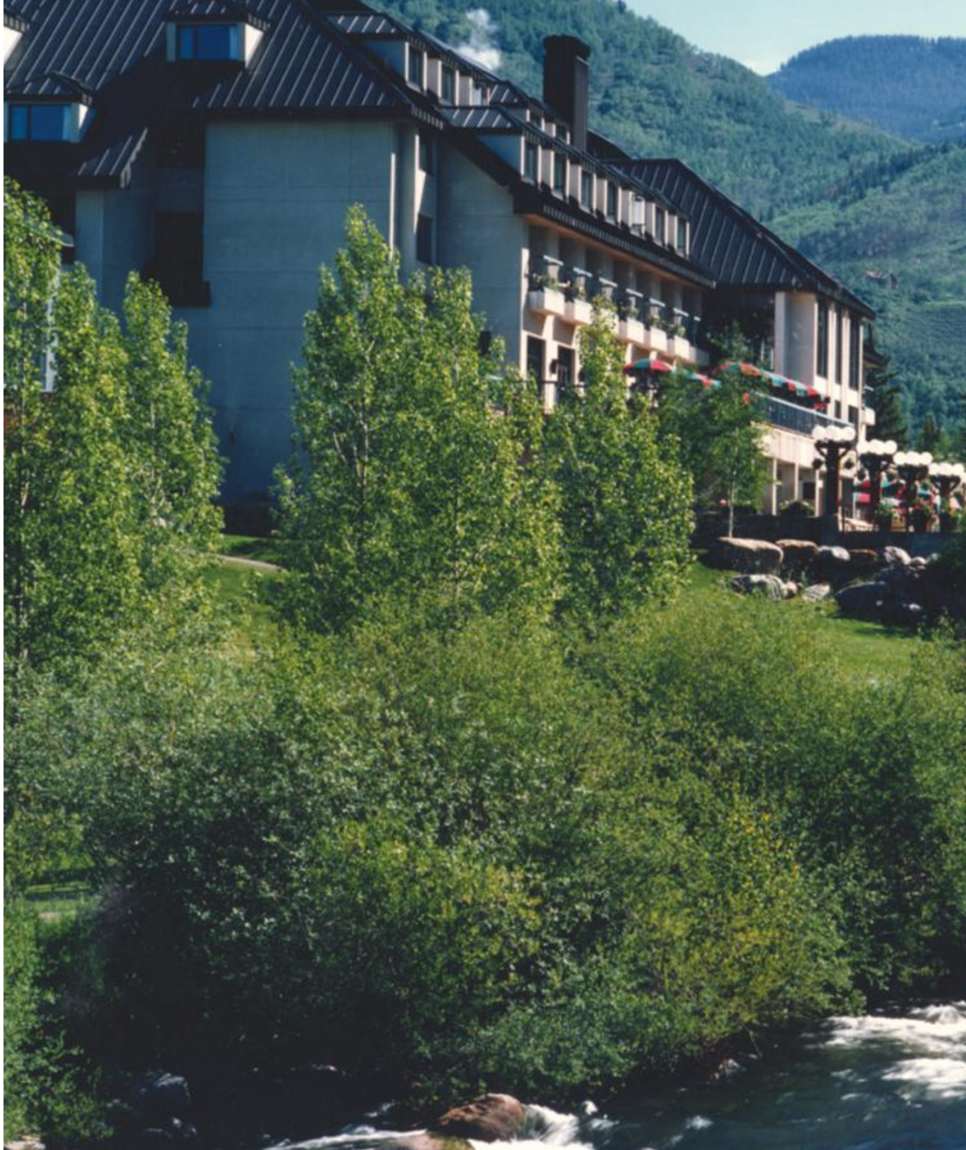
The AARC made sure all the volunteers — RTs and patients alike — had what they needed to make a big impact during their visits.

Find more photos on www.flickr.com/groups/1618839@N20/

PACT members with alpha-1 patients.

John Higgins and Keith Siegel met with Chellie Pingree, congresswoman from Maine.

LuAnne Heemstra, Sen. Tom Harkin from Iowa, and Anne Stark.



Join Us in the Rocky Mountains

Vail Valley abounds with things to see and do — and many of them don't cost a penny

Are you planning to bring your spouse and children along when you come to this year's Summer Forum in Vail, but don't want to break the bank on activities to keep them busy? You don't have to. Vail Valley offers a plethora of free things to see and do. Take a look:

Parking and Transportation: Park for free in the Vail Village and LionsHead parking structures and ride the bus all over town at no cost.

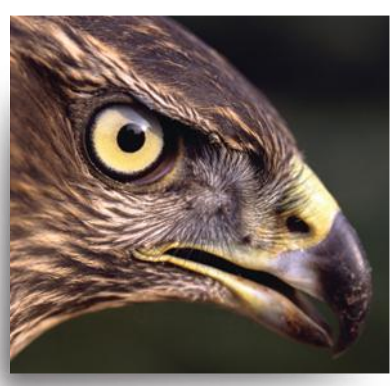
Gondola Rides: Up to three kids age 12 and under can ride the Eagle Bahn Gondola for free when accompanied by one paying adult.

For more information about the AARC Summer Meetings or to register, log on to www.aarc.org/education/meetings/

■ **Discovery Center:** Located at the top of the Eagle Bahn Gondola, the Discovery Center features fun, interactive displays, and guided nature hikes where you can learn more about the local ecosystem.

■ **Betty Ford Alpine Gardens:** Enjoy a unique collection of alpine, sub-alpine, and other mountain plants and flowers in the highest botanical gardens in the world.

■ **Vail Nature Center:** Nestled along the banks of Gore Creek, this seven-acre center features forests, meadows, and streams that are sure to delight. Educational programs are also available to fill you in on what you've been seeing.



■ **Raptor Rendezvous:** Handlers from the Raptor Education Foundation share stories and show off real live raptors every Saturday afternoon on the grassy lawn near the Eagle Bahn Gondola in LionsHead.

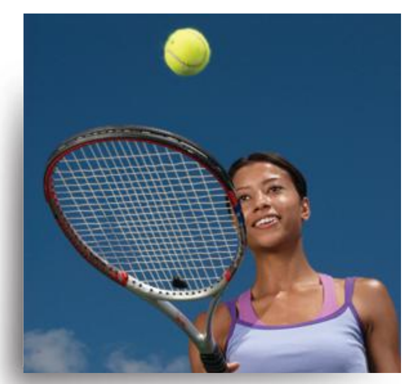
■ **Art Walks:** Walking tours of Vail's public art collection take place every Wednesday. The hour-long tour meets at 11 a.m. at the Vail Village Visitor Information Center on the top level of the parking structure. www.artinvail.com

■ **Farmers' Market & Art Show:** This great show will be running all summer long, and it doesn't cost anything to get in. Once you're there, you'll find lots of local produce, international dishes, fresh baked food, Colorado wine, and arts and crafts ranging from beautiful clothing to handmade items for the home.

■ **Family Fun Ride:** Bring your own bikes, or rent them in Vail, and then join Vail Sports for a one-hour guided ride through LionsHead Village, Vail Village, and Golden Peak.

For much more on free things to see and do in Vail during the AARC Summer Meetings, July 17–20, visit http://summer.vail.com/summer/activities/free-things-to-do.asp then join us in Vail for the AARC Summer Meetings. See you in Colorado!

FOR VIDEO LINK go to http://summer.vail.com/summer/vail-summer-video.asp



Golden Peak Tennis Courts: Play for free on a first-come, first-served basis.

Fly Fishing Casting Clinics: Gore Creek Fly Fisherman offers complimentary daily casting clinics at 10:30 a.m. along the Gore Creek Promenade in Vail Village that are perfect for folks who have never fly fished before as well as for those who want to brush up on their skills.

Skatepark: Located at the LionsHead parking structure, this free skatepark features a half-pipe, pyramid, multiple ramps, transitions, rails, and banks, plus a street course area for younger or less experienced riders.

Vail Recreation Path: Located right in the middle of town, this trail stretches 15 miles from West Vail to East Vail and is surrounded by 350,000 acres of national forest.

Colorado Ski Museum: Located on the upper level of the Vail Village parking structure, this museum covers the history of Vail, skiing, and the 10th Mountain Division through interactive exhibits and more.

Adventure Ridge: Bocce ball, a slackline park, horseshoes, and disc golf (if you bring your own discs) are all available at no charge up on top of the mountain.

Jazz @ The Vail Farmers' Market: Featuring local and regionally based jazz talent, these shows take place on Sundays from noon to 3:30 p.m.

Hot Summer Nights Concert Series: Head over to the Gerald R. Ford Amphitheater on Tuesdays for a free concert. Shows have yet to be announced, but bands generally range from rock to country. www.vvf.org/vvf/info/events.entertainment.hotsummernights.aspx

CALL FOR ENTRIES

AARC *Times*

PHOTO CONTEST

IMPORTANT: PLEASE READ THE FOLLOWING PHOTO REQUIREMENTS

Adhering to these requirements will assure that your photograph will be acceptable for publication. A good photograph produced at the wrong resolution may render it unsuitable for reproduction.

➡ **Since the photo is for the cover,** we require a vertical format. Turn your camera sideways to take the photo.

NO | YES

➡ **If your photo is taken with a standard film camera,** we will need a color print and negative shipped to us at **PHOTO CONTEST,** AARC, 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706.

➡ **Most digital cameras give you a choice of settings for image resolution.** Photos taken at lower resolution settings take up less room on your memory card but may not be useable for print productions. Set your camera for the highest resolution photo and save it as JPEG or TIFF.

➡ **We prefer that you mail a CD of your photo since it will probably be too large to be e-mailed.** If you do try to e-mail, please send it directly to our production manager, Donna Knauf, at knauf@aarc.org and indicate clearly in your e-mail that the photo is for the Photo Contest.

HERE'S YOUR CHANCE TO HELP CHOOSE THE COVER OF *AARC TIMES* MAGAZINE

HERE'S HOW IT WORKS:

AARC Times will collect photo entries from the membership. Contest finalists will receive **FREE DUES** on renewal AND will automatically be entered into the publication's Photo-of-the-Year Contest, which will take place in the November 2011 issue.

The Photo-of-the-Year winner will see his or her photograph on the **COVER** of the January 2012 issue of *AARC Times*!

WHAT KINDS OF PHOTOS ARE WE LOOKING FOR?

Heartwarming photos of your adult patients who rely on your care and guidance and who inspire you.

JUST FOLLOW THESE SIMPLE RULES:

- Provide a signed release for any patients or co-workers pictured in your photos. The form is available online at **www.aarc.org/headlines/photo_contest/** or can be faxed to you by calling Karen at (972) 406-4661. Photos cannot be published without signed releases.
- Send a brief background story with the photo.
- Photos will not be returned and become the property of the AARC.
- Do not print photos from your home printer.
- Photographic prints of good quality are acceptable. Please **read the requirements we have provided at left** so that you send your photo in a format that can be used and reproduced in a magazine.

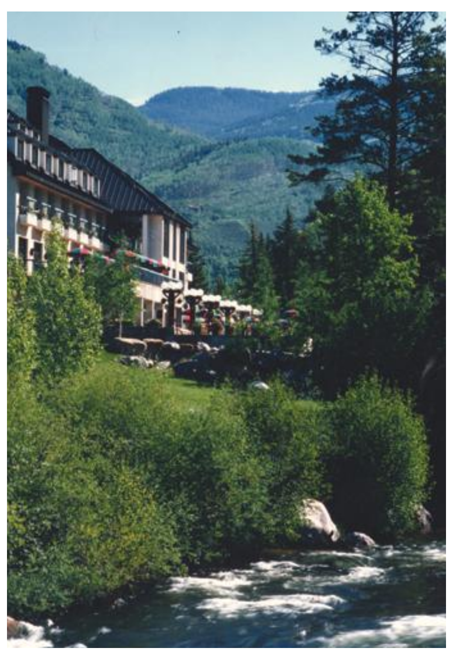
WWW.AARC.ORG

meetings

todo

AARC Summer

learn, sun & play



The premier respiratory care educational event of the summer joins forces with one of America's top vacation destinations in

Vail, Colorado

AMERICAN ASSOCIATION FOR RESPIRATORY CARE

Pre-Summer Forum Programs

Sunday, July 17, 2011

Vail, CO

NATIONAL BOARD FOR RESPIRATORY CARE (NBRC)

9:00 am – 12:00 noon

NBRC-Sponsored Item Writing Workshop

The National Board for Respiratory Care (NBRC) will sponsor a free 3-hour item writing workshop that is designed to assist the attendee to develop his/her skills in effective and high quality multiple choice item writing. There is no preregistration for this workshop. The number of attendees is limited to a first-come first-serve basis while on-site. Following this workshop, you may choose to serve as an item-writer for future NBRC credentialing examinations. Hone your item writing skills and enhance your program's test bank. Aid your credentialing organization in developing effective and high quality credentialing examinations.

COMMISSION ON ACCREDITATION FOR RESPIRATORY CARE (CoARC)

12:00 noon – 2:00 pm

Meet the Commission

CoARC Board members and Executive Office staff will be available to meet program faculty to assist them with specific program issues and/or answer any accreditation questions they might have. Appointments must be made for this session. To make an appointment, please contact Shelley Christensen at shelley@coarc.com

Visit AARC.org for program updates.

BEYOND THE PRECEPTOR: A GUIDE TO MENTORING FOR PROGRAM FACULTY, DEPARTMENT EDUCATORS & MANAGERS

2:00 pm – 6:05 pm

William F. Galvin MSED RRT CPFT AE-C FAARC/*Presiding*

Approved for up to 3.67 hours of continuing education credits (CRCE)

As one of the most requested topics on AARConnect list serves, the AARC is proud to offer this Summer Forum pre-course for program educators, as well as department educators and managers on how to become better preceptors and mentors. We are pleased to address a topic that is relative to student clinical education as well as orientation and development of new and existing employees. Don't miss out on this opportunity to better engage your students and staff by developing the mentor within you!

2:00 pm – 2:20 pm

The Effective Preceptor & Mentor: Going from Good to Great

Erna L Boone DrPH MEd RRT, Cabot AR

This presentation compares and contrasts the characteristics and skills needed to be both an effective preceptor and mentor. The hospital educator, whether providing preceptorship for students or mentorship for therapists, shares his/her experience and expertise, provides guidance and support for the learner and acts as a role model through demonstration of professional and technical competence. Not content with just being a good mentor? Then be sure to attend this interactive and engaging presentation that will allow you to be the best mentor you can be for your students and employees.

Meetings 2011

information

2:25 pm – 3:05 pm

Beyond Preceptoring: The RT as a Mentor

Erna L Boone DrPH MEd RRT

An introduction of bridging the gap as the student becomes the therapist and the department educator is both preceptor and mentor. The hospital educator is the leader in the next step of the preceptoring and mentoring process for graduate therapists and existing RTs who need assistance in becoming better clinicians, patient advocates, and hospital employees. Invest in your own professional growth and development by making the successful transition from preceptor to mentor - your students, employees, and colleagues will be glad you did.

3:10 pm – 3:50 pm

Providing Constructive Feedback

Kathy Rye EdD RRT FAARC, Little Rock AR

Providing effective feedback and effective strategies for improvement of professional knowledge, attitudes, behaviors, and overall performance are among the most challenging and important skill sets that excellent clinical preceptors need to possess. Why is it then that we do so poorly at giving it? The answer is simple – the infrequency in which we give it and the negative emotions that consume us before and during the delivery of the message. This presentation will provide attendees with tools they can use to prevent their own emotions from getting in the way of delivering effective feedback that is constructive in nature, how to frame the message, and how to be sure the recipient leaves feeling good about the conversation.

3:55 pm – 4:35 pm

Techniques of Evaluation

Kathy Rye EdD RRT FAARC

Providing an effective evaluation is, along with providing effective feedback and strategies for improvement, the most challenging and important skill set preceptors must have. Preceptoring demands excellence in the skills of evaluation, providing constructive feedback and effective remedial strategies for improvement. Attendees will leave this presentation with a solid understanding of what behaviors, traits, and performance attributes must be present in an effective student/employee evaluation.

4:40 pm – 5:20 pm

Solving Problems in Therapist/Preceptor Relationships

Arthur A Taft PhD RRT FAARC, Augusta GA

Working together and using effective communication are among the keys to solving many of the problems and challenges that surface in a teacher/learner setting. For maximum benefit, both clinical instructors and preceptors must utilize proper and effective techniques as various problems arise. The ability to communicate and feel comfortable to share critical reviews without repercussion are essential elements of the preceptor/student or manager/employee relationship. This two-way street of dialogue facilitates higher performing teams and promotes improved efficiency and productivity. This presentation will highlight the required elements necessary for problem solving and improved communication in any vertically reporting work relationship. All program faculty, managers, and department educators will benefit from this talk.

5:25pm – 6:05 pm

Putting It All Together: Engaging Excellence

Arthur A Taft PhD RRT FAARC

This presentation is a summary of the entire course and provides a framework for both clinical instructors and department educators to continually improve their skills to provide excellence in clinical performance. A focus will be placed on strengthening the mentoring relationship that takes place between the student/employee and the clinical preceptor/department educator/manager. Establishing and building upon a relationship that emphasizes professional growth and clinical excellence is a win-win…for student and employee, the college and the hospital, but most importantly for the patient and the profession.

See pages 64-66 for registration form and discounts, how to make your hotel reservation, and transportation discounts.

All programs are approved for Continuing Respiratory Care Education (CRCE) credit.

lectures to hear AARC Summer

learn, earn

Earn your CRCE credits, then enjoy the outstanding vacation attractions with your family.

Summer Forum - up to 17.09 hours

Beyond the Preceptor - 3.67 hours
Educator's Track - 16.39 hours
Manager's Track - 15.79 hours
Competency College - 3.33 hours

AMERICAN ASSOCIATION FOR RESPIRATORY CARE

SUMMER FORUM

MONDAY–WEDNESDAY, JULY 18–20, 2011

VAIL, CO

See pages 64–66 for registration form and fees, hotel reservation information, and travel discounts.

Approved for up to 17.09 hours of continuing education credit (CRCE).

Monday, July 18, 2011

PLENARY SESSION

8:00 am – 8:50 am

Cheryl A Hoerr MBA RRT FAARC Chair, AARC Program Committee|*Presiding*

AS I SEE IT: OPPORTUNITIES FOR THE PROFESSION

Sam P Giordano MBA RRT FAARC, Irving TX

Yogi Berra is quoted as saying, "The future ain't what it used to be." This humorous saying is frequently interpreted by the more poignant and oft-quoted proverb, "Change is the only constant." There should be little doubt that change is, in fact, the business of the day. Health care is facing tumultuous and volatile times – riddled with tremendous complexity and uncertainty. But with change comes opportunity. Join your fellow managers and educators in this joint session in which past, present and future trends and forces shaping health care will be addressed along with their implications for the practice of respiratory care. How will respiratory care be defined, how will respiratory therapists be impacted and what opportunities lie ahead?

EDUCATORS TRACK

9:00 am – 12:00 noon

Lynda T Goodfellow EdD RRT FAARC – Chair, AARC Education Section| *Presiding*

TECHNOLOGIES TO ENHANCE LEARNING

9:00 am – 9:40 am

Audience Response Systems: Can They Be Used in a Respiratory Care Program?

Vanessa King MEd RRT, Rochester MN

This presentation will provide an overview of the educational concepts and current literature for the use of audience response systems (ARS) in education. The requirements for software and hardware will be identified. Possibilities for application of this technology in an RC program will be demonstrated, including the design of slides to meet a range of teaching objectives.

9:45 am – 10:30 am

Role of Audience Response Systems in Real-Time Clinical Simulation Debriefing

Bryan Wattier RRT, Rochester MN

This presentation will review the application (or blending) of ARS technology with medical simulation. Examples will be provided to demonstrate how ARS can be used as a tool to promote discussion during debriefing, assess learner knowledge and also evaluate scenario effectiveness.

10:35 am – 12:00 noon

Audience Response Systems Used in Developing Clinical Preceptor Feedback and Assessment Skills

Vanessa King MEd RRT and Bryan Wattier RRT

This session will demonstrate how ARS can be incorporated into clinical preceptor training programs. Examples will be provided to illustrate how ARS can be applied in clinical preceptor development to facilitate improved feedback and enhance the preceptor's student assessment skills. The ability to easily collect inter-rater reliability data is an added benefit to the use of the system. The session will be an interactive workshop to allow participants the opportunity to design, create and demonstrate the use of an audience response system.

MANAGERS TRACK

9:00 am – 11:55 am

Bill Cohagen BA RRT FAARC Chair, AARC Management Section| *Presiding*

VIEW FROM THE "C SUITE"

9:00 am – 9:55 am

Drivers of Health Care Change: With or Without Washington

Garry W Kauffman MPA FACHE RRT FAARC, Elizabethtown PA

This presentation will review current and anticipated forces that have changed and will continue to change the delivery of health care services. How have these changes impacted the profession? What changes are likely to come, and what can we do about them? The presentation will include an overview of these forces, followed by an interactive discussion with participants to address what forward thinking roles the AARC, the Management Section, and the RT Manager must play to proactively address these pending changes.

10:00 am – 10:55 am

Are RT Departments Expendable?

Mark A Valentine MBA RRT, President of The Heart Hospital Baylor Plano, Plano TX

What do the executives in the administrative suite think about RTs? Do they see us through the lens of an RT as valued-added physician extenders, or do they see us as semi-professionals who can be replaced with lesser-skilled, lesser-paid caregivers? Do they see aerosol treatments and MDIs as a value-added intervention, or are they looked at as a necessary evil in which productivity is defined as "just get 'er done"? This presentation will provide an overview to attendees what they must do as managers to show the value of their department to hospital executives.

11:00 am – 11:55 am

Movin' on Up

Mark A Valentine MBA RRT

The presenter, a RT, will share his experiences in making the transition to the executive suite. He will also provide recommendations for those considering the move to the "C Suite" so that they are ensured of a successful transition to this level of leadership. Pros and cons of executive level hospital leadership will be highlighted as well as the core competencies hospital CEOs look for when making hiring decisions for these roles. Be sure to attend this presentation and identify whether or not you want to make the jump to the next level.

EDUCATORS TRACK

2:00 pm – 6:00 pm

Lynda T Goodfellow EdD RRT FAARC| *Presiding*

ENHANCING YOUR TEACHING SKILLS

2:00 pm – 2:45 pm

Motivation in the Classroom: Increasing Student Engagement

Jackie Heisler PhD MPH RRT, Greensburg PA

Student engagement occurs when students make a psychological investment in learning. Strategies will be discussed for

added-value

Check out the pre-Summer Forum course

Beyond the Preceptor: A Guide to Mentoring for Program Faculty, Department Educators & Managers

Register now for this course specially designed for program faculty, department educators and managers.
See page 52 for course agenda.

exhibits

Book publishers and AARC Corporate Partners display their latest products on

Monday & Tuesday 11am to 2 pm

All exhibits are at the

Vail Marriott Moutain Resort

Monday, July 18 (cont)

creating and managing a positive active-learning environment in today's diversified classroom. In addition, methods for measuring student engagement will also be reviewed.

2:50 pm – 3:35 pm
Teaching With Technology: How Savvy Are You?
Jackie Heisler PhD MPH RRT
Keeping up with technology savvy students and engaging them is a constant challenge in the classroom. New technology is constantly being introduced. Various types of technology that may be introduced in the classroom and clinical setting will be evaluated, as well as how they may be integrated into a respiratory program.

TOOLS, TRICKS AND TECHNIQUES FOR TEACHING ON-LINE COURSES

3:40 pm – 4:15 pm
From Instructional Platforms to Course Development to Instructing On-Line
Jody Lester MA RRT, Nampa ID
Over the years, on-line education has gained considerable popularity and acceptance and has become a highly desirable method of teaching at the post secondary level of education. Most institutions provide some form of on-line delivery, but effective on-line education requires more than just knowledge of the instructional platform being used. It entails the complex and complicated issues of curriculum development as well as content delivery. The presenter will share her many years of experience and present specific tools for building and instructing on-line courses.

4:20 pm – 5:15 pm
Building Connections When Teaching Large On-Line Classes
Jody Lester MA RRT
It is difficult to create student-to-student and instructor-to-student connections in large on-line classes. The presenter will share specific techniques and ideas for fostering these connections without becoming a 24/7 instructor.

EDUCATION SECTION MEMBERSHIP MEETING

5:20 pm – 6:00 pm
Lynda T Goodfellow EdD RRT FAARC/*Presiding*
Reports from various Education Section Committees and Task Forces will be addressed as well as discussion and dialogue regarding issues related to the section.

MANAGERS TRACK

2:00 pm – 5:00 pm
Bill Cohagen BA RRT FAARC/*Presiding*

LEAN WORKSHOP: WHAT EVERY RC MANAGER SHOULD KNOW

2:00 pm – 5:00 pm
Laurie D Wolf MS CPE, St. Louis MO and
Darnetta Clinkscale MBA RRT, St. Louis MO
Continuous quality improvement has been an ongoing concern in hospitals for decades. However, the current economic climate as well as anticipated new financial constraints will further challenge hospitals to reduce operating expenses. This highly interactive work-shop will be co-led by an industrial engi-neer and the Director of Respiratory Care services that are trained in Six Sigma Black Belt and Lean methodology. They will both educate the participants as well as provide them with tangible tools to utilize in implementing lean methodology in their departments.

Tuesday, July 19, 2011

RC EDUCATION RESEARCH – PAPER PRESENTATIONS

7:00 am – 7:50 am

Nancy Weissman PhD RRT, Palm Beach FL/*Presiding*

Presentation of educational research papers. Each presentation will be followed by a discussion period. Complimentary continental breakfast will be provided.

EDUCATORS TRACK

8:00 am – 11:35 am

Lynda T Goodfellow EdD RRT FAARC/ *Presiding*

CoARC WORKSHOP: WHAT EVERY RC EDUCATOR SHOULD KNOW

8:00 am – 8:50 am

Reviewing and Analyzing Your Annual Report

Stephen P Mikles EdS RRT FAARC, Pinellas Park FL

Attendees will be provided with an update on CoARC's new Web-based annual reporting tool: E-Accreditation. The presenter will focus on the processes and strategies for successfully reviewing and analyzing the annual report data.

8:55 am – 9:45 am

How to Evaluate Students in the Laboratory

Gary C White MEd RRT RPFT, Spokane WA

The presenter will describe the role of the respiratory care laboratory in preparing students for entry into the clinical environment. CoARC standards will also be covered that apply to respiratory care laboratories and evaluation of students in the laboratory setting. The presenter will describe the structured activities that are common to laboratory instruction and discuss methods that may be utilized to evaluate student performance. The presenter will also compare the commercially available tools for evaluating RC students in the laboratory, describe how to create your own laboratory evaluation instruments, and list the CoARC requirements for recordkeeping.

9:50 am – 10:40 am

Developing and Evaluating Inter-Rater Reliability Measures

Pat M Munzer DHSc RRT FAARC, Topeka KS

This presentation will give an overview of how one program developed an Inter-rater Reliability Program for use by their clinical instructors. Take-home ideas will be given so participants can develop their own program. Participants will be able to obtain ideas on how to develop an inter-rater reliability program, will discuss how to use the program to evaluate the instructors, and what to do with the data.

10:45 am – 11:35 am

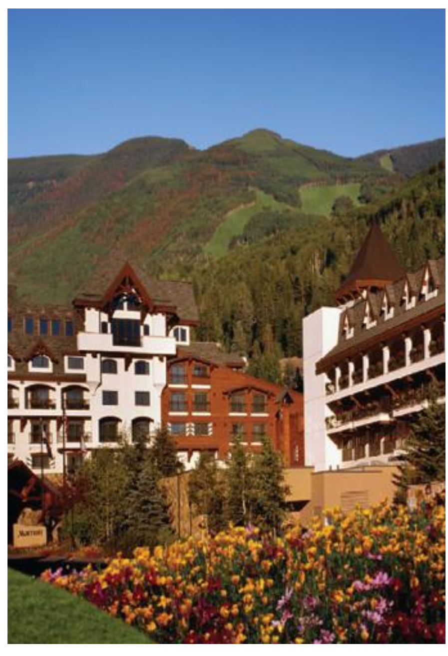
How to Evaluate Students in the Clinical Setting

Gary C White MEd RRT RPFT

The presenter will describe the purpose of clinical instruction in the respiratory care curriculum and list CoARC standards that apply to the evaluation of students in the clinical setting. An overview of the challenges faced by programs assessing the student's clinical competence will be discussed, as well as differentiating between the student's global evaluations vs. their skill/competence evaluation. The presenter will also highlight existing and custom-made instruments that may be employed in the evaluation of students in the clinical setting.

Visit AARC.org for program updates.

enhance

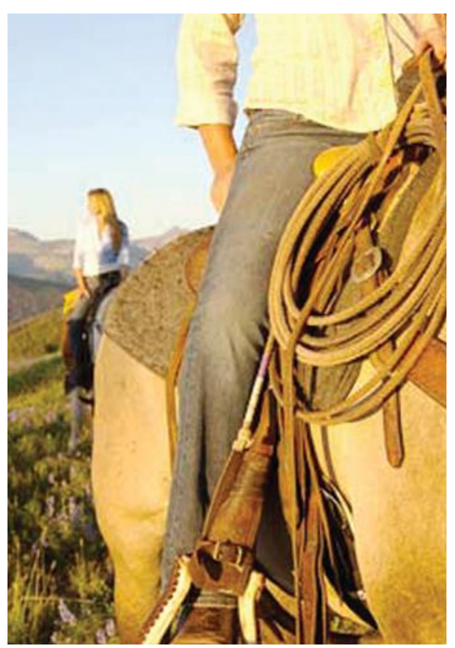


Maximize your attendance by registering for the post-Summer Forum course

Competency College: Ensuring Competency for Students & Staff

See page 63 for details.

more for your money



When forced to prioritize, simply ask: What would make more sense than to enjoy simple family pleasures while enhancing my career?

All meetings at the beautiful
Vail Marriott
Moutain Resort

Tuesday, July 19 (cont)

MANAGERS TRACK

8:00 am – 11:55 am
Bill Cohagen BA RRT FAARC/ *Presiding*

MANAGEMENT BEST PRACTICES: WHY REINVENT THE WHEEL?

8:00 am – 8:55 am
Utilizing Protocols to Increase the Value of the RT
Thomas R Lamphere RRT, Sellersville PA
While protocols have been in use for several decades, many RT departments have been unable to streamline their use across all services offered within their hospital. This presentation will review the latest literature on the value of protocols and give specific examples of how protocols can demonstrate the value of the RT department. It will also identify what the traditional barriers for implementation have been from other hospitals and how you can avoid the same pitfalls.

9:00 am – 9:55 am
A Performance Improvement Model: Creating, Providing, and Demonstrating Quality Respiratory Care Innovations
David Mantz MBA BA RRT-NPS, Salina KS
In an environment of decreasing reimbursement, rising costs, and demands of quality, the role of all health care providers in the hospital will be scrutinized. In order to continue providing these essential services for patients, RTs must be able to add value at a level that renders us irreplaceable on the clinical team. Respiratory therapists are innovators by training and must continue to innovate both for our patients and the profession. Quality improvement methods are an essential part of this process. An overview of a successful PI model will be discussed with a review of proper format, implementation, and reporting of processes. The presenter will provide handouts and templates to attendees so they can immediately transfer learned skills into their everyday practice once they return home.

10:00 am – 10:55 am
Work Culture as a Determinant of Staff Performance
Janice R Thalman MHS RRT FAARC, Durham NC
Measuring work force satisfaction and engagement will identify areas for improvement in an organizational work culture. Leadership action plans to address improvement in work culture can be directly linked to staff performance. The success of a performance evaluation process and staff development can be further aligned with individual and supervisory accountability, thus leading to a high performing department. Attendees will leave this presentation with step-by-step instructions on how to create, implement and follow through on leadership action plans for your entire management team. Unhappy with the satisfaction, engagement, or performance of your team? Then this is a presentation you can't miss!

11:00 am – 11:55 am
How to Create a Budget and Sell It to Your CFO
Bill Cohagen BA RRT RCP FAARC, Phoenix AZ
This interactive program will demonstrate to managers how to create a budget that will allow their RT department to provide services in an appropriate and fiscally responsible manner. Specific instructions will be provided with respect to packaging the value of RT services that will compel executives to approve both capital and operating budgets. Handouts will be disseminated, including a spreadsheet that will assist managers in their own budgeting process. Already budget savvy? Not to worry… this presentation transcends your typical finance talk and gets at the root of how to "sell" your executives on a budget – or any other project!

share

Tuesday, July 19 (cont)

EDUCATORS TRACK
2:00 pm – 5:35 pm
Lynda T Goodfellow EdD RRT FAARC| ***Presiding***

SPECIAL FACULTY LECTURE SERIES
2:00 pm – 2:50 pm
Thoughts While Erasing the Blackboard: Personal Reflections on Teaching and Learning
Jerome M Sullivan PhD RRT FAARC
Professor Emeritus, College of Health Science & Human Service, University of Toledo
While many of our more experienced and seasoned respiratory care educators are approaching the golden years of retirement, the Education Section is pleased to recognize one of its more distinguished, respected and accomplished retirees with an opportunity to share his personal philosophies and experiences on teaching and learning. The lecture is reserved for a retired or retiring colleague possessing a resume of extraordinary accomplishment and contribution to the arts and science of respiratory care education. Join us as we pay tribute to one of our own as he shares his wisdom, experiences, expertise and personal reflections on teaching and learning over a truly illustrious professional career.

EDUCATION POTPOURRI
2:55 pm – 3:45 pm
Demystifying Research: Infusing Research into Your Respiratory Care Program
Sara L Varekojis PhD RRT, Columbus OH and Georgianna G Sergakis PhD RRT, Columbus OH
Future therapists should be prepared to thrive in the current health care environment and to promote the further evolution of the therapist's role in health care delivery. Promoting and understanding how research influences this future is key to the preparation of tomorrow's workforce. Strategies to infuse research into RT preparation ranging from the first day of class to complete immersion in a research experience will be presented.

3:50 pm – 4:40 pm
Using Simulation Gadgetry to Produce That "Aha" Moment
Doug M Pursley MEd RRT, Springfield MO
This presentation will describe the use of simulation modeling to enhance students' comprehension of various topics in respiratory care. The benefits as well as models representing a chest tube drainage system, a collapsible airway producing auto-PEEP, and a model for teaching high-flow and low-flow oxygen systems will be discussed. Attendees will be given instructions on how to make the models easily and inexpensively.

4:45 pm – 5:35 pm
Motivational Interviewing: Coaching and Teaching at the Bedside
Crystal Dunlevy EdD RRT RCP, Columbus OH
Respiratory therapists are increasingly being asked to provide more teaching and coaching at the bedside. Areas of teaching asthma education, tobacco cessation and pulmonary rehabilitation are just a few areas that demand a high degree of patient education. Whether you are a faculty member of a respiratory care program or a clinician at the bedside, you need an understanding of how to be more effective in teaching and coaching patients. Are you addressing this in your program?

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See pages 48-50 for local attractions.

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Tuesday, July 19 (cont)

MANAGERS TRACK

2:00 pm – 4:55 pm

Bill Cohagen BA RRT FAARC/ *Presiding*

TRANSITION OF CARE: COMPETENCIES FOR COPD MANAGEMENT

2:00 pm – 2:55 pm

Competencies for COPD Management: the AARC COPD Educator Program

Thomas J Kallstrom MBA RRT FAARC, Irving TX

According to Medicare discharge claims, COPD is listed in the top 3 for readmission DRGs. For patients readmitted within 30 days of discharge, this has negative financial consequences for the hospital. Evidence has shown that empowering RTs to become better bedside educators with active participation in the discharge process can improve quality, reduce hospital readmissions, and cut costs. This presentation will provide an overview of the COPD Educator Program offered by the AARC and identify how the competencies discussed can be woven into the daily services offered by your RT department. Are COPD readmissions problematic in your institution? If you're not sure, ask your executives and then book your trip to Vail, CO, for this presentation on how to make your RTs the COPD experts!

3:00 pm – 3:55 pm

The Competencies for COPD: the Home Care Environment

Kim S Wiles RRT, Ford City PA

What happens to the COPD patient once they're discharged from the hospital? Do managers know? Should they care? This presentation will discuss why the RT manager must be engaged in the discharge process and, most importantly, know what happens to the patient and how they are cared for once they return home. Active involvement by the manager with local home health agencies and DMEs will not only allow for more seamless care from the hospital to the home, but also will improve care and likely reduce costly hospital readmissions. What does seamless care look like? It all starts with core competencies that start in the hospital and are then carried into the home. Advocate for your patients in the home and demand that your local home health providers employ RTs who are competent in COPD management. Attend this presentation to learn what those competencies are.

4:00 pm – 4:55 pm

Competencies for COPD: Pulmonary Rehabilitation

Brian W Carlin MD FAARC, Pittsburgh PA

It is a natural progression for many RT managers to oversee multiple departments, including but not limited to pulmonary rehabilitation (PR). This progression stems from the basic fundamental knowledge of the needs and care provided to the patient with pulmonary disease. For many, the core competencies and true expertise needed to fall within this bailiwick are lacking… especially for the newly assigned manager of a PR department. This presentation will provide detailed knowledge of the American Association for Cardiovascular and Pulmonary Rehabilitation competencies required for PR professionals. Most importantly, it will provide attendees with the tools needed on how to institute those competencies into the care for patients undergoing pulmonary rehabilitation. A must-see presentation for new or seasoned PR managers or those considering a PR management position.

AARC.org for everything that matters in respiratory care.

Meetings

network

Wednesday, July 20, 2011

EDUCATORS TRACK

8:00 am – 10:50 am

Lynda T Goodfellow EdD RRT FAARC/*Presiding*

JIMMY A YOUNG MEMORIAL LECTURE

Presented by the National Board for Respiratory Care

8:00 am – 9:30 am

Ethics in Testing and Candidate Preparation

TBD

This year's Jimmy Young Memorial Lecture will discuss how the NBRC intends to proactively integrate philosophy about ethics into certification programs for neonatal/pediatric and adult critical care specialists. Items requiring consideration of ethics will be rolled out first when the Neonatal/Pediatric Specialty Certification Examination goes through a major update in mid-2011. Examination items that engage ethics will be included when the Adult Critical Care Specialty Certification Examination launches in 2012. The speakers will detail ways in which these new items will be developed to expand on content that was discussed during the 2010 Jimmy Young presentation. The program will conclude with a discussion about ethics in the areas of test preparation, test taking, and information sharing behaviors among candidates for NBRC examinations and how the NBRC has reacted to unprofessional behaviors among credentialed respiratory therapists through its Judicial and Ethics Committee since its incorporation in 1960.

AGENCY UPDATES

9:35 am – 10:10 am

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

Karen J Stewart RRT FAARC, AARC President

Michael T Amato, ARCF Chair

David Bowton MD FCCP FCCM, CoARC Chair

Gregg Ruppel RRT RPFT FAARC, NBRC President

10:15 am – 10:50 am

Incorporating Service Learning Into Your Respiratory Care Program

Doug Pursley MEd RRT, Springfield MO and

Thomas J Kallstrom MBA RRT FAARC, Irving TX

This presentation will discuss the importance of volunteerism and specifically include community service and service learning into your respiratory care program. Numerous examples will be provided with a view to the recent efforts by the respiratory care community through the highly effective and highly publicized DRIVE4COPD.

DR. FRED HELMHOLZ EDUCATION LECTURE SERIES

Presented by the Committee on Accreditation for Respiratory Care

Will Beachy PhD RRT FAARC/*Presiding*

11:00 am – 12:00 noon

Career Paths in Respiratory Care

Thomas D Jones MEd RRT CPFT LRCP, Mountain Home AR and

David L Vines MHS RRT, Chicago IL

Career pathways may be used in health professions to allow individuals who are already working in the healthcare field to move into other areas of practice. Career pathways assist people in making the right career and educational choices so that they can achieve professional and career goals. Career pathways may expand individuals' skills sets, scope of practice, or allow them to move into

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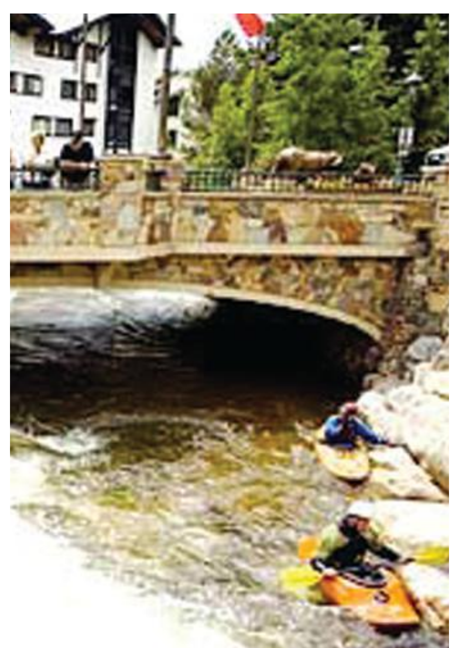


Online registration is underway now at **AARC.org**

Two significant ways to save:
1. Register early
2. Register for the pre-Summer Forum, Summer Forum and the post-Summer Forum course.

See page 66 for details.

Wednesday, July 19 (cont)

management, education, research or specialty practice. This presentation will offer the perspectives of a program director from an associate degree respiratory care program and a program director from bachelor's and graduate degree respiratory care program on how graduates can advance their educational and career goals.

MANAGERS TRACK

8:00 am – 11:55 am
Bill Cohagen BA RRT FAARC/ ***Presiding***

MANAGEMENT SECTION MEMBERSHIP MEETING

8:00 am – 8:55 am
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 other management peers. All Summer Forum attendees are invited to attend.

MANAGEMENT POTPOURRI

9:00 am – 9:55 am
My Therapists Have Spoken – Now What? Maximizing Team Commitment, Effort, and Loyalty
Cheryl A Hoerr MBA RRT CPFT FAARC, Rolla MO
This presentation will provide the correlation between employee engagement and business performance. Additionally, it will focus on employee input as a vital part of developing high functioning departments. The "Eight Keys to Building Employee Engagement" will be reviewed with respect to providing the attendees with the knowledge to understand motivating factors and build employee engagement. Worried that you can't improve employee engagement on your own? No need to worry. A step-by-step algorithm will be shared on how to engage your employees into improving employee engagement on their own.

10:00 am – 10:55 am
Creating a Policy and Procedure Manual
Bill Cohagen BA RRT FAARC, Phoenix AZ
Is your P&P manual 10, 15, 20 years old or older? Is it sitting in a binder collecting dust, or is it electronic and posted on your hospital's intranet? One of the most highly mentioned requests on the Management Section AARConnect has been the request to share policies and procedures. The presenter will share required components that must be imbedded within a policy or procedure, and demonstrate how to create an evidence-based P&P manual with proper referencing of the literature. More importantly, the attendee will learn how to maintain, update and keep policies current. Procedural examples and templates will be handed out as a guide for writing your next P&P. Recommendations will also be given on how to approach your IT department so that you can bring your P&P manual to the digital age where RTs or other caregivers can view your policies – from anywhere in the hospital!

11:00 am – 11:55 am
New Roles for RTs: Improving Quality and the Bottom Line
Thomas R Lamphere RRT, Sellersville PA
Traditional roles of RTs find them working in short-term acute care hospitals (STACH). In today's economy, STACHs are facing severe economic challenges that sometimes result in the loss of RT positions. There are, however, other care venues that have been demonstrated to provide care in a less expensive manner and that have shown job growth for RTs in untraditional roles. Attendees will leave this presentation with knowledge, intuition, and know-how on how to improve quality and the economics of their department by creating new roles and responsibilities for their staff. A can't miss presentation for the manager needing to cut costs while maintaining quality through their people.

Meetings

AMERICAN ASSOCIATION FOR RESPIRATORY CARE

Post-Summer Forum Course

Wedsday, July 20, 2011

COMPETENCY COLLEGE: ENSURING COMPETENCY FOR STUDENTS & STAFF

1:30 pm – 5:05 pm

William F. Galvin MSED RRT CPFT AE-C FAARC/*Presiding*

Approved for up to 3.33 hours of continuing education credits (CRCE)

The 2011 Competency College will logically follow many of the issues addressed in the Summer Forum pre-course titled "Beyond Preceptoring: A Guide To Mentoring for Program Faculty, Department Educators and Managers", and speak to the issue of competency assessment. It will address assuring competency of both students as well as employees – requirements of both CoARC and The Joint Commission. We invite program faculty charged with documenting the competency of their students, and RC department managers and department educators responsible for documenting the competency of their staff to join us for a timely and meaningful session.

1:30 pm – 2:20 pm

Cultural Competency

Crystal Dunlevy EdD RRT RCP, Columbus OH

The minority population in the U.S. is currently 35%, advancing a trend that is likely to make minorities the new American majority by midcentury. Additionally, 32 million Americans are expected to enter the health care system as health care reform laws take effect. In this session, we will examine strategies to prepare both current and future practitioners to effectively deal with differences in populations from multiple perspectives of disability, chronic disease, and cultural disparity.

2:25 pm – 3:15 pm

The Proficiency of Competency Testing

Sarah L Varekojis PhD RRT RCP, Columbus OH

This presentation will address legal, ethical and practical issues related to competency assessment. Now that respiratory care requires licensure in 49 states and CoARC is an independent accrediting agency with emerging standards, there is even greater need to document new as well as continuing skill competency. The continuing move toward care provided by protocol and therapist specialization leads to ethical considerations surrounding maintenance of skills used less often. Best practices regarding competency documentation, including objective assessment tools and using clinical practice guidelines as the basis for objective assessment will be discussed.

3:20 pm – 4:10 pm

The Upside of Competency Testing

Georgianna G Sergakis PhD RRT RCP, Columbus OH

Meeting standards for competency testing doesn't have to be dreaded by the evaluator or the learner. The principles of adult learning and generational learning preferences will be discussed in the context of turning mandated proficiency and competency testing into an opportunity for personal and professional development. This opportunity for lifelong learning, team building, and developing critical thinking and clinical decision skills will be explored. A discussion of strategies ranging from high-tech to low-tech options will be shared ranging from building complex high fidelity simulations to planning competency testing on a shoestring budget.

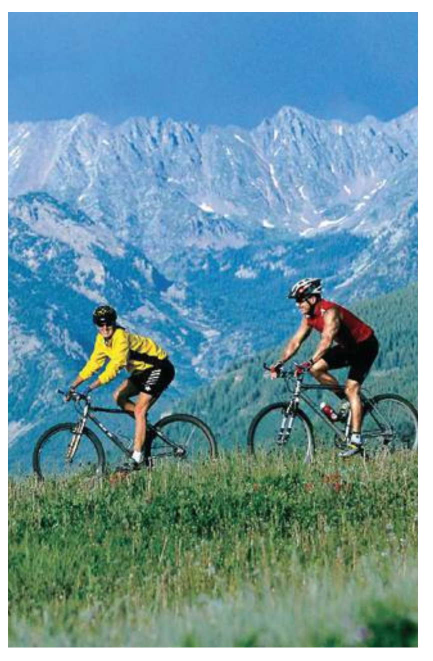
4:15 pm – 5:05 pm

Remediation Following Competency Testing

Crystal Dunlevy EdD RRT RCP, Columbus OH
Georgianna G Sergakis PhD RRT RCP, Columbus OH
Sarah L Varekojis PhD RRT RCP, Columbus OH

In this session, participants will develop a process to help managers and educators remediate employees or students who have failed to demonstrate competency. Attendees will discuss strategies and implications associated with remediation, and implementation of the remediation process. Most importantly, risks of failure to remediate will be highlighted, and the impact it would have on the patient.

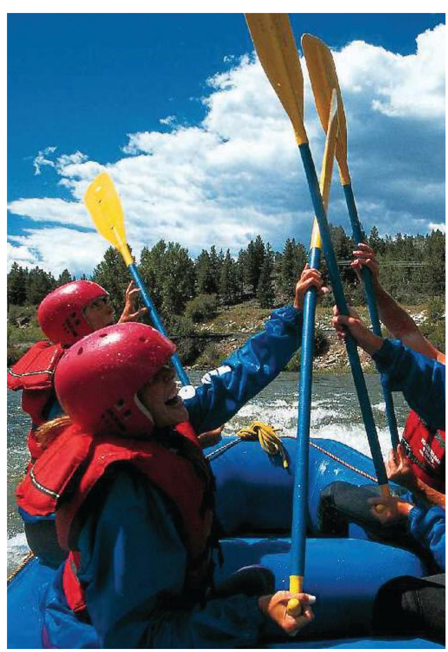
dine in paradise



Enjoy the outdoors . Walk under the stars inhaling flower-scented breezes. What a way to end a day of intense educational training.

AARC Summer

learn & vacation



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http://summer.vail.com/summer/activities/free-things-to-do.asp

https://www.colorado.com/ColoradoGuide.aspx

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AMERICAN ASSOCIATION FOR RESPIRATORY CARE

Summer Meetings Site and Travel Information

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Hotel Reservations

- **Online** https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=3325885.
- **Call** 800-266-9432 or 506-474-2009. Refer to "**AARC Summer Meetings**." Discounted rates are available only through these phone numbers.
- **Room Rate**: $154 plus 9.8% tax for single – quad occupancy. Deposit required.
- **Free** in-room high speed Internet access.
- **Discounted** valet parking for AARC hotel guests at $10 daily per car.
- **Cut-off date** for the AARC's special sleeping room rate is **Friday, June 24, 2011**.

Airline Discounts

Denver International Airport (DEN) is approximately 127 miles east of the hotel.

Eagle County/Vail Regional Airport (EGE) is approximately 35 miles west of the hotel.

Discounted fares also apply to family and friends.

AIRTRAN AIRWAYS

- **Discounts** valid for Denver International Airport.
- **Call**, or have your travel agent call, AirTran Airways EventSavers Desk at 866-683-8368. Refer to **Event Code DEN071611 and the AARC 2011 Summer Meetings**.
- **The discount** is available only by calling the toll free number.

AMERICAN AIRLINES

- **Discounts** valid for Denver International Airport and Eagle Co./Vail Regional Airport.
- **Online** at www.aa.com. Enter **4771BC** in the Promotion Code box (no booking fee).
- **Call** AA Meeting Services at 800-433-1790 and refer to **Authorization Code 4771BC** (booking fee added).

CONTINENTAL AIRLINES

- **Discounts** valid for Denver International Airport.
- **Online** at www.continental.com. Enter **ZKBQ885410** in the Offer Code box (receive an additional 3% off and no booking fee).
- **Call** Continental MeetingWorks at 800-468-7022. Refer to Z Code **ZKBQ** and Agreement Code **885410** (booking fee added).

DELTA AIRLINES DELTA

- **Discounts** valid for Denver International Airport and Eagle Co./Vail Airport.
- **Call**, or have your travel agent call, Delta Meeting Network at 800-328-1111. Refer to **Ticket Designator NM7BB**.
- **The discount** is available only by calling the toll free number (no booking fee).

Summer Meetings Site and Travel Information (cont.)

Ground Transportation

AIRPORT SHUTTLE SERVICE

Colorado Mountain Express is giving AARC attendees a discount on airport shared ride shuttle service from both Denver International Airport and Eagle Co./Vail Airport. Discounted one-way prices from DEN are $71.10 + $3 fuel charge per person and $40.50 + $1 fuel charge per person from EGE. Advance reservations required.

- **Online** at ridecme.com. Enter **AARC** in the Discount Code box on the Tentative Travel Itinerary page.
- **Call** 800-525-6363 or 970-754-7433. Mention Discount Code **AARC**.
- **Children 12 and under** qualify for half-price fares when one *full-fare* adult ticket is purchased. Call Colorado Mountain Express for details at 800-525-6363.

BUDGET RENT A CAR

- **Discounts** are available for the Budget locations at the Denver International Airport and the Eagle Co./Vail Regional Airport.
- **Online** at www.budget.com. Click "More Options". Enter **U064639** in the Offer Code (BCD) box.
- **Call** 800-772-3773. Refer to Discount Offer Code **U064639**.

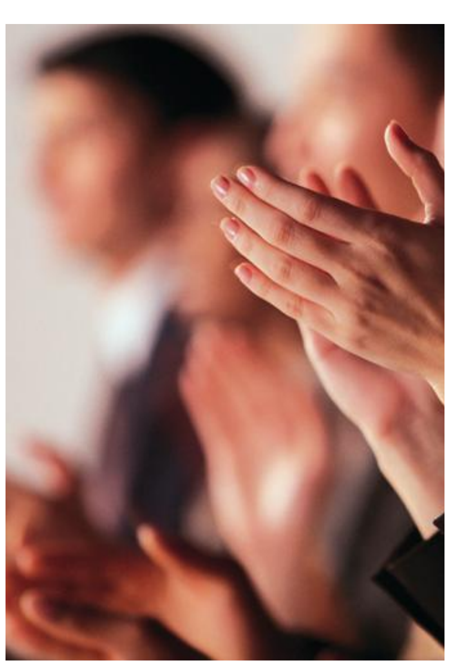
ENTERPRISE RENT-A-CAR

- **Discounts** are available for the Enterprise location at the Denver International Airport.
- **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**.

HERTZ RENT A CAR

- **Discounts** Discounts are available for the Hertz locations at the Denver International Airport and the Eagle Co./Vail Regional Airport.
- **Online** at www.hertz.com. Enter **049T0004** in the Convention Number (CV) discount box.
- **Call** 800-654-2240 or 405-749-4434. Refer to Convention Discount Code **049T0004**.

network



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REGISTRATION FORM 2011

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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 (**______**)**______________

____

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City ____________________ **State** ________ **Zip** ________

Pre Course

Beyond the Preceptor: A Guide to Mentoring

Sunday, July 17, 2:00 pm - 6:05 pm

Pre-registration required. Deadline: June 24.

No registration fee if registered for Summer Forum but must pre-register by deadline.

	Member	Non-Member
If registered for Summer Forum	☐ Free	☐ Free
All others: By May 20	☐ $25	☐ $40
All others: May 21-June 24	☐ $50	☐ $80

Summer Forum

Monday, July 18, 8:00 am - Wednesday, July 20, 12:00 noon

	Member	Non-Member	Student Member
By May 20	☐ $280	☐ $400*	☐ $90
After May 20	☐ $305	☐ $410*	☐ $90

***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.

Post Course

Competency College: Ensuring Competency for Students & Staff

Wednesday, July 20, 1:30 pm - 5:05 pm

Pre-registration required. Deadline: June 24.

No registration fee if registered for Summer Forum but must pre-register by deadline.

	Member	Non-Member
If registered for Summer Forum	☐ Free	☐ Free
All others: By May 20	☐ $25	☐ $40
All others: May 21-June 24	☐ $50	☐ $80

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If paying by credit card you may FAX your registration form to (972) 484-2720.

Mail Registration Form and check or money order, payable to AARC, to:

AARC Summer Meetings
9425 N MacArthur Blvd, Suite 100
Irving, TX 75063-4706
Phone (972) 243-2272

You may register online at AARC.org

Cancellations must be in writing.
There will be a 35% handling fee for cancellations received by June 28. No refunds will be made thereafter.

Industry Watch

PARI adds multimedia to its website

PARI Respiratory Equipment has changed its website at www.pari.com to include new multimedia features. Using *flowplayer* technology, the site features a video section with videos and animated shorts showing how PARI products work. PARI spokesmen say its exclusive Timestrip indictor is a fun way for kids, parents, and adults to learn the technical ins and outs of nebulizers; it can also help clinicians explain why compliance makes a difference in the effectiveness of therapies.

Nellcor platform integrated into Welch Allyn monitor

Covidien has announced the integration of its Nellcor™ OxiMax™ platform with SatSeconds™ technology into the Welch Allyn Connex® Vital Signs Monitor, an advanced, easy-to-use system that acts as three devices in one, offering spotcheck, monitoring, and triage. Says Pete Wehrly, president of Respiratory and Monitoring Solutions at Covidien, "Working with Welch Allyn reflects our ongoing mission at Covidien to provide an ever greater number of health care providers with technologies and products that improve patient safety, enhance medical efficacy, and increase health care efficiency."

Invacare launches e-book

Invacare Corporation has launched a new resource to help providers navigate the challenges of competitive bidding. The Invacare® One Partner interactive e-book includes information on financing, non-delivery oxygen technology, merchandising, repairs, co-pay collection, and more, giving providers the tools to redefine their approach and focus on their core business strengths. "National competitive bidding is changing the business landscape," says Carl Will, a senior vice president at the company. "For providers… partnering with a manufacturer with all the tools you need to support your business plan will put you on the path to success." The e-book is available at www.invacare.com to those accessing Invacare Pro.

Praxair sells home care business to Apria

Praxair Inc. has entered into a definitive agreement with Apria Healthcare Inc. to sell its U.S. home care business to Apria. Part of the company's broader North American health care business, Praxair's U.S. home care business operates from 85 branch locations and employs approximately 1,100 people, providing home respiratory services and durable medical equipment to clients across 27 states.

Vapotherm gets FDA clearance for Flowrest device

Vapotherm has received FDA 510(k) clearance for its Flowrest® home care device to deliver warmed, humidified high-flow breathing gases to patients using the nasal cannula. The device has also received CE marking. "Our hospital customers have been asking us for a solution to enable earlier discharge of high-flow therapy patients; and patients and families have consistently asked us to deliver a cost-effective solution for comfortable, effective respiratory support in the home," says CEO Robert Storey.

Teva Respiratory launches national health campaign

Teva Respiratory has launched a multi-city tour for EIB Active™, a national health campaign to raise awareness about asthma and exercise-induced bronchospasm. During a stop in Los Angeles, celebrity nanny and parenting expert, Jo Frost, visited an area school to speak with children, parents, and school influencers about asthma and EIB. She shared her personal experience on effectively managing her own condition. "I was diagnosed at the age of five years old with asthma and EIB," Frost said. "It's important for me to be able to share my story so children and adults who may be experiencing symptoms of EIB can take control and manage their condition to stay healthy and active."

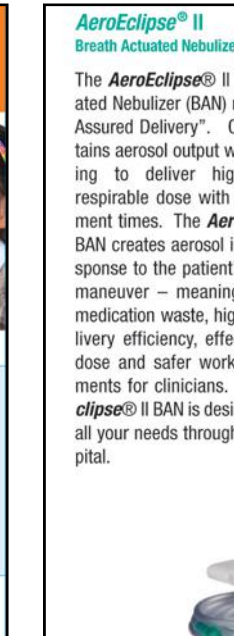
Riverain Medical publishes poster presentation

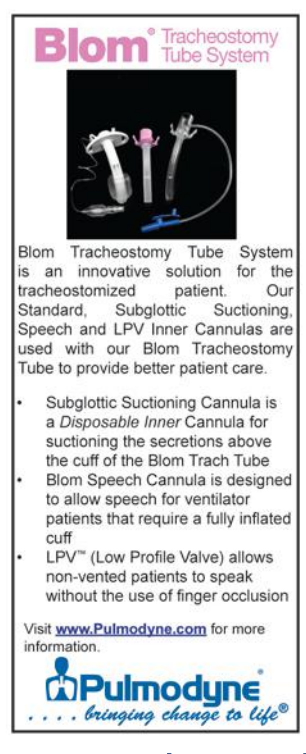
A poster presentation titled "A Superior Chest X-Ray Computer-Aided Detection (CXR CADe) Application: A Reader Study," was recently published on the European Society of Radiology's website, according to Riverain Medical. Investigators compared two versions of Riverain's CAD technology, OnGuard™ 5.1 and OnGuard 1.0. The study found that personnel using OnGuard 5.1 were able to detect smaller lung nodules, including those that were primary lung cancer. The study analyzed more than 250 chest x-rays.

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

Marketplace

Featuring information on products and equipment from manufacturers





Bronchial Challenge Test Kit

The Aridol® (mannitol inhalation powder) Bronchial Challenge Test Kit from Pharmaxis is the first new bronchial challenge test in more than two decades and the company's first product launch in the United States. The single-use, indirect test requires a 15% reduction in FEV_1 and only takes about 20 minutes to administer for a positive test. Aridol is used to assess bronchial hyperresponsiveness in patients six years of age and older who do not have clinically apparent asthma. It should not be used as a stand-alone test to assess asthma or as a screening test for asthma. (888) 416-1828, www.pharmaxis.com

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

AARC Representative Update

(continued from page 20)

moving pulmonary rehabilitation into the legislative forefront. This partnership is extremely important to both groups. Our AARC legislative team works with the AACVPR team in just this manner.

Representing the AARC is a great way to show our professionalism and our role in taking care of pulmonary patients. It is vital as an organization that we not only look within our own organization but we also look at organizations that share our similar goals and missions. In that light, the AARC and the AACVPR do just that. ■

Observations

(continued from page 27)

Don't give up — our patients' needs have not changed. They still want professionals they can relate to who permit them to ask questions related to their care and condition that they would have been afraid to ask if not for that special relationship. Health care, in general, is intimidating to laymen; but you can see our patients as not just patients but someone's wife, daughter, son, husband, father, mother, or loved one. This is the difference you bring about that will never be measured in dollars and cents, efficiency, or quantity counts of procedures.

Please take a few minutes to remember Rina and then to remember your Rinas as well. You are fighting the good fight for our patients. Those efforts are not unnoticed by them. Please keep it up no matter how tough the going gets. You are contributing to our society. ■

Clinical Perspectives

(continued from page 29)

While there may be those who feel that the use of checklists in health care is rather low-tech and not necessarily needed, the strong counter-argument is the fact that medical science has gotten extremely complex and will continue to do even more so in the years ahead. Health care checklist proponent Atul Gawande, author of "The Checklist Manifesto" and a practicing general surgeon, reminds us that today's medicine is entirely too complex to be left to the memory of any one person. Gawande convincingly argues that "checklists (help) catch mental flaws inherent in all of us — flaws of memory and attention and thoroughness."[4] So while an individual checklist, in and of itself might not be high-tech, if properly designed and used, checklists have the potential to significantly improve patient safety. For those patients depending on RTs for an uneventful transport while their oxygenation status is being monitored, a simple checklist could reduce the likelihood of a serious event happening. So be on the lookout for the next patient handoff where a safety checklist is used to ensure that all elements are in place to assure adequate oxygenation is maintained, in spite of the numerous distractions competing for our attention. ■

REFERENCES

1. Committee on Quality of Health Care in America, Institute of Medicine. Kohn LT, Corrigan JM, Donaldson MS, editors. To Err Is Human: Building a Safer Health System. Washington DC: National Academy Press; 1999.
2. Dunne PJ. Respiratory therapists should be the experts in VAP prevention: making the case. AARC Times 2011; 35(2):16-19.
3. Birkmeyer JD, Miller DC. Surgery: can checklists improve surgical outcomes? Nat Rev Urol 2009; 6(5):245-246.
4. Gawande A. The checklist manifesto: how to get things right. New York: Henry Hold and Company; 2009.
5. de Vries EN, Prins HA, Crolla RM, et al. Effect of a comprehensive surgical safety system on patient outcomes. N Engl J Med 2010; 363(20): 1928-1937.
6. Berenholtz SM, Pham JC, Thompson DA, et al. Collaborative cohort study of an intervention to reduce ventilator-associated pneumonia in the intensive care unit. Infect Control Hospital Epidemiol; (Epub ahead of publication, April 2011).
7. Joint Commission Center for Transforming Healthcare website. Joint Commission Center for Transforming Healthcare tackles miscommunication among caregivers. Available at: www.centerfortransforming healthcare.org/news/display.aspx?newsid=23 *Accessed Feb. 22, 2011*

RC Currents

IN THE NEWS

Japanese Relief: How You Can Help

The AARC has been watching the unfolding story in Japan and wants its international members there to know that their colleagues here in the United States are concerned about their health and welfare. If you would like to assist the Japanese relief effort, you can go directly to the International Federation of Red Cross and Red Crescent Societies (www.ifrc.org/en) to make a donation.

"Many members have contacted AARC indicating a desire to help our friends in Japan," says Executive Director Sam Giordano, MBA, RRT, FAARC. "AARC encourages you to give any amount you can to the International Federation of Red Cross and Red Crescent Societies. Thank you for any help you can provide."

The AARC currently has 57 Japanese members, including many living in and around Tokyo. ■

International Fellowship Program Looking for City Hosts

Every year the American Respiratory Care Foundation (ARCF) sponsors an International Fellowship Program that brings physicians, therapists, and nurses from other countries to our shores to learn more about American-style RC 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. The ARCF is currently accepting applications from AARC members in metropolitan areas who would be willing to:

- Communicate with Fellows prior to their visit to ensure a smooth trip
- Develop an itinerary for the city activities and coordinate all activities among the various sites, including transportation between sites
- Provide an overview of the health care system in the United States
- Ensure that objectives of the Fellowship visit are met
- Communicate with the AARC International Respiratory Care Committee.

If this sounds like something you'd enjoy being involved in, learn more about the program (www.arcfoundation.org/international/fellows/city_host) and apply by the **June 1** deadline. The fellowships take place in the fall just prior to the AARC International Respiratory Congress, which is scheduled this year for Nov. 5–8 in Tampa, FL. ■

Journal Issues Call for Open Forum Abstracts

A simple and convenient way for you to submit abstracts online for the Respiratory Care Open Forum for the AARC International Respiratory Congress is at http://aarc2011.abstractcentral.com. Easy online instructions will guide you through properly submitting abstracts for Respiratory Care 2011 in Tampa, FL, Nov. 5–8. The deadline for submitting Open Forum abstracts is **June 1**.

The Open Forum is your opportunity to gain national and international recognition for your work in cardiorespiratory care. Plus, accepted abstracts will be published in the October 2011 issue of Respiratory Care and will automatically be considered for research fellowships from the American Respiratory Care Foundation. ■

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:

Sam Giordano, AARC Executive Director

- Attending the American Thoracic Society meeting in Denver, CO

Thomas J. Kallstrom, AARC COO and Associate Executive Director

- Presenting an AARC update to the Colorado Society for Respiratory Care
- Attending the American Thoracic Society meeting in Denver, CO

National Health Observances

- **Older Americans Month**; May; U.S. Administration on Aging; www.aoa.gov
- **Asthma Awareness Month**; May; U.S. Environmental Protection Agency; www.epa.gov/asthma/awm
- **World Asthma Day**; May 3; Global Initiative for Asthma; www.ginasthma.com; materials available
- **World No Tobacco Day**; May 31; Pan American Health Organization; www.who.int/tobacco/wntd.en

AARC Times Seeks Volunteers To Review Articles

The *AARC Times* staff is always grateful to respiratory care professionals willing to volunteer their time and expertise to providing critical reviews of clinical articles submitted for publication in our magazine. The *AARC Times* reader who shows dedication to the respiratory care profession in this way serves as an important extension to our publications staff and helps us prepare quality clinical articles.

If you are interested in providing this kind of service to your professional organization, please email your resume and a brief letter explaining your areas of interest and expertise to *AARC Times* Editor Marsha Cathcart at cathcart@aarc.org.

We know there's a lot of untapped talent out there, so we hope to be hearing from you soon! ■

Helping Veterans Breathe Easier

by Kimberly Gearhart

Army Veteran William Pfaff exercises under the watchful eye of AARC member Patricia Jefferson.

A year ago, William Pfaff needed oxygen to get through his day. Just climbing a flight of stairs left him out of breath. But that was before he enrolled in the pulmonary rehabilitation program at the Southeast Louisiana Veterans Health Care System in New Orleans. "Now I park on the seventh floor and take the stairs up to the clinic on the ninth or tenth floor," says the Army veteran. "I come twice a week and work on getting stronger and breathing better."

As part of his rehabilitation, Pfaff works with Patricia Jefferson, RRT, who teaches him controlled breathing techniques and monitors his heart rate and oxygen levels during exercise periods. "We work on getting him the skills he needs to manage his respiratory health even after he leaves the program," says the AARC member.

The program's focus on wellness and health self-management is critical to improving quality of life for veterans, and it also reduces health care costs. Dollar-for-dollar it is more cost-effective to keep patients healthy than to try to make them better once they have fallen ill.

"We really need this," says Pfaff. "I've lost 32 pounds, and I can breathe again. It really makes you want to get up in the morning. Veterans need this kind of positive program." ■

Kimberly Gearhart is a writer-editor for the Southeast Louisiana Veterans Health Care System in New Orleans, LA.

Nominate an AARC Member for "Success Stories" or "Interesting People"

Do you know an AARC member who would be a good choice for one of our "people" features in "RC Currents"? If so, provide this information to the editor at the address below: the member's name, job title, place of work, city, and state; why you think they should be featured; and their contact information. Send to: Editor Marsha Cathcart, cathcart@aarc.org with "Success Stories" in the subject line. ■

Read All About It…

"Post-Polio Health Care Considerations for Families & Friends" is available from Post-Polio Health International (www.post-polio.org) and contains information and answers to the questions and concerns of polio survivors and their families. It can be downloaded as a booklet or viewed online by clicking on relevant sections. ■

▶ Transitions

Clifton Dennis, BHS, RRT, AE-C, has selected to serve on the National Asthma Educator Certification Board. Dennis is a respiratory therapist and asthma educator in pediatrics at MCG Health in Augusta, GA. (Photo 1)

Scott Cerreta, BS, RRT, has joined the COPD Foundation as director of education. He comes to the position from the American Lung Association of Arizona, where he served as COPD educator director and provider educator. A Navy veteran, Cerreta was awarded three Navy Achievement medals and Sailor of the Year honors at the U.S. Naval Hospital in Naples, Italy. In 2010 he received the Practitioner of the Year award from the Arizona Society for Respiratory Care for his work in COPD. (Photo 2)

Ellen Calefati, RRT, was recently honored with a Core Value Award at an Employee Recognition Dinner hosted by Newark Beth Israel Medical Center in New Jersey. (Photo 3)

Kent McCain, RRT, has been named director of respiratory care and neuro-sleep services at SouthCrest Hospital in Tulsa, OK. In his new position, McCain will oversee all the operations of these services.

Sheldon Porter, RRT, has opened a health care consultant business in Durham, NC, that focuses on training nurses, allied health care professionals, and the community to take care of patients with complex respiratory care needs. Independent Respiratory Consultants Inc. also offers smoking-cessation instruction, spirometry testing, and asthma education. (Photo 4)

Julie Aubrey, MHA, RRT-NPS, has joined Kendall Regional Medical Center in Miami, FL, as director of pulmonary medicine. She comes to the position from Flagler Hospital in St. Augustine, FL, where she served as manager of the cardiopulmonary department. (Photo 5)

Andrew Philippi has been inducted into the Phi Theta Kappa honor society for two-year colleges. He is a student at Carteret Community College in Morehead City, NC. (Photo 6)

Troy Zimmerman, RRT, CPFT, AE-C, is the new manager of pulmonary function services at St. Luke's Health System in Boise, ID.

Anthony W. Schmitt, MEd, RRT, is now on the board of directors of Pulmonary Fibrosis Partners in Evansville, IN. Schmitt is director of clinical education at the University of Southern Indiana (USI) in Evansville. He also chairs Smoke Free Evansville and serves on a committee at USI aimed at making the campus smoke free. (Photo 7)

Robert Fischer, BS, RRT, passed away in February. He was a respiratory therapy instructor at Washington State Community College in Marietta, OH, and also had served as director of the RC department at Marietta Memorial Hospital. He was 58.

We welcome news about AARC members. Submit job changes, awards, and death notices online at www.AARC.org/transitions. ■

Members, Send Us Your Human Interest Stories

Have you been active in a ventilator-dependent kids' summer camp? Have you helped an elderly patient in need? Have you saved a life outside of a health care facility? *AARC Times* is always searching for stories from AARC members that relate special experiences.

If you have a human interest story to share with our readers, please contact *AARC Times* Editor Marsha Cathcart at cathcart@aarc.org. ■

AARC Member in Nebraska Delivers Tailor-made Care

Roberta Edwardson often sets up a full bed tent like this one for OSA patients at the facility who are unable to adjust to CPAP.

Respiratory therapists are known for their ability to adapt to just about any clinical situation; but for Roberta Edwardson, RRT, adjusting to the special needs of her patients isn't just a once-in-awhile occurrence. As the only respiratory therapist on staff at the Beatrice State Development Center (BSDC), a facility for individuals with developmental disabilities (IDD) in Beatrice, NE, she works closely with colleagues in medicine, nursing, and other therapies to make sure her patients get customized care.

"The typical respiratory patient is usually able to understand the treatment or therapy ordered for them," she explains. "Some individuals with IDD, similar to many elderly, do not fully participate in what is being asked of them; they could be frightened of the procedures and become even less participatory."

Edwardson has been at the center since October of 2009, a few months before the facility hired a new clinical services director, physician, and neurologist. Working closely with staff, this new leadership team instituted an interdisciplinary approach to the care of patients that the RT believes is markedly improving care. "The majority of our individuals have many different clinical and recreational therapies requested in order to maximize their potential and optimize their independence," she says. "For example, one man had up to 13 different sessions in one week." The 46-year-old suffers from severe scoliosis; prior to the new approach, he was using only 13% of his lung capacity.

Using the team concept, the facility was able to combine his aquatic therapy, physical therapy, and respiratory therapy, effectively reducing his sessions to three times a week. Now he spends the first half hour doing aquatherapy in the pool, then moves to a changing table for at least 10 minutes of chest therapy while a physical therapist works on core strengthening and stretching.

From there, Edwardson works with the patient on controlled breathing techniques, coughing techniques, and focused breathing. "He tries to move my hands while I am gently pushing against his ribs. This helps him understand what it feels like to use his diaphragm," she says. His lung capacity has almost doubled since beginning the new regimen, and he enjoys all the therapy.

Residents at the center suffer from many conditions that require an innovative approach to respiratory therapy. Many are at risk for aspiration or aspiration pneumonia due to oropharyngeal disorders, severe gastroesophageal reflux, and musculoskeletal deformities. Asthma, nocturnal hypoxia, and obstructive and central sleep apnea are also common.

Edwardson says creativity especially comes into play when dealing with the nocturnal hypoxia patients because many of them will not leave a cannula in place or are such restless sleepers that they run the risk of entangling the cannula around their neck. "In this situation, we provide them with an oxygen-enriched environment for sleeping by creating a full bed tent and delivering 35% oxygen by a venturi device," she says.

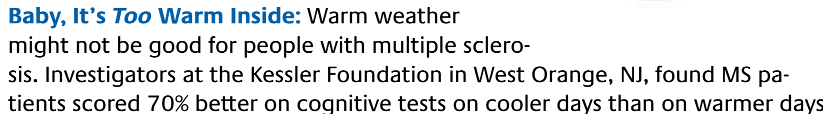
The bed has helped many patients who can't or won't use traditional therapies to sleep easier. One woman with traumatic brain injury who is able to make her own decisions was diagnosed with possible obstructive sleep apnea (OSA) via an ApneaLink™ study, but balked at having a full sleep study and refused to wear CPAP or a cannula. Edwardson set her up with the full bed tent, hoping that it would ease her symptoms. "After the first night I went to see how she had done, and when I asked how she liked her new bed she said, 'I love it! Do you want one?'" When the RT explained that she was the one who set it up for her, the patient replied simply with "Thank you so much."

It is those thank-you's from patients and families that mean so much, says Edwardson. She knows she has found the right patient population for her respiratory care skills. "With patience and perseverance, I think they are appreciative of what I do, and they tend to be less judgmental. I love to see them smile and rejoice in even their smallest triumphs," says the RT. "Every individual I treat or work with is like my daughter or son, and I provide them the support, care, and attention I would expect for my daughter or son." ■

▶ Strange But True…

Be Still My Beating… Skin? Scientists from the Scripps Research Institute have converted adult skin cells into beating heart cells without having to first go through the laborious process of generating embryonic-like stem cells. This technology could lead to new treatments for a range of diseases and injuries involving cell loss or damage, such as heart disease, Parkinson's, and Alzheimer's.

Merry about Cherries: Athletes who drank tart cherry juice after a strenuous workout returned to 90% of normal muscle function in 24 hours, compared to just 85% when they didn't drink the juice. British researchers attribute the finding to the antioxidants found in the juice. (*Medicine & Science in Sports & Exercise*)



Baby, It's *Too* Warm Inside: Warm weather might not be good for people with multiple sclerosis. Investigators at the Kessler Foundation in West Orange, NJ, found MS patients scored 70% better on cognitive tests on cooler days than on warmer days.

Computers for $500, Alex: IBM's artificial intelligence computer — dubbed "Watson" — recently beat "Jeopardy!" champs Ken Jennings and Brad Rutter on national TV. What's next for the supercomputer? Watson is now at Columbia University Medical Center, where developers are testing its ability to diagnose medical conditions in real patients.

Gone Today, Hair Tomorrow: Researchers from UCLA and the Veterans Administration who were studying how stress affects gastrointestinal function in mice may have stumbled onto a treatment for male baldness. The mice were genetically engineered to overproduce a stress hormone that also leads to loss of hair on their backs. When the investigators treated them with a compound called astressin-B to see if it would affect gastrointestinal tract function, they surprisingly found that the compound caused all their hair to grow back. ■

Higher Bilirubin Levels May Protect Against Lung Diseases

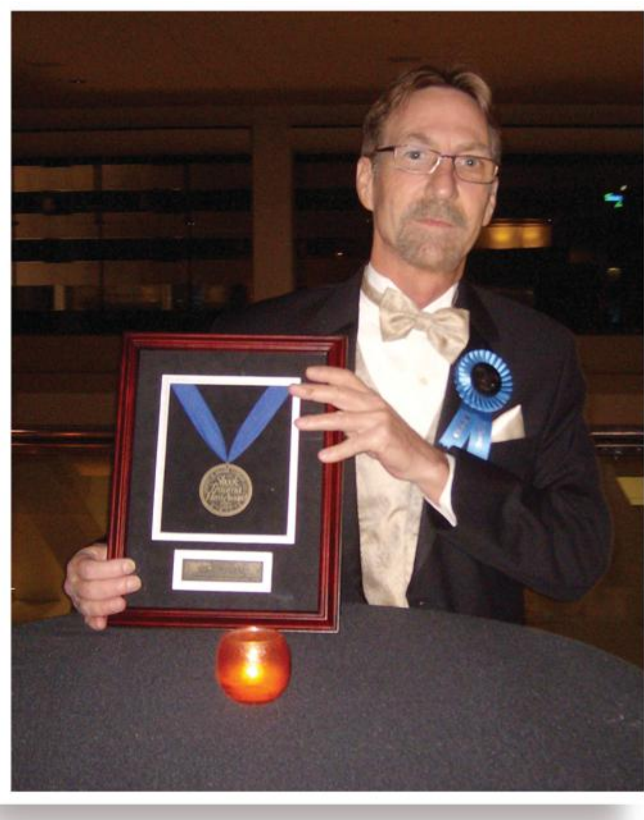
British researchers publishing in the Feb. 16 issue of JAMA find people with higher levels of the protein bilirubin have a lower risk for lung cancer, COPD, and death from any cause. The study was conducted among 504,206 people in the United Kingdom's Health Improvement Network.

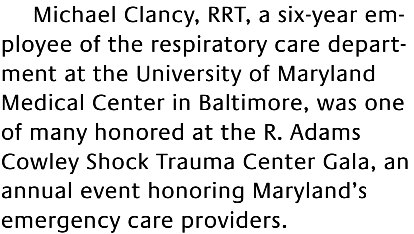
Every 0.1 milligram per deciliter (mg/dL) increase in bilirubin was associated with an 8% decrease in lung cancer risk in men and an 11% decreased risk in women. A 6% lower risk for COPD and a 3% lower risk of death was noted for each 0.1-mg/dL increase in men and women.

Bilirubin, which is manufactured by the body as the hemoglobin in red blood cells, breaks down and is responsible for the yellow color of bruises and the yellow discoloration in jaundice, has already been associated with lower rates of heart disease in people without liver disease. ■

Respiratory Therapist Named "Hero" at Shock Trauma Center Gala

by Jeff Ford, MHA, RRT





Michael Clancy, RRT, a six-year employee of the respiratory care department at the University of Maryland Medical Center in Baltimore, was one of many honored at the R. Adams Cowley Shock Trauma Center Gala, an annual event honoring Maryland's emergency care providers.

Clancy received the prestigious "Hero Award," and the AARC member says he was somewhat surprised to be honored with the award. "I was just doing what I always do — giving the best care possible." Clancy, a recent cancer survivor himself, realizes first-hand what it means to be "on the other side." His performance continues to be an exemplary model of the life-saving work RTs perform each day to provide safe, compassionate, quality patient care at the medical center.

The Hero Award nomination criterion is comprised of a rather rigorous selection process that includes analyzing components of the nominee's role in the care of one of two patients treated at the center over the course of a year. Components include the nominee's patient interface, the treatment provided to the patient, and whether or not he or she played a significant role in the patient's overall care and recovery. In addition, an extensive review by shock trauma administrators, physicians, and EMS staff facilitates the selection of award recipients.

Michael Clancy was honored at a gala to recognize emergency care providers in Maryland.

The first patient in this round of the awards was a Cumberland teenager who survived a devastating gunshot wound in a hunting accident. This 15-year-old survivor is now an advocate for hunting safety. The second patient, a 19-year-old Eastern Shore teenager, was trapped in her car, suffered blunt trauma injury, and experienced cardiac arrest several times after hitting a pole while driving under slippery road conditions. Following her recovery, she joined her brother at the University of Maryland, College Park campus.

"At the gala, we thanked 93 individuals involved in these two cases. However, in doing so, we also honored the hundreds of other providers — emergency dispatchers, firefighters, EMS providers, Maryland State Aviation Command personnel, nurses, physicians, technicians, and rehabilitation therapists — who dedicate their lives to saving Maryland's most critically injured patients," says Thomas Scalea, MD, physician-in-chief at the center.

More than a celebratory event, the gala focuses awareness to raise funds for the Shock Trauma Center's activities and expansion, as well as provide for the growth of training and educational programs. "We call the Shock Trauma Gala 'A Night for Heroes,'" says Karen Doyle, vice president of operations and nursing at the center. "One person cannot

do it alone; it takes a team of well-coordinated medical experts to save a trauma patient."

The Shock Trauma Center is comprised of a variety of ICUs, including select, multi, and neuro-trauma critical care. The center has a dedicated trauma resuscitation unit (TRU), surgical suites, and PACU, all staffed 24/7 by respiratory therapists, physicians, and nurses. "Respiratory therapists play a key role in the care and recovery of patients in our trauma center," says Maria Madden, clinical coordinator for shock trauma. "Working side-by-side with our physicians and nursing staff, the respiratory therapists have developed strategies to meet the emergent needs of the trauma patient in the TRU, along with the demanding needs of our spinal cord injury patients in the neuro-trauma critical care unit."

In recent years our respiratory department has advanced the quality of patient care provided to some of our sickest patients. In addition to Mike Clancy's award, we have also received the Department Under Fire Award as part of the center's rewards and recognition celebration known as "Spirit Day." This award recognizes our staff's flexibility and adaptability in the constantly changing trauma environment. ■

Jeff Ford, MHA, RRT, is director of respiratory services, diagnostic bronchoscopy, and pulmonary function at the University of Maryland Medical Center in Baltimore.

Ventilator Bundle and Better Communication Cut VAP Rate

A new study led by investigators from Johns Hopkins and conducted in Michigan ICUs finds implementation of the ventilator bundle can markedly reduce the incidence of ventilator-associated pneumonia (VAP).

The study compared data from 112 ICUs at 72 Michigan hospitals from October 2003 through September 2005 before implementation of the bundle, with data collected for up to 30 months after a ventilator bundle checklist was implemented. The bundle included five therapies:

- elevating the head of the bed more than 30° to keep bacteria from migrating into the lungs,
- giving antacids or proton pump inhibitors to prevent stomach ulcers,
- giving anticoagulants to prevent blood clots,
- lessening sedation to allow patients to follow commands, and
- daily assessment of readiness to remove the breathing tube.

At the beginning of the study, patients received all five therapies on 32% of ventilator days. The percentage rose to 75% 16–18 months post-implementation and 84% 28–30 months post-implementation. Most importantly, cases of VAP dropped by more than 70%.

The investigators stress, however, that use of the checklist only tells part of the story. The VAP reduction program also included staff training on teamwork and better communication to ensure that the bundle was being properly administered. The importance of getting patients off ventilators as quickly as possible was also emphasized, and a component was implemented to allow caregivers to learn from their mistakes. They established a "culture of safety" to educate patients' families about the therapies and encourage them to ask questions to ensure that their loved ones were getting the appropriate care. "Far too many patients continue to suffer preventable harm from these respirator-linked pneumonias," says study lead author Sean M. Berenholtz, MD, MHS. He and his colleagues believe broad use of the intervention outlined in their study could go a long way to prevent the vast majority of the 36,000 deaths that occur each year due to VAP. The study, which is part of the larger Keystone ICU Project, was published ahead of print in *Infection Control and Hospital Epidemiology* in February. ■

Racial Disparities Abound in Readmissions

Elderly black Americans are significantly more likely to be readmitted to the hospital following treatment for heart attack, pneumonia, and congestive heart failure, find researchers publishing in the Feb. 16 issue of JAMA. Compared to white patients, they had a 13% higher chance of readmission within 30 days of discharge.

The finding was strongest for those treated at hospitals that serve more blacks. Black patients discharged from minority-serving hospitals, defined as the 10% of hospitals serving the most black patients, had a 23% higher chance of readmission than black patients discharged from non-minority-serving hospitals. ■

Watch What You Tweet

Everybody seems to be getting on Twitter these days, and health care professionals are no exception. A new study out of the George Washington School of Medicine and Health Sciences in Washington, DC, suggests medical personnel should be careful what they tweet.

The investigation analyzed 5,156 tweets made by 260 physicians with 500 or more followers during a month's time. Three percent of the tweets were classified as unprofessional, containing profanity, potential patient privacy violations, sexually explicit material, or discriminatory statements. Another 1% fell into the "other unprofessional" category and encompassed statements containing unsupported claims about products being sold by the physicians on their websites or repeated promotions of specific health products. Ten tweets were found to contain statements about medical therapies that ran counter to existing medical knowledge or guidelines, raising the specter of possible patient harm. The study was published as a research letter in the Feb. 9 issue of JAMA. ■

Epinephrine OK for Croup

A systematic review of the literature is putting a stamp of approval on a long-used treatment to help children breathe easier. In a study published in the February issue of *The Cochrane Library*, Canadian investigators analyzed eight controlled studies that specifically addressed the effectiveness of nebulized epinephrine in the treatment of croup.

The research involved 225 children with moderate to severe illness who were either evaluated in an emergency department or were in the hospital. The analysis showed the treatment is safe and effective, and concerns that the drug might cause a rebound effect when it wore off were not substantiated. However, the investigators emphasize that, due to the short action of the drug, children need to remain in the hospital or emergency department for observation to determine how they are faring after the effect wanes. ■

Contribute to Writer's Corner

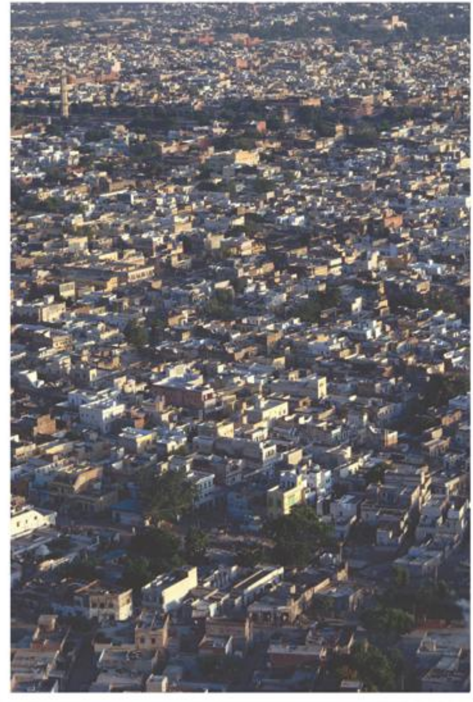
AARC Times is currently considering brief stories from AARC members for publication in the Writer's Corner section of "RC Currents." Submissions should be under 500 words and contain a cover letter with the member number, contact information such as phone and fax numbers, and email address. Send submissions to cathcart@aarc.org with "Writer's Corner" in the subject line. ■

Anthropology and Asthma

What does anthropology have to do with asthma? Everything, reports a University of Wisconsin researcher who presented on the topic at the recent American Association for the Advancement of Science meeting in Washington, DC.

David Van Sickle shared results from a study he conducted to show how asthma is viewed differently in different cultures, possibly leading to an incorrect assessment of the prevalence of the disease worldwide. For example, when he had physicians in India watch videos of people exhibiting classic asthma symptoms (e.g., wheezing, shortness of breath, and waking up at night and coughing), the vast majority avoided the asthma diagnosis, favoring instead diagnoses like "wheezy bronchitis." The same experiment conducted in Wisconsin most often resulted in an asthma diagnosis.

The difference, he explains, lies in the way different cultures view asthma. Returning to the India example, he notes that in that country asthma still carries a stigma, making physicians hesitant to label people with the disease. The nation's private medical marketplace doesn't help either. "People resist being diagnosed with asthma for fear of being stigmatized," he says. "A physician is unlikely to make an unpopular diagnosis because one can always go down the street and get a different doctor." ■



New Members

Welcome to the AARC

U.S. Members

Sharp, Terry, Nome, Ak*

Adams, Tayanta, Emelle, Al*
Alexander, Janet, Mobile, Al*
Anderton, Marcella, Mobile, Al*
Blevins, Eric, Tuscaloosa, Al*
Como, Scott, Trussville, Al*
Garrett, Barry, Ashville, Al*
Hill, Amy, Childersburg, Al*
Kelsey, Susan, Florence, Al
Marion, Laura, Anniston, Al*
Roberts, Lessia, Muscle Shoals, Al*
Tartt, Shenika, Birmingham, Al*
Williams, Karen, Madison, Al*
Williams, Shannon, Huntsville, Al*

Burgener, Darla, Fayetteville, Ar
Clark, Andrea, Salem, Ar*
Watt, Heidi, Hamburg, Ar*

Curry, Misty, Scottsdale, Az*
Gipson, Paula, Phoenix, Az*
Green, Kathryn M, Sun City West, Az*
Hiner, Leslie, New River, Az*
James-Heeley, Toni, Tucson, Az*
McMahon, Kimberly, Phoenix, Az
Robinson, Jennifer, Glendale, Az
Sciortino, Virginia, Sahuarita, Az*
Starr, Mark, Peoria, Az*
Wagoner, Kelsey, Yuma, Az

Abarca-Sanchez, Juan, Chico, Ca
Abellana, Arlene, Stockton, Ca*
Alimbuyao, Marjorie, San Diego, Ca
Apahidean, Claudiu, Fullerton, Ca*
Balteff, Krystle, San Diego, Ca*
Banjo Aderinto, Tara, Buena Park, Ca*
Barilone, Pamela, Santa Maria, Ca*
Barnum, Terence, La Palma, Ca
Beltran, Lily, Corona Del Mar, Ca*
Berry, John, Anaheim, Ca
Boccadoro, Tina, El Dorado Hills, Ca
Bogman, Katrina, Fairfield, Ca*
Brueske, Dorothy, Modesto, Ca*
Burton, Hillary, Hesperia, Ca
Conterno, Cora, San Diego, Ca
Crackel, Martin, Salinas, Ca*
Cuculich, Pamela, Modesto, Ca*
Damos, Joseph, Modesto, Ca
Davis, Keondra, Modesto, Ca
Deng, Qingdong, San Diego, Ca
Dowsey-Herrera, Johanna, Ventura, Ca*
Drenthe, Rachel, Long Beach, Ca
Elkin, Rachel, Santee, Ca
Enciso, Jazmin, Whittier, Ca*
Fernandez, Divina, Chula Vista, Ca*
Fliege, Leslie, Huntington Beach, Ca
French, Shannon, La Mesa, Ca
Garcia, Juan Antonio, Whittier, Ca
Gerolaga, Michael, Walnut, Ca
Gonzales, David, Chula Vista, Ca*
Goodman, Gary, Redondo Beach, Ca*
Greer, Savannah, Bakersfield, Ca*
Gustaveson, Matthew, Corona, Ca
Gutierrez, Dario, Fairfield, Ca
Hahn, Michael, Highland, Ca
Hamilton, Jeffrey, Bakersfield, Ca*
Hutson, Ryan, Galt, Ca*
Huynh, Andy, Westminster, Ca
Iovanni, Pati, Vallejo, Ca*
Jackson, Victor, Chula Vista, Ca
Jenkins, Audrey, Chula Vista, Ca
Jenson, Kate, Menifee, Ca*
Kaye, Elizabeth, Escondido, Ca*
Kirkwood, Danielle, Bellflower, Ca
Kwan, Rhea, San Jose, Ca*
Lane, David, San Francisco, Ca*
Lauderdale, Krystal, Fountain Valley, Ca
Leavers, Ralph, Redding, Ca*
Lin, Tina, Rowland Heights, Ca
Loun, Steve, San Diego, Ca*
Luciano, Meynard, Cerritos, Ca
Luna, Mark, Anaheim, Ca
Maguyon, Alexis, San Diego, Ca*
Marquez, Harvey, Carson, Ca
Medrano, Roxana, Bell, Ca*
Miranda, Abel, Atwater, Ca*
Montague, Jennifer, Victorville, Ca*
Mote, Lloyd, Long Beach, Ca*
Nguyen, Davis, Anaheim, Ca
Ochoa, Fabiola, Corona, Ca
Pan, Steven, Garden Grove, Ca*
Peoples, Alidda, Menifee, Ca
Rafael, Anne Marie, Hayward, Ca*
Real, Sandra, Carson, Ca
Reyes, Bernard, Long Beach, Ca
Riggio, Alison, Corona Del Mar, Ca*
Ruiz, Taryn, Fullerton, Ca
Silva, Anthony, Pomona, Ca*
Simon, Derek, Long Beach, Ca
Steven, Tyler, Long Beach, Ca
Strizu, Fabian, Modesto, Ca*
Suon, Sewell, Long Beach, Ca
Taing, Meng, San Gabriel, Ca
Temple, Evelyn, Oakland, Ca*
Thompson, Jeremy, Inglewood, Ca*
Tran, Sarina, Santa Ana, Ca
Uwakwe, Athanasius, Manteca, Ca*
Vanaselja, Elmar, Oceanside, Ca*
Vasquez, Melissa, Garden Grove, Ca
Vu, Long, Garden Grove, Ca
Wilber, Laura, San Diego, Ca*
Workman, Vanessa, San Francisco, Ca*
Wortman, Rachel, Concord, Ca
Wright, Patricia, Princeton, Ca*
Yeung, Samantha, Sunnyvale, Ca
Yuan, Hang, Ventura, Ca
Yutuc, John, Irvine, Ca
Zuniga, Louxel, Bonita, Ca*

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Henley, Krystle, Denver, Co
Kaeck, Mark, Lafayette, Co*
Murren, Nicole, Denver, Co*
Sadsad, Quirino, Aurora, Co*
Schmidt, Susan, Pagosa Springs, Co*
Sipres, Hope, Denver, Co
Strong, Bill, Canon City, Co*
Tavares, Jonas, Silverthorne, Co

Alicea, Glorivy, East Hartford, Ct
Bennett, Renee, Willington, Ct
Bielecki, Nicole, New Britain, Ct
Black, Karen, Hamden, Ct
Christopher, Anthony, Manchester, Ct
Crabb, Ryan, Norwalk, Ct
Delete, Delete, Danbury, Ct*
Fiedorowicz, Samantha, New Britain, Ct
Figueroa, Damaris, New Britain, Ct
Fushey, Sarah, Stafford Springs, Ct
Giglietti, Annmarie, East Haven, Ct
Gonzalez, Joselyn, East Hartford, Ct
Guerra, Morna, Clinton, Ct*
Headford, Elisa, Sandy Hook, Ct*
Hernandez, Cathy, East Hartford, Ct
Jordan, Tracy, Hartford, Ct
Lamaj, Dorjana, Simsbury, Ct
Lazarus, Tysen, Farmington, Ct
Lukaszczyk, Marta, East Hampton, Ct
Lyde, Demetria, New Britain, Ct
Martins, Cindy, Vernon, Ct
Mason, Tonia, Ellington, Ct
McAviney, Alyssa, Cheshire, Ct
Menditto, Kristopher, Tolland, Ct
Mrvoljak, Enisa, Berlin, Ct
Muhammad, Bashir, Colchester, Ct
Muth, Shawntay, Manchester, Ct
Mysliwiec, Amanda, New Britain, Ct
Ostiguy, William, Enfield, Ct*
Packard, Lisa, Hebron, Ct
Pitblado, Jennifer, Simsbury, Ct
Ramirez, Rafael, Newington, Ct
Richard, Julie, Coventry, Ct
Rivera, Johanna, Hartford, Ct
Rossi, Nicole, Windsor, Ct
Ruiz, Gladis, Meriden, Ct
Saddler, Alethea, Hartford, Ct
Sager, Lyndsy, Wethersfield, Ct
Tanguay, Jamie, Colchester, Ct
Tucker, Carrie, Hartford, Ct
Vargas, Giselle, Waterbury, Ct
Vincent, Robin, Southington, Ct

Adkins, Cindy, Georgetown, De*

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Blocker, Tyerune, Newberry, Fl*
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Cox, Dian, Port Charlotte, Fl
Crain, Jimmie, Tallahassee, Fl*
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Cunningham, Michael, Pembroke Pines, Fl*
Deknegt, Jeremy, Pembroke Pines, Fl
Desrosiers, Obed, Miami, Fl
Deweil, Russell, Lake Placid, Fl
Egene, Bens, Miami, Fl
Eugene, Marie, Miami, Fl
Fernandez, Raquel, Miami, Fl
Gachette, Phedo, Miramar, Fl
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Kancock, Keith, New Port Richey, Fl
Kercy, Johanne, Port St Lucie, Fl*
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Lockhart Horner, Kay, Saint Augustine, Fl*
Lockwoo, Kevin, Saint Petersburg, Fl*
Mixdorf, Timothy, Lynn Haven, Fl*
Mortimer, Denise, Tampa, Fl*
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Noel, Johanne, Pembroke Pines, Fl
Noelsaint, Antoinise, Miami Gardens, Fl
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Smith, Michael, Orlando, Fl*
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Thomas, Marlene, New Smyrna Beach, Fl*
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Williams, Suzana, Port Saint Lucie, Fl*

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Boyd, Theresa, Columbus, Ga*
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Delete, Delete, Morris, Ga*
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Euds, Brittany, Edwardsville, Il
Hersi, Dahir, Peoria, Il*
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Johnson, Terry, Armstrong, Il
Joseph, Jean, Chicago, Il*
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Marcott, Mary, Edwards, Il*
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Pedroza, Kristena, Peoria, Il
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Swenson, Mindy, Elkville, Il*
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Torres, Carolyn, Loves Park, Il*
Tutor, Brooke, Waterloo, Il
Urbanc, Hillary, Edelstein, Il
Varughese, Soniya, Lincoln Wood, Il*
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Wilkinson, Sara, Roxana, Il

Batchelor, Melissa, Batesville, In*
Cheek, Melissa, Dillsboro, In
Fowler, Luster, Clermont, In*
Laduke, Donna, Pekin, In
Losekamp, Hayley, Cedar Grove, In
Paquette, Phyllis, Indianapolis, In*
Phy, Wesley, Evansville, In*
Ramseyer, Jeremy, Shelbyville, In*
Roseboom, Amy, Brownsburg, In*
Shortencarrier, Denise, Fort Wayne, In*
Silva, Juan, Indianapolis, In*
Stein, Mary Ann, Mishawaka, In
Whitfield, Renata, Indianapolis, In

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Bossman, Stephen, Parsons, Ks
Bristow, Michael, Parsons, Ks
Doggett, Tracy, Wichita, Ks*
Estrada, Kacey, Parsons, Ks
Gath, Candice, Parsons, Ks
Gibson, Dana, Parsons, Ks
Higgins, Chris, Meade, Ks*
Hines, Amanda, Parsons, Ks
Jay, Donna, Parsons, Ks
Laturner, Lynn, Parsons, Ks
Luton, Randall, Paola, Ks*
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Skahan, Kylee, Topeka, Ks*
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Stringer, Heather, Parsons, Ks
Tanner, Jerad, Parsons, Ks
Watkins, Jeremy, Wichita, Ks
Wilkinson, Emily, Leawood, Ks*

Browdy, James, Louisville, Ky*
Caskey, Vickie, Morehead, Ky*
Chasteen, Bill, East Bernstadt, Ky
Deitz, Darryl, Louisville, Ky*
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Linsin, Heidi, Murray, Ky*
Little, Priscilla, Prestonsburg, Ky*
Robinson, Edwina, Winchester, Ky*
Simpson, Danny, Louisville, Ky*
Soley, Dawn Marie, Lexington, Ky*
Watson, Kristopher, Independence, Ky
Workman, Shaun, Murray, Ky*
Young, Amanda, Dry Ridge, Ky

Antonio, Shaontrea, Edgard, La
Arceneaux, Timothy, Erwinville, La
Arvie, Lateigra, Thibodaux, La
Aucoin, Meghan, Thibodaux, La
Barrilleaux, Callie, Houma, La
Barrios, Michael, Covington, La*
Bordelon, Jordan, Cut Off, La
Bruce, Alisha, Cut Off, La
Bueche, Melanie, Houma, La
Chamberlain, Krista, Oakdale, La
Chark, Shirdetra, Thibodaux, La
Clout, Caitlyn, Houma, La
Cunningham, Courtney, Houma, La
Dunn, Casie, Otis, La
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Grabert, Ashley, Houma, La
Gros, Megan, Schriever, La
Hudnall, Sarah, Jena, La*
Hughes, Andrew, Monroe, La*
Lagarde, Latonya, Gray, La
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Lejeune, Patti, Eunice, La*
Mangus, Victoria, Lacombe, La*
Martorana, Sara, Luling, La
Pattison, Joseph, Arabi, La*
Perilloux, Candie, Vacherie, La
Richard, Andree, Thibodaux, La
Staples, Ranada, Thibodaux, La
Trosclair, Heidi, Chauvin, La

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Mann, Colleen, Silver Spring, Md*
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Mekbib, Teshome, Silver Spring, Md*
Milord, Emmanuel, Silver Spring, Md*
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Wallace, Christina, Woolwich, Me*

Antosiek, Patricia, Shelby Twp, Mi*
Austin, Timothy, New Baltimore, Mi
Balasubramaniyan, Subbulakshmi, Farmington Hills, Mi*
Bennett, Melinda, Ravenna, Mi*
Black, Randall, Lansing, Mi*
Burchart, Christine, Saline, Mi
Carmona, Andres, Allen Park, Mi
Carver, Kristin, Pontiac, Mi
Coleman, Leslie, Commerce Township, Mi*
Coles, Mary, Morenci, Mi*
Cook, Darlene, Detroit, Mi
Cummings, Brent, Lansing, Mi*
Curren, Lisa, Dearborn Heights, Mi
Dadabbo, James, Allen Park, Mi
Dilorenzo, Eric, Waterford, Mi*
Duffey, Brian, Chesterfield, Mi
Dulong, Karen, Canton, Mi
Eklund, Kelly, Hudsonville, Mi*
Fakkas, Ann, Temperance, Mi
Finley, Jason, Monroe, Mi
Freker, Lindsay, Ottawa Lake, Mi
Gadille, Sarah, Petersburg, Mi
Gurski, Carrie, Oxford, Mi
Haddix, Bradley, Carleton, Mi
Heffron, Lindsay, Chelsea, Mi*
Hunter, Tamia, Flint, Mi*
Jackson, Charlene, Oxford, Mi
Jackson, David, Troy, Mi
Kinnunen, Lynette, Berkley, Mi*
Kocher, Kelley, Portage, Mi*
Koenigsknecht, Brett, Vicksburg, Mi*
Lamor, Iris, Owosso, Mi*
Lentz, Michael, Monroe, Mi
Likert, Scott, Milan, Mi
Luthy, Joseph, Ida, Mi
Makkapati, Srilakshmi, Canton, Mi*
Mallord, Clinton, Allen Park, Mi*
Maloy, William, Lambertville, Mi
Manley, Melinda, Carleton, Mi
Martin, Terri, Grand Ledge, Mi*
Mata, William, Monroe, Mi
Mathieu, Amanda, Clarkston, Mi
McAllister, Rick, Adrian, Mi
McKinnon, Lauretta, Lansing, Mi*
Meade, Roger, St Claire Shores, Mi
Mendez, Erica, Monroe, Mi
Miles, Melinda, Monroe, Mi
Miller Koch, Debra, Huron Twp, Mi
Miller, Jocelyn, Kalamazoo, Mi*
Moinet, Cynthia, Saint Johns, Mi*
Nelson, Felix, Flint, Mi
Ollie, Tawana, Detroit, Mi
Palko, Timothy, Haslett, Mi*
Palmer, Curtis, Burton, Mi*
Persaud, Elissa, Romulus, Mi
Pettway, Brandon, Ypsilanti, Mi
Pittman, Angela, Ida, Mi*
Reaume, Brittany, Rockwood, Mi*
Roberts, Paul, Greenville, Mi*
Roberts, Sherri, Greenville, Mi*
Robinson, Kellie, Dundee, Mi
Root, Jennifer, Dundee, Mi*
Rowe, Terry, Charlevoix, Mi*
Simcock, Katherine, Lansing, Mi*
Simmons, Jessica, Temperance, Mi
Slater, Kim, Wyandotte, Mi*
Soleau, Heather, Newport, Mi
Stanfill, Cody, Petersburg, Mi
Synod, Stephania, Royal Oak, Mi*
Taylor, Sue, Grosse Ile, Mi
Taylor, Tracy, Hillsdale, Mi*
Wallace, Kimberly, Monroe, Mi
Watson, Kevin, Rochester, Mi*
Watt, Teresa, Fowlerville, Mi*
White, Brandon, Lambertville, Mi
Williams, Lesley, Lyons, Mi*
Williams, Rachel, Sparta, Mi*
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Wooten, Lisa, Trenton, Mi
Zemens, Lauren, Huntington Woods, Mi*
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Dagostino, Marty, Hugo, Mn
Styliades, Carol, Amherst, Mn*
Toetschinger, Sharon, Little Canada, Mn*

Bailey, Brandi, Kansas City, Mo*
Beagle, Daniel, St Clair, Mo
Beasley, Angel, Saint Louis, Mo
Beland, Douglas, St Louis, Mo
Biggs, Christina, Gerald, Mo
Blair, Brian, Union, Mo
Brando, Margaret, Liberty, Mo*
Branson, Brandy, Owensville, Mo
Bunch, Samantha, Koshkonong, Mo*
Burton, Rodney, Fenton, Mo
Carmickle, Leah, Saint Louis, Mo
Collins, Amy, Springfield, Mo
Davis, Rossie, Union, Mo
Dedic, Ajsa, Saint Louis, Mo
Farrow, Tom, Saint Louis, Mo
Figgemeier, Tianna, Gerald, Mo
Fike, Bethany, Springfield, Mo*
Gant, Wanda, Saint Louis, Mo
Hagedorn, Bonnie, Washington, Mo
Hamilton, James, Troy, Mo
Hawkins, Kenneth, Fenton, Mo
Hoke, Jessica, Saint Charles, Mo
Huddleston, Robert, Fenton, Mo
Jaouni, Kevin, Valley Park, Mo
Johnson, Jacky, Kansas City, Mo*
Kuhlman, Ralph, St Louis, Mo
Ladyman, Angie, Gerald, Mo
Liles, Frankie, St Louis, Mo
Lucas, Kimberly, Blue Springs, Mo
Luecke, Kimberly, O Fallon, Mo*
Maksche, Robert, Arnold, Mo*
Martin, Danielle, Sullivan, Mo
Mathews, Frank, Ballwin, Mo
Morse, Robin, Florissant, Mo
Owens, Natasha, St Louis, Mo
Pena, James, Ballwin, Mo
Penn, Andrea, Columbia, Mo*
Ramirez, Tanya, St Louis, Mo
Reid, Lashonda, Saint Louis, Mo
Rubin, Jennifer, St Peters, Mo
Samenus, Michael, Blue Springs, Mo*
Sanderson, Michelle, Nevada, Mo*
Selfors, Jessica, Thayer, Mo*
Shelley, La Donna, St Louis, Mo
Skalas, Christine, St Louis, Mo
Soubie, Michael, Kansas City, Mo*
Swienckowski, Jennifer, Peculiar, Mo*
Thebeau, Christopher, Fenton, Mo
Tomanovich, Amy, Fenton, Mo
Wachter, Michael, Imperial, Mo
Walker, Steffany, Plattsburg, Mo*
Wall, Mike, Fenton, Mo
Walls, Judith, Saint Louis, Mo
Webster, Cheryl, St Louis, Mo
Wegescheide, Jessica, Sullivan, Mo
Williams, Robert, St Louis, Mo

Bennett, Timothy, Oxford, Ms*
Billingsley, Steven, Southaven, Ms
Higginbotham, Jennifer, Houlka, Ms*
Lemmon, Gayle, Water Valley, Ms*
McCoy-Carter, Margaret, Hernando, Ms*
Nichols, Jenny, Southaven, Ms*
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Gauger, H Gene, Jamestown, NC*
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Sutton, John, Sylva, NC*
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Burse, Qiana, Omaha, Ne
Estep, Kristin, Papillion, Ne
Fisher Idt, Susan, Gretna, Ne
Fitzgerald, James, Omaha, Ne*
Gallardo, Mariana, South Sioux City, Ne
Gregory, Kelly, Bellevue, Ne
Hocking, J, Lincoln, Ne
Hull, Scott, Bellevue, Ne*
Jones, Millini, Omaha, Ne
McAtee, Michaela, Omaha, Ne
Modrykamien, Ariel, Omaha, Ne*
Mudloff, Krystal, Omaha, Ne
Powell, Rebekah, North Platte, Ne*
Schanbacher, Mack, Kearney, Ne
Schultz, Megan, Lincoln, Ne
Schultz, Rachel, Omaha, Ne
Sheldrake, Jessica, Omaha, Ne
Thompson, Chris, Yutan, Ne

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Hernandez, Gladys, Carlsbad, NM*
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Antolin, Christina, Henderson, Nv
Avalos, Mario, Las Vegas, Nv
Bagtas, Anthony, Las Vegas, Nv
Blackham, Marianne, Las Vegas, Nv
Comeaux, Candace, Las Vegas, Nv
Corral, Francisco, Henderson, Nv
Cummins, Donny, North Las Vegas, Nv
Fleming, Henrietta, Las Vegas, Nv
Flores Soto, Kara, Las Vegas, Nv
Francisco, Bianca, Las Vegas, Nv
Franco, Brian, Henderson, Nv
Gonzales, Elizabeth, Henderson, Nv
Grosdidier, Jason, Sparks, Nv*
Harp, Brenda, Reno, Nv*
Hartman, Gary, Las Vegas, Nv*
Holmes, William, Henderson, Nv
Knox Green, Maci, Las Vegas, Nv*
Kurtz, Sarah, Reno, Nv*
Lee, Trevis, Henderson, Nv
Lim, Faye, Las Vegas, Nv
Lim, Rod Anne, Las Vegas, Nv
Manausa, Paul, Henderson, Nv
McGee, Dennis, North Las Vegas, Nv
McNamara, Kimberly, Las Vegas, Nv
Morgan, Jaqulynn, Las Vegas, Nv
Myers, Daisy, Reno, Nv*
Rodriguez, Veronica, Las Vegas, Nv
Ruman, Katie, Henderson, Nv
Showaafere, Rahel, Las Vegas, Nv
Sims, Charles, Las Vegas, Nv
Slane, Erica, North Las Vegas, Nv
Tirre, Mark, Las Vegas, Nv

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Jaranilla, Therese, Bronx, NY*
Lam, Emily, Brooklyn, NY*
Malloy, Michael, Smithtown, NY*
Miot, Chantal, Rosedale, NY*
Montgomery, Peg, Scottsville, NY
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Pellizzari, Darlene, Liverpool, NY*
Rall, Marzenna, Nesconset, NY*
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Thomas, Dona, West Nyack, NY*
Thomas, Shirley, Coram, NY*
Warren, Clifford, Liverpool, NY*
Young, Kathy, Canton, NY

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Bresnahan, Laura, Warren, Oh*
Brock, Carrie, Cincinnati, Oh
Brown, Deborah, Columbus, Oh*
Brown, Heather, Tipp City, Oh
Brown, Holly, Fairfield, Oh
Cunningham, Christine, Westerville, Oh*
Frederick, Ginny, Lebanon, Oh*
Fye, Erica, Cincinnati, Oh
Gallagher, Tanya, Cincinnati, Oh
Giulito, Linda, Massillon, Oh*
Gordon, Rebecca, Norwalk, Oh*
Hertzman, Roger, Centerville, Oh*
Humphrey, Christian, Seaman, Oh*
Johnson, Shirley, Dayton, Oh*
Kent, Jeff, Milford, Oh
Koontz, Dawn, Hamilton, Oh*
Mahl, Danielle, Toledo, Oh
Millhouse, Tyrone, Akron, Oh*
Mrusek, Dianna, Cincinnati, Oh
Nelson, Rebecca, Tipp City, Oh
Nicastro, Antonio, Cincinnati, Oh
O'brien, Timothy, Wickliffe, Oh
Ramos, Christine, Hamilton, Oh
Riedlinger, Beth, Upper Sandusky, Oh*
Stahl, Fred, Holland, Oh
Stapleton, Kelly, North Bend, Oh
Sturgeon, Lindsay, Milford, Oh
Thrall, Beth, Brooklyn, Oh*
Tiberio, Dominic, Lewis Center, Oh*
Wallace, Anthony, Cincinnati, Oh
Watzek, Miranda, Cincinnati, Oh
White, Mary, Cincinnati, Oh

Davidson, Kacie, Comanche, Ok
Eubanks-Stockton, Nicky, Whitefield, Ok*
Francois, Amber, Lawton, Ok
Hamrick, Smantha, Fletcher, Ok
Hill, Summer, Lawton, Ok
Ramey, Megan, Lawton, Ok
Robbins, Sherry, Tonkawa, Ok*
Welch, Chad, Comanche, Ok

Anderson, Grant, Portland, Or
Chatfield, Elaine, Ore City, Or
Damian, Jason, Milwaukie, Or
Downs, Douglas, Portland, Or
Field, Brooke, Gresham, Or
John, Leder, Woodburn, Or*
Meidlein, Ruth, La Grande, Or*
Moreno, Mathew, Portland, Or*
Pratt, Tammie, Pleasant Hill, Or*
Singer, Kelly, Sherwood, Or
Smith, Chelsea, Lake Oswego, Or
Van Cleave, John, Portland, Or
Vaughn, Heidi, Gladstone, Or
Wanker, Haley, Oregon City, Or
Welander, Richard, Tigard, Or*
Wild, Stephanie, Portland, Or
Wilson, Donovan, Tigard, Or

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Bradley, Denise, Larksville, Pa*
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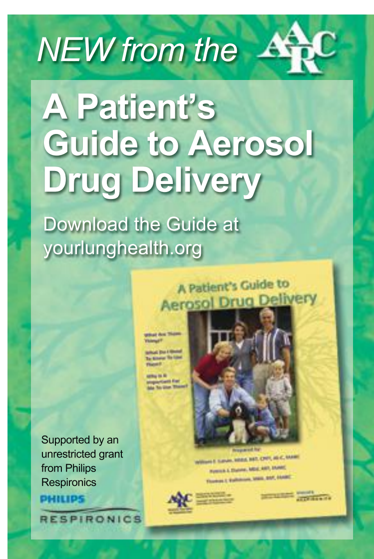

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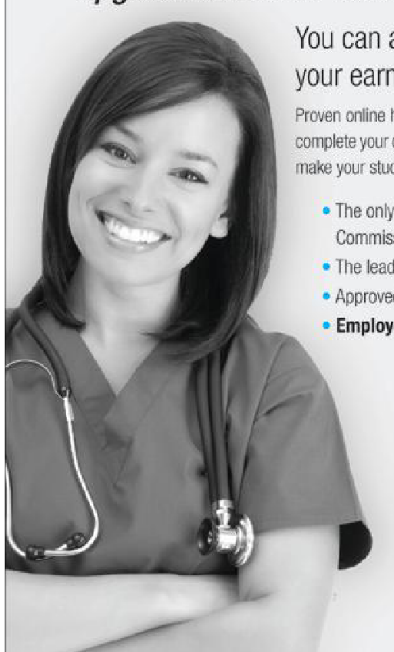

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They Can Hear Us Now

(continued from page 47)

with the AARC's Capitol Connection, the Association made it easy for supporters to add credence to the message the PACT and patients would be delivering face-to-face. By the end of the week-long event, Capitol Connection had logged more than 10,000 messages to members of Congress.

Then the PACT representatives were ready to get down to work as soon as they reached Washington on the afternoon of March 7. An issue briefing held that evening ensured everyone was up to speed on the objectives before heading out for the meetings with their members of Congress the next morning. Miriam O'Day, AARC's director of legislative affairs who is based in Washington, DC, joined other members of the AARC government affairs staff to go over the key talking points and answer any remaining questions. PACT members also visited with each other to share state and regional issues and meet the alpha-1 and COPD patients who would be playing such a crucial part in their sessions on The Hill.

A marathon, not a sprint

While the PACT visits all take place on just one day out of the year, this annual rite of passage for the respiratory care profession more closely resembles a marathon than a sprint, with everyone working before, during, and after the event to ensure its success. Jim Love, RRT, who was there representing Arizona, is a veteran of the PACT event and a great example of how these volunteers get the job done. His preparation begins months before boarding the plane and continues for months after returning home. During the build-up to the event, he asks as many AARC members in his state as possible to support the key issues by using the AARC's Capitol Connection website. Love also makes sure his legislators hear from him on a regular basis once he returns home.

"Within five working days after the meeting I send an email briefly talking about the subjects we covered and saying thank you for the meeting at least twice in that email," Love reports. "I also mention that I understand how hard they work and I really appreciate their taking the time to consider our issues." Another email follows about three months later to ask about the progress of the AARC legislation and whether the legislator has signed on as a co-sponsor. "I then do this every three months all year long."

Carrie Bourassa, RRT, a PACT representative from Minnesota who has been going on the trip since 2002, says the ongoing nature of the lobby day allows therapists to build on the discussions from year to year. "During our first trip to Washington, DC, much of our time was spent educating the offices on who RTs were, what we do, and why our patients need access to RTs in all patient care settings," she says. "As the years have progressed, many of the same individuals are still in office and their staff still in place. Our relationships have developed over time, allowing us to concentrate on the topics at hand to increase the impact and success of the meetings."

Bourassa believes the personal connections she and her fellow PACT members have made in the process have been priceless for the profession. "Staff from our congressional offices now know they have an expert resource and in past years have not hesitated to contact me asking for information on any number of topics related to respiratory care." Bourassa recalls one case in particular that illustrates the bonds that have been formed. "One of the individuals I met with has a mother with COPD, and when I made him aware of the benefits of pulmonary rehabilitation, he got his mother enrolled in a program. He still to this day thanks me for helping change her life, which is one of the reasons why, year after year, I continue to devote my efforts so that every patient is advocated for and our profession is represented," she says.

You're up next

With the help and support of the AARC governmental affairs staff and Association leaders, the 120 PACT representatives and the patient advocates who accompanied them on their visits left Washington, DC, last March with the knowledge that their members of Congress now had a better understanding of the issues. They know the role of the respiratory therapist in the health care system and how it could be strengthened by passage of the H.R. 941 Medicare Respiratory Therapy Initiative bill. Now it's your turn. Take a few moments to visit Capitol Connection on www.aarc.org/advocacy/pact and write to your members of Congress, asking them to support this vital legislation for your patients and your profession. ■

Heidi Ross, health policy advisor for Congressman Elijah Cummings, met with MD/DC Society members.

Calendar of Events

AARC & State Society Programs

May 3–4
Plantsville, CT
CTSRC Super Symposium XXIX
Contact Susan Albino at (203) 527-8317 or www.ctsrc.org

May 4
AARC Live Webcast
High-Flow Oxygen Therapy: Is It Here to Stay?
Contact AARC, (972) 243-2272, www.aarc.org/education/webcast_central

May 4–6
Breckenridge, CO
CSRC State Conference and VAP Workshop
Contact Mindy Lemons at (303) 765-3854 or www.colosrc.org

May 4–6
Osage Beach, MO
40th Annual MSRC Conference and Business Meeting
Contact Lisa Newcomer at (573) 331-5191 or www.mosrcstatemeetings.com

May 9–11
San Diego, CA
43rd Annual CSRC Convention
Contact Abbie Rosenberg at (888) 730-CSRC or www.csrc.org

May 21–22
Anchorage, AK
ASRC Annual Educational Conference
Contact Liz Collins or Paul Drake at (907) 714-4438

May 23–25
Virginia Beach, VA
VSRC 34th Annual Symposium by the Sea
Contact www.vsrc.org

June 1–3
Oak Brook Terrace, IL
ISRC 43rd Conference and Exposition
Contact www.isrc.org or Kelli DeBerry at (708) 423-8888

July 17–20
Vail, CO
AARC Summer Meetings
Contact AARC, (972) 243-2272, www.aarc.org/education/meetings

August 16–18
Prescott, AZ
ASRC's 45th Annual AzSRC Conference
Contact www.azsrc.org or Amy.Bardin@yahoo.com, (623) 205-4930

October 23–29
Respiratory Care Week
Contact AARC, (972) 243-2272, www.aarc.org

October 26
Lung Health Day
Contact AARC, (972) 243-2272, www.aarc.org

November 5–8
Tampa, FL
AARC International Respiratory Congress
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For information on submitting calendar events, contact: Beth Binkley, AARC Times
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