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AARC Strategic Plan

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

AARC Strategic Objectives

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

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

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Utilize additional therapies to maximize oxygen delivery with validated ventilation systems.

Reference: 1. Data on file. Hampton, NJ: Ikaria, Inc; 2013.

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- INOMAX is contraindicated in the treatment of neonates known to be dependent on right-to-left shunting of blood
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INDICATIONS AND USAGE

Treatment of Hypoxic Respiratory Failure

INOmax® is a vasodilator, which, in conjunction with ventilatory support and other appropriate agents, is indicated for the treatment of term and near-term (>34 weeks) neonates with hypoxic respiratory failure associated with clinical or echocardiographic evidence of pulmonary hypertension, where it improves oxygenation and reduces the need for extracorporeal membrane oxygenation.

Utilize additional therapies to maximize oxygen delivery with validated ventilation systems. In patients with collapsed alveoli, additional therapies might include surfactant and high-frequency oscillatory ventilation.

The safety and effectiveness of INOmax have been established in a population receiving other therapies for hypoxic respiratory failure, including vasodilators, intravenous fluids, bicarbonate therapy, and mechanical ventilation. Different dose regimens for nitric oxide were used in the clinical studies.

Monitor for PaO_2, methemoglobin, and inspired NO_2 during INOmax administration.

CONTRAINDICATIONS

INOmax is contraindicated in the treatment of neonates known to be dependent on right-to-left shunting of blood.

WARNINGS AND PRECAUTIONS

Rebound Pulmonary Hypertension Syndrome following Abrupt Discontinuation

Wean from INOmax. Abrupt discontinuation of INOmax may lead to worsening oxygenation and increasing pulmonary artery pressure, i.e., Rebound Pulmonary Hypertension Syndrome. Signs and symptoms of Rebound Pulmonary Hypertension Syndrome include hypoxemia, systemic hypotension, bradycardia, and decreased cardiac output. If Rebound Pulmonary Hypertension occurs, reinstate INOmax therapy immediately.

Hypoxemia from Methemoglobinemia

Nitric oxide combines with hemoglobin to form methemoglobin, which does not transport oxygen. Methemoglobin levels increase with the dose of INOmax; it can take 8 hours or more before steady-state methemoglobin levels are attained. Monitor methemoglobin and adjust the dose of INOmax to optimize oxygenation.

If methemoglobin levels do not resolve with decrease in dose or discontinuation of INOmax, additional therapy may be warranted to treat methemoglobinemia.

Airway Injury from Nitrogen Dioxide

Nitrogen dioxide (NO_2) forms in gas mixtures containing NO and O_2. Nitrogen dioxide may cause airway inflammation and damage to lung tissues. If the concentration of NO_2 in the breathing circuit exceeds 0.5 ppm, decrease the dose of INOmax.

If there is an unexpected change in NO_2 concentration, when measured in the breathing circuit, then the delivery system should be assessed in accordance with the Nitric Oxide Delivery System O&M Manual troubleshooting section, and the NO_2 analyzer should be recalibrated. The dose of INOmax and/or FiO_2 should be adjusted as appropriate.

Heart Failure

Patients with left ventricular dysfunction treated with INOmax may experience pulmonary edema, increased pulmonary capillary wedge pressure, worsening of left ventricular dysfunction, systemic hypotension, bradycardia and cardiac arrest. Discontinue INOmax while providing symptomatic care.

ADVERSE REACTIONS

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice. The adverse reaction information from the clinical studies does, however, provide a basis for identifying the adverse events that appear to be related to drug use and for approximating rates.

Controlled studies have included 325 patients on INOmax doses of 5 to 80 ppm and 251 patients on placebo. Total mortality in the pooled trials was 11% on placebo and 9% on INOmax, a result adequate to exclude INOmax mortality being more than 40% worse than placebo.

In both the NINOS and CINRGI studies, the duration of hospitalization was similar in INOmax and placebo-treated groups.

From all controlled studies, at least 6 months of follow-up is available for 278 patients who received INOmax and 212 patients who received placebo. Among these patients, there was no evidence of an adverse effect of treatment on the need for rehospitalization, special medical services, pulmonary disease, or neurological sequelae.

In the NINOS study, treatment groups were similar with respect to the incidence and severity of intracranial hemorrhage, Grade IV hemorrhage, periventricular leukomalacia, cerebral infarction, seizures requiring anticonvulsant therapy, pulmonary hemorrhage, or gastrointestinal hemorrhage.

In CINRGI, the only adverse reaction (>2% higher incidence on INOmax than on placebo) was hypotension (14% vs. 11%).

Based upon post-marketing experience, accidental exposure to nitric oxide for inhalation in hospital staff has been associated with chest discomfort, dizziness, dry throat, dyspnea, and headache.

OVERDOSAGE

Overdosage with INOmax will be manifest by elevations in methemoglobin and pulmonary toxicities associated with inspired NO_2. Elevated NO_2 may cause acute lung injury. Elevations in methemoglobin reduce the oxygen delivery capacity of the circulation. In clinical studies, NO_2 levels >3 ppm or methemoglobin levels >7% were treated by reducing the dose of, or discontinuing, INOmax.

Methemoglobinemia that does not resolve after reduction or discontinuation of therapy can be treated with intravenous vitamin C, intravenous methylene blue, or blood transfusion, based upon the clinical situation.

DRUG INTERACTIONS

No formal drug-interaction studies have been performed, and a clinically significant interaction with other medications used in the treatment of hypoxic respiratory failure cannot be excluded based on the available data. INOmax has been administered with dopamine, dobutamine, steroids, surfactant, and high-frequency ventilation. Although there are no study data to evaluate the possibility, nitric oxide donor compounds, including sodium nitroprusside and nitroglycerin, may have an additive effect with INOmax on the risk of developing methemoglobinemia. An association between prilocaine and an increased risk of methemoglobinemia, particularly in infants, has specifically been described in a literature case report. This risk is present whether the drugs are administered as oral, parenteral, or topical formulations.

 IMK111-01540 April 2013

Helping Patients Discover the Benefits of Exercise

by Allen Wentworth, MEd, RRT, FAARC

Regular exercise has been shown to decrease mortality and age-related morbidity in older adults.[1] However, motivating healthy older patients to exercise can be challenging enough. A whole new set of barriers exists when trying to motivate elderly patients who suffer from chronic lung disease to exercise, yet exercise is essential to improve a patient's quality of life.

Respiratory therapists need to learn to individualize exercise programs to accommodate a patient's ability to exercise — be it in the home or rehabilitation programs. It's even more important for oxygen patients to understand the importance of being mobile and to utilize today's technology to assist with maintaining an active, enjoyable life.

Motivating patients

Respiratory therapists can be a vital element in motivating patients to exercise. RTs should take the time to talk about the benefits of exercise and nutrition as they provide therapy. RTs have a unique opportunity to motivate patients as they have already established relationships with many of them who have had frequent admissions or visits in a pulmonary rehabilitation facility. Pulmonary rehabilitation consults should be obtained for patients who qualify. If patients don't qualify, there are many alternatives: recreation centers, gyms, malls, and home. The first step is to talk to the patient and find out what they value, like to do, or what they used to like to do.

The "stages of change" model presented by Prochaska and DiClemente may be used to promote the desire to add exercise to a patient's daily activities. There are five stages: precontemplation, contemplation, preparation, action, and maintenance.[2]

1. The precontemplation stage occurs in the newly diagnosed patient with chronic lung disease who is in the hospital or emergency department after an exacerbation. At this point they have not even considered exercise.

2. The contemplation stage can be the RT bringing up the possibility of increasing a patient's enjoyable daily activities. RTs can plant seeds of encouragement in the patient's mind regarding what they could possibly do.

3. The preparation stage is getting ready. During this stage they enroll in a pulmonary rehab program, gather a friend or two who will walk with them in a mall, or look around their home to see what they already own they can use to exercise. Next, they need to set the start date.

4. The fourth stage is action. The start date has arrived. Initially, smaller incremental goals are best to set for patients and then celebrate as they are reached. As the patient progresses, goals can stretch more, setting a final goal as the ability to bring a previously enjoyed hobby (such as fishing, golfing, dancing, bowling, sex, or whatever they previously enjoyed) back into the patient's life.

5. Maintenance is the final phase in which the patient focuses on maintaining exercise and activity. Ideally, in this phase exercise should become an enjoyable habit that has enabled them to improve

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their quality of life. Exercise becoming habitual is the single best predictor of long-term success.

Usually, successful compliance with long-term exercise will be achieved by identifying and overcoming barriers to activity; recruiting a friend, spouse, or family support; and providing positive reinforcement. Self-efficacy can be achieved by beginning slow and achieving short-term goals created by the patient. Understanding the patient's interests and active hobbies that they would like to be able to do again can serve as a long-term goal and improve their attitude toward exercise.

Discomfort can be a barrier. Again, start slow to avoid excessive soreness. Vary exercise intensity and range to overcome boredom. A physical therapy consult may be required during the preparation phase to overcome a disability. Ensure rails or other objects are available to help alleviate their fear of falling. Be sure patients wear appropriate loose clothing, which will be more comfortable and will help prevent loss of balance. Using common household items can help those who are on a low income fixed budget or live in a rural setting. The most common concern of patients with chronic lung disease is dyspnea and poor tolerance to exercise. For this reason, support groups such as Better Breathers' or other clubs can get the patient interacting with people who have the same challenges. Patients are more encouraged, learn tips to overcome barriers, and receive inspiration from these groups. Face-to-face interactions with other patients who have been successful have been reported to be extremely motivational and inspire patients that they can be successful as well.

Promoting exercise can be more effective when included as a part of counseling for a chronic disease. Patients need to understand the positive impact exercise can have on their health. Exercise should begin as early as possible to receive the maximum benefit, but it is never too late. Exercise enhances cardiovascular fitness by improving blood pressure, decreasing coronary artery disease, and improving congestive heart failure symptoms. Exercise can decrease the risk of diabetes, improve glycemic control, and improve insulin sensitivity. Osteoporosis can improve with exercise, as well as improved function and decreased pain with osteoarthritis. Quality of sleep, improved cognitive function, decreased fatigue, and lowered depression can also occur with exercise.[3]

Overcoming the big barrier: exercising with oxygen

In 1980, the Nocturnal Oxygen Therapy Trial (NOTT) demonstrated the mortality benefit of wearing oxygen continuously versus 12 hours nocturnally. The 12-month mortality rate in the nocturnal group was 20.6% versus 11.9% in the continuous use group. The 24-month mortality rate was 40.8% versus 22.4% respectively.[4] Unfortunately, some patients feel that once they are required to wear oxygen it's a sentence that will limit their activity in life. It is important to help patients understand that with the correct equipment and a well-developed exercise program, patients can return to activities they have enjoyed throughout their life.

Patients must work closely with their home oxygen company, advocating for the proper equipment they need to stay mobile. RTs must take an active role, as well, and advocate for these patients. As home care companies face more reimbursement challenges, we must ensure the customer's needs are met.

There have been many advances over the past 20+ years regarding both the oxygen source and the delivery devices. Oxygen sources in the home began with pressurized cylinders of various sizes and are still used today. Liquid oxygen (LOX) came on the scene with the advantages that it can be stored, transported, and trans-filled more easily. Additionally, one liter of LOX produces 860 liters of gas, which makes it a concentrated, efficient oxygen source and important for the mobile patient. Oxygen concentrators came on the market in the mid-1970s, providing a convenient system for extracting oxygen from room air by using electricity. There are also home-fill systems that provide a mechanism for concentrators to fill smaller cylinders for mobility. In the mid-1990s, portable oxygen concentrators made being a mobile patient even easier. These are small, lightweight concentrators that can be carried easily. RTs must ensure they know the advantages and disadvantages of these systems (as it relates to each individual patient's needs), educating their patients as they are set up with the equipment.[5]

Delivery devices have made advances, as well. Nasal catheters were replaced with nasal cannulas and masks, with nasal cannulas still the most common today. However, there are other systems available. Oxy-View™ (Transtracheal Systems, Englewood, CO) oxygen therapy eyeglasses with a built-in cannula are available for the self-conscious. Transtracheal oxygen catheters can be used to reduce the flow requirements but also can conceal the use of oxygen. Very recently, the OxyArm™ (Southmedic Inc., Barrie, ON, Canada) entered the market. This is a device that looks like a Bluetooth headset that allows a plume of oxygen to be blown over the patient's mouth and nose.

Devices that interact with a patient's respiratory pattern have been beneficial in meeting a patient's oxygenation and ventilation demands during exercise. Intermittent flow regulators, which usually interface with oxygen cylinders, conserve gas and allow for oxygen flow to occur only as the patient inhales. The main benefit of this device regarding exercise or increased activities is that it maintains a more constant fraction of inspired oxygen (FIO_2) regardless of the patient's minute ventilation. Additionally, there are pressurized oxygen delivery systems that are portable and function like bi-level positive airway pressure, enhancing ventilation.

All of these devices, from a source gas to delivery and pulsating devices, can provide benefits to assist the patient in overcoming dyspnea and improving exercise tolerance. Each patient should be assessed with their equipment to ensure it meets their needs. These devices provide the patient with tools to assist with their self-efficacy and motivation to exercise.

Although there are conveniences associated with using specialized equipment in a gym, there are many items at home that patients can use in an effective exercise program. Whether patients are extroverted or introverted will greatly affect their compliance with a group exercise class versus a home program.

Pulmonary rehabilitation programs may be lacking in some rural areas, thus limiting access. However, there are studies assessing the use of telemedicine to interface with a hospital or physician's office to provide monitoring of patient exercise. Although a rehabilitation program may not be available, it does not mean the patient cannot exercise. Disease management and education, nutrition, and an individualized exercise program can be developed in a physician's office, prior to discharge, over the phone, or online. Exercise does not have to occur in a gym. There are plenty of household items that can be utilized in exercise:

- Patients can use resistance bands or cans of food for resistance training to increase their muscle tone and strength.
- Patients can use chairs to do squats by sitting down and standing up again. As they progress, they can use the chair or handrail to balance and squat further down.
- Chairs can be used for push-ups, leg raises, or leg extensions.
- Climbing stairs is a good way for patients to exercise as their tolerance allows.
- Additionally, walking is always good and can be done anywhere.

There is no reason why a patient cannot exercise at home. Although exercise can be accomplished at home, keep in mind that patients may receive more benefit if they exercise with other patients. However, exercise — regardless of the location — can provide a benefit and improve the patient's quality of life.

Respiratory therapists are in a unique position to assess, intervene, educate, motivate, and bring patients together to improve their quality of life. RTs must have the passion to be proactive and help patients deal with their barriers and live life, and teaching them to exercise is just the first step.

RTs must provide patients with numerous resources, such as www.YourLungHealth.org. Support groups must be started in communities where they don't exist. Bringing patients together helps them realize that they are not alone. It inspires patients to see other patients who have improved their quality of life and are talking about enjoying activities they thought they would never again experience. Many patients will express that one of their biggest inspirations was speaking with other patients who have learned to successfully live again. RTs must have the passion to be proactive and help patients deal with their barriers and live life. Teaching them to exercise is just the first step. ■

Allen Wentworth is not affiliated with any of the products or companies mentioned in this article.

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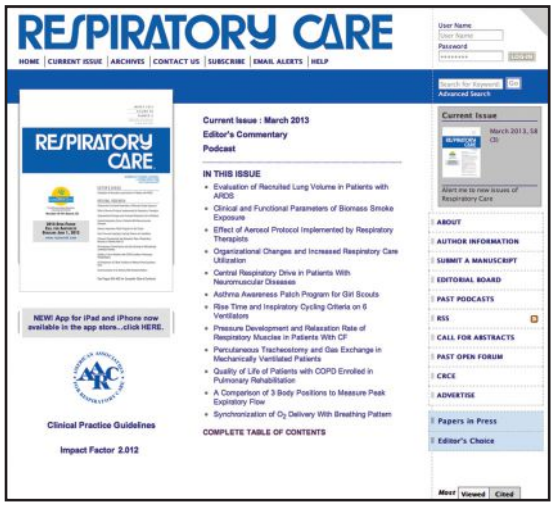

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Ending Misdiagnosis of Pulmonary Arterial Hypertension, an RT's Role

by Rino Aldrighetti

In your role as a respiratory therapist, you may have already crossed paths with someone living with pulmonary arterial hypertension (PAH). You may have encountered them in right heart failure in the intensive care unit, post-diagnosis as they learned to use an inhaled therapy, doing cardiopulmonary stress testing, managing home oxygen, participating in pulmonary rehabilitation, or undergoing a lung transplant. What is even more likely is that you have encountered PAH patients struggling with a misdiagnosis who did not yet know they had the disease. These individuals, many of whom have a diagnosis of asthma or COPD, may have been wondering for months or years why they continued to be symptomatic after being treated with medications. Here are the sobering facts:

- The average time between PAH symptom onset and diagnosis: 2.8 years.[1]
- The average lifespan for an individual living with PAH who does not receive treatment: 2.8 years.[2]

The Pulmonary Hypertension Association (PHA) launched "Sometimes It's PH: An Early Diagnosis Campaign" (www.SometimesItsPH.org) to address the unacceptable delay between individuals' first experiencing PAH symptoms and when they receive an accurate diagnosis and treatment. The time between symptom onset and diagnosis remains unchanged over the past 20 years, and delayed or missed diagnosis is the biggest barrier to delivering available care. The Pulmonary Hypertension Association is mobilizing to change aspects of medical practice so that more patients gain access to the nine treatments and the many specialty care centers that have become available in the United States. The nine PAH-specific treatments include: ambrisentan, bosentan, epoprostenol, room temperature stable epoprostenol, iloprost, sildenafil, tadalafil, treprostinil, and intravenous/subcutaneous treprostinil.

While we continue the search for a cure, education that leads to earlier diagnosis is a priority in saving and improving patients' lives. Respiratory therapists are critical members of the medical team when it comes to reducing the diagnosis delay.

Defining pulmonary aterial hypertension

Pulmonary arterial hypertension is a type of pulmonary hypertension (PH) that affects pulmonary circulation, resulting in increased pulmonary vascular resistance. The World Health Organization currently classifies PH as one of five types:[3]

- Pulmonary arterial hypertension
- PH associated with left heart disease
- PH associated with lung disease or hypoxemia
- PH associated with embolic disease
- PH associated with miscellaneous diseases.

In the United States, an estimated 20,000–30,000 individuals are being treated for PAH. In some cases, no cause can be identified, while other cases are traced to a genetic link. PAH is more likely to occur in individuals with certain associated conditions such as scleroderma, lupus, sarcoidosis, congenital heart disease, liver disease, and HIV.

Women develop pulmonary arterial hypertension four times more frequently than men in the United States; but the disease can impact anyone of any age, including in-

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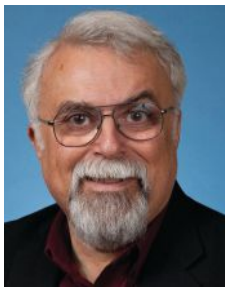

Rino Aldrighetti is the president and CEO of the Pulmonary Hypertension Association, located in Silver Spring, MD.


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Resources for Respiratory Therapists

Learn more about the Pulmonary Hypertension Association's campaign (www.SometimesItsPH.org).

■ The Pulmonary Hypertension Association's PH Professional Network (PHPN) — our membership network for allied health professionals — welcomes respiratory therapists. PHPN is a community of over 900 PH-treating allied health professionals dedicated to enhancing communication, improving professional development, and furthering pulmonary hypertension research and education (www.PHAssociation.org/PHPN).

■ The 2013 PH Professional Network Symposium, "The Power of Teamwork: 10 Years of Professional Collaboration in PAH," will include accredited continuing education sessions for respiratory therapists (www.PHAssociation.org/PHPN/Symposium).

■ PHA Online University provides the opportunity to complete accredited courses online (www.PHAOnlineUniv.org).

■ Share the Pulmonary Hypertension Association's main website with your patients. Whether they are newly diagnosed or simply new to PHA, they will find resources to help them better understand the disease and connect with the broader PH community (www.PHAssociation.org). ■

fants and children. It occurs across the United States and throughout the world.

A PH patient's ability to complete their activities of daily living is measured through their functional class. Class I patients have no limitation in their physical activity, while Class IV patients may experience shortness of breath and fatigue even at rest. Their symptoms increase with physical activity.

Diagnosis and treatment

Symptoms of pulmonary arterial hypertension include shortness of breath, fatigue, angina pectoris, syncope, and peripheral edema. The diagnosis is one of exclusion. Respiratory therapists are essential throughout the process, which begins with pulmonary function, arterial blood gas, and six-minute walk tests and concludes with confirmation of the PAH diagnosis via right-heart catheterization.

There is currently no cure for PAH. It remains a progressive, fatal disease; but there are treatments available that improve and prolong life. Treatment options include conventional medical therapies such as oxygen, anticoagulation, and diuretics, as well as nine therapies designed specifically to target PAH. Additional treatments are currently in review by the U.S. Food and Drug Administration; and there is an abundance of new research underway in the field, including research on the impact of nitric oxide therapy.

A small minority of patients who demonstrate a favorable response to vasodilator testing at the time of heart catheterization may respond well to calcium channel blockers. Other treatment options include prostacyclin, endothelin receptor antagonists, and phosphodiesterase Type 5 inhibitors. Some of the nine available treatments are inhaled, while others are delivered orally, intravenously, or subcutaneously. In some cases, PAH therapies are prescribed in combination.

A patient's hemodynamic profile and right ventricular function largely instruct the choice of therapy. An individual's functional class and ability also impact treatment decisions. Treatment is highly individualized, and medication side effects are often limiting. Depending on the response to medical treatment, a lung or heart-lung transplant may be considered.

Respiratory therapists and PAH treatment

Inhaled prostacyclin analogues have been shown to delay clinical worsening, improve exercise tolerance, and decrease symptoms in PAH patients. They are delivered via adaptive aerosol or ultrasonic pulsed delivery devices, so respiratory therapists often train patients on the use of their devices and assess barriers to therapy compliance. Three clinical research trials are currently testing the impact of nitric oxide therapy on pulmonary arterial hypertension in the out-patient setting.

Oxygen therapy is an essential part of PAH treatment for many patients. The need for supplemental oxygen varies from patient to patient. Some require oxygen therapy 24 hours a day, while others need oxygen only with exercise, at night, or when they fly. Patients' needs also range from low-flow to high-flow devices. It is critical to re-assess supplemental oxygen needs on a regular basis.

Studies have shown that exercise training through a pulmonary rehabilitation program can impact short-term functioning and well-being in selected PAH patients that equals the best current drug therapies.[4-6] In these studies, exercise therapy is an adjunct to, not a replacement for, medical treatment. Six-minute-walk and pulmonary function tests, especially lung diffusion testing, are used on an ongoing basis to monitor patients' response to therapy.

Early diagnoses save lives

Shaye is 12 years old…. She was diagnosed with extreme anxiety in 2007; but during the two years that followed, her symptoms continued to get worse. Her doctor would say her heart palpitations, dizziness, sweating,

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Headquartered in Silver Spring, MD, the Pulmonary Hypertension Association is the country's leading organization connecting pulmonary hypertension patients, families, and medical professionals. Our mission is to find ways to prevent and cure pulmonary hypertension and provide hope for the community through support, education, advocacy, and awareness. There are more than 200 PH support groups around the nation, helping many of the estimated 30,000 diagnosed patients in the United States. To learn more, visit www.PHAssociation.org/. ■

nausea, chest pains, and shortness of breath were all due to anxiety. What we would find out later is all of this was caused by something else, something we could never have prepared ourselves for.

— Shaye's mother, Teresa, writing about the delay in Shaye's PAH diagnosis

It takes too long for pulmonary hypertension to be diagnosed. One in five patients in the Registry to Evaluate Early and Long-term PAH Disease Management (REVEAL) who were diagnosed with pulmonary arterial hypertension reported symptoms for more than two years before their disease was recognized. At the point of diagnosis, nearly 75% had an advanced stage of the disease.[7]

The Pulmonary Hypertension Association's "Sometimes It's PH: An Early Diagnosis Campaign" seeks to reduce the time from symptom onset to accurate diagnosis by increasing health care providers' recognition of PAH as a possible diagnosis and their referral of suspected PAH cases to appropriate specialty care centers.

A zebra is the symbol of the campaign and a metaphor for an unexpected diagnosis. When medical professionals first learn about how to reach a diagnosis, they are taught, "When you hear hoof beats, think horses, not zebras." Pulmonary arterial hypertension is often misdiagnosed as asthma, COPD, or other common diseases; but while some of the symptoms may be similar to these conditions, PAH is distinctly different — like a zebra among horses.

In your role as a respiratory therapist, when you observe patients who are failing to improve despite apparent compliance with their treatment for asthma, COPD, or other lung conditions, ask whether the patient has been assessed for pulmonary arterial hypertension. Your inquiry could save a life. ■

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While some of the symptoms may be similar to asthma, COPD, or other common diseases, PAH is distinctly different — like a zebra among horses.

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Nutrition Therapy in the Ventilated Patient

by Jami E. Baltz, RD, CNSC

The nutritional care of the ventilated patient is a paramount aspect of overall patient care. Many critically ill patients are malnourished at baseline or are at risk for developing malnutrition and related complications. The resulting detrimental effects of malnutrition include increased morbidity and mortality, decreased functional quality of life, prolonged duration of mechanical ventilation, and increased length of hospital stay.[1] This article will focus on the relationship between nutrition therapy and respiratory function in the ventilated patient.

Alterations in energy expenditure are often noted during illness. Profound catabolism occurs with critical illness and respiratory failure and (once established) can worsen nutrition status. These alterations in metabolism can make it difficult to determine the appropriate nutrition provision for critically ill patients. All ICU patients should be considered for enteral nutrition therapy, which should be administered within 24–48 hours for improved outcomes.[2] Nutrition therapy impacts respiratory function in a variety of ways including muscle function, carbon dioxide (CO_2) production, and immune modulation. Most importantly, respiratory function relies on proper dosage of nutrients as over- and underfeeding can exacerbate respiratory failure.[3]

about the author...

Jami E. Baltz, RD, CNSC, is a clinical dietitian at Stanford University Hospital in Stanford, CA.

Avoiding under- and overfeeding

It is a regular occurrence in the ICU that approximately 50% of the nutrition prescribed is being provided to patients for the first two weeks of ICU stay, resulting in suboptimal nutrition delivery.[4] Underfeeding can result in a loss of lean body mass, immunosuppression, poor wound healing, and an increase in nosocomial infections. This can also result in an inability to respond to hypoxemia, hypercapnia, and diminished weaning capacity.[5] Continual underfeeding in the ICU results in a cumulative caloric deficit. A deficit greater than 10,000 calories is associated with an increased length of stay, days on mechanical ventilation, and mortality.[6]

The amount of protein provided is also a crucial aspect of nutrition for the ventilated patient. Muscle breakdown dramatically increases with critical illness and when the amount of muscle protein lost exceeds protein gain. The diaphragm is among the most aerobically active muscles. It has a high metabolic rate and uses up available energy in a few seconds if it is not rapidly regenerated.[7] Diaphragmatic atrophy occurs with consistently impaired protein intake. At least 1.5 g/kg protein is required for the ventilated patient. However, more recent clinical evidence indicates that most patients require above this amount.[8,9]

Underfeeding is more common in the critically ill patient, but overfeeding patients can be equally detrimental. Overfeeding generally occurs in patients receiving parenteral nutrition and/or transitioning to enteral nutrition. Overfeeding can cause an increase in physiological stress, hyperlipidemia, hyperglycemia, azotemia, hepatic impairment, and respiratory failure.[10] Excess amounts of substrates can exacerbate respiratory failure by increasing carbon dioxide load.[3]

Initially, carbohydrates were believed to be the cause of hypercapnia and signs of overfeeding due to increased production of CO_2 from oxidation of carbohydrates. Early studies compared standard isocaloric feedings with high fat, low carbohydrate feedings resulting in increasing carbon dioxide production, alveolar ventilation, lower respi-

ratory quotient, and lower carbon dioxide tension.[11-13] However, many factors affect CO_2 production in ventilated patients, such as exogenous buffering agents or medications, and large stores of CO_2 are released with ventilation. Therefore, current practice is based on a trial where excess total calories, not excess carbohydrates, increase CO_2 production.[14]

Many patients are already receiving low to moderate carbohydrate regimens due to the importance of glycemic control during critical illness. The stress response to critical illness causes wide swings in nutrient requirements. Therefore, the nutrition support process needs to balance the potential detrimental effects of both under- and overfeeding with glycemic control. Poor glycemic control is associated with adverse outcomes in the hospitalized patient. Hyperglycemia and hypoglycemia have been related to an increase in inpatient length of stay, time on ventilators, and mortality. Good glycemic control can help to prevent these complications. Current recommendations are to maintain a target blood glucose goal range of 140–180 mg/dL and to consider a blood glucose value of < 70 mg/dL during nutritional support as hypoglycemia.[2,15]

Indirect calorimetry

Indirect calorimetry is the most accurate method for determining resting metabolic rate (RMR) and resting energy expenditure (REE) for the ventilated patient and is considered to be the "gold standard" for measuring energy expenditure in critically ill patients.[16,17] Indirect calorimetry is indicated in clinical conditions where predictive equations are inaccurate. This includes large open wounds or burns, underweight/cachectic, obesity, limb amputation, and severe fluid accumulation.[18] It is also useful in ventilated patients who fail to respond to nutrition support or are exhibiting signs of under- or overfeeding.[19] Indirect calorimetry determines the resting energy expenditure and respiratory quotient by measuring inspired oxygen (VO_2) and expired carbon dioxide (VCO_2) using the Weir equation[20] where:

$$REE = (3.9 \times VO_2) + (1.1 \times VCO_2) \times 1.44$$

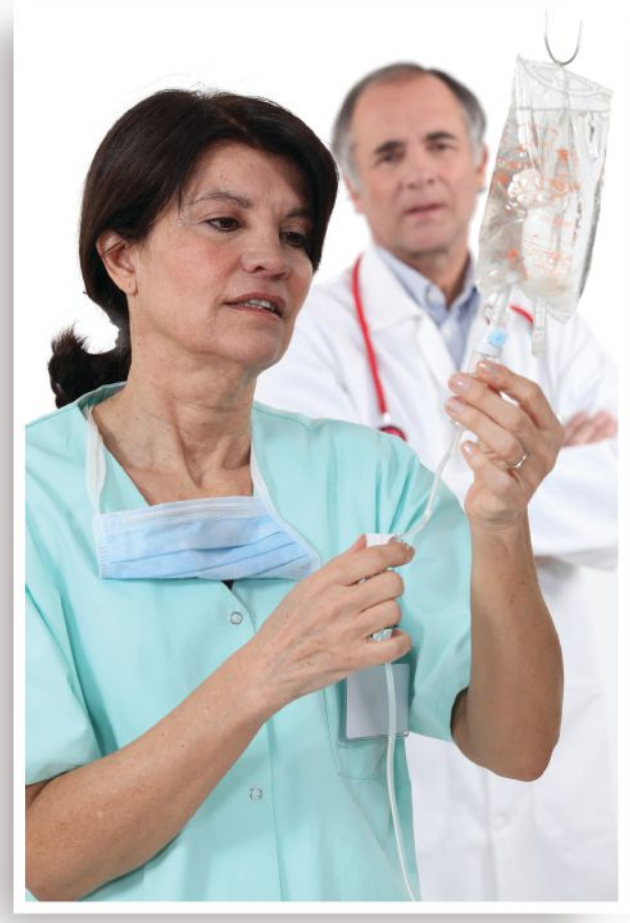
The respiratory quotient (RQ), the ratio of VCO_2 to VO_2 can also be calculated where:

$$RQ = VCO_2/VO_2$$

In regards to VO_2 measurements, elevated fraction of inspired oxygen (FiO_2) introduces error as the oxygen concentration approaches 1.0. As a result, the accuracy of indirect calorimetry diminishes as FiO_2 increases. Additionally, any error in gas concentration analysis or delivery is amplified at a higher FiO_2. Due to this technical limitation, indirect calorimetry is not recommended or considered to be accurate at $FiO_2 > 0.60$.[21-23] These technical limitations are common due to the available metabolic measuring devices.

Respiratory quotient was once thought to be useful as a means to determine nutritional substrate utilization. However, the accuracy of this assumption has never been substantiated. The large stores of CO_2 in the body can be mobilized with ventilation and thus would reflect an increase in CO_2 excretion but not necessarily production. Therefore the use of the RQ measurement is of limited clinical value. Measured values of RQ between the physiologic range of 0.67 to 1.3 should be used as a means of quality control and verifying test validity.[22]

Ideally, indirect calorimetry should be conducted at baseline and anytime there is a change in the patient's clinical status. However, energy expenditure varies on a daily basis and changes depending on each phase of the



metabolic response to stress. There currently is no consensus in the literature to guide practice on the frequency of indirect calorimetry.

The RT and dietitian relationship

As part of a nutritional assessment, the dietitian determines the nutrient requirements of the ventilated patient. Ongoing monitoring of the clinical status, including communication with the respiratory therapist, helps the dietitian to assess how the nutrition prescription is impacting respiratory function and clinical status. Indirect calorimetry may be ordered by the physician or requested by the dietitian, and is conducted by the respiratory therapist. By understanding the foundations as discussed above, it allows the RT to assess the validity of energy measurements by reviewing the patient's ventilatory settings, hemodynamics, or any other factor that may affect the results. Once the study is complete, it is important for the RT to identify if the results are valid, taking into account disease process, overall nutritional intake, and understanding of RQ. Some questions the RT may ask on the evaluation of measurement include:[24]

- Was the FiO_2 <0.6, was it accurately measured, and was it stable during the measurement?
- Were the values for VO_2 and VCO_2 stable (<5% coefficient of variation on a 5-minute test, <10% coefficient of variation on a 10- or 30-minute test)?
- Was the RQ in the expected physiological range (0.67 to 1.3)?
- Does the RQ indicate overfeeding (>1.1) or underfeeding (~0.6)?
- What was the patient's condition during the test?
  - Fed/fasted
  - Agitated/relaxed
  - Asleep/sedated

The dietitian will compare the estimated energy needs to the measured energy needs. Evaluate energy intake and make adjustments to the nutrition prescription as needed. Close partnership and good communication between respiratory therapists and dietitians is invaluable to the respiratory function, success of nutrition therapy, and the overall care of the ventilated patient. ■

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Daily Habits Affecting Sleep and CPAP Adherence

by Karla Smith, BS, RRT, RPSGT

The diagnosis of obstructive sleep apnea (OSA) causes many concerns for the patient, but the most important issue is how to adhere to therapy. Since continuous positive airway pressure (CPAP) is the first line of treatment, it is vital that patients diagnosed with OSA become and remain compliant with the CPAP.

Data suggests that early use patterns predict long-term adherence and that most patients establish their patterns in the first month and as early as four days.[1] In this article, you will find some of the most common ways in which patients can acquire habits that are useful in the long term.

Education and communication

The significance of an established CPAP education program is to assure patients understand the importance of CPAP therapy by explaining the consequences of untreated OSA. This type of education should be happening regularly and should be done with follow-up.

Along with this education, it is important to impress on the patient that they are only as successful with the therapy as their ability to communicate problems and ask questions. They should be encouraged to call with **any** question regarding CPAP therapy. If they are not communicating with their equipment supplier or health care provider, no one is aware there is a problem.

about the author...

Karla Smith, BS, RRT, RPSGT, is the sleep center coordinator at St. Alexius Medical Center in Bismarck, ND.

Mask fit

Does anyone really know how many CPAP masks/interfaces are on the market? There are so many different types that it can be difficult to find the right fit or style. However, this may be the most important factor in regards to long-term adherence. Without a good mask fit, most people will just quit using their CPAP.

Patients should be encouraged to be very diligent about their mask fit. They must realize that without a proper fit, the therapy will be a nightly battle. They may experience pressure sores from a mask that is improperly fitted or have breakthrough snoring if the mask is too loose. Most CPAP providers work very closely with the patient and are able to swap the mask at no cost within a specific time frame.

Humidity

There are differing views regarding the use of heated humidity with CPAP.[2,3] One fact that is agreed upon, however, is that heated humidity is associated with decreased symptoms of the upper airway, such as stuffy nose or dry nose, mouth, and throat. Most patients are prescribed heated humidity for this reason. The odds of CPAP failure is decreased if patients do not experience these annoying side effects.

Incorrect pressure

When patients are titrated in the sleep center, the sleep staff do their best to obtain an optimal pressure. Remember, this titration is typically done during one visit. The patients' sleep is so variable due to the fact that they are not in their own beds and that it is only for one night.

Patients go home with a certain pressure prescribed to them, but what most people do not realize is that this may not always be optimal. Some patients have difficulty adjusting to the initial pressure. Patients not on an optimal pressure may be waking up gasping for air or taking off the mask.

It is important to note that a CPAP pressure can be changed without a sleep study — but only at the discretion of the health care provider.

CPAP acclimation

During the first education encounter, it is very important to explain to the patient that they will, in fact, have many ups and downs when starting CPAP and that it may be necessary for them to get acclimated to the CPAP. It may even take a couple of weeks to get comfortable with the treatment.

One great tool to explain is CPAP desensitization. This technique is beneficial to patients who feel that they cannot tolerate the mask all night. Explaining to patients that wearing the mask and CPAP while sitting in their recliner for an hour is an easy way to get used to the mask. Increasing the trial time each day usually results in being able to tolerate the CPAP all night.

Healthy lifestyle

Daily exercise is important for all bodies. It is especially important for OSA patients to ensure they are getting daily exercise to assure they can establish or maintain a healthy weight. Recent studies have found that daily exercise can help increase sleep quality, and it can also decrease the likelihood that their OSA will worsen.[4] A weight gain of 10% can increase the severity of OSA. This, in turn, could decrease CPAP adherence because of re-emerging symptoms.

Sleep hygiene

Sleep hygiene is also a very important aspect of promoting CPAP adherence. It is vital to practice good sleep hygiene seven days a week, 365 days a year. It is also essential to get the recommended seven to eight hours of sleep per night. This may sound difficult; but this routine can promote quality sleep and, along with CPAP, increase daytime alertness.

Here are a few more "best practices" regarding sleep hygiene that your patients can use to increase CPAP adherence:[5]

- Maintain the same bedtime and wake time every day.
- Avoid napping during the day if possible. If you must nap, limit napping time to less than one hour and try not to nap after 3 p.m.
- Avoid stimulants such as caffeine, nicotine, and alcohol too close to bedtime. While alcohol is well known to speed up the onset of sleep, alcohol dis-

rupts sleep as the body begins to metabolize it, causing arousals. If you have trouble sleeping, do not ingest more than 200 milligrams (two cups of coffee) of caffeine a day. Remember that chocolate has caffeine.

- Exercise can promote good sleep. Vigorous exercise should be done earlier in the day. Avoid vigorous exercise if you have trouble falling asleep. Relaxing exercise, like yoga, can be done before bed to help initiate a restful night's sleep.
- Eating too close to bedtime, heavy meals, or foods that upset your stomach can affect sleep.
- Establish a regular relaxing bedtime routine. The routine can include a warm bath, reading, or a light snack.
- Associate your bed with sleep. Try to keep electronics out of the bedroom.

> It is our duty to assure that we prepare and educate these patients so that we can help them realize a full and happy life.

- Make sure that the sleep environment is pleasant and relaxing. The bed should be comfortable; the room should not be too hot, too cold, or too bright.
- If you worry during the night, set aside a designated "worry" time before bed. Write down worries to get them out of your system before bedtime.
- Do not go to bed until you are sleepy.
- Get out of bed if you are unable to go to sleep. Do some type of quiet activity and then go to bed when you are tired.

Why should we care about the daily routine of OSA patients? As respiratory therapists, we know that the consequences of untreated obstructive sleep apnea can cause long-term health effects[1] and a decrease in quality of life. It is our duty to assure that we prepare and educate these patients so that we can help them realize a full and happy life. ■

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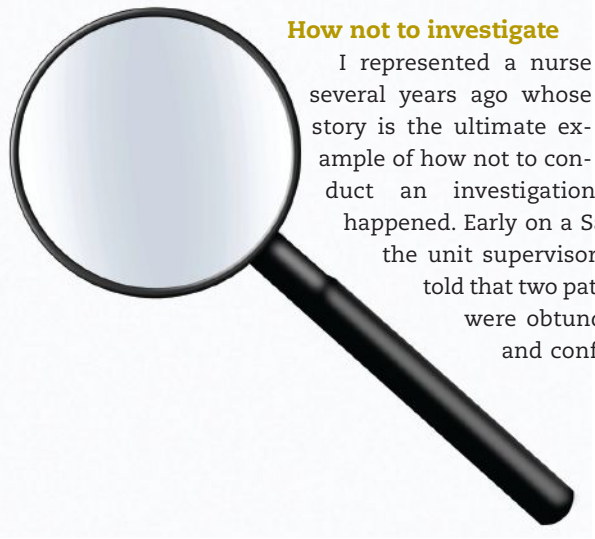
The Investigation

by Anthony L. DeWitt, JD, RRT, FAARC

As a department manager, I was always suspicious when a conversation started with "you didn't hear this from me, but…."

I was suspicious because it is human nature for people to want to avoid accountability. When people seek to avoid accountability, it most often means that they have some reason to avoid that accountability. Most of the time it means they do not want to be "outed" as a "rat" or a whistleblower. We often refer to people who tell those in charge about the misdeeds of others as "tattletales." It's a judgment-laden term that implies that the person who is carrying the tale is doing so for reasons other than doing the right thing. If a person will not sign a document making a formal complaint, they won't be there to back you up if the charge turns out to be phony. Never give an informant a promise of confidentiality. The courts won't allow you to keep it.

Irrespective of how we learn about things, as managers and supervisors we have an obligation to our employer to conduct a fair, open, and honest investigation into whatever misdeed has been done.



How not to investigate

I represented a nurse several years ago whose story is the ultimate example of how not to conduct an investigation. Here's what happened. Early on a Saturday morning the unit supervisor was called and told that two patients on the floor were obtunded, disoriented, and confused, and that a nurse had given propofol to cause this condition. The supervisor came to the hospital, identified the obtunded patients, found two used bottles of propofol in their rooms, and audited the Pyxis® (CareFusion Corporation, San Diego, CA) medication management system to find that two bottles had been taken out the night before by Nurse X, my client. When he came to work the next day, he was asked if he could explain why he took the propofol out and whether it was actually dispensed to those patients. He said he assumed he got it out for another nurse. However, he could not prove it; and so he was terminated on the spot and reported to the Board of Nursing.

At no time did the supervisor ever read the patient's records. At no time did he ever interview the other members of the ICU team, other than a passing question to the nurse who blew the whistle and who assured him that no other nurses used propofol that evening. In short, he looked at inputs and outputs. Nurse X was on duty, got out propofol, and could not account for it. Patient A was obtunded. Patient B was obtunded. Guilty as charged.

But on cross examination at the Board of Nursing hearing, the supervisor, called as the state's star witness, paid for his lack of a fair, careful, and credible investigation. He was forced to admit he'd never reviewed the record. He was forced to admit that the nurse who reported the event never called the doctor for either patient and never sought any medication for either patient. He was forced to admit that days earlier the same patients had much the same unexplained bouts of being obtunded.

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.

Science and the clock also played a role. Propofol has a half life of 3–9 minutes. Unless administered by a drip (the way it was used on Michael Jackson), it is metabolized quickly. Its effects are gone in under 20 minutes.

Nurse X left the hospital at 6:45 a.m. The morning duty nurse charted the patient's Glasgow Coma Score at 15 (the highest possible score one can achieve) at 7:00 a.m. for both patients. No one discovered the patients obtunded until 8:00 a.m. When confronted with this irrefutable record of evidence, the supervisor changed his story. It could not have been Nurse X.

The right way

When a patient incident is attributable to bad patient care or misconduct, the person who makes the report of the incident should immediately write an incident report and sign their name. From that report, the patient's medical records should be obtained and preserved. A person who will have no role in the decision making should then conduct the investigation. Normally, that person should be outside the department and outside the chain of command of the department where the incident took place because those inside the chain of command may be pressured, rightly or wrongly, to take a position one way or the other.

Every person who witnessed the event should be interviewed. The physicians should be interviewed. Statements should be written out and signed if possible. Ideally, the person doing the investigation should be a clinician who understands the core issues involved in the alleged wrongdoing. For example, a registered therapist would make a good investigator for an incident involving an ICU patient because she will be familiar with the patient care issues. Likewise, an ICU nurse would be appropriate to investigate misconduct by a therapist. Risk managers or hospital security staff without clinical backgrounds should be avoided. While these people may understand how to do an investigation, in most cases they won't understand the clinical facts and be able to apply medical learning to the data received.

If the incident is serious and involves alcohol, drugs, or criminal behavior, then the person suspected should be suspended with pay until the investigation is complete. Once the investigation is complete, it should be written up as follows:

Allegation: Nurse X gave propofol to Patient A.

Records reviewed: Medical record, Pyxis system reports.

Persons interviewed: Nurse X, Nurse Y, Doctor G, Doctor R, Therapist Q.

Summary of investigation: Here the investigator would summarize the facts he learned and from whom he learned them.

The report does not end with a conclusion. The investigator's job is to gather the facts, not make decisions. The decision maker, usually a supervisor or department head, should reach the conclusion. That conclusion should be supported by the facts and should not be based on emotion or how other staff members feel about the accused or the event. Justice, to be fair, has to be blind. That's why using uninvolved persons to investigate produces a better result. But it is always the manager's job to determine what to do about the facts uncovered. In that regard, the manager should remember that his primary duty is to hospital patients.

> If a person will not sign a document making a formal complaint, they will not be there to back you up if the charge turns out to be phony. Never give an informant a promise of confidentiality. The courts will not allow you to keep it.

Protecting the patients comes first. System integrity is the next consideration. If no action is taken, will it weaken confidence in the administration of the department? If the answer is yes, then some action should be taken.

Always remember that it is far easier to defend a wrongful termination case than it is to defend a wrongful death case. ■

DISCLOSURE

Anthony L. DeWitt is not affiliated with the product or company mentioned in this article.

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* Hewitt, M. "The Cost of Mechanical Ventilation: Reductions Due to Use of a Commercial Endotracheal Tube Holder." Presented at the American Association for Respiratory Care International Congress. 5-8 November 2011, Tampa, Florida USA.

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The Medicare Payment Advisory Commission (MedPAC)

by Cheryl West, MHA

I'll wager a guess that many of you have been in a situation where your administration or manager announces that the Medicare policies, reimbursements, coverage, etc., under which you've been providing respiratory therapy services will now be changed and you wondered: "Now, why did 'they' do that?" I'll also bet that there is a good chance that part of the answer is "MedPAC." And it's probably a safe assumption that most of you might be asking, "What is MedPAC?"

Outside the Washington DC "beltway," MedPAC is a little-known (assuming it is known at all) congressionally created commission. I assure you, however, that inside the corridors of the Washington DC health policy arena — be it Congress, the Centers for Medicare and Medicaid Services (CMS), or health policy special interest organizations — it is very well known, highly respected, and carries an extremely influential voice in determining the direction of the nation's health policy. The recommendations of MedPAC can and do impact millions of Americans, and not just Medicare beneficiaries.

about the author...

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

So, what is MedPAC?

To quote from their website (www.medpac.gov): "The Medicare Payment Advisory Commission is an independent congressional agency established by law… in 1997… to advise the U.S. Congress on issues affecting the Medicare program. The Commission's statutory mandate is quite broad: In addition to advising the Congress on payments to private health plans participating in Medicare and providers in Medicare's traditional fee-for-service program, MedPAC is also tasked with analyzing access to care, quality of care, and other issues affecting Medicare."

MedPAC has 17 appointed commissioners and a fairly small (in Washington DC terms) staff of full-time analysts and researchers. MedPAC taps into health policy experts from around the country who have no particular agenda and, thus, offer impartial input and expertise. MedPAC also seeks out the views from the stakeholders who will be directly or indirectly affected by a particular shift of policy. Meetings are held regularly and are open to the public. MedPAC issues two reports yearly (March and June); and unlike many government agencies, these reports are *never, ever late*.

According to the MedPAC website, in addition to these two reports: "MedPAC advises the Congress through other avenues, including comments on reports and proposed regulations issued by the Secretary of the Department of Health and Human Services, testimony, and briefings for congressional staff."

Sounds like the "same old, same old" federal government commission/panel/agency issuing yet another unread report where the recommendations will never see the light of day. But how wrong that assessment would be!

What is MedPAC's influence?

Here is one example of the influence of MedPAC. Those of you who are employed in acute care hospitals know that your facility will have its reimbursement decreased if there are excess hospital readmissions for three diagnoses: heart attack, heart failure, and pneumonia. This new readmission policy was implemented Oct. 1, 2012, after new regulations were issued by CMS. Those new regulations were implemented because in 2010 Congress enacted a provision in the Affordable Care Act called Health Care Reform.

To quote from their website: "The Medicare Payment Advisory Commission is an independent congressional agency established by law… in 1997… to advise the U.S. Congress on issues affecting the Medicare program.

What made Congress decide to insert the readmission provision into the massive health care reform law, and why did they choose those three diagnoses? The answer: MedPAC. To be more precise, go to page 103 of their June 2007 "Report to the Congress: Promoting Greater Efficiency in Medicine" (www.medpac.gov/documents/Jun07_EntireReport.pdf). The entire chapter is devoted to the problem of preventable readmissions, and you will note the cost to the Medicare program of heart attack, heart failure, and pneumonia. Moreover, if you look at the cost of Medicare readmissions in the table on page 116, you'll see that COPD ranks right up there as a costly readmission. In the annual Hospital Inpatient Prospective Payment System update regulation, CMS has proposed that starting in 2015 (fiscal year to start Oct. 1, 2014) that COPD will be added to the list of readmission diagnoses. That's the influence of MedPAC.

To be clear, when CMS revises policies or issues regulations, it most certainly is not based exclusively on a MedPAC recommendation. For example, with respect to readmissions, Stephen Jencks, MD, MPH, a leading expert in preventing rehospitalizations among Medicare patients and a former CMS employee, conducted a study subsequent to the MedPAC Report that was consistent with the MedPAC recommendations. Other expertise is also called upon. CMS has a vast cadre of staff who are researchers, analysts, and experts whose jobs are to advise and recommend policy changes. It is also quite true that CMS will review and often heed recommendations made by other government agencies that undertake specific studies or reviews on very specific aspects of Medicare policy. Two other important agencies that weigh in to CMS are the Department of Health and Human Services' Office of Inspector General (https://oig.hhs.gov) and the Government Accountability Office (www.gao.gov). These organizations are key to digging into areas where problems might be occurring and offering recommendations to either fix identified problems or (in their view) improve the Medicare program.

However, MedPAC has an exceptionally strong influence, and its recommendations matter — not only to Congress but to CMS as well. When there are big policy shifts to the Medicare program that either require a congressional change to the Medicare law or a policy shift from CMS, confidence should be high that the impartial and credible MedPAC has weighed in with its recommendations. ■

COPD Hospital Readmissions: What Challenges Are on the Horizon?

by Thomas J. Kallstrom, MBA, RRT, FAARC

The Affordable Care Act (ACA) in 2013 now seems to be a household phrase, which today continues to make its emerging presence known to everyone in health care. This will soon be more pronounced for patients with a COPD diagnosis who readmit to the hospital within 30 days of discharge. COPD readmissions are on the radar screen of third-party payers and especially the Centers for Medicare and Medicaid Services (CMS), and we should not expect this to be a temporary phenomena either. In fiscal year 2013 (which started on Oct. 1, 2012) readmission penalties for patients with pneumonia, heart failure, and acute myocardial infarction were put in place as part of the ACA's mandate to reduce payments to hospitals that had excessive readmissions for certain diagnoses. CMS has proposed to expand this in fiscal year 2015 to include COPD.[1]

This is significant when you consider the implications of what this could mean to the management and preparation for discharge of our patients from the hospital. This should cause us to seriously reexamine how we prepare and educate patients and their caregivers to better manage patients once they are discharged. In 2009, a landmark study written by Stephen Jencks, MD, MPH, and colleagues on rehospitalizations among Medicare beneficiaries found that almost one-fifth (19.6%) of Medicare beneficiaries who had been discharged from the hospital were rehospitalized within 30 days. Another 34% were rehospitalized within 90 days, and 56% within the following 12 months. Of this total, 22.6% of patients with COPD were readmitted within 30 days.[2] The ultimate cost of readmissions is estimated to be somewhere between $15 and $17 billion a year.[3] This essentially accounts for 13% of all federal spending and 22% of national health care spending. As you see, the numbers are staggering.

These increasing costs of care are driving this need to look closer at its impact on the federal budget. Medicare spending, in particular, has been projected to increase by about 79% between 2010 and 2020, from $518.5 billion to $929.1 billion. In fact, the Medicare Payment Advisory Commission (MedPAC) has indicated it will be closely monitoring the quality of care indicator.[4] In regards to readmissions, MedPAC also states that while not all readmissions can be prevented, there is still a concern that Medicare readmission rates have consistently been too high and could be lowered through greater coordination of care.

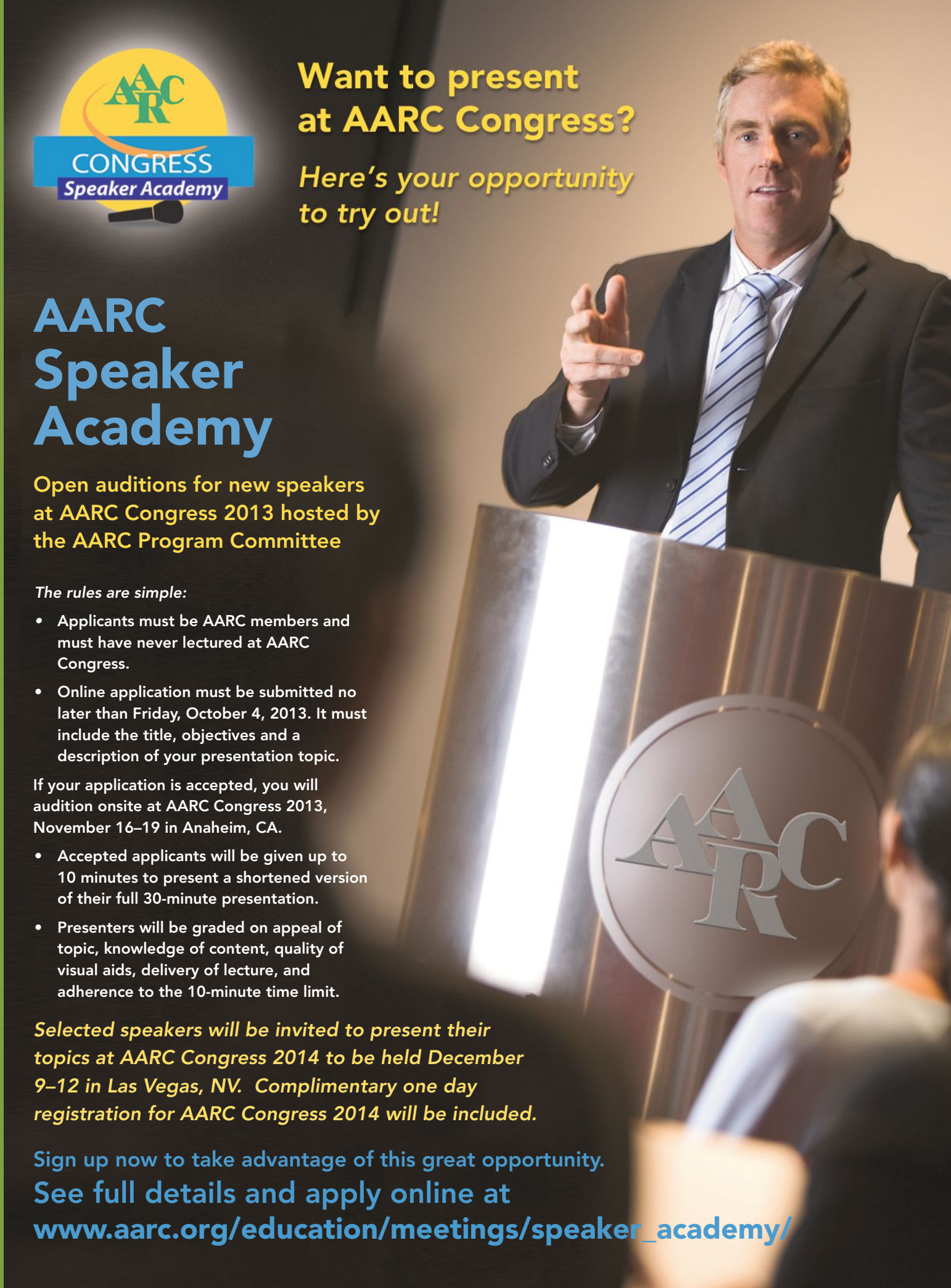
about the author...

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

COPD Best Practices Community

Where does this leave the respiratory therapist? What impact can we make in this approaching threat to hospitals? The answer is: a lot. At the direction of the AARC Board of Directors, we have reached out to our members to identify best practices of COPD pertaining to disease management. We are soliciting all practicing respiratory therapists who currently have a hospital-based COPD disease management program in place to share them with us in our COPD Best Practices Community.

It is here that members can share implemented programs and outcomes that showcase the respiratory therapist in the untraditional roles of disease manager, patient educator, and discharge planner. These best practices may take the form of an inpatient or outpatient protocol, COPD admission/readmission order sets, and medication protocols. Once collected,



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- Online application must be submitted no later than Friday, October 4, 2013. It must include the title, objectives and a description of your presentation topic.

If your application is accepted, you will audition onsite at AARC Congress 2013, November 16–19 in Anaheim, CA.

- Accepted applicants will be given up to 10 minutes to present a shortened version of their full 30-minute presentation.
- Presenters will be graded on appeal of topic, knowledge of content, quality of visual aids, delivery of lecture, and adherence to the 10-minute time limit.

Selected speakers will be invited to present their topics at AARC Congress 2014 to be held December 9–12 in Las Vegas, NV. Complimentary one day registration for AARC Congress 2014 will be included.

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these programs will be vetted and made available to AARC members for consideration as they design their own programs.

A series of webcasts are being planned for late summer and fall of 2013 where some of those who have submitted information about their programs can describe them in more detail with AARC membership.

We are inviting submissions at this time, using the template below. To participate in the COPD Best Practices Community, do the following:

1. Navigate to the **COPD Best Practices Community** on AARConnect at www.aarc.org/go/od1.

2. Click the Join Community button.

3. Set your email preferences. (We suggest that "real-time" emails will give you the best interaction and communications with the community.)

4. Prepare to submit your idea or just participate in discussions with that community.

A series of webcasts are being planned for late summer and fall of 2013 where some of those who have submitted information about their programs can describe them in more detail with AARC membership. This likely will include how they got buy-in from their hospital leadership (medical and administrative), what role the RT and their manager/director play in this, how they were able to get multidisciplinary cooperation, what they are measuring, and more.

Placing the respiratory therapist front and center in this changing landscape of health care is one endeavor that we should embrace and not turn away from. I encourage all practicing respiratory therapists, managers, and directors to now develop their own disease management programs that start at the hospital. We are in unprecedented times in which some of the old ways of looking at the provision of health care — especially as it pertains to preventive care education — will be reexamined.

As the AARC will be sharing these programs, we also will be spotlighting other unique approaches to care and patient education. Keeping in mind that no two hospitals are alike, no two programs will be alike either. As we share these programs, you will want to customize them to your own setting.

Preparing the profession for change

Earlier in this column I mentioned Dr. Stephen Jencks. Dr. Jencks will be our Keynote Speaker on Nov. 16, 2013, for AARC Congress 2013 in Anaheim, CA. Today he is an independent health care safety consultant who has devoted the past six years to reducing hospital readmissions, with special attention to measurement. He will be providing us with his perspective on this change and at the same time challenging us to place ourselves in a better position to be proactive and not reactive.

The time is now for respiratory therapists to become more engaged in making a difference in disease management of COPD — both in the hospital and beyond. ■

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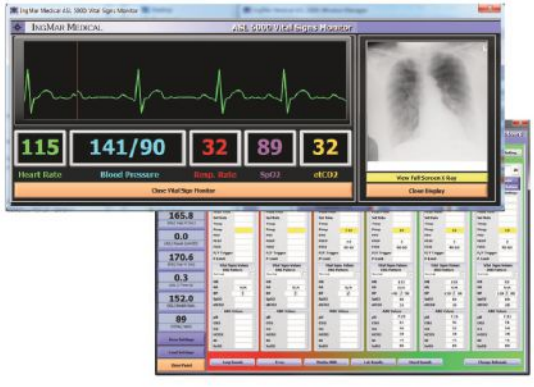

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Cast Your Vote Online for the 25th Annual AARC Zenith Awards

The AARC awarded the 2012 Zenith Award to the following (from left):
Teleflex Medical, Cary Vance accepting; Philips Healthcare, Frank Lazzaro and Dan Van Hise accepting; Fisher & Paykel Healthcare, Justin Callahan and Rob Cornell accepting; Draeger Medical, Lothar Thielen and Steve Menet accepting; Covidien, Jim Willett accepting; and Boehringer Ingelheim, Christopher Connolly accepting.

Each year the AARC presents the Zenith award to the top corporations in the respiratory care industry during our annual International Respiratory Convention & Exhibition. Considered the "people's choice" award of the respiratory care profession, they are highly prized by the recipients, who proudly display them on their websites and in their Exhibit Hall booths.

Now it is up to *you* to choose the recipients for 2013. This is your opportunity to say "thank you" to your favorite industry team members… the companies that research and develop new products and enhancements to make life better for patients, whose representatives are just a phone call or email away when you need help, who stand behind their products and services.

The AARC will present the 2013 Zenith Awards to executives representing the winning companies when the Association convenes AARC Congress 2013 in Anaheim, CA, on Saturday, Nov. 16. Your vote could place your favorite company in the spotlight during this year's Awards Ceremony. Now, that's a great way to show them your appreciation for making your job easier.

These Top Companies Received the 24th Annual Zenith Award

In last year's Zenith Award competition, we honored the following companies for reaching the pinnacle of excellence in service and support for the respiratory care profession: Boehringer Ingelheim, Covidien, Draeger Medical, Fisher & Paykel, Philips Healthcare, and Teleflex Medical.

Get involved in choosing the recipients of this year's award by voting online today at **www.aarc.org/zenith.** ■

Consider these voting criteria

When making your choice, evaluate the manufacturers, service organizations, and supply companies that have done the most outstanding job for you over the past year according to these criteria:

- Quality of equipment and/or supplies
- Accessibility and helpfulness of sales personnel
- Responsiveness
- Service record
- Truth in advertising
- Support of the respiratory care profession.

This year all Zenith Award voting has moved to the Web. Go online to www.aarc.org/zenith where you will see the list of companies serving the respiratory care markets. You may vote for up to 10 companies by filling out the online ballot. Online voting will end on Sept. 23. ■

Log on to www.aarc.org/zenith. Cast your vote by Sept. 23, 2013.

Pushing for a Cause

Vent 5Ks pit RTs against RTs in a battle to raise funds for the ARCF

By Debbie Bunch

Outlandish costumes (for people and machines) coupled with RT camaraderie and lots of fun once again made the American Respiratory Care Foundation's Ventilator 5K events a big hit across the country. In this story we have two great examples to share.

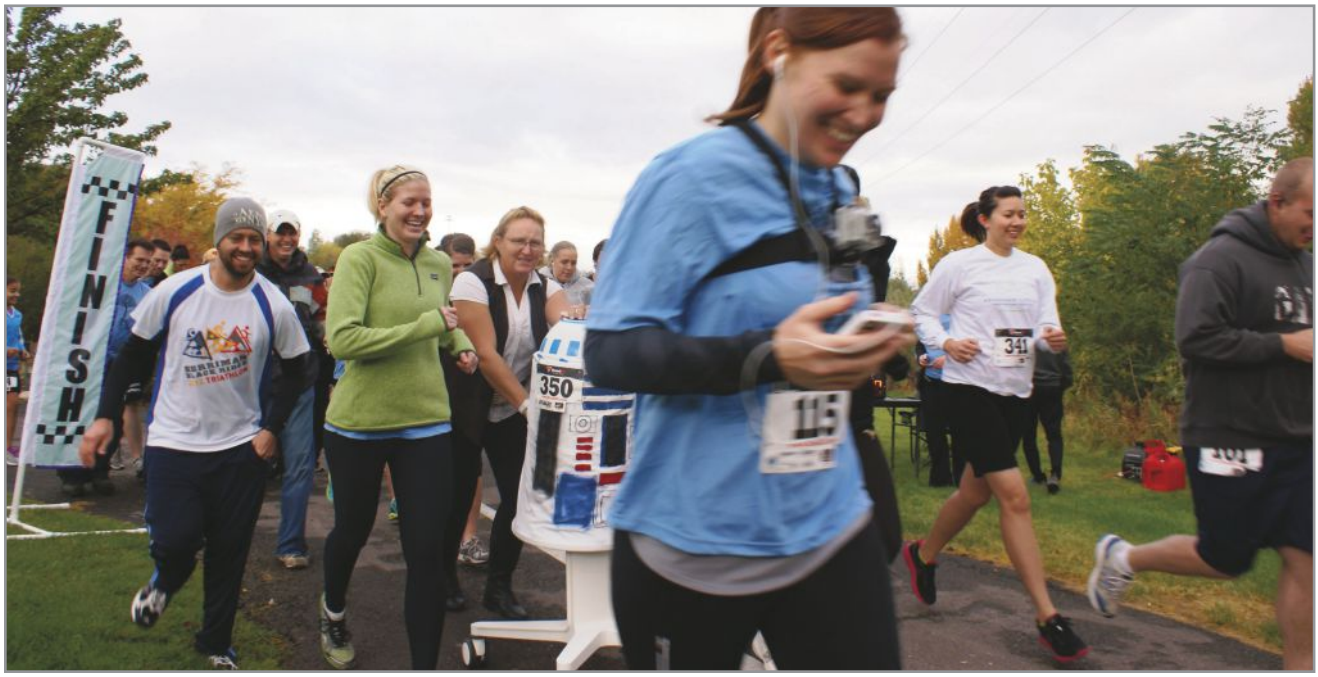
"Star Wars" Meets "101 Dalmatians"

Who: Weber State University
Where: Ogden River Parkway, Ogden, UT
When: Oct. 13, 2012
Number of participants: Two Vent 5K teams; 52 5K runners

Themes/costumes: Advanced-level students turned a Carina home ventilator (a previous Vent 5K first-place award) into R2-D2 from "Star Wars," building on the common RT mantra, "May the Forced Vital Capacity Be with You." Entry-level students created a Dalmatian out of a V60 from Philips Respironics. With the screen transformed into an EKG tracing, the theme became "101 Palpations."

Amount raised: Between two "give back" nights at a local Chili's, donations from local supporters, proceeds from a raffle and community runners, and donations on the ARCF page on FirstGiving.com, the students were able to send a check for $3,550 to the ARCF.

Some hospitals also held 5K runs along with the Ventilator 5K to raise additional funds for the ARCF.



This was the sixth Vent 5K for Weber State and Team Captain Janelle Gardiner, MS, RRT, AE-C, assistant professor in the program. She says she and her colleagues host the event year after year not only to foster team building among their students but also to give them a greater awareness of the ARCF and the role it plays in supporting scholarship, research, and community projects related to their new profession. As for the students, Gardiner says they love the sense of accomplishment they receive from the event. "The advanced-level students are so invested, and they take great pride in making it a success," she says. "And it's fun to see the entry-level students get their feet wet and try to get a feel for how things work."

There are always a few program graduates on hand as well, many of whom participate as community runners. "One of these days, I'm going to get them all back and have them all decorate ventilators and really have some fun!" says the AARC member, who says she would recommend the Vent 5K to any of her fellow educators. "I remember when I heard about the event at the AARC House of Delegates meeting when it was just coming forward. I thought it would be fun, but I didn't really think I could make it work," she recalls. Then she talked to one of her students about it, and her enthusiasm was all the impetus the educator needed. "Before I knew it, we were off and running — literally and figuratively — and we've been running ever since." ■

A Great Bonding Experience

Who: University of Maryland Medical Center
Where: The university's student center in downtown Baltimore
When: Oct. 12, 2012
Number of teams: Five teams throughout Maryland and the District of Columbia, including two from UMMC, one from Franklin Square Medical Center, one from Carroll Hospital, and for the first time, one from Children's National Medical Center

Themes/costumes: Mardi Gras was the overall theme, but individual teams zeroed in on everything from "How the Grinch Stole Christmas" (complete with $600 worth of toys gathered by Carroll County Hospital RTs to donate to needy children) to the "O_2 Disaster Krewe."

Amount raised: $4,400

An annual Vent 5K has been a tradition at the University of Maryland Medical Center (UMMC) for three years now, and Maria Madden, BS, RRT-ACCS, trauma clinical coordinator at the facility, says the event has grown over the years, with more local hospitals signing up to participate. "The first year of the Vent 5K, many of the teams felt it was a great bonding experience that included teamwork with co-coworkers outside the hospital," says the AARC member. RTs enjoyed putting the costumes together, raising money they knew would be put to good use by the ARCF in addressing local lung health issues, and just getting together for the relay to share lots of laughs.

"The overall goal of the event is to increase awareness of the profession of respiratory care and support ongoing community efforts of respiratory therapists, as well as promote the advancement of the ARCF activities," says Madden. She and her team have done that by posting videos of the event on YouTube every year. "These have been highlighted on several professional sites and have been

viewed by therapists all over the country," she says. "The fact that we have had repeated participants and that the number of teams has grown demonstrates to us that this is an important team fundraising effort to continue."

AARC member Carolyn Williams, BS, RRT, and her group from Children's National Medical Center in Washington, DC, participated for the first time in 2012 and says they had a blast. In keeping with the overall Mardi Gras theme, they decked out their VersaMed iVent in purple, green, and gold beaded necklaces and complemented the razzle-dazzle with a face mask on the front and feathers on the back. Since their individual theme was the "O_2 Disaster Krewe," they also made sure the disaster vent was ready for anything. "Attached to our ventilator were emergency equipment (such as a neonatal bag valve mask), nonrebreather mask, nasal cannula, CPAP mask, and inline nebulizer adaptor," says the staff therapist.

Her team alone raised $1,200 for the ARCF, some of it from an unexpected source. "We took our ventilator on a tour of our hospital; and we were able to secure additional unexpected donations once hospital administrators saw what we were doing," explains Williams.

The UMMC Vent 5K came out the big winner in last year's overall competition, with participants going home from AARC Congress 2012 with a brand new ventilator donated by Breathe Technologies, Inc. At press time, Madden said the group was still in the process of working with the participating hospitals to determine how to best utilize the new device. ■

Vent 5K Has a Serious Side, Too

As the stories and pictures on the previous pages illustrate, the American Respiratory Care Foundation's Vent 5K is always packed with fun and games. But there's a serious side to this annual rite of passage as well. All the money raised by the participants goes to fund worthwhile lung health activities in the community. Here are four examples from the past year.

■ **Sharing the knowledge:** Children's Medical Center in Dallas, TX, sponsors an annual Respiratory Care Symposium during National Respiratory Care Week to help educate not only respiratory care staff and other clinicians at Children's but also other RTs and clinicians in the Dallas/Fort Worth area about the latest thinking in respiratory care and disease management research. The event features a lecture series delivered by resident experts at the 595-bed teaching hospital, and staff therapists get involved by providing peer teaching. The symposium is also approved for continuing education credits.

Footing the bill for this event has become more and more difficult over time; so Joseph Sabella, PhD, RRT-NPS, and colleagues decided to apply for one of the ARCF community grants to help cover some of the costs. The ARCF community grant received by the group went a long way toward ensuring that the symposium would continue to meet the needs of the community.

■ **Reaching an underserved group:** Data from the Centers for Disease Control and Prevention's 2009–2010 National Adult Tobacco Survey indicates that tobacco use is significantly higher among members of the lesbian, gay, bisexual, and transgender (LGBT) community, 38.5% versus 25.2%. The respiratory therapy division at The Ohio State University School of Health & Rehabilitation Sciences wanted to investigate the reasons for this disparity and applied for an ARCF grant to help fund the project.

With the help of the ARCF community grant, senior respiratory therapy students were able to host focus groups for members of the young adult LGBT community earlier this year to determine both their patterns of tobacco use and wants and needs regarding tobacco cessation. Focus group findings are now being used to develop a tobacco-cessation program tailored to the specific needs of the LGBT community. The students also entered the project in the Denman Undergraduate Research competition at the university and placed fourth in their category.

■ **Supporting kids with asthma:** Camp Superkids is hosted every year by Johns Hopkins Bayview Medical Center in Baltimore, MD, to give children with asthma a better understanding of themselves and their asthma, plus the tools they need to communicate with others about what it is like to live with the condition. While the total cost for meals, lodging, medical supplies, asthma education sessions, traditional summer camp activities, and more runs around $700 per camper, cost to the camper is set at just $400.

However, many families still cannot afford to send their children to the camp, so camp organizers seek addi-

With the help of the ARCF community grant, senior respiratory therapy students were able to host focus groups for members of the young adult LGBT community earlier this year to determine both their patterns of tobacco use and wants and needs regarding tobacco cessation. Focus group findings are now being used to develop a tobacco-cessation program.

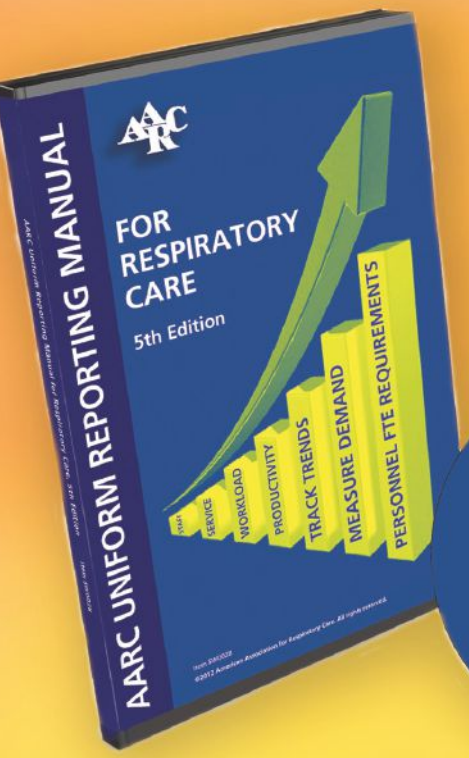
tional funds to provide scholarships for children in need. Thanks to the ARCF community grant received by the camp late last year, several children who would otherwise have been unable to enjoy the camping experience were able to attend the session held this past summer, where they learned to control their asthma rather than have their asthma control them. (For more information about Camp Superkids, contact Heather Dougherty at campsuperkids@gmail.com.)

■ **Educating the next generation:** Respiratory therapy students from Monroe County Community College (MCCC) in Monroe, MI, have been taking pig hearts and lungs into their local elementary schools as part of a countywide dissection project since the mid-1980s. Children not only learn about cardiopulmonary anatomy and physiology during the session but also receive important information about tobacco use and what it can do to cardiopulmonary health. Since parents often assist in the classroom project, the education goes beyond the younger generation to the older generation as well.

Unfortunately, state budget cuts recently eliminated funding for the initiative. The ARCF community grant received by MCCC will allow this informative program to continue and enhanced the program by providing 10 anatomically correct and reusable heart and lung models. Now under the guise of the respiratory therapy program at the college, the interactive, hands-on learning opportunity has the added benefit of enhancing the service learning component for respiratory therapy students, who will serve as coordinators, dissection assistants, and presenters on the consequences of tobacco use. Along the way they hope to further awareness of the respiratory care profession as well.■

For more information, log on to www.arcfoundation.org/support/vent_5k/

Tools to Make Respiratory Management Easier



AARC Uniform Reporting Manual for Respiratory Care, 5th Edition

This updated edition is an invaluable resource to analyze productivity, track trends in the utilization of services, establish FTE requirements, and measure demand and intensity of services. Compares activities based on relative workload intensity, providing an objective means of assessing staffing needs. Extending beyond inpatient services, this URM also provides current standards for clinical activities for additional services frequently directed by RTs and includes: Echo/Non-invasive Cardiology Labs; Blood Gas Labs; Pulmonary Diagnostic Labs; Sleep Disorders Labs; Hyperbaric Medicine; and Pulmonary Rehabilitation Services. Standardized worksheets are included for each productivity system. Copyright 2012 AARC.

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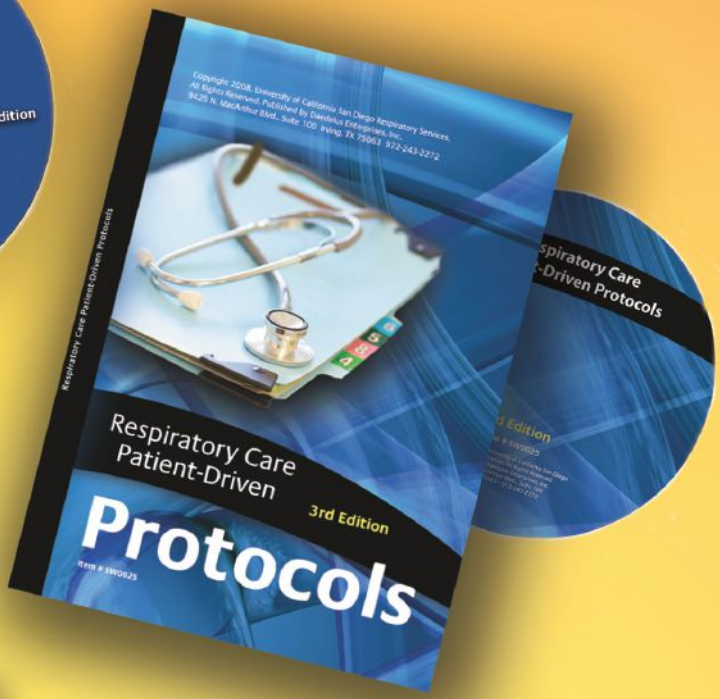

Respiratory Care Patient-Driven Protocols, 3rd Edition

The pressure is on to efficiently operate a respiratory care department more economically. One of the most significant ways to accomplish safe and effective cost savings is through the use of protocols by respiratory therapists. Protocols have been scientifically validated as an effective method to reduce expenses and this manual is an excellent resource for the development, implementation, or refinement of care plans. Contains algorithms with each protocol. Copyright 2008 University of California San Diego, Respiratory Services.

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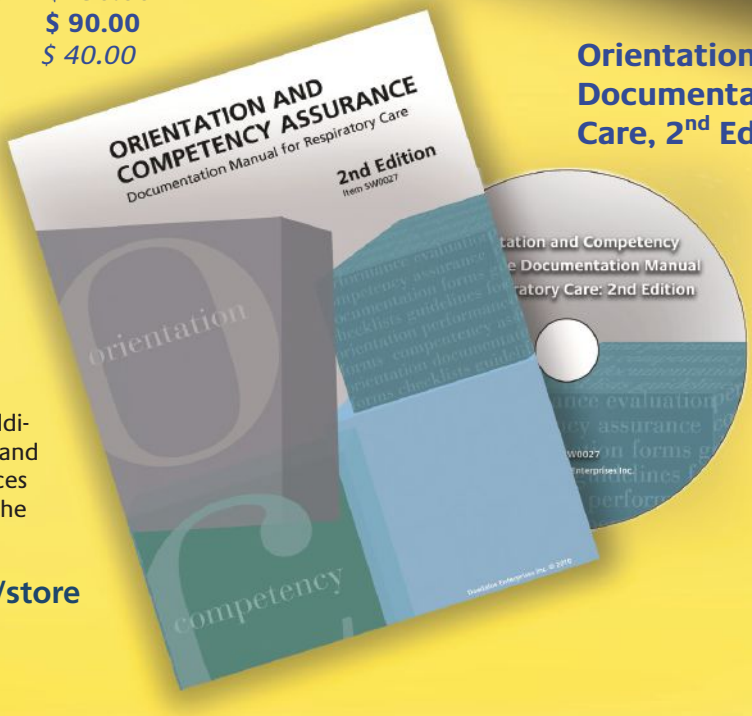

Orientation and Competency Assurance Documentation Manual for Respiratory Care, 2nd Edition

Take the worry out of documenting orientation and competency in respiratory care. With its easy-to-use digital format, this manual provides tools for documentation of compliance for Respiratory Care Services with the 2010 standards for CMS, IHI (Institute for Healthcare Improvement), and The Joint Commission. Terminology is consistent with the AARC's Uniform Reporting Manual. Includes guidelines in chapter format with reference to over 90 detailed competency documentation forms. An "off the shelf" system that you can begin using right away. Copyright 2011 Daedalus Enterprises Inc.

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Medicine's Loss Was Respiratory Therapy's Gain

AARC honors Kerry George with the Jimmy A. Young Medal

by Debbie Bunch

Log on to www.AARC.org for the latest information on AARC Congress 2013.

Today, computerized equipment is used in the pulmonary function laboratory, and the therapist does not really do any of the computations needed for the testing as they used to do with a slide rule when George entered the profession.

When Kerry George first entered the workforce, he dreamed of heroic feats in the operating room, but it turns out the classroom is where he was meant to be.

Kerry George, RRT, MEd, FAARC, knew exactly what he wanted to do with his life when he was growing up in the small town of Forreston, IL, back in the 1960s — and "teacher" definitely wasn't it. "I have often said that if someone had asked me to make a list of 500 jobs I might be interested in when I was in high school, I don't think teaching would have made that list," says this year's winner of the AARC's prestigious Jimmy A. Young Medal. "I decided when I was in fifth grade what I would do. I was to become a surgeon."

As it turned out, medicine's loss was the respiratory therapy educational community's gain, because teaching is exactly what George has spent the majority of his career doing. As an instructor turned program director at Des Moines Area Community College (DMACC) in Des Moines, IA, since 1977, he has helped develop several hundred respiratory therapy students into excellent practitioners. The professional organizations governing their careers have benefited from his expertise as well.

Jimmy A. Young Medal

Every year the AARC bestows the Jimmy A. Young Medal on a member of the profession who has exceeded all expectations for meritorious service to the AARC and advancement of the respiratory care profession. The award was created in 1976 to honor the memory of Jimmy A. Young, MEd, RRT, an exemplary member of the profession and AARC leader who died suddenly at the age of 40.

Among his many accomplishments were serving as director of the first "inhalation therapy" department at Massachusetts General Hospital in Boston, co-authoring one of the first textbooks on respiratory care, "Principles and Practice of Inhalation Therapy," and serving as the 22nd president of the AARC. ■

And now for Plan B

A good student who was mainly interested in math and science, George entered college with medical school at the forefront of his mind. He took all the right courses to prepare for a future as a surgeon, and he fully believed he would be accepted into one or more schools when he graduated. His career goals underwent a course correction during his senior year at the University of Illinois at Urbana Champaign. "When I applied to medical schools in the spring of 1973, I was shocked not to be accepted," he says now. He got out of school with a BS in biology and the realization that he would have to develop a "Plan B."

"As I prepared to get some experience in health care while waiting to reapply to medical schools in 1974, I went to the local hospital to see what kinds of jobs were available," says the AARC Fellow. "At the time I was applying, they had two positions available." One involved transporting patients to and from the physical therapy department. The other was in a department called "inhalation therapy."

"I did not think transporting patients would help me learn much, so I asked to talk with someone in the inhalation therapy department," he recalls. He met with the department director at Freeport Memorial Hospital in Freeport, IL, and liked what he saw. "Two days after I first heard the term 'inhalation therapy,' I started work as an inhalation therapist," says George. The "Plan B" detour ended up being the road for him. "I never did apply again to medical school."

Formal training

George says he learned a lot about the profession at Freeport, including the opportunities that were available for someone like him who came into the field with a bachelor's degree. But he also learned that he still had a lot to learn about taking care of people with lung disease. "This created the desire to learn more and to become much more involved in the profession," he says. The first order of business: get some formal training in respiratory therapy.

In his part of Illinois at the time, there were two RT educational programs: a two-year program in Rockford and an accelerated program at the University of Chicago Hospitals and Clinics School. The latter seemed to be a better fit for him, and he applied and was accepted. What's more, the hospital agreed to continue to pay his salary while he completed the program, making it possible for him to gain formal education in the profession without compromising his finances.

George got his first taste of the educational arena when he had the chance to participate in the pulmonary education and training of emergency medical technicians at the hospital. He enjoyed seeing the joy the students had over learning new things, but at that point in his

career was still committed to the clinical side of the profession. After a few more years at Freeport — where he says he did everything from administering intermittent positive-pressure breathing treatments, to disinfecting equipment, to analyzing blood gas specimens on an analyzer that required several milliliters of blood and manual calibration before each measurement — he decided to move to Wisconsin, where he took a job as a therapist at St. Mary's Medical Center in Madison. It was there that he realized where his career was really heading. "I had the opportunity to work with some students from the local program there

"I am proud of all that has been accomplished by graduates of the program," George says.

and to work with new graduates of the program when they were hired," he recalls. The more contact he had with the students and new graduates, the more he saw some issues that he thought he might be able to influence in other people just starting out in the profession. "Some of these were specific knowledge and skills, and some were attitudes and expectations," he says. "I discovered that if I wanted to impact the things I felt should be different, I could only do that by becoming involved in the education process."

Given the rapid growth in the profession back in those days that spelled upward mobility for anyone with a bachelor's degree, formal training in respiratory therapy, and a few years of experience in bedside care, George also knew it was time to choose between a future in management or education. Management would lead to a reduction in his contact with patients, an aspect of the profession he enjoyed, while teaching would still involve patient care through the clinical education of his students. That cinched the deal. "I learned of a position in the respiratory therapy program at Des Moines Area Community College and decided we would move to Iowa for a couple years until a position in the respiratory therapy program opened in Madison," he says.

George went on to earn a master's degree in education from Iowa State University in 2001 and says he is proud of the reputation he's been able to build for the respiratory therapy program at DMACC. His biggest reward has been seeing his students go on to have successful careers in the profession. "I am proud of all that has been accomplished by graduates of the program," he says. As he became more and more invested in the educational side of respiratory care, however, he realized that he could make an even bigger impact on the future of his field by getting more involved in his professional organizations.

An AARC member since his days in the University of Chicago program — he credits Program Director Bill Morrison, RRT, for showing him why he should join — George says he never thought much about getting actively involved until he went to work as an instructor at DMACC. "I was an Active AARC member but not an 'active' member from 1974 until 1978," he explains. "I paid my dues, read the publications, attended a few meetings, and did what most members do — not much." Once he landed in Iowa, though, he found the other instructor in the program at the time was actively involved in the Iowa Society for Respiratory Care. After attending a few local meetings with her, he realized that he, too, could play a part in the leadership of his profession. "I soon was wholly involved and enjoyed the opportunities to work with the leaders of the profession in Iowa and eventually at the national level," he notes.

Go to www.AARC.org to register for AARC Congress 2013, make hotel reservations, and see transportation discounts.

Service to the profession

Over the next 20 years, George served the AARC in numerous capacities, culminating with his election to president-elect in 1996. But even before he became president, he had the unique opportunity to help shape the future of RT educational accreditation during negotiations between the AARC and Joint Review Committee for Respiratory Therapy Education (JRCRTE). Those discussions continued in his presidential year, concluding with the formation of the current Commission on Accreditation for Respiratory Care (CoARC) in 1998. He also took the opportunity his AARC presidency gave him to visit other countries to see how they provided respiratory care. Following his year as president, he served on the board of directors of the Commission on Accreditation of Allied Health Education Programs (CAAHEP), the umbrella body that formed to oversee CoARC and the accreditation organizations of other professions after professional accreditation transitioned from the American Medical Association process. "I was honored to be elected to a position on the board and to serve as a liaison to accreditation committees outside the respiratory therapy profession as well as to provide leadership to the development of the accreditation processes for health education programs," says George. "The respiratory therapy profession and CoARC were leaders in developing a focus on outcomes of the educational process rather than focus on the inputs and processes."

George also worked with the National Board for Respiratory Care (NBRC) in developing examinations. "I have had the opportunity to work mainly with the Certified Respiratory Therapist and Written Registered Respiratory Therapist examinations during my time with the NBRC," says George, who is currently serving as president of the NBRC Board of Trustees. "I am very proud to have been chair at the time the two separate committees were combined into one." Those efforts will come full circle in 2015, when the NBRC will implement a single multiple-choice exam for both credentials. "This is a big step in enabling RTs to achieve credentials important to their professional development," he says. "My experiences have allowed me to gain a broad understanding of the many different NBRC credentialing activities and to be able to lead the organization in a positive manner."

Longtime friend and colleague Charlie G. Brooks, Jr., EdD, RRT, FAARC, credits George with helping to form the modern versions of the AARC, NBRC, and CoARC. "There has been no challenge he has refused to take on for the betterment of both the Association and the profession," says Dr. Brooks. "I can think of no one more deserving of the Jimmy A. Young Medal."

Gary Smith, BS, RRT, FAARC, who as CEO of the NBRC has worked closely with George over the years as well, agrees. "Kerry has influenced many areas of the profession, from the education of students to assisting with the accreditation system and serving as a commissioner for CAAHEP, as well as participating as an appointed representative to state licensure boards and various special commissions throughout his distinguished career. He is an effective educator, communicator, and public speaker who always delivers the message in a clear and understandable fashion."

As for George himself, he believes all of the work he and others have done to create strong professional organizations for members of the respiratory care profession are on the verge of paying off through the development of RTs who are not just providers of care, but care managers. "We will continue to be involved in the traditional roles of care of patients with acute illnesses in hospitals, but with a smaller portion of our workforce," predicts the educator. "Many more will be working in physician offices and for health care insurance and management organizations to reduce the need for patients with these chronic illnesses to access care in the emergency department and hospital." Indeed, he fully envisions a future when the students who graduate from his RT program and others will enter a workforce that depends on their skills and expertise to keep patients healthy rather than just treat them when they are sick.

"We have the opportunity to have the most significant impact on future costs, and we must grab that opportunity," says this year's Jimmy A. Young Medalist. "I am very confident that we will focus our attention on the outcomes of care we provide and begin to demonstrate our value in improving the quality of life for persons with chronic and acute respiratory illnesses while significantly reducing the costs of our health care system as it truly becomes a system to manage health rather than illness." ■

> ***"I envision a future when the students who graduate from my RT program and others will enter a workforce that depends on their skills and expertise to keep patients healthy."***
>
> ***– Kerry George, RRT, MEd, FAARC***

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Preview of

AARC Congress 2013

in Anaheim, CA

5 Five sessions to put at the top of your list Nov. 16–19

AARC Congress 2013, set for Nov. 16–19 in Anaheim, CA, promises to deliver the state-of-the-art information you'll need to deal with provisions in the Affordable Care Act and more. Here's a glimpse at five sessions you won't want to miss from the professionals who will be presenting them this fall.

Photos by Lennie Sirmopoulos, Convention Photography, Tustin, CA

AARC CONGRESS 2013

1 The "New" Health Care Paradigm: Will RTs Survive or Thrive?

WHO: Garry Kauffman, MPA, RRT, FAARC

WHAT: Director, Respiratory Care Services

WHERE: Wake Forest Baptist Medical Center, Winston-Salem, NC

The Patient Protection and Affordable Care Act, accountable care organizations, value-based purchasing, reimbursement penalties, reimbursement rewards, length of stay, medical homes, global capitation, care transitions — this is just a sampling of the changes washing across the bow of the health care ship. Are we, as health care professionals, sailing in the Titanic, or are we prepared to paddle our nimble kayaks?

The answer is both! Never before in the history of the U.S. health care system have we been inundated with such a vast array of "new" rules, "new" reimbursement strategies, "new" quality standards, "new" patient satisfaction goals, "new" productivity standards, and a myriad of other "new" challenges that seemingly are attempting to swamp whatever craft we're in.

This presentation will provide an overview of the pressures, challenges, drivers, and goals for delivering health care in today's environment, including transitioning an organization from the "old rules" to the "new and constantly changing rules." It will be directed at clinical RTs who want to know as much as the C-Suite leaders know, seasoned leaders, those new to leadership, and those who are simply wondering what respiratory therapy leadership is all about. I will make the connections between each driver and what the respiratory therapist must know, how we must practice using evidence-based medicine and best practices, how we must document the outcomes of our services, and how we must communicate our value to each stakeholder. If we don't, we'll be swamped by the swells. If we do (and I know we can), we'll deftly paddle our way through the rapids and arrive on the other side, emerging more valuable than ever. ■

Garry Kauffman

2 Teaching Adults: You Better Make It Useful

WHO: Bill Galvin, MSEd, RRT, FAARC

WHAT: Assistant Professor and Program Director, Gwynedd Mercy College RT Program

WHERE: Gwynedd Valley, PA

Whether it's the parent of an infant needing chest physiotherapy, an adult learning about his asthma action plan, or an elderly COPD patient wrestling with the safe and effective use of her home oxygen, the need for effective patient education is ever-present and will continue to grow and evolve. Does today's respiratory therapist know the subtle differences in teaching and learning between these different populations?

This presentation will identify the characteristics and needs of adult learners in all stages of life. I will draw on my experience as the author of book chapters and articles on patient education to address the topic in the context of asthma education as well as the COPD patient. I'll cover the issues of motivation, utility, active learning, engagement, and multiple-sense learning during the 30-minute presentation.

It should be clear to Congress attendees that effective patient education skills will play a critical role in our evolving health care system. This presentation will highlight the importance of this role specifically as it applies to the adult learner. It will provide the tools and techniques to be effective with the different, unique populations RTs encounter every day on the job. ■

Bill Galvin

3 The Future of the Respiratory Therapist in Home Care

WHO: Joseph Lewarski, BS, RRT, FAARC

WHAT: Vice President of Clinical Affairs, Invacare Corporation

WHERE: Elyria, OH

As the U.S. health care system continues to evolve into one focused on quality, outcomes, improved management of chronic disease, evidence-driven care, and of course, the lowest cost of care, it only seems logical that home care — and particularly home respiratory therapy — should play a major role. Ironically, at a time when we are needed the most, there is no professional recognition of home respiratory care. Equally concerning is the fact that the funding that supports home respiratory therapy is eroding at a record pace.

With no professional recognition or funding source, home respiratory therapy has been subsidized through the payments for key home respiratory technologies. These include, but are not limited to, oxygen, CPAP/sleep therapy, mechanical ventilation, and aerosolized drugs. Over the last 15–20 years, as a result of myriad legislative and policy initiatives, the payments for these and other medical devices that fall under the Medicare Part B durable medical equipment benefit have been significantly reduced, in some cases by over 80%. With such draconian payment reductions, can home care providers continue to support the role of respiratory therapists?

In this next evolution of health care, the care provided outside of the walls of the hospital will become the new standard; and the home is recognized as patient preferred, high quality, and lower cost. This will ring especially true for individuals with chronic diseases, such as COPD, congestive heart failure, asthma, and degenerative neuromuscular disorders — all disorders that are best supported by a home respiratory therapist. It is clear that there will be a role for the home respiratory therapist, but both the work and the payment sources are likely to differ.

It's time to understand how we got here and where we are going. What roles will respiratory therapists play in the highly dynamic home care environment of the future? This presentation will delve into those issues and attempt to answer that question. ■

Joseph Lewarski

4 High-frequency Ventilation in Adults: Indicated or Contraindicated?

WHO: Dean Hess, PhD, RRT, FAARC

WHAT: Assistant Director of Respiratory Care, Massachusetts General Hospital

WHERE: Boston, MA

At the 2010 AARC Congress in Las Vegas, NV, Neil MacIntyre, MD, FAARC, and I debated the use of high-frequency oscillatory ventilation in the care of adults with severe refractory hypoxemia. Earlier this year, two randomized controlled trials were published in the *New England Journal of Medicine* related to this subject.

So the question becomes, should the outcomes of this research change practice? Dr. MacIntyre and I will present our responses to this question, with Dr. MacIntyre arguing that this therapy is indicated and myself arguing that it is contraindicated.

We'll also be using audience response technology to engage participants in a manner that is not commonly used in a debate format. Two old friends debating a clinical topic while directly engaging the audience should make for a lively session. Along the way, we also hope to inform the audience about how they may, or may not, change practice when new evidence becomes available. ■

Dean Hess

5 Palliative Care in Long-term Acute Care Hospitals

WHO: Mary Hart, MS, RRT, FAARC

WHAT: Director of Clinical Education, University of Texas Health Science Center at San Antonio Respiratory Care Program

WHERE: San Antonio, TX

Respiratory therapists practice in all health care locations: hospital, long-term care facility, rehabilitation center, outpatient clinic or physician office, and the list goes on and on. We are at the bedside of many chronically ill patients on a daily basis. Some we have just encountered for the first time, but many we have treated over and over again — we know their needs, their wishes, their dislikes, their sorrow, and their families. It is often us they look to for help in answering those hard questions, such as, "What happens at the end?," "Will I be kept pain free?," "What do I need to do to die?," "How will my family know what I want if I can no longer make decisions?," and "Will my doctor really do as I ask at the end?"

Answering these questions can be awkward. Respiratory therapists have always played a role in caring for the dying patient by providing treatment and a caring heart. Palliative care, as it is known today, focuses on relieving pain and suffering to help the patient have "a good death" and allows families to play an active role in that process.

Most physicians and palliative care teams rely on respiratory therapists to assist in caring for these patients. In the hospital and in long-term care facilities, RTs are often called to a patient's bedside for terminal extubation. The family is usually present for this procedure; and it is our responsibility to be professional, show compassion, and treat the patient with dignity while removing life support, despite the fact that we know what is about to occur.

RTs must become familiar with all aspects of palliative care and examine their role as a member of the palliative care team. As a former pulmonary rehabilitation coordinator, I met many COPD patients who were at different stages of their disease. We prepared them and their families as to what they could expect in the future. In doing so, we found when the time came for palliative care, the family and patient were less frightened and confused about the process. They were able to make decisions without fear.

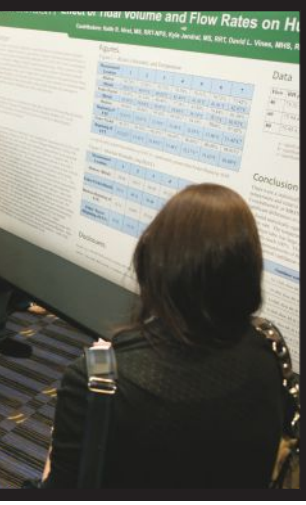
As RTs, we are trained to "save lives." Therefore, palliative care can be somewhat confusing, especially for the new RT or student. During my presentation I will share some actual experiences from RTs and palliative care teams working in long-term care facilities that may help influence others in their practice. ■

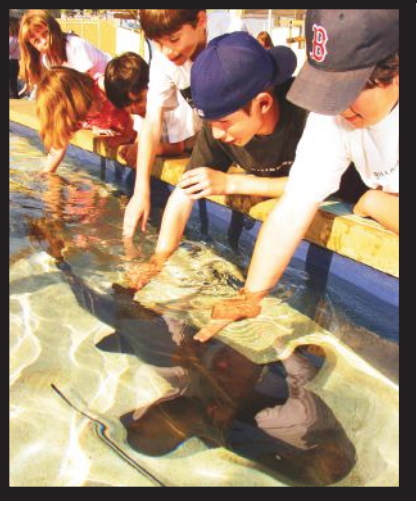
Mary Hart

Anaheim Insider

We know you will spend most of your time at this year's Congress attending lectures and symposia to recharge your professional batteries and provide you with the cutting-edge knowledge you'll need to thrive in the ever-changing health care environment. But the Congress is a great place to kick back and relax too; and while major attractions like Disneyland get the most press, you'll also find plenty of other places to have fun.

To find out which places the locals like best, we turned to members of the California Society for Respiratory Care. The next couple of pages provide some "inside information" on what to see and do in the Anaheim area from AARC members Patrick Moore, RRT, and Marianne Shaw, RRT.





Patrick Moore's Picks

Patrick Moore

To start the day . . . One of my favorite things to do is go to Porto's Bakery. Porto's is that one place where you bring a box of goodies into the department at report time, and by the end of report, the box is empty and all you have left are crumbs. The folks at Porto's began by baking cakes out of their home and selling them to neighbors and friends. They proved to be so popular that the Porto family opened a 300-square-foot bakery on Sunset Boulevard. That was decades ago, and now when you're in Anaheim you can enjoy it, too! They have epic cheese rolls, Cuban sandwiches, chocolate croissants to die for, and the famous potato balls. Porto's is around 20 minutes from the Anaheim Convention Center and well worth the trip. The lines are long but the service is quick, so don't let that discourage you! Porto's Bakery, 8233 Firestone Blvd., Downey. **www.portosbakery.com**

And for the afternoon . . . To work off all the calories you ate at Porto's, why not spend your afternoon enjoying Pearson Park? It's filled with tennis courts, baseball diamonds, and an Olympic-size swimming pool for you aquatic fans. If you're into running or walking, there is a nice trail throughout the park. They have a relaxing duck pond and a beautiful cactus arboretum, plus an outdoor amphitheater. So check the schedule when you arrive in town for some cool entertainment. The park is about five minutes from the Convention Center and is accessible by an OCTD bus ride. Find it at the corner of Harbor Blvd. and Cypress St.
www.anaheim.net/articlenew2222.asp?id=4387

To start off the evening . . . Tortilla Jo's at Downtown Disney is one of those establishments where they get it right! They purport to have the best margaritas in Orange County, served blended or on the rocks. According to the bartender, Casey, on the rocks is highly recommended. The food is delicious and fresh. No canned refried beans here. Black beans made from scratch, lean chicken, savory beef, and awesome salsa. Order the tableside guacamole, and it will be made fresh right in front of you! When you're cruising Downtown Disney, stop in for some awesome nachos and a margarita. **http://disneyland.disney.go.com/downtown-disney/tortilla-jos/** ■


Pearson Park

Marianne Shaw's Picks


Marianne Shaw

See a show . . . The historic Pantages Theater was the last theater built by the vaudeville impresario Alexander Pantages. Opened on June 4, 1930, it features a palatial Art Deco design. The theater was acquired in 1949 by renowned millionaire Howard Hughes, who used it for his RKO Theatre Circuit. From 1949 through 1959 it was home to the annual Academy Awards presentations. It has been featuring stage productions since 1977; and when the AARC Congress arrives this November, "The Lion King" will be playing. 6233 Hollywood Blvd., Los Angeles. **www.hollywoodpantages.com**

Get some fresh air . . . Visit the South Coast Botanical Garden and stroll through the 87 acres of the "Jewel of the Peninsula" to see 2,500 different species of plant life. Located in Sunset's Zone 23, one of the most favored growing areas in the world, the gardens feature about 100 mature trees and shrubs rarely seen anywhere else in the world. You won't find a better place to unwind after the meeting. Located about 10 miles south of LAX at 26300 Crenshaw Blvd. on the Palos Verdes Peninsula. **www.southcoastbotanicgarden.org**

Hit the boardwalk . . . Huntington Beach hosts "Surf City Nights" every Tuesday all year long. You'll see street acts, live music, kids' activities, and a farmers' market. Take part in the fun, or just enjoy a leisurely stroll down the 8-mile stretch of boardwalk along the Huntington Beach coastline. There are plenty of great places to stop for a bite or a cool, refreshing drink along the way. Main Street, Huntington Beach. www.surfcityusa.com

Mountain atmosphere in the California sun . . . The Lazy Dog Cafe recreates the comfortable feeling of a lodge in Wyoming. The atmosphere is relaxed and the food is excellent. Starters range from Inside-Out Quesadilla to Brick Oven Spinach & Sundried Tomato Cheese Dip. The main courses cover all the bases, from pastas and pizzas, to sandwiches and burgers, to meat, chicken, and fish dishes. 1623 West Katella Ave., Orange. **www.lazydogrestaurants.com** ■


Porto's Bakery

Huntington Beach

AARC Times

Photo Contest

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http://tinyurl.com/72qfqt5

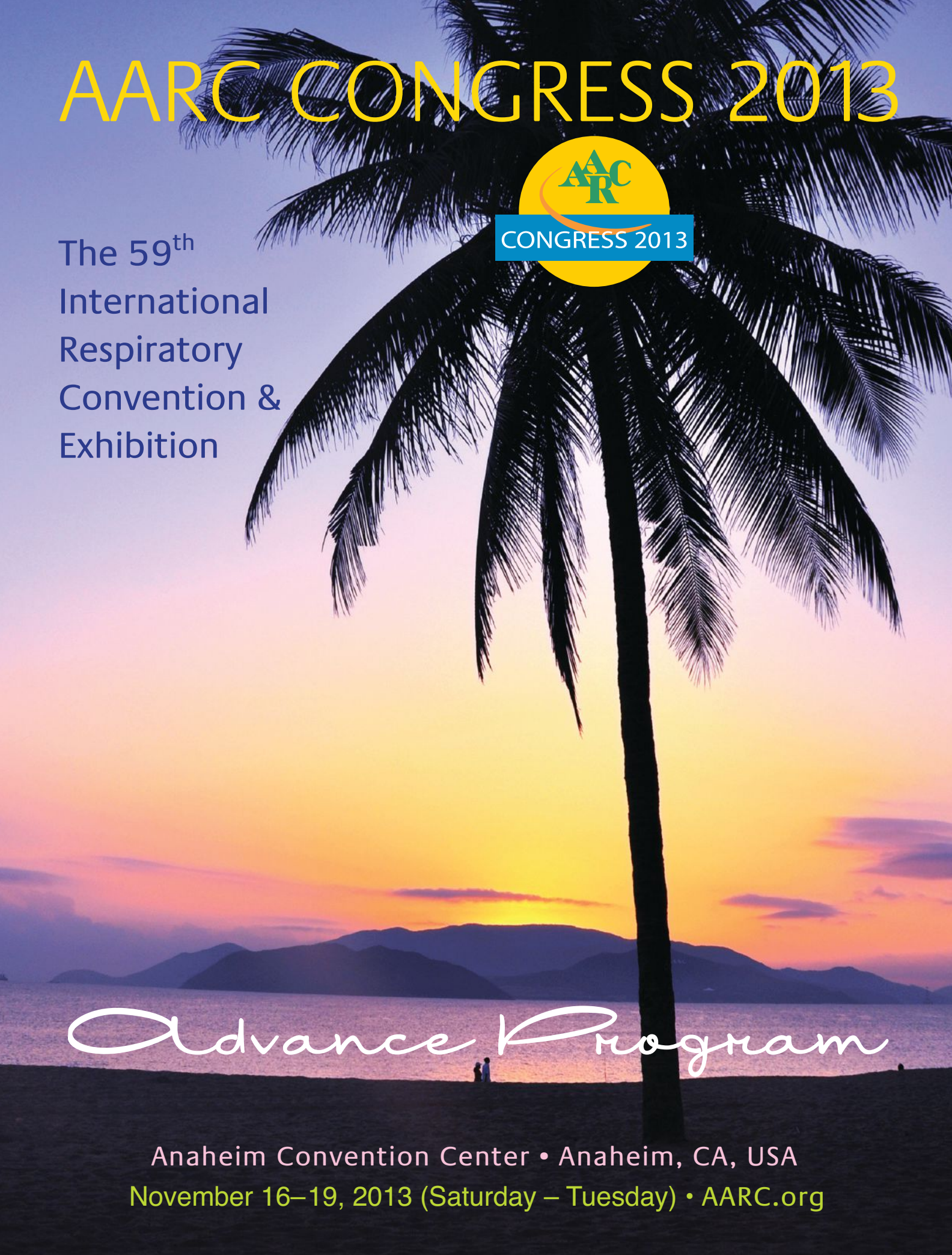
- Take the photo at your highest quality setting
- Email your photo by Oct.15 to knauf@aarc.org or send a CD to: Photo Contest, *AARC Times*, 9425 N. MacArthur Blvd., Irving, TX 75063

- You must be an AARC member.
- Contest finalists will receive one year *FREE DUES* on membership renewal.
- Finalists will be in the Dec. 2013 issue for members to vote on.
- The winning photo will be on the March 2014 cover.
- All photos become the property of the AARC.
- You must provide a signed release form for everyone in the photo.
- Go to www.aarc.org and type *photo release* in the search box or have Karen fax you one. Call (972) 406-4661.
- If you have a story for the photo, please send that, too.

AARC CONGRESS 2013

CONGRESS 2013

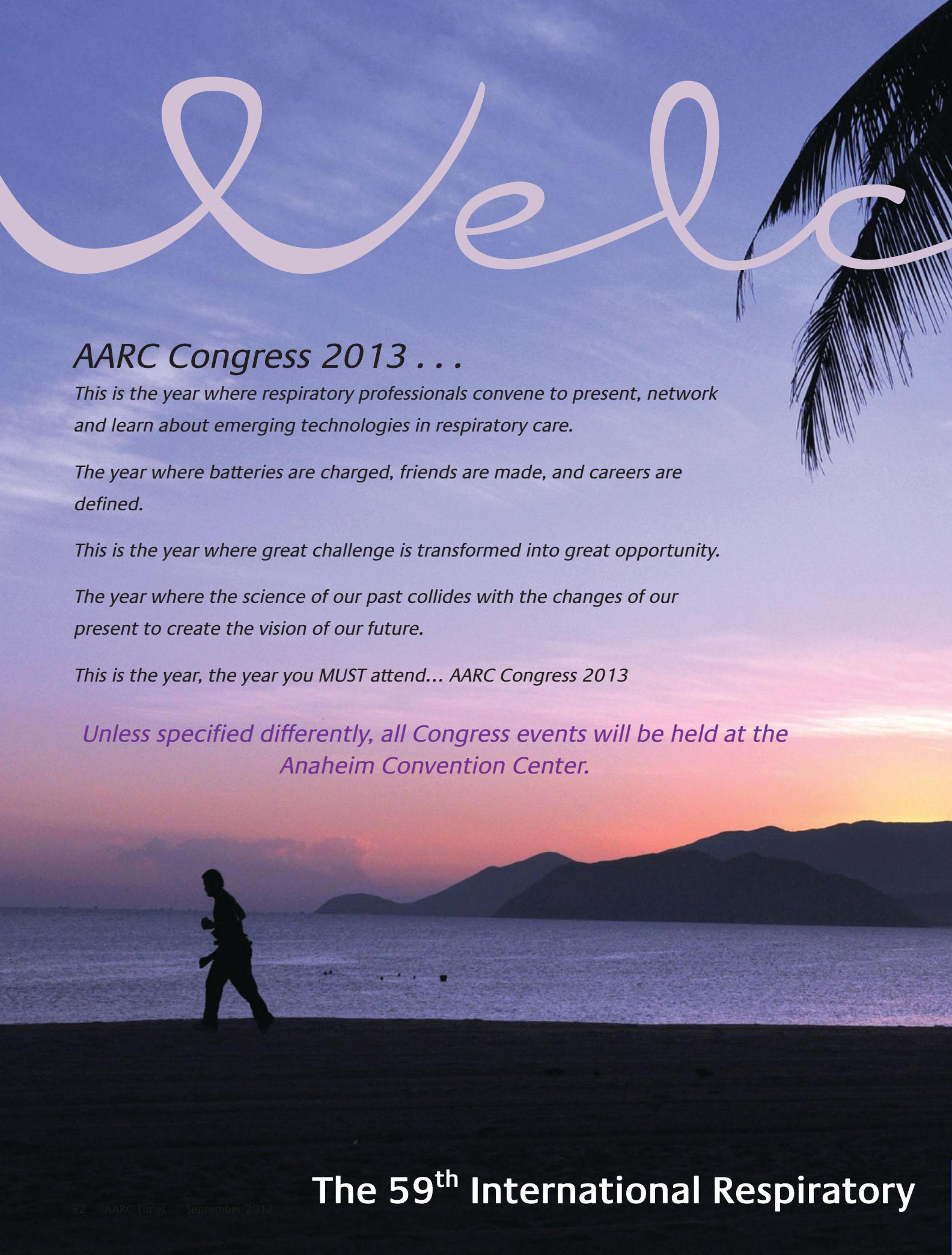
The 59th International Respiratory Convention & Exhibition



Advance Program

Anaheim Convention Center • Anaheim, CA, USA

November 16–19, 2013 (Saturday – Tuesday) • AARC.org



AARC Congress 2013 . . .

This is the year where respiratory professionals convene to present, network and learn about emerging technologies in respiratory care.

The year where batteries are charged, friends are made, and careers are defined.

This is the year where great challenge is transformed into great opportunity.

The year where the science of our past collides with the changes of our present to create the vision of our future.

This is the year, the year you MUST attend… AARC Congress 2013

Unless specified differently, all Congress events will be held at the Anaheim Convention Center.

The 59th International Respiratory

AARC Congress 2013

Welcome

On behalf of AARC President George Gaebler and the Board of Directors, we invite you to attend the largest respiratory care meeting in the world. At AARC Congress 2013 in Anaheim, the AARC Specialty Sections and the Program Committee have developed a curriculum that will offer more of everything that matters to you and your patients. You may attend other educational meetings, but none of them offer you all of the following. . .

- A keynote address by Dr. Stephen Jencks; an international authority on hospital readmissions.
- The latest information on the Affordable Care Act and its impact on hospitals, patients and the respiratory therapist.
- The AARC Exhibit Hall where you can learn, see and touch the latest advancements in technology showcasing all manufacturers in the industry...more than 200 exhibitors in total.
* The results of original research presented to you by your peers in 19 Open Forums over the 3 1/2 days.
* All the continuing education credit (CRCE) you need to maintain your state license.
* Programs in all areas of respiratory care: adult critical care, neonatal and pediatric care, home care, continuing care, rehabilitation, diagnostics, transport, management, education, sleep, and long-term care, all presenting the most current and cutting-edge information.
* A closing ceremony you'll not want to miss! Bob Eubanks from the TV hit show "The Newlywed Game" will discuss human interaction and the importance of compassion in communicating with patients.
* And that's not all! Bob Eubanks will close out the meeting by giving one lucky attendee the chance to win **$100,000** in the "America's Greatest Game Show" challenge!

Read through this program and very rapidly you will realize why you must come to Anaheim and be part of the largest and most comprehensive respiratory care meeting anywhere in the world...AARC Congress 2013.

See you there!

300+ original research projects

150+ speakers

235+ sessions on current respiratory care topics

3 1/2 days of networking and education

3 days of exhibits of all companies in the industry

18+ CRCE credits

So register now and connect to the professional event where everything is about quality respiratory care.

AARC CONGRESS 2013

Convention & Exhibition

Pre Course:

Respiratory Care and the Trauma Patient

Friday, Nov 15

Anaheim Convention Center • Anaheim, CA

Course capacity is limited. Pre-registration required. Deadline: Friday, October 25, 2013, or when course is full. Approved for 6.70 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

OBJECTIVES: The care of a person who is injured critically from multiple traumas is a challenging task, and every interaction can make the difference between life and death. This course is designed to assist the respiratory therapist in caring for the trauma patient and in understanding the unique treatment and care needed for different mechanisms of injury.

8:00 am – 8:40 am

ARDS and the Trauma Victim

Joe Hylton BSRT RRT-NPS CPFT EMT-P, Charlotte NC

ARDS is a devastating clinical syndrome that frequently impacts trauma victims. Early recognition and treatment can significantly affect mortality, even in the transport environment. This presenter will discuss how trauma victims are uniquely susceptible to developing the syndrome. Recognition and interventions for conventional treatment of ALI/ARDS will be discussed.

8:45 am – 9:25 am

Independent Lung Ventilation in the Patient with Severe Unilateral Lung Injury

Keith D Lamb RRT-ACCS, Newark DE

How do you ventilate a patient who has received severe damage to one lung without causing damage to the other? The presenter will give an overview of how independent lung ventilation can achieve similar goals to that of traditional mechanical ventilation. Case studies and examples of how this can be achieved at the bedside will be discussed.

9:30 am – 10:10 am

Airway Management of the Trauma Victim

Brady Scott MS RRT-ACCS, Chicago IL

Trauma patients can present some of the most challenging airway scenarios. This presentation will cover intubation techniques with the spinal cord injury patient, severe facial trauma, and other out-of-the-box situations. What types of equipment should be kept on hand? What levels of competence are needed for these types of intubation techniques? These and other questions will be answered during this presentation.

Joe Hylton BSRT RRT-NPS CPFT EMT-P

Keith D Lamb RRT-ACCS

Brady Scott MS RRT-ACCS

10:10 am – 10:25 am
Break

10:25 am – 11:05 am
Transport of the Trauma Victim
Joe Hylton BSRT RRT-NPS CPFT EMT-P
Trauma patients are often the most tenuous and usually require transport to an alternate facility better equipped to manage the patient's injuries. This presentation will cover the key challenges in inter- and intra-hospital transport. Strategies will be provided on how to avoid common pitfalls and mistakes.

11:10 am – 11:50 am
Specialized Hemodynamic and Physiological Monitoring of the Trauma Patient
Matthew T Davis RRT, Baltimore MD
Multiple etiologies of shock are common in the trauma patient. Hypovolemia, spinal injuries, traumatic brain injury as well as direct injury to the heart make ensuring end organ and tissue perfusion a difficult challenge. This presentation will talk about the latest in monitoring the trauma patient including StO2, PbO2, and hemodynamic monitoring.

11:50 am – 1:10 pm
Lunch – On Your Own

1:10 pm – 1:50 pm
Mechanical Ventilation and TBI; How to Ventilate the Traumatic Brain Injured Patient
Carl R Hinkson MS RRT-NPS ACCS FAARC, Seattle WA
Ventilating the TBI patient can be a challenge. This presentation will cover approaches to reducing intra-cranial pressure and how the ventilator may help or hurt in the process. The role of the respiratory therapist will be discussed.

1:55 pm – 2:35 pm
Can Airway Pressure Release Ventilation (APRV) Prevent ARDS in Trauma Patients?
Nader M Habashi MD FACP FCCP, Baltimore MD
Patients with traumatic injuries are at a greater risk of developing several forms of acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) from indirect lung injury such as aspiration lung injury, fat embolism lung injury, transfusion-related lung injury, and sepsis-related lung injury. Furthermore, trauma victims may also suffer direct pulmonary insult from pulmonary contusion, ventilator-associated pneumonia, and post-operative respiratory failure. All these types of lung injury generally require mechanical ventilator support. However, mechanical ventilation can result in ventilator-associated lung injury (VALI) and potentiate these forms of lung injury. Although the majority of the literature has been focused on the management of ARDS, little has been described on the prevention of ARDS. Can modifications to the way we use the ventilator actually prevent ARDS development?

2:40 pm – 3:20 pm
Mechanism and Pathophysiology of Spinal Cord Injuries
Keith D Lamb RRT, Newark DE
This lecture will discuss the mechanism and pathophysiology of traumatic spinal cord injuries (SCI). The most current evidence-based literature on the treatment of this patient population will be shared. The presenter will conclude by discussing the future of SCI treatment and prevention.

3:20 pm – 3:35 pm
Break

3:35 pm – 4:15 pm
Respiratory Care of the Trauma Patient with Spinal Cord Injury
Maria Madden RRT ACCS, Baltimore MD
This lecture will discuss ventilator strategies, bronchial hygiene, and other therapies specific to respiratory care as it relates to the management of the spinal cord injured patient. Timing of tracheostomy and diaphragm pacing will also be discussed.

4:20 pm – 5:00 pm
Shock Resuscitation
Nader M Habashi MD FACP FCCP
Shock is inadequate tissue perfusion, which presents clinically as hemodynamic instability and organ failure. This results in difficulty delivering metabolic substrates (oxygen) at the cellular level, and results in anaerobic metabolism. In trauma patients, loss of blood volume, cardiac injury, tension pneumothorax, and spinal cord injuries are typical. Shock is a common cause of death in trauma, second only to traumatic brain injury. This presentation will discuss the pathophysiology of shock, initial management of shock in trauma, and how mechanical ventilation influences hemodynamics in the unstable injured patient.


Matthew T Davis RRT


Carl R Hinkson MS RRT-NPS ACCS FAARC


Nader M Habashi MD FACP FCCP

Pre Course:

Tobacco Intervention and Cessation Aids

Friday, Nov 15

Anaheim Convention Center • Anaheim, CA

Course capacity is limited. Pre-registration required. Deadline: Friday, October 25, 2013 or when course is full. Approved for 7.08 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

OBJECTIVES: Tobacco use continues to be on the forefront of health-related concerns. In this program, participants will learn strategies to build a successful tobacco intervention and cessation program.

8:00 am – 8:55 am

Tobacco Treatment Guidelines, Evidence, and Brief Intervention Strategy

Susan Rinaldo Gallo MEd RRT CTTS FAARC, Durham NC

This session introduces the current recommended tobacco treatment guidelines and the evidence that supports them. The impact of tobacco use on morbidity and mortality will be discussed with implications for the health care system. A brief intervention strategy (Ask, Advise, Refer) will be explained and demonstrated.

9:00 am – 9:55 am

Contribution of Tobacco Use to Morbidity and Mortality

Steven A Schroeder MD, San Francisco CA

Smoking is a primary determinant of morbidity and mortality. This physician presenter will discuss the physiology and relationship of tobacco use to morbidity/mortality. Add this information to your educational arsenal for tobacco interventions. Your patients will be glad you attended.

9:55 am – 10:10 am

Break

10:10 am – 11:05 am

How to Respond to Those Not Ready or Willing to Quit

Susan Rinaldo Gallo MEd RRT CTTS FAARC

A strategy for addressing patients unwilling to quit tobacco use (5 Rs) will be explained. Participants will learn how to identify where a client is on the spectrum of quit contemplation. Examples of how one responds to various stages of quit contemplation will be demonstrated and practiced.

Susan Rinaldo Gallo MEd RRT CTTS FAARC

Steven A Schroeder MD

11:10 am – 12:05 pm

Interventions/Reinforcement

Jonathan Waugh PhD RRT RPFT CTTS FAARC, Birmingham AL

How does the typical adult respond to a tobacco cessation intervention? High school students? Or younger? What types of reinforcement will they respond to? This presentation will discuss strategies for intervention and reinforcement and how they should be incorporated into a tobacco cessation program. The presenter will provide examples of both intervention and reinforcement and how to maximize their effect.

12:05 pm – 1:05 pm

Lunch – On Your Own

1:05 pm – 2:00 pm

Pharmacologic and Other Support Aids for Tobacco Cessation

Steven A Schroeder MD

Pharmacotherapies and other support aids can enhance the quit rates of most smokers. As the pre-eminent experts in tobacco cessation counseling, respiratory therapists should be well informed as to all of the available cessation aids on the market. The presentation will detail aids and discuss strategies to incorporate them into a tobacco cessation program.

2:05 pm – 3:00 pm

Case Study Discussion

Amber Galer RRT, Salt Lake City UT – Discussion Leader (with Program Faculty)

Several case studies will be presented with audience interaction. Discussion will include counseling objectives and medication selection with comparison of recognized guidelines. Recommendations for addressing special populations will be included.

3:05 pm – 3:25 pm

Tobacco Prevention for Elementary School Age Children

Jonathan Waugh PhD RRT RPFT CTTS FAARC

This demonstration of how to present tobacco prevention and lung health information focuses specifically on the elementary school age group. A presentation currently used with this age group will be demonstrated along with related activities to engage interest and enhance understanding. Recommendations for addressing school teacher concerns will be provided, and the demonstrated materials will be made available to the audience for use in their own communities.

3:25 pm – 4:00 pm

Tobacco Prevention for Middle School versus High School Students

Amber Galer RRT

Tobacco prevention and cessation approaches for middle school versus high school age children will be contrasted and demonstrated. The type of information appropriate for this age group, supporting activities, and useful props will be demonstrated, and the presentation will be made available to the audience for use in their own communities. Creative media for exposing commonly held myths and tobacco marketing strategies for teenagers (and specifically young women) will be showcased.

4:00 pm – 4:15 pm

Break

4:15 pm – 4:45 pm

Starting a Tobacco Cessation Program for In-patients

Susan Rinaldo Gallo MEd RRT CTTS FAARC

A plan for starting a hospital-based tobacco-cessation program will be outlined with solutions for common challenges. Integration with hospital information systems and partnering with other health care professionals will also be addressed.

4:50 pm – 5:00 pm

Workshop Summary

Jonathan Waugh PhD RRT RPFT CTTS FAARC

A summary review of the key points and learning objectives from the course will be discussed.

AARC CONGRESS 2013

Jonathan Waugh PhD RRT RPFT CTTS FAARC

Amber Galer RRT

Pre Course: Patient Safety and the Respiratory Therapist

Friday, Nov 15

Anaheim Convention Center • Anaheim, CA

Course capacity is limited. Pre-registration required. Deadline: Friday, October 25, 2013, or when course is full. Approved for 3.70 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

OBJECTIVES: Patient safety is a priority for every hospital administrator and care provider, and patients expect safe, appropriate, evidence-based care with every ED visit and hospital admission. In a new and evolving health care system, respiratory therapists must be key stakeholders and take a leadership role in providing this level of care to patients…100% of the time. The participant in this course will better understand patient safety as it relates to health care reform and will glean new opportunities to not only deliver safe patient care but to mitigate mistakes.

1:00 pm – 1:55 pm

Emphasis on Patient Safety Under the Affordable Care Act

Bill Lamb RRT CPFT FAARC, Wentzville MO

The foundation of the ACA reform lies in its ability to drive costs out of health care. While there are many mechanisms in place to accomplish this, delivering care that mitigates or eliminates hospital-acquired conditions, sentinel events, and avoidable readmissions is at the forefront of the care delivery model. Therefore, patient safety initiatives are essential for the survival of any healthcare provider. This program discusses patient safety, evidence-based practice, and reviews the role of the respiratory therapist in providing appropriate, safe patient care.

2:00 pm – 2:55 pm

NIV – Skin Breakdown

Robert M Kacmarek PhD RRT FAARC, Boston MA

Skin breakdown and pressure ulcers have become a staple in patient assessment by nursing. Regulatory issues, national patient safety goals, and transparency in publicly reported data largely drove this change in practice. On the heels of this come opportunities for the respiratory therapist. While skin breakdown from patients receiving non-invasive ventilatory support is not new, the emphasis to monitor it is. This presentation will review best practices in assessment, identification, treatment, and continual monitoring for skin breakdown with the respiratory patient receiving NIV.

2:55 pm – 3:10 pm

Break

3:10 pm – 4:05 pm

Sentinel Events, Critical Incidents, and Near Misses

Steven E Sittig RRT-NPS FAARC, Rochester MN

Although much focus is placed on sentinel events and critical mistakes, oftentimes, more can be learned from near misses. Systems for reviewing and learning from sentinel events, critical incidents, and near misses will be discussed. Suggestions for implementing systems to learn from medical errors will be offered. Updated processes and data on these events will also be presented.

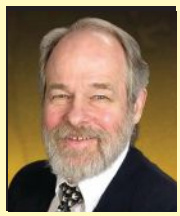
4:10 pm – 5:05 pm

Checklists: Getting Help from the Experts

April Gochberg PhD RRT- ACCS, Cincinnati OH

Checklists have been used since the 1920s in aviation with undisputable improvements in safety. Unfortunately, they have been slow to migrate into the delivery of healthcare…or have they? This presentation will review the journey taken by The Christ Hospital in Cincinnati to incorporate checklists into every day practice. Soliciting input from Boeing, the respiratory therapy department was successfully able to develop, simulate, and implement safety checklists into the care of the mechanically ventilated patient. The presenter will teach you how to do the same.

Bill Lamb RRT CPFT FAARC



Robert M Kacmarek PhD RRT FAARC

Steven E Sittig RRT-NPS FAARC

April Gochberg PhD RRT- ACCS

Pre Course:

Preparing for a Pandemic:

The Strategic National Stockpile Mechanical Ventilators

Friday, Nov 15
Anaheim Marriott • Anaheim, CA

Course capacity is limited. Pre-registration required. Deadline: Friday, October 25, 2013, or when course is full. The workshop will be repeated Friday afternoon, November 15 from 1:00 pm - 4:00pm. Approved for 2.75 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

Pandemic events present multiple challenges to the health care environment and the ability of the respiratory therapist to provide mechanical ventilation to all persons in need. The Strategic National Stockpile (SNS) is a repository of ventilators that would be used to supplement the supply currently in use by the nation's acute care facilities. These ventilators can be requested and allocated to areas of need in the event of a pandemic.

This symposium is designed to provide the respiratory therapist with the information necessary to utilize the SNS ventilators during a pandemic in addition to an opportunity for hands-on experience with all three stockpiled ventilator types.

Objectives: At the conclusion of this presentation, the participant will be able to:

- Discuss the issues that would be encountered regarding pandemic events and the need for mechanical ventilation
- Describe capabilities of the three SNS ventilators
- Identify how the SNS ventilators are allocated and utilized during a pandemic event
- Identify how the SNS ventilators are stored and maintained

Richard D Branson MSc RRT FAARC/*Presiding*

8:00 am – 8:25 am

Mass Respiratory Failure

Lewis Rubinson MD PhD, Baltimore MD

This session will focus on how a pandemic event will impact acute care facilities and the provision of mechanical ventilation. The respiratory therapist's role in these events will also be discussed.

8:30 am – 8:50 am

SNS Stockpile: Ventilator Allocation and Storage/Maintenance

Eileen Malatino RN MS, Atlanta, GA

This session will describe how SNS ventilators are requested and delivered. In addition, the presenter will discuss how the SNS ventilators are stored and maintained.

8:55 am – 9:20 am

A Clinician's Perspective: The SNS Ventilators

Richard D Branson MSc RRT FAARC, Cincinnati, OH

The Strategic National Stockpile consists of three specific mechanical ventilators. This session will discuss the capabilities of all three mechanical ventilators.

9:25 am – 11:00 am

SNS Hands-on Ventilator Training

This session will provide the respiratory therapist with the opportunity to gain hands-on experience with all three SNS ventilators.

Lewis Rubinson MD PhD

Eileen Malatino RN MS

Richard D Branson MSc RRT FAARC

Getting the Job: From Resume to Interview

Saturday, Nov 16
Anaheim Marriott • Anaheim, CA

The health care job market has changed considerably in the last few years. RC program graduates as well as the more seasoned practitioner are experiencing considerable difficulty in many regions of the country securing employment. Respiratory care program directors are under considerable pressure from accreditation agencies to demonstrate successful outcomes as thresholds have been established by CoARC to assure the public and the graduate that employment occurs. Even seasoned and experienced practitioners are encountering difficulty securing a job during these trying economic times.

This symposium is designed to address the key components of a job search and interview, and assist the attendee in securing gainful employment as a respiratory therapist.

TARGET AUDIENCE: Students, congress attendees, job seekers. This event is open to the public; however you must be an AARC member to attend.

OBJECTIVES: After attending this session, the attendee will:

- Recognize that securing employment is a process
- Identify the steps in the employment process, including how and where to look for a job
- Be able to develop an effective and functioning resume
- Be able to develop/create a cover letter
- Be better equipped to effectively and successfully participate in the employment interview
- Understand opportunities and pitfalls that one must consider prior to relocation
- Receive guidance and advice on how to effectively address typical interview questions

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

2:00 pm – 2:20 pm

Putting Your Best Foot Forward: Writing a Resume

Cheryl A Hoerr MBA RRT CPFT FAARC, Rolla MO

This session will address the development and creation of a professional resume. The attendee will learn that crafting an effective and well-developed resume is not only the genesis of any job search, but is key to securing an interview. The presenter will share components of this critical document and will provide real examples of the good and the bad.

2:25 pm – 2:40 pm

Finding Your Dream Job

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

The digital computer-age has not only led to the demise of newspapers, but has made the "Want Ads" completely obsolete. The way in which the world seeks employment has completely changed. From hospital websites, to social media, and headhunting firms to LinkedIn, the Internet (while convenient) creates its own set of challenges if you don't know where to look, how to navigate a website, or understand the complexity of networking tools. This presentation will speak to each of these components, and emphasize the importance of building, growing and leveraging your professional network to locate posted (and potential) employment opportunities.

2:45 pm – 3:00 pm

Standing Out Above the Crowd: Writing an Eye Catching Cover Letter

Douglas S Laher MBA RRT FAARC, Irving TX

The simplicity of submitting an on-line employment application and resume in many ways has de-emphasized the role of the resume and placed greater importance on the cover letter. Sophisticated scanning software now has computers performing initial screenings with the ability to filter resumes based on job history and experience. While computers may be responsible for getting your resume on the desk of the hiring manager, it's the cover letter that will determine whether or not the hiring manager will even read it. The presenter will share components of this critical document and will provide real examples of the good and the bad.

3:05 pm – 3:25 pm

Knocking It Out of the Park: Sealing the Deal with an Effective Interview

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

This presentation will discuss the "do's and don'ts" of an effective interview. Attendees will learn how to leverage strengths and disguise weaknesses in answering some of the more common interview questions. In addition, the presenter will also discuss the art of answering behavioral based interview questions and what differentiates a one-on-one interview from a panel interview. Soft skills such as promptness, appearance and advanced preparation will also be discussed.

3:30 pm – 4:00 pm

Lights, Action, Camera! The Interview's in Session

Bill Galvin MSEd RRT CPFT AE-C FAARC, Gwynedd Valley PA
Cheryl A Hoerr MBA RRT CPFT FAARC
Garry W Kauffman MPA FACHE RRT FAARC
Shawna L Strickland PhD RRT-NPS AE-C FAARC

The setting is a simulated conference room in which two mock interviews will be conducted between an applicant and a panel of hospital personnel. One interview will showcase conduct detrimental to an effective interview, and the other will highlight favorable behavior that lead to a job offer. Each 10-minute mock interview will be followed by a 5-minute interactive debrief in which attendee comments will be solicited by the moderator.

4:05 pm – 4:20 pm

Relocation: When Local Markets Become Saturated

Douglas S Laher MBA RRT FAARC

Certain segments of the country are completely saturated with RTs with few (if any) vacant positions available. Even PRN opportunities are difficult to find. However, there are other parts of the country where there are shortages of RTs and positions are plentiful. This presentation will discuss the critical elements one must consider before accepting a position that requires relocation. Attend this lecture and hit on the lessons learned from a presenter who recently relocated his family from Cleveland, OH, to Dallas, TX.

4:25 pm – 4:40 pm

Panel Discussion

Bill Galvin MSEd RRT CPFT AE-C FAARC
Cheryl A Hoerr MBA RRT CPFT FAARC
Garry W Kauffman MPA FACHE RRT FAARC
Douglas S Laher MBA RRT FAARC
Shawna L Strickland PhD RRT-NPS AE-C FAARC

The symposium will conclude with a panel discussion tying together all aspects of the job search process. This panel discussion will provide attendees the opportunity to dialogue with actual hiring managers and gain feedback on how to enhance the likelihood of successfully securing a position as a respiratory therapist.

Cheryl A Hoerr MBA RRT CPFT FAARC

Shawna L Strickland PhD RRT-NPS AE-C FAARC

Douglas S Laher MBA RRT FAARC

Garry W Kauffman MPA FACHE RRT FAARC

Bill Galvin MSEd RRT CPFT AE-C FAARC

AARC Congress 2013

Opening Session

8:30 am - 10:55 am

Thomas J Kallstrom
MBA RRT FAARC
AARC Executive
Director/CEO/*Presiding*

AARC Awards Ceremony

8:30 am - 10:10 am

The ceremony recognizes the "doers" in the profession, from students to long-established practitioners. Be there and applaud your peers. Today it's them; tomorrow it may be you!

Saturday, Nov 16

Keynote Address

10:15 am – 10:55 am

Whose Problem Are COPD Readmissions?

Stephen F Jencks MD MPH, Baltimore MD
Consultant in Healthcare Safety & Quality

Today hospitals are penalized if too many of their Medicare patients with certain diagnoses are readmitted within 30 days of discharge. In 2015, COPD may join other respiratory-related diagnoses including pneumonia and CHF for which penalties may be assessed. In this keynote lecture, Dr. Jencks will discuss how readmissions have become an issue that is forcing serious investment in reducing the fragmentation of healthcare. He will then outline the stake that respiratory therapists have in this new kind of accountability and how this accountability can be used to make therapists more respected members of the care team.

Dr. Jencks is an independent consultant in healthcare safety and quality and Senior Fellow at the Institute for Healthcare Improvement. His work focuses on understanding and preventing hospital readmissions, and his 2009 NEJM article on hospital readmissions in Medicare is considered authoritative. For CMS, he was Chief Scientist in the Office of Research, and Senior Clinical Advisor and Director of the Quality Improvement Organization program in the Office of Clinical Standards and Quality. He has received the Ernest A. Codman Award and the Distinguished Service Medal of the U.S. Public Health Service, and he retired as Assistant Surgeon General.

Sputum Bowl Preliminaries

8:00 am – 6:00 pm

Sherry Whiteman BHS RRT/*Presiding*

Teams from the AARC State Societies compete in the preliminary competitions. The top four teams will advance to the Finals on Monday evening, Nov 18, along with the Student Sputum Bowl finalists.

Opening of Exhibit Hall

11:00 am (Exhibit Hall C)

George W Gaebler MSEd RRT FAARC/*Presiding*

The 2013/2014 AARC President opens the Exhibit Hall. As the "Gold Standard" of all respiratory care meetings, AARC Congress 2013 presents to you all the manufacturers and suppliers in the industry. The Exhibit Hall offers attendees an opportunity to see, touch, and manipulate the latest technology in the field and have clinical conversations with manufacturer representatives. Don't miss this great opportunity!

Presenting an Open Forum Abstract

11:30 am – 12:00 noon

Teresa A Volsko MHHS RRT FAARC, Youngstown OH

The purpose of this presentation is to introduce the neophyte research presenter to the customs, roles, and experience of presenting an Open Forum session. Included will be the stages of an Open Forum presentation that include setting up the poster, interacting with moderators, presenting at the podium and participating in moderated audience discussion of the research.

Orientation for First-time Attendees

11:30 am – 12:00 noon

Presented by the AARC Program Committee, Cheryl A Hoerr MBA RRT CPFT FAARC

Are you a first-time attendee with unanswered questions about whom to see, where to go, and what to expect from your first AARC Congress? If so, then attendance at this presentation is a MUST for you! This presentation provides first-time attendees with an overview of the entire AARC Congress and includes suggestions on how to maximize your time not only at the educational session, but also at the exhibits and peripheral activities as well.

Thomas L Petty Memorial Lecture

1:00 pm – 2:00 pm

Thomas L Petty's Lessons for the Respiratory Care Clinician of Today

David J Pierson MD FAARC, Bellevue WA

Thomas L Petty may be the single most important physician in the history of respiratory care in terms of his contributions to its progress and their practical relevance today. Dr. Petty first described ARDS and showed the effects of PEEP in this syndrome; he demonstrated the benefits of long-term oxygen therapy in COPD and started one of the first pulmonary rehabilitation programs anywhere; he stressed the need for collaborative, multidisciplinary respiratory care; and he was an early advocate for compassionate end-of-life care for patients amidst the complexity and intrusiveness of modern management. This lecture will expand on these and other areas in which Dr. Petty was a true pioneer in our field, most of whose lessons remain relevant and acutely pertinent today.

Teresa A Volsko
MHHS RRT FAARC

Cheryl A Hoerr MBA
RRT CPFT FAARC

Saturday, Nov 16

Up in Smoke: Home Oxygen, Smoking and Safety

2:10 pm – 2:40 pm

Up in Smoke: Home Oxygen, Smoking and Safety

Kim S Wiles RRT, Ford City PA

Content Category: Patient Safety

Oxygen therapy for use in the home has been prescribed for the respiratory compromised patient for many years. Unfortunately, the majority of these patients have been long—time smokers. Despite warnings about potential dangers, a considerable number of these patients continue to smoke in the home while wearing supplemental oxygen. At what point does the danger from smoking with oxygen outweigh the benefits? This presentation will answer this and other relevant questions about the care of the home oxygen patient.

Advanced Pharmacology of Airway Management & RSI

2:10 pm – 2:40 pm

Emergency Airway Management/RSI

Joe C Hylton RRT-NPS NCEMT-B FAARC, Charlotte NC

Content Category: Adult Critical Care

This presentation will provide a comprehensive review of the latest recommendations regarding the physiology and pharmacology of Rapid Sequence Intubation. The lecturer will discuss which drugs are most appropriate for which patient population as well as a simplistic overview of rapid sequence pharmacology.

RESPIRATORY CARE

OPEN FORUM® Symposia

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Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. Twenty OPEN FORUM Symposia will be presented during the four days of AARC Congress 2013. See pages 98-107 for symposium sessions, abstracts titles and authors.

Multi-institutional Collaboration to Establish a Ventilator Patient Weaning Unit

2:10 pm – 2:40 pm

Multi-institutional Collaboration to Establish a Ventilator Weaning Unit

Gene Gantt RRT, Livingston TN and Garry W Kauffman MPA FACHE RRT FAARC, Winston-Salem NC

Content Category: Management

While chronic ventilator-dependent patient units, LTACHs, and hospital-based ventilator units have been around for decades, the outcomes of these services vary widely. The multi-organizational collaboration to provide this service in a novel way is designed quite differently from these other organizations. This presentation will address the value of ventilated patient weaning units, how two such organizations have collaborated to provide this service, and the outcomes resulting from this unique clinical service line.

Ageism, Have You Examined Your Views?

2:10 pm – 2:40 pm

Ageism, Have You Examined Your Views?

Lorraine Bertuola BA RRT, Towson MD

Content Category: Clinical Practice

In American society, age discrimination (ageism) is prevalent. Statistics show that 80% of people over 65 years of age have reported being a victim of ageism. This lecture will review ageism, what can be done to mitigate it and help attendees recognize potential biases.

Games Your Kids Are Dying to Play

2:10 pm – 2:40 pm

Dangerous Asphyxial Games

Douglas E Masini EdD RRT-NPS RPFT AE-C FAARC, Savannah GA

Content Category: Neonatal/Pediatric

Choking games are increasing in prevalence throughout the U.S. and beyond. This presentation will focus on asphyxial games. Emphasis will be placed on the recognition of signs and symptoms that indicate the need for an emergency airway. Suggestions will be offered for effectively educating today's youth about the games they are "dying to play".

Kim S Wiles RRT

Joe C Hylton RRT-NPS NCEMT-B FAARC

Gene Gantt RRT

Garry W Kauffman MPA FACHE RRT FAARC

Lorraine Bertuola BA RRT

Douglas E Masini EdD RRT-NPS RPFT AE-C FAARC

What Is Your Cardiopulmonary Exercise Test and Clinical Trial IQ?

2:10 pm – 3:15 pm

2:10 pm – 2:40 pm

Cardiopulmonary Testing Survey – What Are Labs Doing Correctly?

Katrina Hynes RRT RPFT, Rochester MN

Content Category: Pulmonary Function

This presentation is the result of a survey performed in 2012 to learn more about the knowledge base of those performing cardiopulmonary exercise and metabolic testing. Additionally, who is performing testing, their experience/training, procedures, and QA activities. Attend this lecture, absorb the data, and identify opportunities to improve practices in your cardiopulmonary testing lab.

2:45 pm – 3:15 pm

Man You're Fussy – Participating in a Clinical Trial Using Cardiopulmonary Exercise Testing (CPET)

Katrina Hynes RRT RPFT

Content Category: Pulmonary Function

Cardiopulmonary Exercise Testing for a clinical trial is more involved than standard patient testing. This presentation will review the nuances related to collecting accurate data for this type of testing, and provide recommendations for changes in practice to best meet the needs of all stakeholders.

Prone Positioning

2:10 pm – 3:15 pm

Prone Positioning

Pro: Richard D Branson MSc RRT FAARC, Cincinnati OH

Con: Richard H Kallet MS RRT FAARC, San Francisco CA

Content Category: Adult Critical Care

Prone positioning has been described as an intervention that improves ventilation/perfusion matching in the hypoxemic ARDS patient. In the past, the literature has not demonstrated an appreciable influence on outcomes. However, a recent meta-analysis suggests that there may be a clinically relevant improvement in mortality when this intervention is used in the sickest patients with severe ARDS. This intervention does not come without significant risk. This Pro/Con between two visionaries of our profession will focus on the potential risks and potential benefits of implementing this strategy in your sickest ARDS patients.

Ventilator Waveforms: Beyond Pretty Lines on the Screen

2:10 pm – 3:50 pm

2:10 pm – 2:40 pm

Ventilator Waveforms 101: Down to the Basics

Ruben D Restrepo MD RRT FAARC, San Antonio TX

Content Category: Adult Critical Care

Recognizing how ventilator waveforms are displayed is critical to understand patient-ventilator interactions and to optimize the management of patients undergoing invasive mechanical ventilation. This presentation is designed to explain the foundational concepts behind every graphic displayed on the ventilator screen.

2:45 pm – 3:15 pm

Understanding Patient-Ventilator Interaction: the Importance of Asynchrony

Jonathan Waugh RRT PhD FAARC, Birmingham AL

Content Category: Adult Critical Care

Patient-ventilator asynchrony is one of the most common unrecognized events in the ICU. Its recognition and management is important to change patient outcomes. Attend this lecture to better understand the different types of asynchrony, conditions (and modes of ventilation) in which asynchrony is most likely to occur and what the respiratory therapist can do to mitigate the risk of asynchrony and/or eliminate it altogether.

3:20 pm – 3:50 pm

How Can I Use Waveforms to Optimize the Management of Patients with ARDS?

Neil R MacIntyre MD FAARC, Durham NC

Content Category: Adult Critical Care

Ventilator management of the ARDS patient is perhaps the most challenging aspect of a respiratory therapist's skillset. Consistent vigilance of the patient-ventilator interaction plays an important role in the management of the patient population. Waveforms often display patient response to ventilator changes and patient status beyond what clinicians suspect. Attend this lecture to expand your ventilator management skills of the ARDS patient.

Continuing Respiratory Care Education (CRCE)

AARC Congress 2013 is approved for all the credit hours you need to maintain your state license, more than 18 hours.

Katrina Hynes RRT RPFT

Richard D Branson MSc RRT FAARC

Richard H Kallet MS RRT FAARC

Ruben D Restrepo MD RRT FAARC

Jonahan Waugh RRT PhD FAARC

Neil R MacIntyre MD FAARC

Saturday, Nov 16

Year in Review 2013 – Part I

2:10 pm – 4:25 pm

2:10 pm – 2:40 pm

Neonatal Respiratory Care

Craig Smallwood RRT, Boston MA

Content Category: Neonatal/Pediatric

An overview of the important literature published in 2013 related to neonatal respiratory care.

2:45 pm – 3:15 pm

Pulmonary Function Testing

Jeff Haynes RRT RPFT, Nashua NH

Content Category: Pulmonary Function

An overview of the important literature published in 2013 related to pulmonary function testing.

3:20 pm – 3:50 pm

Airway Management

Charles G Durbin Jr MD FAARC, Charlottesville VA

Content Category: Adult Critical Care

An overview of the important literature published in 2013 related to airway management.

3:55 pm – 4:25 pm

Invasive Mechanical Ventilation

Eddy Fan MD, Toronto Ontario

Content Category: Adult Critical Care

An overview of the important literature published in 2013 related to invasive mechanical ventilation.

Un-complicating the Complicated: Learning to Teach COPD Patients

2:45 pm – 3:15 pm

Un-complicating the Complicated: Learning to Teach COPD Patients

Robert Messenger RRT CPFT FAARC, Elyria OH

Content Category: Clinical Practice

The current healthcare environment demands that institutions and clinicians exploit every opportunity to become more effective and efficient. In particular, this includes how they train COPD patients to actively participate in the management of their own care. This presentation will identify the reasons why oxygen patients are especially difficult to train and will provide practical tips on patient training, tools and techniques. The concepts of adult education will be reviewed and age/education appropriate training approaches will be discussed.

Disclosure of Faculty Conflict of Interest

- The AARC remains strongly committed to providing the best available evidence-based clinical information to participants of this educational activity and requires an open disclosure of any potential conflict of interest identified by our faculty members.
- It is not the intent of the AARC to eliminate all situations of potential conflict of interest, but rather to enable those who are working with the AARC to recognize situations that may be subject to question by others.
- All disclosed conflicts of intesest are reviewed by the AARC Program Committee to ensure that such situations are properly evaluated and, if necessary, resolved.
- The AARC educational standards pertaining to conflict of interest are intended to maintain the professional autonomy of the clinical experts, which is essential in promoting a balanced presentation of science.
- Through our review process, all AARC CRCE activities are ensured of independent, objective, scientifically balanced presentations of information.
- Disclosure of any real or preceived conflict will be acknowledged at the onset of each presentation.

Craig Smallwood RRT

Jeff Haynes RRT RPFT

Charles G Durbin Jr MD FAARC

Eddy Fan MD

Robert Messenger RRT CPFT FAARC

COPD and Dynamic Hyperinflation with Exercise – What Have We Learned?

2:45 pm – 3:15 pm

COPD and Dynamic Hyperinflation with Exercise – What Have We Learned?

Janos Porszasz MD PhD, Torrance CA

Content Category: Clinical Practice

The impact of COPD and dynamic hyperinflation with exercise is a primary endpoint in multiple current studies. This presentation will discuss the effect of hyperinflation on physiology and its application to COPD severity and treatment.

What the Hospital RT Needs to Know About Home Oxygen

2:45 pm – 3:15 pm

What the Hospital RT Needs to Know About Home Oxygen

Connie Paladenech RRT RCP, Winston-Salem NC

Content Category: Management

Determination of appropriate oxygen dosing and delivery systems is a key component of the successful transition of the hypoxic patient from hospital to home. Many differences exist between home oxygen delivery systems and those used in the hospital. The hospital RT needs to have an understanding of home oxygen delivery systems in order to accurately assess needs for LTOT and provide appropriate recommendations to the medical team. The presenter will discuss this information and share opportunities on how hospital-based RTs can use the AARC's guide on Portable Oxygen Concentrators to train and educate their patients before they leave the hospital.

The Financial Value of Respiratory Services in Long-Term Care

2:45 pm – 3:15 pm

The Financial Value of Respiratory Services in Long-Term Care

Lorraine Bertuola BA RRT, Towson MD

Content Category: Management

The indirect financial value of skilled respiratory services in long-term care will be explored. Metrics that can be used to measure value will be discussed in detail. Attendees will leave this lecture with the skillset to develop their own dashboard to monitor, improve and define value of their department in an LTAC environment.

Why Is My Baby So Blue?

2:45 pm – 3:15 pm

Why Is My Baby So Blue?

Elizabeth Cooper BHS RRT, Cincinnati OH

Content Category: Neonatal/Pediatric

The differential diagnosis of the neonate with cyanosis is broad. The clinician must quickly distinguish between respiratory and cardiac etiologies. This presentation will provide essential concepts to assist with the initial assessment and diagnosis of the cyanotic infant. Suggestions for optimal initial stabilization and management will be offered.

Open Forums #1, #2 and #3

3:15 pm – 5:10 pm

Supported by an unrestricted educational grant from

monaghan™

Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion and interaction among investigators and observers. Posters are used to expand the information presented. The titles and authors of all abstracts will be posted by Aug 31.

A Look into the Crystal Ball – COPD, Training, and Pulmonary Rehabilitation

3:20 pm – 3:50 pm

A Look into the Crystal Ball – COPD, Training, and Pulmonary Rehabilitation

Janos Porszasz MD PhD, Torrance CA

Content Category: Clinical Practice

The Los Angeles Biomedical Research Institute conducts leading-edge research in training methods to improve outcomes in COPD. Their findings have been implemented and tested within pulmonary rehabilitation programs for many years. This presentation looks at the current science and future of exercise training in COPD.

The "New" Healthcare Paradigm: Will RTs Survive or Thrive?

3:20 pm – 3:50 pm

The "New" Healthcare Paradigm: Will RTs Survive or Thrive?

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

Content Category: Management

We are inundated with the "new" rules, "new" reimbursement, "new" quality standards, "new" patient satisfaction goals, but has anyone assembled all of this 'new' information in a way that gives clear direction for RTs? This presentation will provide an overview of the pressures, challenges, and goals for delivering healthcare and connect it to what respiratory therapists must know, how they must practice, and how they must communicate their value. If we don't, we're history. If we do, we thrive!


Janos Porszasz MD PhD


Lorraine Bertuola BA RRT


Elizabeth Cooper BHS RRT


Garry W Kauffman MPA FACHE RRT FAARC

Saturday, Nov 16

A Whirlwind History of Respiratory Therapy: Told Through Vintage Medical Photography

3:20 pm – 3:50 pm

A Whirlwind History of Respiratory Therapy: Told Through Vintage Medical Photography
Steve DeGenaro RRT, Waterloo IA
Content Category: Clinical Practice
Respiratory therapy is a relatively new profession and has developed and evolved over the last 60 – 70 years into the profession it is today. The presenter will discuss the history of the profession and how it developed. While the profession has existed less than 100 years, disease states, therapeutic regimens, and diagnostic testing associated with the profession today extends far back into history. The presenter will use historical photography from his (and other) collections to establish a timeline for the birth of the profession as well as how treatment modalities and diagnostic procedures were developed.

Recruitment Maneuvers for ARDS

3:20 pm – 4:25 pm

Recruitment Maneuvers for ARDS
Pro: Robert M Kacmarek PhD RRT FAARC, Boston MA
Con: Rolf D Hubmayr MD, Rochester MN
Content Category: Adult Critical Care
The use of recruitment maneuvers in patients with ARDS is controversial. In this pro-con, two authorities debate the benefits of recruitment maneuvers and address the important question about whether or not they should be used.

Air Goes In…. What Comes Out? – A Symposium on Exhaled Biomarkers

3:20 pm – 5:00 pm

3:20 pm – 3:50 pm
Biomarkers in Exhaled Breath Condensate
Alison J Montpetit PhD RN, Richmond VA
Content Category: Pulmonary Function
This presentation will include an overview of exhaled breath condensate (EBC), its collection techniques, and biomarkers that can be measured in it. Ongoing respiratory research will be presented, as will potential clinical uses for EBC biomarkers. How can this information be applied to practice? What are the roles of the respiratory therapist? Attend this lecture to find out!

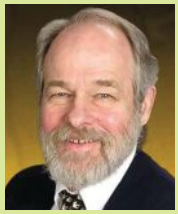
3:55 pm – 4:25 pm
Exhaled Breath Condensate pH
Michael D Davis RRT, Richmond VA
Content Category: Pulmonary Function
This presentation will include an overview of exhaled breath condensate pH. The relevance and complications of airway acidification, therapies for reversing airway acidification, and current and ongoing research will be presented.

4:30 pm – 5:00 pm
Exhaled Nitric Oxide
Bruce K Rubin MD MEngr MBA FAARC, Richmond VA
Content Category: Pulmonary Function
While exhaled nitric oxide is a relatively new technology, it's been around long enough for the profession to make some determinations on it effectiveness and application. This presentation will include an overview of exhaled nitric oxide (eNO), its clinical uses, and shortfalls.

Industry Support Statement

- The AARC is proud of the collaboration we have had with friends in industry for many years, and we wish to acknowledge our appreciation for their unrestricted educational grants for AARC Congress 2013.
- All sponsored sessions will be identified in the program, with signage, and verbally at the lecturn.
- The AARC accepts support only on the condition that the Program Committee be the sole organizer of all sessions, including selection of speakers and topics.


Steve DeGenaro RRT


Robert M Kacmarek PhD RRT FAARC


Rolf D Hubmayr MD


Bruce K Rubin MD MEngr MBA FAARC

Patient Education Symposium: One Size Doesn't Fit All

3:20 pm – 5:00 pm

3:20 pm – 3:50 pm

Teaching Toddlers and Adolescents: You Can't Do It Alone

Lisa Tyler MSM RRT-NPS CPFT, Philadelphia PA

Content Category: Education

Teaching toddlers and adolescents is certainly very different from the more mature adult or senior. They possess limited life experiences, frequently shorter attention spans, and don't think in the abstract. This presentation will address the unique needs of this younger generation. It will provide general characteristics as well as specific teaching/ learning strategies for the child and adolescent.

3:55 pm – 4:25 pm

Teaching Adults: You Better Make It Useful

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

Content Category: Education

Adult learners may represent the majority of the patient population that the RT teaches on a regular basis. But are we effective in our delivery? Are we truly meeting their needs? This presentation will identify characteristics of the adult learner and will address the general principles of adult learner education.

4:30 pm – 5:00 pm

Teaching Older Adults and the Elderly: It's Not about Shouting

Helen M Sorenson MA RRT FAARC, San Antonio TX

Content Category: Education

A frequent technique to employ when teaching the elderly is to speak louder. Often we will hear the patient say, "I am not deaf." While this gives us reason for pause (and it should), we often cannot truly appreciate and understand the different needs they present to the teaching/learning process. This final presentation will address the unique needs of the elderly patient.

High-Frequency Ventilation in Neonatal and Pediatric Intensive Care

3:20 pm – 5:00 pm

3:20 pm – 3:50 pm

High Frequency Jet Ventilation

Sherry E Courtney MD, Little Rock AR

Content Category: Neonatal/Pediatric

High-frequency jet ventilation (HFJV) has unique features in the management of the neonate with acute respiratory failure. This presentation will review the available data and the clinical indications for HFJV as well as common management strategies.

3:55 pm – 4:25 pm

High Frequency Percussive Ventilation

Robert M DiBlasi RRT-NPS FAARC, Seattle WA

Content Category: Neonatal/Pediatric

Can high-frequency percussive ventilation improve outcomes in pediatric patients with acute lung injury? The unique gas delivery properties and potential advantages of this high-frequency modality will be discussed.

4:30 pm – 5:00 pm

High-Frequency Oscillatory Ventilation

Christine Kearney RRT, Seattle WA

Content Category: Neonatal/Pediatric

High-frequency oscillatory ventilation (HFOV) is a commonly used modality for neonatal and pediatric patients with acute lung injury. This presentation will review patient selection, management techniques, and the available medical literature. Will the recently published adult study affect HFOV use in pediatrics? This presentation will offer strategies for optimal HFOV use in infants and children.

I Am Not an Educator, How Do I Teach Students in the Clinical Arena?

3:55 pm – 4:25 pm

I Am Not an Educator, How Do I Teach Students in the Clinical Arena?

Aaron Light DHSc RRT, Springfield MO

Content Category: Clinical Practice

This presentation will provide education basics to clinicians and help guide them to becoming better preceptors. Audience members will be presented with the dos and don'ts of precepting and the results of years of student surveys that detail what they want from their preceptors.

Did They "Stick the Landing"? Use of New Multimedia Technology and Olympic-type Competency Rating Systems to Train Clinical Preceptors

3:55 pm – 4:25 pm

Did They "Stick the Landing"? Use of New Multimedia Technology and Olympic–type Competency Rating Systems to Train Clinical Preceptors

Dan J Grady MEd RRT FAARC, Asheville NC

Content Category: Management

Multiple regulatory agencies require competency assessment of clinical performance, but few tools exist to train clinical preceptors and ensure validity and reliability of their ratings. This presentation will demonstrate the use of new AARC multimedia video technology in training clinical preceptors to evaluate clinical performance. The purpose of this presentation is to describe preceptor training techniques that will improve the quality of competency assessments.

Lisa Tyler
MSM RRT-NPS CPFT

Bill Galvin
MSEd RRT CPFT
AE-C FAARC

Helen Sorenson
MA RRT FAAC

Sherry E Courtney
MD

Robert M BiBlasi
RRT-NPS FAARC

Christine Kearney
RRT

Dan J Grady
MEd RRT FAARC

Saturday, Nov 16

COPD Disease Management – a Model for All Settings

3:55 pm – 4:25 pm

COPD Disease Management – a Model for All Settings

Brian W Carlin MD FAARC, Pittsburgh PA

Content Category: Clinical Practice

COPD is the 3rd leading cause of death in the U.S. The disease can be managed effectively through a well-designed plan of care. Respiratory therapists are ideally qualified to play a lead role in managing these patients. Dr. Carlin will describe the role of the RT in various settings including the hospital, pulmonary rehab, and homecare in improving outcomes for these patients.

Capnography: Isn't It Time to Recognize It As the Fifth Vital Sign?

3:55 pm – 4:25 pm

Capnography: Isn't It Time to Recognize It As the Fifth Vital Sign?

Ruben D Restrepo MD RRT FAARC, San Antonio TX

Content Category: Clinical Practice

Although capnography has been considered to be standard of care for the monitoring of CO2 in patients undergoing mechanical ventilation in the operating room, it's the critical role in different clinical settings is not well known. This presentation reviews the most current evidence supporting the applications of capnography in the mechanically ventilated and spontaneously breathing patient.

AARC CONGRESS 2013

Technology Etiquette: Training of the RT

4:30 pm – 5:00 pm

Technology Etiquette: Training of the RT

Peter J Papadakos MD FCCM FAARC, Rochester NY

Content Category: Patient Safety

With the explosion of electronic medical records, the concern is that patients are becoming more like "e-patients" than human beings – each with their own challenges, concerns, and disabilities. Is this the case? Can caregivers distinguish between the two? Have we lost our way and forgotten the most basic element of patient care… the patient? In this presentation, we will discuss new skill sets needed to remain focused on the patient despite the presence of a computer in the room. The user-to-technology interface is a growing educational and safety concern in the medical practice. Don't become an e-provider… attend this lecture and learn the skills necessary to provide excellent patient care in a digital environment.

Get Real! – How Good Is Today's Simulation Technology?

4:30 pm – 5:00 pm

Get Real! – How Good Is Today's Simulation Technology?

Joel M Brown RRT, Newark DE

Content Category: Clinical Practice

The use of simulation technology is expanding greatly and is now more realistic than ever. This lecture will demonstrate how respiratory therapy departments can incorporate simulation training as a tool to evaluate staff competence and critical thinking without jeopardizing the care of the patient. Where can departments find simulators? How do they ensure inter-rater reliability for moderators? You'll have to attend this lecture to find out.

Exhibit Hours at The Buying Show:
Saturday, Nov. 16, 11:00 am - 4:00 pm
Sunday, Nov. 17, 9:30 am - 3:00 pm
Monday, Nov. 18, 9:30 am - 2:00 pm


Brian W Carlin MD FAARC


Ruben D Restrepo MD RRT FAARC


Peter J Papadakos MD FCCM FAARC


Joel M Brown RRT

From the "Napkin Drawing" to the Marketplace: The Medical Innovation and Commercialization Alliance Program

4:30 pm – 5:00 pm

From the "Napkin Drawing" to the Marketplace: the Medical Innovation and Commercialization Alliance Program

Dan J Grady MEd RRT FAARC, Asheville NC

Content Category: Management

Changes in reimbursement have prompted hospitals to explore new sources of revenue by investing in their employees' medical product ideas. This presentation will discuss experience with a new state-funded "incubator" program to identify and develop new medical product ideas. New resources available to assist RTs with medical product innovations will also be covered.

COPD and Comorbidities: Why All the Fuss?

4:30 pm – 5:00 pm

COPD and Comorbidities: Why All the Fuss?

Brian W Carlin MD FAARC, Pittsburgh PA

Content Category: Clinical Practice

There are many comorbidities often associated with the COPD patient. This presentation will discuss those comorbidities and their implication on hospital and emergency department admissions. The presenter will discuss the importance of tailoring patient education not just to COPD but to any other potential comorbidities as well. In addition, attendees will leave this session with a better understanding and tools to reduce hospital readmissions of the COPD patient.

Chemical/Biological and Natural Disasters

4:30 pm – 5:00 pm

Chemical/Biological and Natural Disasters

Joe C Hylton RRT-NPS NCEMT-B FAARC, Charlotte NC

Content Category: Bioterrorism Emergency Preparedness

Chemical, biological, and natural disasters are still a common threat facing the world population. The devastation left behind in the wake of the tornadoes that ripped through Oklahoma earlier this year is evidence of that. Infections caused by new, emerging bioterrorism threats present an increasing concern as well. Knowledge of chemical, biological, and natural threats can greatly aid healthcare workers in identifying and effectively managing these disasters. This lecture will cover how to prepare for and react to a disaster.

Special Events

Breakfast Symposia

Held in the morning, symposia present timely information on topics affecting your practice and are free of charge and approved for CRCE credits. In mid-October Congress registrants will receive an e-mail with the scheduled topics, speakers descriptions and instructions on how to register on-line. Course capacities will be limited, first-come, first served.

Keynote Address

Saturday, November 16, 10:15 am - 10:55 am.

AARC Awards Ceremony

Saturday, November 16, 8:30 am - 10:10 am.

AARC Opening Reception

Saturday, November 16, 7:30 pm. Sponsored by

Dräger

36th Sputum Bowl Finals

Monday, November 18, 7:00 pm. Sponsored by

COVIDIEN

Closing Ceremony

Tuesday, November 19, 11:45 am.

Dan J Grady
MEd RRT FAARC

Brian W Carlin
MD FAARC

Joe C Hylton
RRT-NPS NCEMT-B
FAARC

AARC Congress 2013

Exhibit Hours at The Buying Show:

Saturday, Nov. 16, 11:00 am - 4:00 pm

Sunday, Nov. 17, 9:30 am - 3:00 pm

Monday, Nov. 18, 9:30 am - 2:00 pm

Sunday, Nov 17

AARC Annual Business Meeting

7:30 am – 8:20 am

George W Gaebler MSEd RRT FAARC/*Presiding*

The official Annual Business Meeting of the AARC. 2014 AARC Officers, Board of Directors, and Officers from the House of Delegates are installed. Reports from AARC leadership are presented. The meeting concludes with an address from 2013/2014 AARC President, George Gaebler.

40th Donald F Egan Scientific Memorial Lecture

8:30 am – 9:25 am

This lecture provides an overview of in-depth information about dynamic aspects of pulmonary physiology, pulmonary medicine, or clinical respiratory care. The lectureship is extended to a recognized world-class participant in the area of interest – investigator, clinician, or academician.

The Current State of Lung Protective Ventilation: What Should Clinicians Be Doing?

Rolf D Hubmayr MD, Rochester MN

Content Category: Clinical Practice

Lung protection has become a staple in almost every mechanical ventilation strategy, yet questions still linger on how and when to incorporate such strategies and which modes best facilitate lung protection. This lecture from an internationally recognized expert will address these and other questions. Dr. Hubmayr will also share the most current published evidence on the topic and provide practical suggestions to implement lung protective strategies into your practice.

Sputum Bowl Preliminaries

8:00 am – 6:00 pm

Sherry Whiteman BHS RRT/Presiding

Teams from the AARC State Societies compete in the preliminary competitions. The top four teams will advance to the Finals on Monday evening, Nov 18, along with the Student Sputum Bowl finalists.

Supported by an unrestricted educational grant from

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Management Section Membership Meeting

9:30 am – 10:00 am

Bill Cohagen BA RRT FAARC/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Home Care Section Membership Meeting

10:00 am – 10:25 am

Gregg Spratt CRT CPFT/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Open Forums #4 and #5

10:00 am – 11:55 am

Supported by an unrestricted educational grant from

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Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion and interaction among investigators and observers. Posters are used to expand the information presented. The titles and authors of all abstracts will be posted by Aug 31.

Strange Tales from the Bronchoscopy Suite

10:30 am – 11:00 am

Strange Tales from the Bronchoscopy Suite

William R Solly MS RRT CPFT, Philadelphia PA

Content Category: Pulmonary Function

As we perform our daily job responsibilities, all too often we focus on the latest equipment and ventilator weaning modes, but when was the last time you viewed a patient's airway from the inside? What do various disease states look like? How do they cause the various symptoms that patients experience? These and other questions will be answered in this presentation.

William R Solly
MS RRT CPFT

Sunday, Nov 17

The Future of the Respiratory Therapist in Home Care

10:30 am – 11:00 am

The Future of the Respiratory Therapist in Home Care

Joseph Lewarski RRT FAARC, Elyria OH

Content Category: Management

Now, more than any other time in the history of home care, the role and value of the home respiratory therapist is being questioned. The home medical equipment and health care business is changing at a rapid pace. National competitive bidding, new health care policies, audit pressures, and continued reimbursement pressures have placed significant strain on many providers. This presentation examines the potential future role of the home RT.

Promoting Patient Safety Through Teamwork and Communication

10:30 am – 11:00 am

Promoting Patient Safety Through Teamwork and Communication

Ira M Cheifetz MD FCCM FAARC, Durham NC

Content Category: Management

Patient safety is a top priority for healthcare administrators and educators around the country. Attention is most commonly given to avoiding medication, procedural, and laboratory testing errors. However, key components to patient safety that are intrinsically linked to all aspects of healthcare are teamwork and communication. This session will emphasize common errors in teamwork and communication, and offer skills to promote patient safety from these important aspects of interpersonal skills.

Patient Education Instructional Materials: From Development to Delivery

10:30 am – 11:00 am

Brochures, Pamphlets, and Patient Guides: The Design, Development, and Use of Patient Education Materials

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

Content Category: Education

Patient education is heralded as an essential component of the future of healthcare. It will hold tremendous value and critical importance in shifting emphasis to personal responsibility, patient ownership, and self-directed care. Previous Congress sessions have addressed the issues of the patient education process, barriers to teaching, and obstacles to learning the requisite skillset for the RT to assume this critical role. Absent from this array of components are the composition and use of printed instructional tools and teaching materials. This session will serve as a sequel to these issues and will address the use of instructional materials in the patient education process, the design and development of patient education materials, and essential elements in composition and development. Additionally, the presentation will address how to employ these tools when interacting with the patient at the bedside.

The ABCs of Sales and Marketing for Your Sleep Center

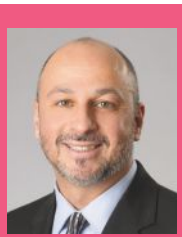
10:30 am – 11:00 am

The ABCs of Sales and Marketing for Your Sleep Center

Peter Allen RRT-NPS-SDS RST RPSGT, Devon PA

Content Category: Sleep Medicine

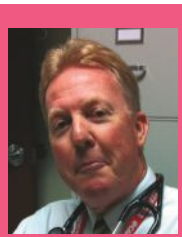
The sleep marketplace has become more competitive every year with no end in sight. It is essential for sleep centers to maximize revenues by identifying new opportunities and new revenue streams. This presentation will present possible new markets to explore and optimal ways of differentiating and marketing your program.



Joseph Lewarski RRT FAARC

Ira M Cheifetz MD FCCM FAARC

Bill Galvin MSEd RRT CPFT AE-C FAARC



Peter Allen RRT-NPS-SDS RST RPSGT

Year in Review 2013 – Part II

10:30 am – 11:35 am

10:30 am – 11:00 am

Noninvasive Monitoring

Lluis Blanch, Sabadell Spain

Content Category: Clinical Practice

An overview of the important literature published in 2013 related to noninvasive monitoring.

11:05 am – 11:35 am

Pulmonary Rehabilitation

Brian W Carlin MD FAARC, Pittsburgh PA

Content Category: Clinical Practice

An overview of the important literature published in 2013 related to pulmonary rehabilitation.

Professors' Rounds: Dueling Experts

10:30 am – 11:35 am

High-Frequency Oscillatory Ventilation in Adults: Indicated or Contraindicated?

Pro: Neil R MacIntyre MD FAARC, Durham NC

Con: Dean R Hess PhD RRT FAARC, Boston MA

Content Category: Adult Critical Care

Even international experts can disagree on the best approach to a clinical problem (and still get along). As two heads are better than one when approaching a complex clinical problem, this new approach to Professors' Rounds will offer competing thoughts on the use of HFOV for adult ARDS patients. A new twist to this Congress favorite will be the incorporation of audience response technology. Come learn and participate in this controversial topic.

Hot Topics in Neonatal Respiratory Care

10:30 am – 11:35 am

10:30 am – 11:00 am

Neonatal Resuscitation Program Update: Does Practice Make Perfect?

John Gallagher RRT NPS MPH, Cleveland OH

Content Category: Neonatal/Pediatric

Lung health starts with the first breath of life. Traditional approaches to neonatal resuscitation have recently been questioned, but is it justified? This presentation will review essential NRP updates. Best practices will be discussed with an emphasis on the role of the bedside respiratory therapist in improving clinical outcomes in neonatal resuscitation.

11:05 am – 11:35 am

Moving Beyond the NICU: Transitioning Infants with Chronic Respiratory Failure to Subacute Care Ventilators

Robert M DiBlasi RRT-NPS FAARC, Seattle WA

Content Category: Neonatal/Pediatric

Increasingly complex neonates are being supported long-term with great success. Many of these infants will require tracheostomy and chronic ventilation as a form of ongoing support within and beyond the NICU setting. Determining when and how these patients should transition from a NICU ventilator is a daunting task. This presentation will provide neonatal clinicians with valuable insight for transitioning these patients to long-term ventilators as well as strategies to prevent readmission to the NICU.

RESPIRATORY CARE

OPEN FORUM® Symposia

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Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. Twenty OPEN FORUM Symposia will be presented during the four days of AARC Congress 2013. See pages 98-107 for symposium sessions, abstracts titles and authors.

Lluis Blanch

Brian W Carlin MD FAARC

Neil R MacIntyre MD FAARC

Dean R Hess PhD RRT FAARC

John Gallagher RRT NPS MPH

Robert M DiBlasi RRT-NPS FAARC

Sunday, Nov 17

Aim Before You Act – Appropriate Application of Ventilator Technology

10:30 am – 12:10 pm

10:30 am – 11:00 am

Introduction to the AIM Cycle

Robert L Chatburn MHHS RRT-NPS FAARC

Content Category: Adult Critical Care

This talk will introduce the concept of appropriate application of technology through the cycle of Assessment (of patient needs), Identification of Technical Capability (what modes can do), and Matching Technology to Needs (selecting the appropriate mode for the patient's needs). There will be a brief overview of the sparse literature regarding appropriate mode selection and a summary of where we need to go in terms of future research. This introductory talk will set the stage for the following two talks.

11:05 am – 11:35 am

Assessing Patient Need

David M Wheeler RRT-NPS, Cleveland OH

Content Category: Adult Critical Care

This talk will describe the various bedside techniques for assessing patient need in terms of safety (gas exchange and lung protection), comfort (patient-ventilator synchrony), and liberation (sudden discontinuation and gradual weaning).

11:40 am – 12:10 pm

Identifying Technical Capability

Robert L Chatburn MHHS RRT-NPS FAARC, Cleveland OH

Content Category: Adult Critical Care

This talk will introduce the problem of mode proliferation and how to classify modes in order to identify which are similar and which are really different. The foundation of mode capabilities lies in their targeting schemes, so this talk will review the seven basic versions used in commercially available ventilators.

Are You Abnormal? Choosing Predicted Values in PF Testing

11:05 am – 11:35 am

Are You Abnormal? Choosing Predicted Values in PF Testing

Carl D Mottram RRT RPFT FAARC, Rochester MN

Content Category: Pulmonary Function

This lecture will explore the controversies surrounding predicted values for lung function testing, including what cut-points define normal/abnormal results, current recommendations, and the Global Lung Initiative.

Aerosol Therapy: Yesterday, Today, and Tomorrow

11:05 am – 11:35 am

Aerosol Therapy: Yesterday, Today, and Tomorrow

Bruce K Rubin MD MEngr MBA FAARC, Richmond VA

Content Category: Neonatal/Pediatric

Aerosol therapy has advanced as much as any other respiratory modality in recent years. This international expert will discuss the past, present, and future of this interesting and challenging field.

Preoperative Screening and the RT Role

11:05 am – 11:35 am

Preoperative Screening and the RT Role

Jessica Schweller MS RRT-RCP RN NP-C, Columbus OH

Content Category: Sleep Medicine

Surgery can be a very scary time for patients and clinicians. Special precautions can be put in place to keep patients safe as long as those at high risk for respiratory complications are identified in time. The presenter will discuss the RT's role in the pre-op evaluation process as well as in the peri- and post-op arenas.

Robert L Chatburn MHHS RRT-NPS FAARC

David M Wheeler RRT-NPS

Carl D Mottram RRT RPFT FAARC

Bruce K Rubin MD MEngr MBA FAARC

Jessica Schweller MS RRT-RCP RN NP-C

Hospital to Home: Reducing Readmissions – More Questions Than Answers

11:05 am – 12:10 pm

11:05 am – 11:35 am

What's Working?

Greg Spratt RRT CPFT, Philadelphia MO

Content Category: Clinical Practice

Healthcare Reform has introduced a number of new programs and incentives for reducing readmissions. Hospitals are scrambling to implement programs that can help, but is there a "best model"? This presentation reviews some of the programs that have been implemented across the country and the results.

11:40 am – 12:10 pm

What's the Latest from the Government?

Anne Marie Hummel, Washington DC

Content Category: Clinical Practice

The Patient Protection and Affordable Care Act was signed into law on March 23, 2010. In addition to establishing a Hospital Readmissions Reduction Program, the act also provided for the creation of new innovative demonstrations and pilot programs that focus on reducing readmissions as well as improving healthcare and lowering costs. This presentation reviews the Government's latest activities in those programs that can create new opportunities for RTs in and outside the hospital.

Reducing Re-admissions: Getting the Best Return on Your Investment

11:05 am – 12:10 pm

11:05 am – 11:35 am

Real World ROI

Crystal L Dunlevy EdD RRT RCP, Columbus OH

Content Category: Management

Today's healthcare market is becoming increasingly competitive. This presentation will give the RT leader practical initiatives that can be used by managers to assist their staff in providing high-quality patient education, discharge planning, and an improved bottom line. Attendees will leave this lecture with tools and metrics that can be used to measure outcomes and return on investment.

11:40 am – 12:10 pm

Customizing Patient Education

Crystal L Dunlevy EdD RRT RCP

Content Category: Management

Understanding the background, beliefs, experiences, and preferences of your audience is necessary to ensure effectiveness of your patient education efforts. Best practices from the literature related to the important role patient education plays in reducing hospital re-admissions will be shared. Outcomes will also be discussed on how patient education can play a primary role in minimizing hospital readmissions.

How Do I Get This PFT Data into the Electronic Medical Record?

11:40 am – 12:10 pm

How Do I Get This PFT Data into the Electronic Medical Record?

Matthew J O'Brien MS RRT RPFT, Madison WI

Content Category: Pulmonary Function

Enabling clinicians' easy access to pulmonary function data in the EMR is important. Although many institutions have tackled this, some continue to struggle. Leaving this presentation, attendees will have a better understanding of the language, cost, and work required to enable the various PFT data integration methods.

Let's Get Real! Overcoming Barriers to Effective Patient-Centered Communication

11:40 am – 12:10 pm

Let's Get Real! Overcoming Barriers to Effective Patient-Centered Communication

Robin Kidder RRT AE-C, St Louis MO

Content Category: Education

Patient-centered communication has become a Joint Commission standard. The presenter will engage the audience in a discussion on the current communication obstacles faced in our unique healthcare environment. Specific techniques to overcome these obstacles will be presented. A frank discussion will be held on communicating with patients and families to enhance compliance and overcome cultural barriers.

Sedation to Facilitate Mechanical Ventilation: the Good and the Bad

11:40 am – 12:10 pm

Sedation to Facilitate Mechanical Ventilation: The Good and the Bad

Peter J Papadakos MD FCCM FAARC, Rochester NY

Content Category: Adult Critical Care

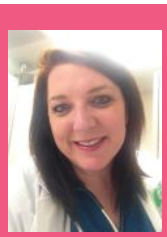
Sedation is necessary to facilitate mechanical ventilation for many adult and most pediatric patients. Although most clinicians clearly acknowledge the benefits of pharmacologic sedation, many are not fully aware of the negative aspects of sedation. This session will review the medical literature with regard to the effects of sedation on the critically ill patient. A focus will be placed on ICU delirium, neuromuscular weakness, and long-term outcomes. Knowledge learned from this session may change the way you manage your mechanically ventilated patients.

Greg Spratt
RRT CPFT

Anne Marie Hummel

Crystal L Dunlevy
EdD RRT RCP

Matthew J O'Brien
MS RRT RPFT



Robin Kidder
RRT AE-C

Peter J Papadakos
MD FCCM FAARC

Sunday, Nov 17

Pediatric Respiratory Care: Surviving Healthcare Reform

11:40 am – 12:10 pm

Pediatric Respiratory Care: Surviving Healthcare Reform

Timothy R Myers MBA RRT-NPS, FAARC, Irving TX

Content Category: Neonatal/Pediatric

The driving changes to reform healthcare provided in acute care settings from an economic, quality, and clinical standpoint will require drastic changes from administration, department leadership, and the clinical staff. The pediatric respiratory care department is not an exception and must transform itself to maintain its place at the bedside.

Inhalational Injuries

11:40 am – 12:10 pm

Inhalational Injuries

Douglas E Masini EdD RRT-NPS RPFT AE-C FAARC, Savannah GA

Content Category: Adult Critical Care

Intentional or accidental, inhalation of toxic agents can have detrimental outcomes. This presentation will review the current status of inhalational injuries. Etiologies and management strategies will be discussed. Potential educational approaches to prevent inhalational injuries will also be offered.

To Sleep... Perchance to Dream: Atypical Sleep-Disordered Breathing in ALS

11:40 am – 12:10 pm

To Sleep… Perchance to Dream: Atypical Sleep-Disordered Breathing in ALS

Lee Guion MA RRT, San Francisco CA

Content Category: Sleep Medicine

The mechanism of sleep fragmentation and daytime sleepiness in ALS remains unclear. Controversy surrounds the role of sleep studies in the clinical management of respiratory insufficiency in this disease. What are the issues? Attend this lecture, find out, and weigh in on the conversation.

Diagnostic Section Membership Meeting

12:15 pm – 12:45 pm

Matthew J O'Brien MS RRT RPFT/*Presiding*

Section Members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Open Forums #6 and #7

12:30 pm – 2:25 pm

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Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion and interaction among investigators and observers. Posters are used to expand the information presented. The titles and authors of all abstracts will be posted by Aug 31.

Long-Term Care Section Membership Meeting

12:45 pm – 1:15 pm

Lorraine Bertuola RRT/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Neonatal-Pediatrics Section Membership Meeting

1:30 pm – 2:00 pm

Cynthia White MSc RRT-NPS FAARC/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Timothy R Myers MBA RRT-NPS FAARC

Douglas E Masini EdD RRT-NPS RPFT AE-C FAARC

Lee Guion MA RRT

Interventional Pulmonary and Respiratory Therapy: Two Things That Go Great Together!

2:05 pm – 2:35 pm

Interventional Pulmonary and Respiratory Therapy: Two Things That Go Great Together!

William R Solly MS RRT CPFT, Philadelphia PA

Content Category: Pulmonary Function

Interventional Pulmonary. You may have heard of the name before, but what exactly does an IP practice offer and how can RTs become involved in this growing field? Come to this presentation to find out more about EBUS, tumor debulking, stent placement, navigational bronchoscopy, and other modalities that an interventional pulmonary practice routinely performs and how RTs can become involved.

The AARC Evidence-based Clinical Practice Guidelines

2:05 pm – 2:35 pm

The AARC Evidence-based Clinical Practice Guidelines

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

Content Category: Clinical Practice

This session will discuss the process by which the AARC is constructing new, evidence-based clinical practice guidelines. The session will showcase the systematic review process and the development of the first guideline released in 2013.

Understanding COPD Guidelines and Putting Them into Practice

2:05 pm – 2:35 pm

Understanding COPD Guidelines and Putting Them into Practice

Scott Cerreta RRT, Washington DC

Content Category: Clinical Practice

This presentation will review the current COPD Guidelines and how they can be incorporated into existing discharge planning modules. A must-see presentation for anyone interested in incorporating a COPD disease manager into their department.

The ABCs of VBP and P4P

2:05 pm – 2:35 pm

The ABCs of VBP and P4P

Dana Evans MHA RRT-NPS AE-C, St Louis MO

Content Category: Management

Is Value-Based Purchasing and Pay for Performance just something for the Executive Suite or will it affect your department? The presenter will discuss how VBP and P4P relates to reimbursement and how providing "signature service" to our patients and therapists can work to minimize financial loss. New and experienced managers will not want to miss this lecture… a new world of healthcare reimbursement lies ahead.

The Move from VAP to VAE: Impact on the Respiratory Therapist

2:05 pm – 3:10 pm

2:05 pm – 2:35 pm

Ventilator-Associated Events: What Every Respiratory Therapist Needs to Know

Dean R Hess PhD RRT FAARC, Boston MA

Content Category: Clinical Practice

In early 2013, surveillance of ventilator-associated pneumonia transitioned to monitoring of ventilator-associated events. This lecture will provide an overview of this program and discuss ways that this impacts respiratory therapists.

2:40 pm – 3:10 pm

Ventilator-Associated Events: Does This Apply to Children?

Kathleen M Deakins MSHA RRT-NPS FAARC, Cleveland OH

Content Category: Clinical Practice

This lecture is a sequel to the previous presentation and will describe how the surveillance of ventilator-associated events will extend to children.

AARC CONGRESS 2013

William R Solly MS RRT CPFT

Shawna L Strickland PhD RRT-NPS AE-C FAARC

Scott Cerreta RRT

Dana Evans MHA RRT-NPS AE-C

Dean R Hess PhD RRT FAARC

Kathleen M Deakins MSHA RRT-NPS FAARC

Sunday, Nov 17

Neonatal Ventilation

2:05 pm – 3:10 pm

2:05 pm – 2:35 pm

Conventional Ventilation of the Premature Infant: What Is the Evidence?

John S Emberger RRT FAARC, Newark DE

Content Category: Neonatal/Pediatric

Premature infants are one of the most challenging populations to ventilate. Learn what the evidence shows for conventional ventilation of this fragile population. The medical literature, recommended guidelines, and clinical cases will be discussed.

2:40 pm – 3:10 pm

Preventing BPD: Search for the Holy Grail

Sherry E Courtney MD, Little Rock AR

Content Category: Neonatal/Pediatric

The incidence of BPD is decreasing, but can it be eliminated? This presentation by a national expert will review the available medical literature and will offer suggestions for ventilator strategies that may eliminate BPD. Is the Holy Grail in eliminating BPD really achievable? Attend this session; your long-held views may be changed.

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Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. Twenty Open Forum Symposia will be presented during the four days of AARC Congress 2013. See pages 98-107 for symposium sessions, abstracts titles and authors.

Managing COPD: Don't Recreate the Wheel, Just Make It Run More Smoothly

2:05 pm – 4:20 pm

2:05 pm – 2:35 pm

Educational Materials from the AARC

Thomas J Kallstrom MBA RRT FAARC, Irving TX

Content Category: Education

This session will review those educational materials regarding the care and management of patients with COPD from the perspective of the AARC.

2:40 pm – 3:10 pm

Educational Materials from the COPD Foundation

Scott Cerreta RRT, Tucson AZ

Content Category: Education

This session will review those educational materials regarding the care and management of patients with COPD from the perspective of the COPD Foundation.

3:15 pm – 3:45 pm

Educational Materials from the Physician Perspective

Brian W Carlin MD FAARC, Pittsburgh PA

Content Category: Education

This session will review those educational materials regarding the care and management of patients with COPD from the perspective of the outpatient physician. Attend this lecture to better understand the educational expectations of RTs following the passage of HR 2619.

3:50 pm – 4:20 pm

Putting the Resources Together: The Patient Experience

Brian W Carlin MD FAARC

Scott Cerreta RRT

Thomas J Kallstrom MBA RRT FAARC

Content Category: Education

During this session the presenters will simulate a patient with COPD and how these educational programs can be used for such a patient throughout the patient's lifetime.

John S Emberger RRT FAARC

Sherry E Courtney MD

Thomas J Kallstrom MBA RRT FAARC

Scott Cerreta RRT

Brian W Carlin MD FAARC

AARC's 29th New Horizons in Respiratory Care Symposium:

Back to the Basics: Respiratory Physiology in Critically Ill Patients

2:05 pm – 4:55 pm

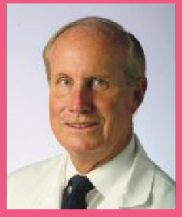
2:05 pm – 2:35 pm
Hypoxia Versus Hypoxemia
Neil R MacIntyre MD FAARC, Durham NC
Content Category: Clinical Practice
Much of respiratory care relates to treatment for hypoxia and hypoxemia. Physiologic causes of hypoxia and hypoxemia will be discussed. Assessments of hypoxemia such as $P(A\text{-}a)O_2$, PaO_2/PAO_2, PaO_2/FIO_2, and pulmonary shunt will be compared. Also presented will be a discussion of adaptive mechanisms for hypoxia and hypoxemia.

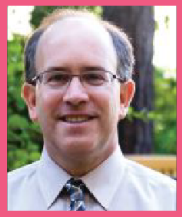
2:40 pm – 3:10 pm
Heart-Lung Interactions and Oxygen Delivery
Ira M Cheifetz MD FCCM FAARC, Durham NC
Content Category: Clinical Practice
This lecture will cover the physiologic determinants of oxygen delivery and the consequences of inadequate oxygen delivery. Also discussed will be clinically important heart-lung interactions.

3:15 pm – 3:45 pm
The Physiology of Ventilation
Lluis Blanch, Sabadell Spain
Content Category: Clinical Practice
The physiologic relationships between $PaCO_2$, CO_2 production, and alveolar ventilation will be described. Also discussed will be how dead space ventilation is measured, causes of elevated dead space, and the physiologic consequences of elevated dead space in mechanically ventilated patients.

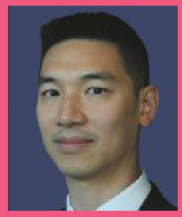
3:50 pm – 4:20 pm
Hypercapnia and Hypocapnia
Eddy Fan MD, Baltimore MD
Content Category: Clinical Practice
Causes of elevated CO_2 production and methods of lowering CO_2 production such as hypothermia will be discussed. Also discussed will be the consequences of permissive hypercapnia (lung injury) and hypocapnia (head injury). Compensatory mechanisms for hypercapnia (and hypocapnia) will be described, both physiologic and therapeutic (bicarbonate, THAM).

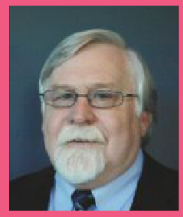
4:25 pm – 4:55 pm
Respiratory Mechanics during Positive Pressure Ventilation
Dean R Hess PhD RRT FAARC, Boston MA
Content Category: Clinical Practice
The clinical significance of airway pressure and flow waveforms will be discussed, as well as the measurement of alveolar pressure using end-inspiratory and end-expiratory breath-holds. The concept of the stress index will be described, as well as a description of how esophageal pressure is measured.


Neil R MacIntyre MD FAARC


Ira M Cheifetz MD FCCM FAARC


Lluis Blanch


Eddy Fan MD


Dean R Hess PhD RRT FAARC

Sunday, Nov 17

Neurorespiratory Disease Management

2:05 pm – 4:55 pm

2:05 pm – 2:35 pm

ALS Palliative Care: Burden of Caregivers Compared to Patient's Quality of Life

Anna Caroline Braga MSc PT, Lisbon Portugal

Content Category: Clinical Practice

ALS is one of the most devastating neurological diseases in adults with an unpredictable clinical course. Though many poor prognostic factors are well known, recent studies have also shown that the physical and emotional burden of caregivers is an issue that must be addressed and should be made part of management plan of an interdisciplinary team specialized in ALS. This lecture will discuss stress reduction by ALS caregivers and the impact stress has on caregiver morbidity and mortality.

2:40 pm – 3:10 pm

Home Tele-monitoring of Non-invasive Ventilation in ALS Reduces Healthcare Utilization

Joao Pereira MSc, Lisbon Portugal

Content Category: Clinical Practice

Non-invasive ventilation is an efficient method for treating respiratory failure in patients with amyotrophic lateral sclerosis. However, it requires a process of adaptation not always achieved due to poor compliance. A telemonitoring system provides timely feedback, increases compliance, increases survival, and reduces healthcare utilization. Attend this lecture and find out how a home tele-monitoring program can improve NIV adherence...potentially by as much as 85%.

3:15 pm – 3:45 pm

Neurorespiratory Disease Management

Anabela Cardoso Pinto MD PhD, Lisbon Portugal

Content Category: Clinical Practice

Neurorespiratory diseases, such as amyotrophic lateral sclerosis, are a group of diseases that generally have a rapid progression with a life expectancy of less than 5 years in most cases. The introduction of treatment methods has helped to not only increase the survival time but to also increase the quality of life for many patients. It is a disease that requires an integrated treatment approach with healthcare practitioners and caregivers. This lecture discusses the optimal approaches required.

3:50 pm – 4:20 pm

NIV in Neuromuscular Disorders like ALS and Duchenne Muscle Dystrophy

Anabela Cardoso Pinto MD PhD

Content Category: Clinical Practice

Efficacy of NIV in ALS and Duchenne muscle dystrophy is indisputable today. However, it still is underused as shown in several European and U.S. surveys. During the presentation, the experience gathered along the past 15 years will be shared, focusing on achieved comfort throughout clinical evolution of the treatment for these two debilitating diseases.

4:25 pm – 4:55 pm

What Do We Need to Know to Follow up ALS Patients from Early to Terminal Disease?

Anna Caroline Braga MSc PT

Content Category: Clinical Practice

The wide clinical diversity associated with several different motor features requires expert knowledge usually gained at the frontiers between neurologic, pulmonology and rehabilitation departments. In this session, issues regarding the integration of motor skills, oxygen demand, and energy expenditure will be discussed. In the face of a fatal disease, the question is: Is this approach a palliative care or a modifiable disease treatment?

Quality Assurance of the Pulmonary Function Technologist

2:40 pm – 3:10 pm

Quality Assurance of the Pulmonary Function Technologist

Jeffrey M Haynes RRT RPFT, Nashua NH

Content Category: Pulmonary Function

It's easy to blame the patient when test results are of poor quality. But is there more to it than that? This presentation will review the sources of poor quality PFT data and describe how to administer a quality assurance program for a technologist.

Long-term Oxygen Therapy: Past, Present and Future

2:40 pm – 3:10 pm

Long-term Oxygen Therapy: Past, Present and Future

Patrick J Dunne MEd RRT FAARC, Fullerton CA

Content Category: Clinical Practice

This lecture will review the history of long-term oxygen therapy (LTOT) including physical development of equipment and the clinical, regulatory and reimbursement decisions that have influenced changes. It will take the listener from the initial equipment to the sophisticated portable devices available today and will speculate on the future developmental needs of LTOT.

Ventilator Outcomes in Long-Term Care

2:40 pm – 3:10 pm

Ventilator Outcomes in Long-Term Care

Lorraine Bertuola BA RRT, Towson MD

Content Category: Clinical Practice

Modern healthcare is focused on clinical and economic outcomes. This lecture will present outcomes data collected over the last three years. Attendees will leave this presentation with a better understanding of how to collect, monitor, own and implement changes in practice based on clinical and economic outcomes.

Shooting for the Stars: How to Achieve Top 10% in Employee Engagement

2:40 pm – 3:10 pm

Shooting for the Stars: How to Achieve Top 10% in Employee Engagement

Lora Harris MS BHA RRT-RN, Plano TX

Content Category: Management

Employee engagement has been shown to be a driver of organizational performance. This presentation will review the science behind employee engagement, provide 5 proven strategies to improve employee engagement, and share some lessons learned.

Open Forums #8 and #9

3:10 pm – 5:05 pm

Supported by an unrestricted educational grant from

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Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion and interaction among investigators and observers. Posters are used to expand the information presented. The titles and authors of all abstracts will be posted by Aug 31.

Feed Me! How Indirect Calorimetry Can Improve Patient Outcomes

3:15 pm – 3:45 pm

Feed Me! How Indirect Calorimetry Can Improve Patient Outcomes

Mark S Siobal RRT FAARC, San Francisco CA

Content Category: Pulmonary Function

Measurement of a patient's resting energy expenditure can add value and reduce mortality in select patient populations. This presentation will review the important role of indirect calorimetry in assuring adequate nutrition in the ICU. What role does the RT play in managing nutrition of the critically ill patient? How important is nutrition to the pulmonary patient? Attend this lecture to get answers to these and other questions.

Jeffrey M Haynes
RRT RPFT

Patrick J Dunne
MEd RRT FAARC

Lorraine Bertuola
BA RRT

Lora Harris MS
BHA RRT-RN

Mark S Siobal
RRT FAARC

Sunday, Nov 17

Debunking the Myths: Understanding the Science and Technology of Low Flow Oxygen Therapy

3:15 pm – 3:45 pm

Debunking the Myths: Understanding the Science and Technology of Low Flow Oxygen Therapy

Joseph Lewarski RRT FAARC, Elyria OH

Content Category: Clinical Practice

Low flow oxygen therapy is such a standard of routine respiratory therapy that little attention is paid to the fundamental science and application. Over the last decade many new oxygen technologies have been introduced that challenge the early science and much of the dogma surrounding effective low flow oxygen therapy. This lecture will review the basic science, engineering, and technology and provide an objective and comprehensive view of this important topic.

Evaluation of Albuterol/Ipratropium Discharge Prescription Appropriateness

3:15 pm – 3:45 pm

Evaluation of Albuterol/Ipratropium Discharge Prescription Appropriateness

Donna Clayton MBA RRT, St Louis MO

Content Category: Patient Safety

High-dose bronchodilators delivered by metered-dose inhalers are often used to treat COPD and asthma exacerbations. Risk for severe medication-related side effects exists if these doses are not de-escalated following stabilization. In this lecture, you'll learn how a respiratory care department and pharmacy collaborated to quantify the incidence of patients discharged on inappropriately high doses of inhaled medications and then developed and implemented a new process to improve patient safety and outcomes. Why reinvent the wheel? Attend this lecture and learn of a step-by-step process to incorporate a similar program in your facility.

Filling the Vacuum of RT Leadership: Developing the Potential Leaders Around You

3:15 pm – 3:45 pm

Filling the Vacuum of RT Leadership: Developing the Potential Leaders Around You

Dana Evans MHA RRT-NPS AE-C, St Louis MO

Content Category: Management

Are you developing the leaders around you? Leadership development is vital for the success of the respiratory care department. This presentation will help leaders identify those around them with the potential for growth and provide tips for helping them reach their full potential.

Pediatric Airway Management

3:15 pm – 4:20 pm

3:15 pm – 3:45 pm

The Internal Jaw: Successful Surgical Correction of Airway Obstruction

Jesse Taylor MD, Philadelphia PA

Content Category: Neonatal/Pediatric

Traditionally, the management of the child with an obstructive upper airway due to facial abnormalities has been quite problematic. A permanent surgical option is now available for infants with severe micrognathia. This session will present a novel surgical approach. The success with the Internal Jaw Procedure will be reviewed, including clinical cases.

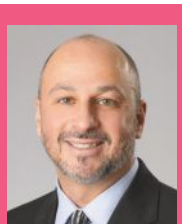
3:50 pm – 4:20 pm

Management of the Difficult Pediatric Airway

Jesse Taylor MD

Content Category: Neonatal/Pediatric

One of the most difficult and scariest scenarios for the clinician is the difficult airway. Appropriate training and planning can make the difference between life and death. This session will review strategies and techniques for managing the difficult pediatric airway.



Joseph Lewarski RRT FAARC

Donna Clayton MBA RRT

Dana Evans MHA RRT-NPS AE-C

Jesse Taylor MD

Sunday, Nov 17

Assessing and Caring for the Hypoxemic Chronic Lung Disease Patient

4:25 pm – 4:55 pm

Assessing and Caring for the Hypoxemic Chronic Lung Disease Patient

Trina M Limberg RRT FAARC FAACVPR, San Diego CA

Content Category: Clinical Practice

Improved activity levels and exercise tolerance are important outcomes in pulmonary rehabilitation, and assessing and treating hypoxemia is crucial for ambulation. Recommendations to use portable and home oxygen systems can be optimized by evaluation during rehabilitation supervised exercise sessions and can assist in this endeavor. Attend this lecture and learn best practices to assess and treat exercise-induced hypoxemia in chronic lung disease patients.

The Elevator Speech – Creating a Winning Message

4:25 pm – 4:55 pm

The Elevator Speech – Creating a Winning Message

Cheryl A Hoerr MBA RRT CPFT FAARC, Rolla MO

Content Category: Management

Healthcare is changing more rapidly than at any time in the past. Respiratory therapists must be able to quickly explain how their services are supporting strategic goals and how they are adding value. Elevator speeches need to be continually perfected and evolve as quickly as the organizations themselves. What sets your department apart, and can you communicate it effectively? A prepared, focused "elevator speech" that is personalized and targeted to your administration can help therapists sell the value of respiratory therapy and ensure that administrators are interested in hearing more. This presentation will walk attendees through the process of creating, rehearsing, and tailoring an elevator speech for a specific audience.

Application in Hand: Respiratory-themed Apps for Phones and Tablets, Patients and Practitioners

4:25 pm – 4:55 pm

Application in Hand: Respiratory-themed Apps for Phones and Tablets, Patients and Practitioners

Steve B Nelson MS RRT FAARC, Irving TX

Content Category: Clinical Practice

Even though apps are vetted by the Apple Store and Google Play teams for "safety," are they worth using precious memory on your phone? This will provide a review of applications on both the iOS and Android platforms, covering applications for both respiratory therapists and patients and which are memory-worthy.

Respiratory Disasters: Conditions You Hope You Never See

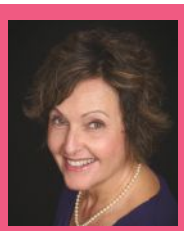
4:25 pm – 4:55 pm

Respiratory Disasters: Conditions You Hope You Never See

David A Turner MD, Durham NC

Content Category: Neonatal/Pediatrics

Respiratory ailments in the neonatal and pediatric populations are commonplace. This presentation will discuss the small number of etiologies that many would classify as disasters. Quick recognition and effective management may make the difference between life and death. Although you hope you never see these conditions, be prepared as you might encounter them.



Trina M Limberg RRT FAARC FAACVPR

Cheryl A Hoerr MBA RRT CPFT FAARC

Steve B Nelson MS RRT FAARC

David A Turner MD

Sunday, Nov 17

So You Think You Can Diagnose Asthma?

3:50 pm – 4:20 pm

So You Think You Can Diagnose Asthma?

Jeffrey M Haynes RRT RPFT, Nashua NH

Content Category: Pulmonary Function

This presentation will include a review of the different diagnostic tests for asthma and the limitations of these tests. Potential sources of inaccurate testing will also be reviewed. What is the best diagnostic test? You'll have to attend this lecture to find out!

Spontaneous Breathing Trials and Their Role in the LTAC

3:50 pm – 4:20 pm

Spontaneous Breathing Trials and Their Role in the LTAC

Peter Loper MD, Charlotte NC

Content Category: Clinical Practice

It is widely speculated that ventilatory weaning in LTAC units is more simplistic than doing so in the acute care hospital because the disease process leading to mechanical ventilation has likely been resolved. However, the patient in the LTAC can present weaning challenges different from those of patients in acute care. This lecture examines the myriad of clinical challenges of the LTAC patient and the use of spontaneous breathing trials in this patient population.

Employee Engagement – Reward and Recognition Is Where It's At!

3:50 pm – 4:20 pm

Employee Engagement – Reward and Recognition Is Where It's At!

Lora Harris MS BHA RRT-RN, Plano TX

Content Category: Management

Employee engagement is linked to positive organizational success. This presentation will review multiple components to improve employee engagement and more specifically, reward and recognition. The presenter will discuss the impact of employee reward/recognition on employee engagement and share best practices that work to increase employee engagement.

Respiratory Care in the Home: Best Practices from our Canadian Colleagues

3:50 pm – 4:55 pm

3:50 pm – 4:20 pm

From ICU to the Home: Strategies for Successful Transition

Rita Troini RRT MA, Quebec Canada

Content Category: Clinical Practice

Effective transition of the patient from hospital to home is now at the center of health care. This lecture will discuss strategies, tactics, and best practices to ensure a smooth and successful transition of the patient from the acute care setting to the home.

4:25 pm – 4:55 pm

Airway Clearance Techniques in the Home

Veronique Adam RRT, Quebec Canada

Content Category: Clinical Practice

Whether it is in the hospital or home, airway clearance is a challenging and daunting task for improved lung function. This lecture examines the effective use of lung volume recruitment and various cough-assist techniques and technologies used as part of a comprehensive, home airway clearance program. Attend this lecture and learn how to enhance the care you provide in the home.

Are RTs Really Needed on Transport?

4:25 pm – 4:55 pm

Are RTs Really Needed on Transport?

Pro: Alex J Brendel RRT-NPS MBA, Roanoke VA

Con: Tabatha M Dragonberry RRT-NPS AE-C, Washington DC

Content Category: Clinical Practice

There has been debate at some facilities whether respiratory therapists are truly needed for inter-hospital transports. Some hospitals are looking at removing RTs from teams based on consultant recommendations. This lecture addresses the pros and cons of RTs on inter-hospital transport, their possible influences on outcomes, and how departments can justify the use of RTs on their own hospital transport teams.

Jeffrey M Haynes
RRT RPFT

Lora Harris MS
BHA RRT-RN

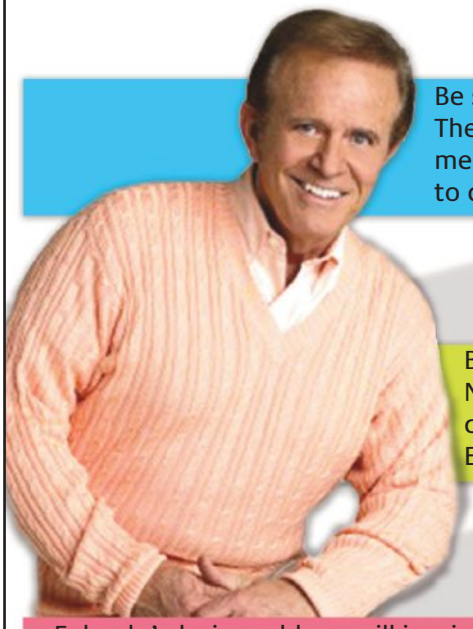
Rita Troini RRT
MA

Veronique Adam
RRT

Alex J Brendel
RRT-NPS MBA

Tabatha M Dragonberry
RRT-NPS AE-C

Bob Eubanks, Host of "The Newlywed Game"



Be sure not to miss the first ever AARC Closing Ceremony. There's no other way to end the world's best respiratory meeting than with a closing ceremony that will be sure not to disappoint.

Bob Eubanks, five-time Emmy Award winning host of "The Newlywed Game" will be on hand. That's right… a TV celebrity will be on hand to deliver the AARC closing address! Eubanks will educate, entertain and leave people inspired.

Eubanks' closing address will inspire all of us to be better communicators with our patients by sharing the flubs, foibles and faux pas he witnessed by hosting the ultimate communication divide… "The Newlywed Game."

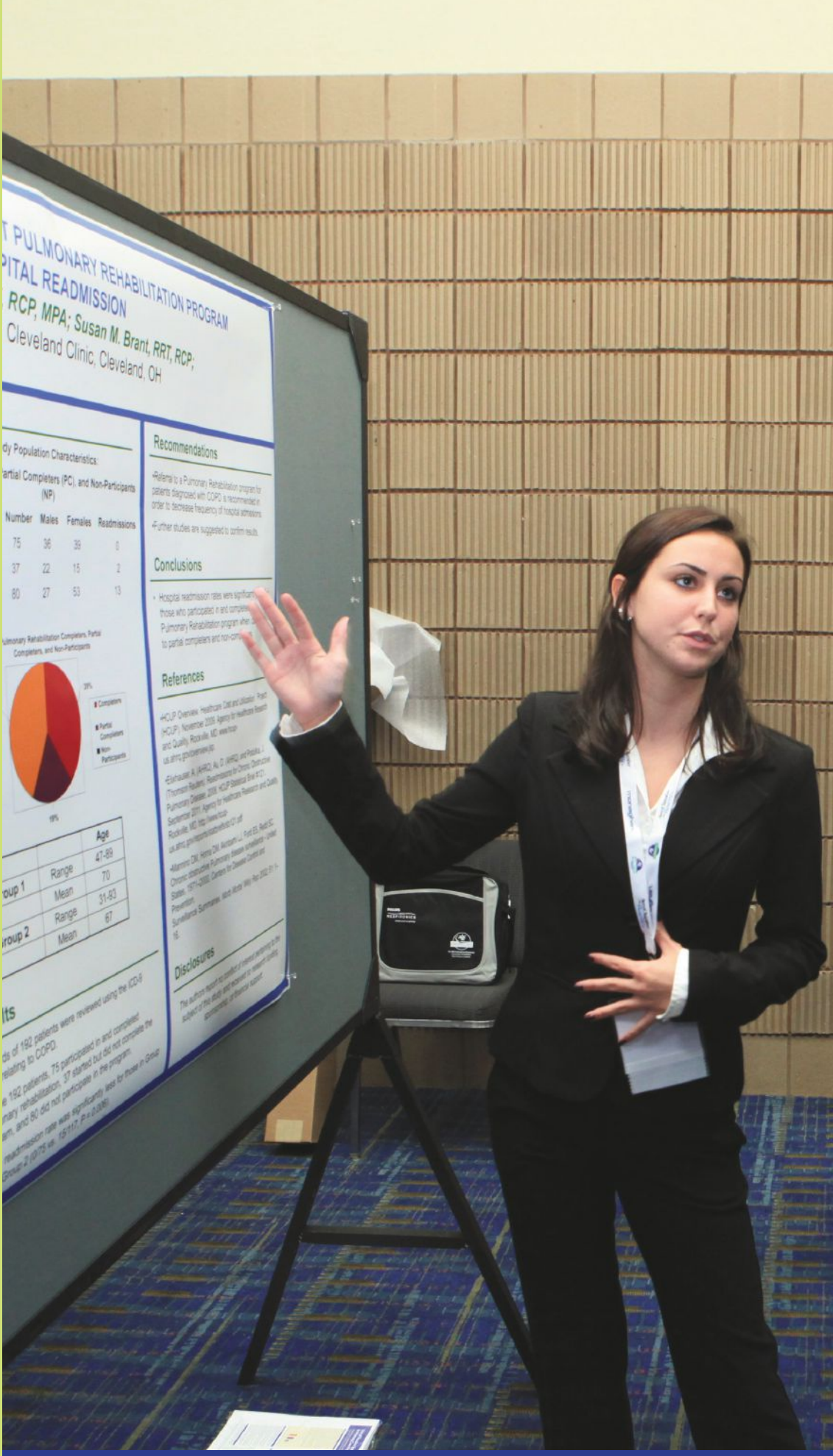
Don't miss out on a chance to compete in a "Newlywed Game" takeoff… "Workmates." How well do you know your co-worker? How well do they know you? Attend the closing ceremony with a chance to find out…live, and on stage.

Does the economy have you down? Could you stand to be handed a check in the amount of $100,000? One lucky Congress attendee will be given a chance to compete in "America's Greatest Gameshow Challenge"…and a chance to win $100,000!

Closing Ceremony Tuesday November 19, 2013

AARC CONGRESS 2013

19 Open Forum Symposia



Respiratory Care Open Forum

Supported by an unrestricted educational grant from

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The Open Forum at AARC Congress is a unique opportunity for attendees to experience the results of scientific studies performed by their colleagues. Abstracts and posters of their work are presented in a symposium format that encourages discussion and interactions among investigators and observers. Indeed, some attendees refer to the Open Forum as the most significant event at the Congress. Respiratory Care journal is proud to present this year's 19 Open Forum symposia. Once again, respiratory care professionals have stepped forward and analyzed the things they do with critical eyes. We encourage you to review all the abstracts in the October issue of Respiratory Care. Come to the Congress and experience an Open Forum symposium!

Open Forum #1
Ventilation/Ventilators – Part 1
Saturday, November 16, 3:15 pm – 5:10 pm

Apnea Testing Using Dräger Medical Oxygen Therapy Software—Tony Ruppert BSRT RRT CPFT, York PA

The Effect of Mechanical Ventilation Modes on the Diaphragm Apoptosis and Ultrastructure in Rabbits—Huiqing Ge MSc RRT, Hangzhou China

Four Month Trial of the RAM Cannula Interfaced With a Mechanical Ventilator to Provide Noninvasive Respiratory Support to Premature Infants in a Level III NICU—Thomas Seidensticker RRT-NPS MA, Carol Stream IL

Investigation of a Novel Turbine-Driven Ventilator for Use in Cardiopulmonary Resuscitation—Scott Allen MD RRT, Salt Lake City UT

Do Undergraduate Respiratory Therapy Students Have Better Ventilator Graphics Interpretative Skills Than Critical Care Physicians?—Juan F Fernandez MD, San Antonio TX

Comparison of Heliox Cylinder Gas Consumption Between Ventilators—Mark Siobal RRT FAARC, San Francisco CA

Delivered Oxygen Concentration and Ventilator Performance Using a Modification to the Metaneb Circuit—Mark Siobal RRT FAARC, San Francisco CA

Validating Performance Characteristics of the Airon Pneuton a Pneumatic Transport / MRI Ventilator—Mark Siobal RRT FAARC, San Francisco CA

Engineering a Platform Device to Deliver Budesonide Nanocluster Dry Powders Using a Mechanical Ventilator—Nashwa El-Gendy PhD, Lawrence KS

Measurement of Carbon Dioxide Elimination During High-Frequency Jet Ventilation: a Bench Study—Craig R Wheeler Jr RRT, Boston MA

A Comparison of the Accuracy of Delivered Tidal Volumes on the Dräger XL and the Servo-i Ventilators at Low Tidal Volume Settings—Jerrold Judd RRT, Aurora CO

Tidal Volume and Minute Volume Delivery From 2-ICU Ventilators in Volume Cycled Mode Compared to 5-Transport Ventilators—Paul F Nuccio MSc RRT FAARC, Boston MA

Comparing Tidal Volume and Minute Volume Delivery in 2 ICU-Ventilators With 5-Transport Ventilators During Time-Cycled-Pressure-Control Mode—Philip Delcore RRT, Boston MA

Patient Safety in Ventilator Care Using Ulnar Length to Estimate Patient Height—Brent D Kenney BSRT RRT FAARC, Springfield MO

Reducing Delays in Spontaneous Breathing Trials After a Positive Daily Screen—Brent D Kenney BSRT RRT FAARC, Springfield MO

Open Forum #2
Aerosols/Drugs – Part 1
Saturday, November 16, 3:15 pm – 5:10 pm

Evaluation of the Knowledge of Pharmacists on the Use of MDI and DPI—Hoang Vu CRT, Mobile AL

The Effect of Adapting Nebulizers to Oxygen Masks on Hypopharyngeal FIO_2 and Aerosol Delivery—Tim Op't Holt EdD RRT AE-C FAARC, Mobile AL

Nebulizer Cleaning Process in the Adult Acute Care Setting—Michelle Spradling RRT, Erlanger KY

The Impact of Different Closed Suction Catheter Designs and pMDI Adapters/Spacers on Aerosol Delivery in Simulated Adult Mechanical Ventilation With 'Wet' and 'Dry' Exhalation—Jacqueline P Williams RRT, Atlanta GA

Aerosolized Antifungal Agents for Mechanically Ventilated Patients on Nitric Oxide—Sherwin E Morgan RRT, Chicago IL

In Vitro Evaluation the Aerosol Delivery of Jet Nebulizer at 3 Locations During Mechanical Ventilation—Hsin-Chun Liu RRT, Zhongli City Taoyuan Taiwan

The Effect of Reservoir Design on Inhaled Aerosol for Small Volume Nebulizers—John Bennett, Cleveland OH

Aerosol Delivery With Different FIO_2 Using an Unheated Large Volume Humidifier to an Adult Lung Model With Tracheostomy Arzu Ari—PhD RRT PT CPFT FAARC, Atlanta GA

Evaluation of the Circulaire II Aerosol Drug Delivery Systems for Micro-Biological Contamination—Mark Grzeskowiak RRT FAARC, Long Beach CA

Comparison of Aerosol Delivery via Aerogen Micropump on the Dry Side Versus the Wet Side of the Heater—Jennah Hollen RRT AE-C, Columubs OH

HFA MDI Actuator Obstruction—Suzan Herzig RRT, San Diego CA

Open Forum #3
Airways Care – Part 1
Saturday, November 16, 3:15 pm – 5:10 pm

Endotrachael Tube Occlusion With an In-Line Suction Catheter: A Bench Study—Scott M Pettinichi MEd RRT-NPS AE-C, Washington DC

Conscious Sedation With Midazolam and Dezocine in Diagnostic Flexible Bronchoscopy: Alleviates Patient Discomfort and Improves Satisfaction—Xiaoke Chen, Shenzhen Guangdong China

Endotracheal Tube Collapse Potential in an Artificial Airway Model—Blake G Hagen RRT RPFT, Edina MN

Performance Evaluation of Airway Medix Closed Suction System Compared With a Standard Closed Suction System—Nimrod Adi MD, Rehovot Israel

Comparison of Two Oscillating Positive Expiratory Pressure Devices: Acapella Versus RC Cornet—Sherry Babic RRT, Cleveland OH

Clinical Staff Confidence in Providing Care and Management of Patients With a Tracheostomy—Victoria M Martin RRT-NPS RPFT, Cincinnati OH

Incentive Spirometry (IS) Best Practice Comparison of Procedural Volumes After Implementation of New Protocol—Carrie M Winberg RRT, Sandy UT

Secretion Mobilization Best Practice Comparison After Implementation of New Protocol—Carrie M Winberg RRT, Sandy UT

Positioning and Verification of Neutral Head Position: Does It Favorably Impact Endotracheal Tube Repositioning?—Jenny Noland RRT, Ann Arbor MI

Estimating Native Endotracheal Tube Cuff Pressure in an Artificial Pilot Balloon Model—William M LeTourneau RRT, Edina MN

Effects of Cough With High Frequency Chest Wall Oscillation (HFCWO) for Airway Clearance—Tetsuo Miyagawa PhD RRT, Yokohama Kanagawa Japan

The Effect of Condensation on Cuff Pressure—William R Howard BSRT RRT MBA, Boston MA

Can a Commercially Available Device Restore the Flow Resistive Properties of an Endotracheal Tube to Pre-Use Conditions?—Thomas Heaney, Smyrna DE

Utilization of a Tracheostomy Decannulation Protocol—Erika Abmas RRT AE-C, Dallas TX

Open Forum #4
Ventilation/Ventilators – Part 2
Sunday, November 17, 10:00 am – 11:55 am

Noninvasive Ventilation (NIV) Utilization in an Academic Emergency Department (ED)—Andrew G Miller RRT, Durham NC

Rapid Process Improvement to Increase Surveillance for Patients Ready for Extubation Around the Clock—John S Emberger Jr RRT FAARC, Newark DE

Extubation Outcomes for Patients Recieving More Than One Spontaneous Breathing Trial (SBT) Per Day—John S Emberger Jr RRT FAARC, Newark DE

The Use of Non-Invasive Ventilation (NIV) in the Post Anesthesia Care Unit (PACU) in an Academic Medical Center—Dean A VanHart RRT, Durham NC

Accuracy of Exhaled Tidal Volume (Measured and Estimated) of Two Subacute/Home Care Ventilators in a Simulated Neonate/Infant Model—Gerald Moody RRT-NPS AE-C, Richardson TX

Effect of Increasing Patient Effort Simulated With an Electronic Test Lung on Tidal Volume During a Spontaneous Breathing Trial With Automatic Tube Compensation—Lonny R Niejadlik, Boise ID

A 5-Year Follow Up After Application of Non-Invasive Ventilator Support in Patients With Neuromuscular Disease—Miri Suh MD, Seoul Republic of Korea

Effects of Hamilton G5 Flow Sensor on Aerosol Delivery—Paul F Nuccio RRT FAARC, Boston MA

Portable Ventilators at Altitude—Thomas C Blakeman MSc RRT, Cincinnati OH

Occult Biological Contamination of Dräger Neonatal Flow Sensors—John Salyer RRT-NPS MBA FAARC, Seattle WA

Prophylactic CPAP Application in Post Extubation Cardiothoracic Open Heart Patients—Lawrence B Cole RRT, Duvall WA

The Impact of Clinical Trials: A Survey on the Use of HFOV—Meagan N Dubosky BSRT RRT-NPS AE-C, Chicago IL

Characteristics of Delivered Tidal Volumes During Nasal Cannula IMV: a Bench Study in an Infant Model—Edward Guerrero RRT-NPS, Conoga Park CA

Effect of Increasing Amplitude Using an Electronic Lung Simulator on Tidal Volume and Peak Inspiratory Pressure During Adaptive Pressure Control—Troy Lempesis, Boise ID

Obesity Affects Work of Breathing During Spontaneous Breathing Trials Using Proportional Assist Ventilation—Terry L Forrette RRT MHS, Mandeville LA

Open Forum #5
Case Reports
Sunday, November 17, 10:00 am – 11:55 am

The Use of Inhaled Isoflurane for Treating Severe Refractory Status Asthmaticus: a Case Study—Aaron Roebuck BSRT, Frederick MD

Rare Airway Anomaly Associated With Jarcho-Levin Syndrome: a Case Presentation—Tessa Lowry, Youngstown OH

Challenges in Ventilating an Infant With Asphyxiating Thoracic Dystrophy—Kim Robbins RRT-NPS RPFT, Little Rock AR

ECMO and Independent Lung Ventilation in an Adolescent Male Post All-Terrain Vehicle Accident—Jennifer Cumming RRT-NPS, Little Rock AR

It Was Not Asthma!—Paul Britton RRT, Little Rock AR

Pulmonary Interstitial Glycogenosis Associated With Respiratory Insufficiency—Josh Story RRT, Little Rock AR

A Case Study: Use of NAVA in an Asynchronous Patient With COPD—Patricia A Dailey RRT, Springfield MA

Unilateral Pulmonary Agenesis: A Case Report—Sherry Barnhart RRT-NPS FAARC, Little Rock AR

Active-Assisted Deep Breathing. From Intensive Care to Home Care: A Novel Approach in Respiratory Care for Patients With Neuromuscular Disorders—Hilda Perry PT, Vancouver BC Canada

Whole Lung Lavage in a 52 Year Old Male With Pulmonary Alveolar Proteinosis—Richard M Hoskins RRT-NPS CPFT, Plano TX

Anaphylactoid Syndrome of Pregnancy: Usually a Catastrophic Complication for Mother and Infant—April L Gochberg PhD RRT-ACCS, Cincinnati OH

Trial of a Standard Guideline to Manage Ventilation Mask Related Pressure Sore—Shu Wah Ng MSc RN, Hong Kong

Episodic Hypotension Associated With 1.0 FIO_2 Delivery During Sepsis and ARDS—Karsten Roberts RRT, San Francisco CA

Tracheopathia Osteochondroplastica—Nathan A Zappia BSRC CRT, Lowellville OH

Rare Presentation of a Tracheal Esophageal Fistula: A Case Report—Kymberly Hoffman, Youngstown OH

Open Forum #6
Airways Care – Part 2
Sunday, November 17, 12:30 pm – 2:25 pm

Early Experience With a Respiratory Therapist Driven Tracheostomy Tube Management Protocol—Joel Ray RRT, Seattle WA

An In Vitro Evaluation of Endotracheal Tube Cuff Leak and Suction Performance Using a Bio-Realistic Model—Sarah K Rozycki, Richmond VA

Esopahageal Intubation of a Patient in the Field Corrected in the Emergency Room With Successful Outcome—Cherian K Paily MSc RRT, Chicago IL

Reducing Unplanned Extubations in a Quaternary Neonatal Intensive Care Unit: Is it as Easy as Communicating With Each Other?—Darren Bullock RRT-NPS, Aurora CO

Evaluation of the Hamilton Medical IntelliCuff versus Manually Setting ETT Cuff Pressures During Simulated Mechanical Ventilation—Christopher T Chenelle, Boston MA

Validation of Feasibility and Functionality of a Video-Laryngoscope Equipped With Ventilation Feature—Jun Oto MD PhD, Boston MA

The Role of Acoustic Reflectometry in Evaluation of Endotracheal Tube Patency: An 'In-Vitro' Comparison of Assessment Techniques Used to Evaluate Airway Resistance Caused by Endotracheal Tube Biofilm Formation—Heather K Thomas CRT, Newark DE

Measured Expiratory Resistance of the Blue and Green Acapella Devices AS Setting Is Increased From 1–5; Amplitude 20 30 40—Scott Hawkins, Boise ID

Initial Experience With an Airway Management Catheter to Clear Partial Endotracheal Tube—John S Emberger Jr RRT FAARC, Newark DE

In-Vitro Evaluation of Two Different Neonatal Endotracheal Tube Securing Devices on Imposed Work of Breathing—David Conomon RRT, Newark DE

The Effect of Imposed Work of Breathing on Spontaneous Breathing Trial Results and Bedside Decision Making in an In-Vitro Adult Model of Spontaneous Breathing—Tom Blackson RRT, Newark DE

Minimizing Endotracheal Tube Cuff Leak—Mark Grzeskowiak RRT FAARC, Long Beach CA

Objects in GlideScope Are Closer Than They Appear—Mike Robertson MHA RRT-NPS, Chillicothe OH

Open Forum #7
Neonatal/Pediatrics – Part 1
Sunday, November 17, 12:30 pm – 2:25 pm

Evaluation of Respiratory Outcomes in Pre-Term Infants Receiving Nasal Continuous Positive Airway Pressure (nCPAP) Versus Surfactant and Mechanical Ventilation During Transport—Linda M Jacobs MPH RRT-NPS, Fort Worth TX

A Novel Delivery Method for Medication in a Pediatric Patient With Respiratory Distress From Pulmonary Alveolar Proteinosis (PAP)—Heather McKelvy BSRT RRT, Palo Alto CA

Decreasing Unplanned Extubations in the Neonatal Intensive Care Unit: a Multi-Disciplinary Approach—Dana Evans MHA RRT-NPS AE-C, St. Louis MO

Evaluation of Implementation of Standardized RT Skin Management During Non-Invasive Ventilation in a Children's Hospital—Lauren E Hutchison BHSc RRT-NPS, Cincinnati OH

Respiratory Mechanics With a RAM Cannula in a Spontaneously Breathing Lung Model—Jeffrey W Wright BSRT RRT-NPS, West Valley City UT

The Effect of Increasing NAVA Levels on Peak Pressures and Electrical Activity of the Diaphragm in Premature Neonates—Kimberly S Firestone RRT, Akron OH

Implementation of Best Practice Strategies to Decrease Unplanned Extubations in the Neonate—Shari A Toomey RRT-NPS MBA, Hardy VA

Comparison of Complications Between Cuffed and Uncuffed Endotracheal Tubes in the Cardiac Neonatal Population Less Than 5kg—Ginger Weido RRT-NPS, Lilburn GA

Standardizing a Method for Safely and Effectively Predicting Successful Extubation in Neonates—Timothy H Roark RRT-NPS, Corbin KY

The Impact of an RT Developing Skills to Perform Quantitative Analysis of Ventilation in a Pediatric Long Term Transitional Care Unit—Carolyn McHendry BSHSc RRT-NPS, Independence KY

The Use of the ASL 5000 to Validate Pediatric and Neonatal Normal and Disease State Lung Models—Amanda Dexter MS, Chicago IL

Laboratory Investigation of 4 Portable Ventilators Using Pediatric and Infant Lung Models—Amy Grant MSc CRT, Chicago IL

Evaluation of an Increase in Flow Versus Pressure Limit in a Time Cycled Pressure Limited Transport Ventilator—Karen M Muirhead RRT-NPS, Newark DE

Decreasing the Infant Mortality Rate in Guyana South America: the International Training of a NICU Nurse—Stacy L Hubbard RRT BSRT, Columbus OH

Survey of Protocol Use and Experience Among Children's Hospitals—Joyce Baker MBA RRT-NPS AE-C, Aurora CO

Evaluation of Implementation of Breath Stacking Therapy Into Clinical Practice in a Children's Hospital—Susan Allgeier RRT, Cincinnati OH

Non-Invasive Trending of CO_2 in Neonates Requiring Low-Flow Oxygen Therapy: Comparison of $EtCO_2$ to $PcCO_2$—David Kissin RRT-NPS ACCS, Portland ME

Effects of Pneumonia on Clinical Outcomes in Burned Children With Inhalation Injury—Ronald Mlcak PhD MBA RRT, Galveston TX

Open Forum #8
Aerosols/Drugs – Part 2
Sunday, November 17, 3:10 pm – 5:05 pm

Comparison of Aerosolized Albulterol and Colistin Delivery via Mechanical Ventilation—Hui-Ling Lin MSc RRT RN FAARC, Taoyuan Taiwan

Influence of Metered-Dose Inhaler Delivery Using Different Mechanical Ventilators—Hui-Ling Lin MSc RRT RN FAARC, Taoyuan Taiwan

Evaluation of Environmental Exposure of Amikacin Inhale (Pulmonary Drug Delivery System) With Amikacin Inhalation Solution—Richard D Branson MSc RRT FAARC, Cincinnati OH

Impact of a Novel Vibrating Mesh Nebulizer on Ventilator Function: a Bench Trial—Carl Hinkson MS FAARC, Seattle WA

Comparison of Aerosol Drug Delivery to a Naso-Pharyngeal Replica via Two Valved Holding Chambers (VHC) With Facemask via Next Generation Cascade Impactor—Robert M DiBlasi RRT-NPS FAARC, Seattle WA

Comparison of Aerosol Drug Delivery to a Naso-Pharyngeal Replica via Two Valved Holding Chambers (VHC) With Facemask via Breath Simulation—Robert M DiBlasi RRT-NPS FAARC, Seattle WA

Management of Severe Hyperkalemia With High Dose of Albuterol Sulfate Nebulized Over One Hour—Cherian K Paily MSc RRT, Chicago IL

Evaluation of a Bleed-in Nitric Oxide Delivery Method During an MRI—Chad E Weagraff RRT, Richmond Heights OH

Effect of Ventilator Mode on Aerosol Delivery—John W Newhart RRT, San Diego CA

The Effect of Nebulizer Placement in the Ventilator Circuit on Aerosol Delivery—John W Newhart RRT, San Diego CA

Effect of Nebulizer Placement on Aerosol Delivery Efficiency in a Mechanically Ventilated Infant Model—Justin Hotz RRT-NPS, Thousand Oaks CA

Open Forum #9
Education – Part 1
Sunday, November 17, 3:10 pm – 5:05 pm

The Interest of Utah Respiratory Therapists and Respiratory Therapy Students in Pursuing an Online Masters of Science in Respiratory Therapy Degree—Lisa M Trujillo RRT DHSc, Ogden UT

Perceptions of Cardiorespiratory Care Students on Their Clinical Preceptors—Tomasina Burrelli CRT, Mobile AL

A Needs Assessment of Tobacco Use Among LGBT (Lesbian Gay Bisexual Transgender) Young Adults in Columbus OH—Crystal L Dunlevy EdD, Columbus OH

Features of RT Textbooks That Facilitate Student Usage and Learning—Kelei Morris CRT, Mobile AL

Effects of an Interprofessional Simulation Activity to Improve Students' Perceptions of Other Healthcare Professions—Chase Poulsen PhD RRT-NPS, Roanoke VA

Peer Assisted Learning in Anatomy & Physiology II Laboratory: An Ultrahybrid Design Using Health Professions Students—George A Steer PhD RRT, Roanoke VA

The Impact of Increasing Entry-Level Respiratory Care Education Standards on the Socio-Economic Diversity of Potential Applicants—Xuan Nguyen RRT MSc, Minnetonka MN

Interprofessional Education: the Attitudes of Respiratory Care Nursing and Clinical Laboratory Sciences Students to Shared Learning at Prince Sultan Military College of Health Sciences in Dhahran Saudi Arabia—Ibrahim A Albalawi BSRT RRT, Dhahran Saudi Arabia

High-Fidelity and Low-Fidelity Simulation: Does Fidelity Effect the Self-Efficacy and Learning Outcomes of Associate Degree-Seeking Respiratory Care and Nursing Students?—Luster Fowler PhD RRT MBA, Indianapolis IN

A State-Wide Survey of Respiratory Therapist Support for Baccalaureate Entry-Level Educational Standards—Daniel J Grady RRT MEd FAARC, Asheville NC

Improving Discharge Efficiency and Effectiveness for Asthma Patients Through Earlier Initiation of Discharge Education—Mary K Walsh RRT-NPS AE-C, Aurora CO

Effectiveness of Dry Powder Inhaler (DPI) Patient Educational Handouts on Correcting Device Use in Chronic Obstructive Pulmonary Disease (COPD) Patient Population and Their Ability to Generate Adequate Peak Inspiratory Flow Rates (PIFR) to Properly Use the Device—Archana B Patel MScRC RRT-NPS, Chicago IL

Utilization of a Lecture Series to Enhance Departmental Education Initiatives—Matthew Trojanowski MSc RRT, Abingdon MD

Needs Assessment for Tracheostomy Curricular Resources—Cory E Martin EdS, Gallatin TN

Open Forum #10
Ventilation/Ventilators – Part 3
Monday, November 18, 9:30 am – 11:25 am

A Comparison of Vision vs. V60 NIV Outcomes Data for COPD Patients: One Hospital's Experience—Diane Brenessel RRT AE-C, Honolulu HI

Tracking Trajectory and Triggering Intensive Care Unit Ventilator Data—Brian K Walsh RRT-NPS RPFT MBA FAARC, Boston MA

APRV Utilization and Clinical Management Strategies: a Survey of Clinical Practice—Andrew G Miller RRT, Durham NC

Comparison of Predicted Anatomic Deadspace and Measured Deadspace During Mechanical Ventilation Using the Dräger Evita Infinity V500—Akio Kinoshita, Urayasu Japan

Performance of the TXP in a Hypobaric Environment—Dario Rodriquez Jr MSc RRT FAARC, Cincinnati OH

Application of ECLS & Lung Recruitment via HFPV & Bronchoscopy—Rita Giordano RRT-NPS, Collingswood NJ

Evaluation of the Vortran Automatic Resuscitator and the Vortran Airway Pressure Monitor in the MRI Environment—Dave Swift RRT, Ottawa ON Canada

Adaptive Support Ventilation Reduces the Number of Ventilator Changes From Initiation to Liberation—Kenneth Miller RRT-NPS MEd AE-C, Bath PA

The Exploration of Planned Extubation of a Southern Medical Center in Taiwan—Li-Ting Kao RRT, Tainan Taiwan

Acute Lung Injury Caused by High Tidal Volume: the Experience From Rat Animal Model—Chin-Ming Chen MD, Tainan Taiwan

Comparison of Pressure Support and Proportional Assist Ventilation Plus for Weaning From Mechanical Ventilation in Critically Ill Patients—Sanjay Sasikumar MSc, Manipal Karnataka India

Efficacy of Recruitment Manoeuvre With or Without Antiderecruitment Strategy in ARDS Patients: a Prospective Study—Heera Lal Mahto MScRT, Manipal Karnataka India

A Bench Study Comparison of Liter Flows and Targeted Positive End Expiratory Pressure Levels When Utilizing a Flow-Inflating Resuscitation Bag—Abby Motz MSc RRT-NPS, Cincinnati OH

Rate of Pressure Ulcer Development Associated With Non-Invasive Ventilation: Opportunity for Improvement—Lisa M Cracchiolo RRT AE-C, St. Louis MO

Open Forum #11
Management – Part 1
Monday, November 18, 9:30 am – 11:25 am

Discharge Time Out for Care Coordination—Kathy Werner, Warrensville Heights OH

Not My Job? Not Anymore. How One Healthcare System's Respiratory Care Department Contributed to Improving Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Scores for the Pain Management Domain—Jimmie Hemmingway RRT, Carrollton TX

A Nurse-Led Caring Program Reduce for COPD Patients With HF Symptoms in Hong Kong—Pui Fan Chan RN, Hong Kong

An Early Ambulation Time & Motion Study in High Acuity Patients: Pre During and Post Time Variables: 1 of 5—Kimberly J Bennion MSc RRT CHC, Salt Lake City UT

An Early Ambulation (EA) Time and Motion Study in High Acuity Patients: Patient Demographics Lines/Tubing Equipment/Supplies and Time Requirements: 4 of 5—Scott Daniel RRT, Salt Lake City UT

An Early Ambulation (EA) Time and Motion Study in High Acuity Patients: Patient Demographics EA Area Score Staff Requirements and Time Variables: 5 of 5—Scott Daniel RRT, Salt Lake City UT

A State-Wide Survey of Management Support for Increasing Respiratory Therapist Educational Standards—Daniel J Grady RRT MEd FAARC, Asheville NC

Validation of Relative Value Unit Metrics for an 800 Bed Respiratory Care Department—Daniel J Grady RRT MEd FAARC, Asheville NC

Respiratory Care Service (RCS) Demographic Survey of 18 Corporate Acute Care Hospitals in Utah and Idaho Studying RCS Gaps for Strategic Planning: 4 of 4—Steve Abplanalp RRT MBA, Salt Lake City UT

The PDCA Cycle: an Optimal Quality Improvement (QI) Tool in Respiratory Care: the UAE Experience—Noel S Tiburcio PhD RRT-NPS RMT Al Ain Abu Dhabi United Arab Emirates

Creating a Tracking System for Clinical Ladder Competencies and Activities—Jan E Phillips-Clar RRT FAARC, La Jolla CA

A Comparison of Acuity With the Utilization of Selected in-Patient Respiratory Care Resources Over 7 Days for Pediatric Patients Requiring Mechanical Ventilation—Ronald Urban RRT-NPS CPFT, Worth IL

Open Forum #12
Asthma and Pulmonary Disease
Monday, November 18, 9:30 am – 11:25 am

Effects of a Pneumonia Pathway on Hospital Readmisson Rates—Melissa Ash RRT-ACCS AE-C, Downingtown PA

Effects of Alcohol Wipe and Foam Disinfectant on Microbes That Harbor on Stethoscopes—Rayan Siraj CRT, Mobile AL

Parental Knowledge Improved After Open Airways for Schools Program—Tim Op't Holt EdD RRT AE-C FAARC, Mobile AL

Improved Asthma Outcomes in Elementary School Students Following the Open Airways for Schools Program—Tim Op't Holt EdD RRT AE-C FAARC, Mobile AL

Chronic Obstructive Pulmonary Disease Education and Training by Respiratory Care Practitioners Decreases Healthcare Utilization and Improves Patient Outcomes—Krystal M Craddock RRT-NPS, Elk Grove CA

Effectiveness of Asthma Education in Grades K-6—Sarah Navarra RRT BSRC, Youngstown OH

Nocturnal Desaturation as an Indicative Feature of Stable COPD Patients a Prospective Open-Label Observational Study—Vera Baturova, Moscow Russia

Effectiveness of a Chronic Pulmonary Disease Clinic on Emergency Department and Inpatient Admission Rates—Robert Drumm RRT-NPS AE-C, Colorado Springs CO

A Nurse-Led COPD Program in Hong Kong—Shu Wah Ng MSc RN, Hong Kong

Use of a Lung Simulator to Evaluate the Performance Characteristics of Oscillatory Positive Pressure Devices—Diane K Dunn RRT, Akron OH

The Use of the Asthma Blues Educational Program and Device Teaching to Improve Asthma Knowledge and Self-Management Skills—Kaynat Saiyed MSc RRT, Chicago IL

The Effect of Humidity on the Biophysical Properties of Cystic Fibrosis Sputum—Jennifer L Bradley, Richmond VA

Are We Actively Looking for the Comorbidities Commonly Associated With COPD as Recommended by the GOLD Guidelines?—Navitha Ramesh MD, Rochester NY

A siRNA Molecular Beacon Theranostic for Latent Tuberculosis—Jonathan B Waugh PhD RRT RPFT FAARC Birmingham AL

Additive Anti-Inflammatory Effect of Roflumilast With Long Acting Beta-Agonists (LABA) in the Treatment of Moderate to Severe Chronic Obstructive Pulmonary Disease: A Meta-Analysis—Rachell Ann Cruz Siute MD, Quezon City Philippines

At What Costs Do Children With Asthma Benefit From Educational Interventions? A Meta-Analysis—Diana Dayan Crispin Cruz MSc PT, Bogota Colombia

The Effectiveness of a Structured Education Pulmonary Rehabilitation Programme for Improving the Health Status of People With Moderate and Severe Chronic Obstructive Pulmonary Disease in Primary Care: the Prince Cluster Randomised Trial—Kathy Murphy PhD MSc RN, Galway Ireland

Evaluation of Initial Modified Pulmonary Index Score (MPIS) to Predict Hospital Admission for Pediatric Asthma Exacerbations—Andrew G Miller RRT, Durham NC

Implementation of a Standing Order Set Improves Time to Treatment in Pediatric Patients With Severe Asthma Exacerbations—Andrew G Miller RRT, Durham NC

Open Forum #13
Neonatal/Pediatrics – Part 2
Monday, November 18, 12:30 pm – 2:25 pm

Gender Differences in Pediatric Burn Patients With Inhalation Injury—Ronald Mlcak PhD MBA RRT, Galveston TX

Achieving Effective Mask Fit in Pediatric Patients—Cynthia C White MSc RRT-NPS FAARC, Cincinatti OH

The Process of Introducing Cultural Change Within a Level III NICU—Shari Ann Toomey MBA, Hardy VA

Carbon Dioxide Elimination Based Resting Energy Expenditure and Metabolic State Diagnosis in the Pediatric Intensive Care Unit: a Multi-Center Validation—Craig D Smallwood RRT-NPS, Boston MA

Volumetric Carbon Dioxide Elimination in Mechanically Ventilated Children and Adults—Craig D Smallwood RRT-NPS, Boston MA

Continuous Infusion of Tissue Plasminogen Activator During Veno-Arterial Extracorporeal Life Support for Treatment of Massive Pulmonary Embolus—Susan A Roark RRT-NPS BSRT, Atlanta GA

Retrospective Comparison of High Frequency Percussive Ventilation (HFPV) Using the VDR-4 With Conventional Ventilation Using the Dräger XLT in Pediatric Patients With Respiratory Syncytial Virus—Jeff L Heltborg RRT, Portland OR

Effects of Frequency (F) and Tidal Volume (V_T) on CO_2 Elimination (VCO_2) During High Frequency Oscillatory Ventilation (HFOV) in a Healthy Neonatal Piglet Model—Robert Gillette MD MA, San Antonio TX

Comparison of High Frequency Oscillatory Ventilation (HFOV) to High Frequency Percussive Ventilation (HFPV) in a Neonatal Piglet Model of Meconium Aspiration Syndrome (MAS)—Robert Gillette MD MA, San Antonio TX

Neonatal Respiratory Rounds Can Improve Staff Satisfaction and Timeliness of Interventions—Irene C Genet RRT, Akron OH

Implementation of a Congenital Heart Disease Screening Protocol Using Pulse Oximetry—Stephanie Vickrey RRT, Indianapolis IN

Evaluation of the Modified Insure Method on Intubated Days and Reintubation Rates—Bonnie Powell RRT BSRC, Youngstown OH

Use of High Flow Nasal Cannula Is Associated With Longer Length of Stay in an All Referral NICU—Kimberly Farney RRT-NPS, Columbus OH

The Effect of Flow Driven Nebulizers on Triggering During Ventilation With the Philips Respironics Trilogy Ventilator—Dave N Crotwell RRT-NPS FAARC, Seattle WA

Non-Invasive Bilevel Positive Airway Pressure (BiPAP) Ventilation in a Young Infant—Pavanasam Ramesh MD FRCPCH, Stoke on Trent United Kingdom

Respiratory Benefits of T-Piece Resuscitator and Early CPAP in the Delivery Room—Paula J Lussier RRT-NPS, Glenview IL

Development and Implementation of a Newborn Congenital Heart Disease Screening Program—Tamra L Kelly RRT-NPS, Roseville CA

Comparison of Two Volume Targeted Neonatal Algorithms When Switching Between Triggered and Non-Triggered Breaths—Kathleen Bonis RRT, Newark DE

Open Forum #14
Diagnostics, Sleep, and Pulmonary Rehab
Monday, November 18, 12:30 pm – 2:25 pm

Compliance With Recommended Non-Pharmacological Management in COPD Patients—Navitha Ramesh MD, Rochester NY

Non-Bronchoscopic Bronchial Alveolar Lavage: A Safe and Cost Effective Procedure for Early Detection and Treatment of Ventilator Associated Pneumonia (VAP) as Well as Other Pulmonary Infections. A Seven Year 5000 Procedures Study—Cherian K Paily MSc, Chicago IL

Diagnostic Bronchoscopy in Immunocompromised Patients—Ana Cristina Vallejo MSc RRT, Chicago IL

Evaluation of Screening Spirometry in Military Personnel—Georgette Haislip RRT CPFT, San Antonio TX

Comparison of FIO_2 in Three High Altitude Simulation Test Interfaces—Sasha Cook RRT, Springfield MO

Comparison of Sampler Filling Times Among Selected Arterial Blood Samplers—Christine McMillen RRT BSRT, Loveland OH

Comparison of Two Devices on the Measurement of Nasal Nitric Oxide—Carl D Mottram RRT RPFT FAARC, Rochester MN

Pulmonary Rehab Participation and Its Effect on Patient Outcomes and 30 Day Hospital Readmissions—Melinda A Hester RRT, Papillion NE

Comparison of Supervised Ground and Treadmill Walk Training in Patients With Stable Chronic Obstructive Pulmonary Disease Patients—Baskaran Chandrasekaran MSc, Coimbatore India

Home Mechanical Ventilation in Patients With Non-Neuromuscular Causes of Ventilatory Impairment—Donghyun Kim PhD, Seoul Republic of Korea

Pulmonary Function of Myotonic Dystrophy With Chronic Ventilatory Failure—DongHyun Kim MD PhD, Seoul Republic of Korea

Results of an Outpatient Pulmonary Rehabilitation Program on Exercise Tolerance and Health-Related Quality of Life—Kimberly Clark EdD RRT-NPS, Charlotte NC

Open Forum #15
Monitoring/Equipment
Monday, November 18th, 12:30 pm – 2:25 pm

Phase II of a Multi-Phase Interdisciplinary Study Aimed at Reducing Endotracheal Tube Device-Related Hospital Acquired Pressure Ulcers in CCU Patients—Charez Norris RRT, Phoenix AZ

Designing a New Nasal CPAP Headgear—Vrati Bagia MSc RRT, Skokie IL

Comparison of iPad/iPhone SpO_2 Devices to a Traditional Pulse Oximeter—Kristie McCoy CRT BSRT, Springfield MO

Comparison of V_D/V_T and Mean Expired CO_2 Measurements Using the Care Fusion Avea Ventilator vs the Respironics NICO 2 Monitor—Mark Siobal RRT FAARC, San Francisco CA

Comparison of Mean Expired CO_2 Measurements Calculated Using the Hamilton G5 Ventilator Volumetric Capnography vs the Respironics NICO 2 Monitor—Mark Siobal RRT FAARC, San Francisco CA

Are We Suctioning the Life Out of Our Ventilated Patients?—Denise Acevedo CRT, San Antonio TX

Controlling ETT Cuff Pressure During Mechanical Ventilation With Continuous Cuff Regulation Devices—William R Howard RRT MBA BSRT, Boston MA

Clinical Evaluation of End Tidal CO_2 Measurement During Noninvasive Ventilation—Joseph Orr PhD, Salt Lake City UT

Successful Utilization of Telemedicine to Provide Specialty Care to Rural Locations—Joyce Baker RRT-NPS AE-C MBA, Aurora CO

The Effects of In-Line Intrapulmonary Percussive Ventilation on Delivered Inhaled Nitric Oxide During Mechanical Ventilation—Nancy Johnson RRT-NPS, Medina OH

The Effects of Positioning an In-Line Intrapulmonary Percussive Ventilation Circuit on Measured Mean Airway Pressure During Mechanical Ventilation—Nancy Johnson RRT-NPS, Medina OH

The Effects of Circuit Selection on Flow and Tidal Volume Using the RAM Cannula and the Trilogy Ventilator—Nancy Johnson RRT-NPS, Medina OH

Impact of Sudden Changes in Oxygenation on the Measurement of Non-Invasive Hemoglobin (SpHgb)—Dina Gomaa RRT, Cincinnati OH

Trend Setters: Optimizing Noninvasive Ventilation in Patients With ALS—Leo Wittnebel MSc PhD RRT, San Antonio TX

Continuous Pulse Oximetry Monitoring With Clinician Notification Is Associated With Lower Patient Mortality in Post-Surgical/Medical Patients—Jon Carlson HCA RRT, Buffalo NY

Performance Comparison of Oxygen Delivery Devices in Patients With Varying Inspiratory Demands—Gwendolyn Hinten, Boise ID

Tracheal Intracuff Monitoring: Balance Between Leak and Overinflation—Leslie M Gonzalez RRT, San Antonio TX

Are We Consistently Doing Something Wrong When Setting Ventilator Alarms? A Comparison Between Practices in Two Countries—Andrew Tate CRT, San Antonio TX

Ventilator Alarms: the Sound of Silence Around the Clock—Andrew Tate CRT, San Antonio TX

A Survey of Public Perception on Pulse Oximeter Applications Designed for iPhone/iPads—Rebbecca Loveland CRT, Springfield MO

Open Forum #16
Education – Part 2
Monday, November 18, 3:15 pm – 5:10 pm

An Interprofessional Simulation Activity to Provide Early Mobilization of the Ventilated Patient in an ICU Setting—Jose D Rojas PhD RRT, Galveston TX

Clinical Preceptor Training Program to Measure and Evaluate Inter-Rater Reliability—Jose D Rojas PhD RRT, Galveston TX

"I Can Do It!" Improving Staff Confidence Through Simulated Learning—Ben Downs RRT-NPS, Little Rock AR

Use of Human Patient Simulation to Improve Critical Thinking and Performance on the CSE—Tammy Babcock MHA RRT-NPS, Galveston TX

Introduction of Computerized Tomography to Respiratory Therapy Students in a Basic Patient Assessment Course: A Case Study—Robert B Murray MSc RRT, Atlanta GA

Credentialing Success in Respiratory Therapy Education: Revisiting Bourdieu's Concepts of Field and Capital—Karen L Shaw PhD RRT-NPS RPFT AE-C, Las Vegas NV

Evaluation of Interprofessional Learning Through a Ventilator Bundle Patient Case Simulation—Tonya Cook MEd RRT, Little Rock AR

Improving Inservice Attendance and Staff Satisfaction—Elsie Collado-Koman RRT MBA-HCM, San Diego CA

Inter-Professional Multi-Patient Clinical Simulation by Health Sciences Students—Georgianna Sergakis PhD, Columbus OH

The Relationship Between Respiratory Care Educational Program Director Leadership Style and CRT vs. RRT Credentialing Success Program Attrition and Job Placement—Jo Bartel MSc RRT-NPS, Oak Park IL

How End of Life Ventilator Management Protocols Can Enhance the Opportunity for Potential Organ Donation—Tammy L Kundinger RRT, Madison WI

Pulmonary Embolism or Primary Pulmonary Artery Intimal Sarcoma: A Diagnostic Challenge—Navitha Ramesh MD, Rochester NY

2+2 Asthma Education Crew—Donna Gardner MSc RRT FAARC, San Antonio TX

Redevelopment and Reimplementation of the Post-Op Heart Surgery Rapid Wean Protocol—Theodore S Vallejos RRT, LA Jolla CA

Open Forum #17
O_2 Therapy and Home Care
Monday, November 18, 3:15 pm – 5:10 pm

Comprehensive Health Management Program Drives Down Late Stage COPD Hospitalizations and Readmissions—Zach Gantt RRT, Nashville TN

Non-Invasive Ventilation: Reducing Re-Hospitalization Through a Clinical Driven Pathway—Debra A Schuessler CRT, Wichita KS

Depression Screening and Transition of Care for Patients Who Have Been Hospitalized for a COPD Exacerbation—Brian W Carlin MD FAARC, Pittsburgh PA

COPD Assessment Test (CAT) Scores and Acute Exacerbation History in COPD Patients Enrolled in a Transition of Care Program Following Hospital Discharge From an Exacerbation—Brian W Carlin MD FAARC, Pittsburgh PA

Comparative Study of Circuit Pressures and CPAP Effect for Four High Flow Nasal Cannula Devices—Gary R Lowe MEd RRT-NPS RPFT, Little Rock AR

Fraction of Delivered Oxygen Titration by Adjustments in Flow on Four Different Manual Resuscitators—Karen D Laroché RRT, Seattle WA

Accuracy and Consistency of Setting Oxygen Flow Meters by Respiratory Therapists in a Healthcare Facility—Suzanne Godbold RRT AE-C BSRT, Little Rock AR

Performance Evaluation of Portable Oxygen Concentrators in a Simulated Pediatric Model—Kristianna S Turley RN, St Louis MO

Humidification Performance of HIFH Flow Nasal Cannula Therapy: A Bench Study—Yusuke Chikata RRT MSc, Tokushima Japan

Comparison of Two Humidifier Systems for the Delivery of Heated High-Flow Nasal Cannula for Infants and Pediatrics—Darren Bullock RRT-NPS, Aurora CO

Temperature Comparisons in Three Heated High Flow Nasal Cannulas—Jim Hynson CRT, Little Rock AR

Observational Assessment of Heated Humidified High Flow Nasal Cannula vs. Standard Nasal Cannula in Post Extubated Patients—Peggy Watts RRT MSc, St. Louis MO

Bench Study of the Oxymask at 15 L/Min Using an Oropharynx Catheter—Aaron E Light RRT DHSc, Springfield MO

Determining the Effect on FIO_2 of Combining the Flows From Two Oxygen Concentrators—William French MA RRT, Kirtland OH

Determining the Effect on Flowrate of Combining the Flows From Two Oxygen Concentrators—William French MA RRT, Kirtland OH

Comparison of FIO_2 in Three Different Non-Rebreathing Masks—Nicole Yannizzi RRT, Springfield MO

The Effect of Disease State on Low Flow Oxygen Delivery by Nasal Cannula: Constant Flow vs Portable Oxygen Concentrator—Steven Zhou, Cleveland OH

Disease State Lowers FIO_2 for Continuous Flow Nasal Cannula But Not for Pulse Dose Portable Oxygen Concentrator—Steven Zhou, Cleveland OH

Comparison of Oxygen Delivery Performance in Three Non-Rebreathing Masks Using a Modified Version of the Alveolar Air Equation—Joseph Baclian RRT, Springfield MO

Does the Distance or Flow Affect Gas Mixing? A Bench Test of a Gas Manifold—Keith R Hirst MSc RRT-NPS, Chicago IL

High Flow Oxygen Devices and Noise Level Safety—Mary Ann Couture MSc RRT-ACCS, South Windsor CT

Open Forum #18
Management – Part 2
Tuesday, November 19, 9:00 am – 10:55 am

Breaking the 30% Survival Rate Window: Impact of the 2010 American Heart Association Guidelines on In-Hospital Cardiac Arrest Survival With Favorable Neurological Function—Ken Thigpen RRT FAARC, Jackson MS

Utilization of RT Services in Academic Medical Center Adult Emergency Departments—Matthew Trojanowski MSc RRT, Abingdon MD

Respiratory Therapy Staffing and Patient Safety in Ohio—Sarah M Varekojis PhD RRT Columbus OH

The Prevalence of Workplace Bullying Among Respiratory Therapists in Ohio—Sarah M Varekojis PhD RRT, Columbus OH

Overcoming Barriers to Respiratory Therapist Engagement in Implementation of the ABCDE Bundle—Meg Blankinship RRT BSRC, Sacramento CA

High Plateau Pressure - a Predictor of High Mortality and Morbidity in Mechanically Ventilated Patients—Cherian K Paily MSc RRT, Chicago IL

Protocol Based Respiratory Care Services: Not Necessarily the Expected Results—Russell E Graham RRT CPFT BSRC, Houston TX

The Reduction of Nitric Oxide Utilization in an Adult Population: an Example of Collaboration Producing Cost Savings—Thomas M Schaltenbrand RRT MBA, St. Louis MO

Management vs. Staff Hiring Committee: Does it Have an Effect on Retention and Staff Morale in an Academic Center—Bhavisha Patel MBA RRT, Houston TX

Evaluation of a Staff Hiring Committee: One Year Post Implementation—Bhavisha Patel MBA RRT, Houston TX

The Impact of Transitioning From a Weighted Time Standard System to Determine FTE Requirements—Richard M Ford RRT FAARC, San Diego CA

Patient Handover Protocol From Intensive Care Unit Effect on Intensive Care Unit Readmission Rate and Predictability of Clinical Variables in Intensive Care Unit Readmitted Patients—John Frattini MD, Chesterfield MO

Open Forum #19
Neonatal/Pediatrics – Part 3
Tuesday, November 19, 9:00 am – 10:55 am

Axillary Temperature in Infants Undergoing Chest CT and Pulmonary Function Testing—Courtney R Cira RRT CPFT MSc, Columbus OH

Endotracheal Tube Diameter Is Not a Risk Factor for Extubation Failure in Premature Infants—Ryan M Sharkey RRT-NPS BSRT, Charlottesville VA

Respiratory Therapists Can Impact the Intensive Care Nursery by Practicing Developmental Care Through Sound Reduction—Renee Bartle RRT, Durham NC

Monitoring Changes in Tidal Volume Due to Changes in Lung Mechanics on the VDR-4: A Bench Model—Amanda J Lutz RRT MScRC, Sussex WI

Assessment of Safety of Tracheal Intubation Practice in the Pediatric ICU and Development of a Quality Improvement Bundle to Reduce Tracheal Intubation Associated Events—Natalie Napolitano MPH RRT-NPS FAARC, Philadelphia PA

Can an Airway Bundle Checklist Improve the Safety of Tracheal Intubation in Pediatric Intensive Care Unit?—Natalie Napolitano MPH RRT-NPS FAARC, Philadelphia PA

Can a Nebulizer Be Used to Deliver High Frequency High Flow Nasal Cannula (HFNC) Ventilation?—Mitchell Goldstein MD, Loma Linda CA

Inhaled Nitric Oxide in ECLS Sweep Gas to Inhibit Platelet Activation—Christine Bichai RRT-NPS, Seattle WA

Combined Iloprost/Inhaled Nitric Oxide Drug Delivery During Infant Mechanical Ventilation: Effect of Sampling Port Type and Nebulizer Location—Robert M DiBlasi RRT-NPS FAARC, Seattle WA

Extubation Readiness Test Delay in the NICU—Toni Brooks RRT, Boston MA

Continuous High Frequency Oscillation Therapy in Mechanically Ventilated Patients Greater Than Two Years of Age in the Pediatric Intensive Care Unit—Stephen R Morgan RRT BSRT, Apex NC

Interdisciplinary Process Improvement to Reduce PICU Admission and Urgent Interventions Using High Flow Nasal Cannula on an Acute Care Unit in Infants With Bronchiolitis—Christina Pano RRT-NPS, Milwaukee WI

In-Vitro Evaluation of the Pressure Volume Characteristics of a High Fidelity Simulation Manikin for Neonatal Resuscitation Training—Joseph Ciarlo RRT-NPS, Newark DE

Divent Decreasing Invasive Ventilator Time in Premature Neonates—Lisa Pappas RRT-NPS BSRT, Salt Lake City UT

The Inconsistency of Providing Ventilation With a T-Piece Style Resuscitator: a Bench Model Study—Kenneth Miller RRT-NPS AE-C MEd, Bath PA

Evaluation of a Quantified Approach to Optimize Ventilator Support in Chronically Ventilated Pediatric Patients—Carolyn McHendry RRT-NPS BSRT, Cincinnati OH

Transition of Respiratory Technology-Dependent Patients From Pediatric to Adult Pulmonology—Denise Willis RRT-NPS, Little Rock AR

Successful Tracheal Decannulation in a Child With CCHS—Denise Willis RRT-NPS, Little Rock AR

AARC Congress 2013

Monday, Nov 18

29th Phil Kittredge Memorial Lecture

8:30 am – 9:25 am

This lecture provides a critical and incisive evaluation of an aspect of clinical respiratory care of emerging or increasing importance.

Electronic Distractions of the RT and Their Impact on Patient Safety

Peter J Papadakos MD FCCM FAARC, Rochester NY

Content Category: Patient Safety

With the explosion of Electronic Medical Records (EMRs), health care facilities have become computer-rich environments and have forever changed the way in which we interact with patients. Societal changes in interpersonal communications have also led to individual health care practitioners being tied to their smart devices. The ECRI Institute (a safety and quality research entity) has identified both alarm fatigue and caregiver distractions from smartphones and other mobile devices as two of the top ten health technology hazards for 2013. The Joint Commission has also just recently announced that "Clinical Alarm Safety" will be added as a National Patient Safety Goal in 2014. To maximize patient safety, it is critical to educate current and future generations of RTs in dealing with technology and in developing skills in electronic etiquette and the interface between the practitioner and device. Only through personal evolution and education can we continue to provide patient-centered care and be advocates for our patients.

This presentation will address the science of electronic distractions and the psychology of why caregivers are so easily distracted. The foundation of the presentation will be built around the science, literature, and research of electronic distractions with outcomes on how distractions impact patient safety.

Adult Acute Care Section Membership Meeting

9:30 am – 10:00 am

Keith D Lamb RRT-ACCS/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Open Forums #10, # 11 and #12

9:30 am – 11:25 am

Supported by an unrestricted educational grant from

monaghan™

Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion and interaction among investigators and observers. Posters are used to expand the information presented. The titles and authors of all abstracts will be posted by Aug 31.

Surface to Air Transport Section Membership Meeting

9:50 am – 10:20 am

Billy L Hutchison RRT-NPS/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Move to Improve Lung Health!

10:30 am – 11:00 am

Move to Improve Lung Health!

Patti DeJuilio MS RRT-NPS, Winfield IL

Content Category: Management

This presentation will provide a best practice overview of mobility of the critically ill patient. A multidisciplinary team within Central DuPage Hospital was formed including APNs, RNs, pharmacists, physical therapists, RTs, and physicians to implement an ICU mobility protocol. The project expanded to all inpatient units. Ambulation in both ICUs increased from 20% mobilized in less than 48 hours to 60% in less than 48 hours currently. Not only was respiratory therapy an integral part of the process, one RT FTE was added. The presenter will share step-by-step instructions on how to establish a similar program in your hospital.

Patti DeJuilio MS RRT-NPS

Monday, Nov 18

Gas Exchange Monitoring in Critically Ill Pediatric Patients

10:30 am – 11:00 am

Gas Exchange Monitoring in Critically Ill Pediatric Patients

Craig Smallwood RRT, Boston MA

Content Category: Neonatal/Pediatric

Gas exchange monitoring may be utilized to detect clinical changes in a patient's condition, support ventilator optimization and facilitate optimal nutrient intake during critical illness. This talk will include the physiologic rationale for gas exchange and metabolic monitoring, an overview of accepted methods as well as future directions and emerging techniques.

Critical Care Medical Transport: Evolution of a Profession

10:30 am – 11:35 am

10:30 am – 11:00 am

Are Transport RTs Facing Extinction?

Steven E Sittig RRT-NPS FAARC, Rochester MN

Content Category: Management

With the upcoming changes in health care reimbursement, how can department managers support their transport team when consultant firms say RTs are not needed on interfacility transport? This lecture will cover the evolving area of critical care medical transport and how the AARC is there to help support transport RTs. This lecture will focus on evidence-based literature as well as textbooks and other national organizations that support the need for the transport RT in high-level critical care transport.

11:05 am – 11:35 am

Critical Care Transport: An RT Perspective

Steven E Sittig RRT-NPS FAARC

Content Category: Clinical Practice

Critical Care Medical Transport has evolved significantly in the past few decades. The involvement of respiratory therapists in this specialty area, especially in neonatal/pediatrics, has been an integral component in providing high-level critical care in transport for decades. Many critical patients are now potentially being transported on advanced modes of ventilation such as APRV. How do managers and educators prepare and support the role of RTs in interfaculty critical care transport? This lecture will help develop a framework to recruit outstanding students in RT programs as well as outstanding clinical staff to enter this dynamic and rewarding area of critical care.

Student Metamorphosis: Transitioning from Student to Professional

10:30 am – 11:35 am

10:30 am – 11:00 am

Becoming a Professional

Toni L Rodriguez EdD RRT FAARC, Phoenix AZ

Content Category: Education

This presentation will provide an overview of the profession of respiratory care to include its evolution, role, and value. Emphasis will be placed on the characteristics and traits of a professional and the critical importance of being involved and maintaining professional membership.

11:05 am – 11:35 am

Getting Credentialed: Success on the Written Exams

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

Content Category: Education

The presentation will address the factors that make for success in the examination process. It will cover preparatory issues, what you will experience onsite, as well as test-taking strategies and techniques. Emphasis will be placed on the written component of the NBRC credentialing process.

Agencies Update

10:30 am – 11:35 am

Agencies Update

George W Gaebler MSEd RRT FAARC – AARC President

Michael T Amato MBA – ARCF Chair

Kathy J Rye EdD RRT FAARC – CoARC President

Kerry E George MEd RRT FAARC – NBRC President

The leadership of the AARC, ARCF, CoARC and NBRC will present the most updated information affecting the profession, research, accreditation, and credentialing. A must-attend session in your agenda!


Craig Smallwood RRT

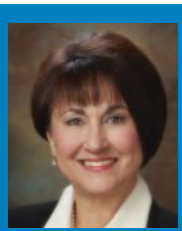

Steven E Sittig RRT-NPS FAARC


Toni L Rodriguez EdD RRT FAARC


Bill Galvin MSEd RRT CPFT AE-C FAARC


George W Gaebler MSEd RRT FAARC


Michael T Amato MBA


Kathy J Rye EdD RRT FAARC


Kerry E George MEd RRT FAARC

Sleep Disorder Breathing: It's Not Just Adults

10:30 am – 11:35 am

10:30 am – 11:00 am

SDB Programs for the Pediatric Population

Kathleen M Deakins MSHA RRT-NPS FAARC, Cleveland OH

Content Category: Sleep Medicine

Sleep disorder breathing (SDB) is increasing in prevalence across a variety of patient populations and often goes unnoticed in the pediatric population. This lecture will describe a screening and mask-fitting SDB program within a children's hospital. Areas that will be covered are desaturation/hypercarbia screening, setting titration, and mask-fitting components.

11:05 am – 11:35 am

Challenges in SBD for the Pediatric Population

Amber Galer RRT, Salt Lake City UT

Content Category: Sleep Medicine

The shift of adult patients from "traditional" sleep labs to a more economical model is occurring at a rapid pace. Due to the complex medical conditions of children, this model is not portable to the pediatric population. This lecture will describe the challenges of SDB studies in the medically complex and fragile pediatric patient.

Improving RT and Physician Relations

10:30 am – 12:10 pm

10:30 am – 11:00 am

Engaging the Anesthesiologist and Respiratory Therapist to Work as a Team

Lori D Conklin MD, Charlottesville VA

Content Category: Clinical Practice

This presentation will discuss how respiratory therapists can maximize their role to the greatest potential. The presenter will share how RTs can better foster professional relationships with the anesthesiologist. Upon completion of this session, participants will be able to develop and enhance communication pathways with the anesthesiologist with the end goal of optimizing patient care of the perioperative patient.

11:05 am – 11:35 am

Medical Direction of Respiratory Professionals

Thomas M Fuhrman MD MMSC FCCP FCCM RRT, Miami FL

Content Category: Clinical Practice

This presentation will describe methods that are best suited to foster the medical direction of trainees, students, and new hires. The presenter will share how to recognize the value of appropriate medical direction and the role of the RT in the critical care setting. Upon completion of this session, participants will be able to discuss role expansion of the RT in the advance practice model.

11:40 am – 12:10 pm

Value-Based Respiratory Outcomes

Peter J Papadakos MD FCCM FAARC, Rochester NY

Content Category: Clinical Practice

This presentation will describe how to integrate the skills of a respiratory therapist into a rapid response team. The presenter will share the application of locally developed care protocols into their regular practice. Upon completion of this session, participants will be able to illustrate how respiratory therapists can improve patient care outcomes and meet AHRQ indicators.

Preventing ICU Readmissions

10:30 am – 12:10 pm

10:30 am – 11:00 am

Why Patients Readmitted to the ICU: What Effect Does ICU Readmission Have on Outcomes?

Robert F Kopel MD FACP FCCP, Newport Beach CA

Content Category: Clinical Practice

When patients require readmission to an ICU, they experience higher mortality, longer length of stay, and incur increased medical costs. From a quality perspective, readmissions may represent inappropriate premature discharge from an ICU. In this presentation, the associated causes and outcomes from ICU readmission will be discussed. The magnitude of this problem will be described. Possible solutions and approaches to preventing ICU readmission will be developed. Description of one institution's approach and how this affected mortality will be highlighted.

11:05 am – 11:35 am

Prevention of ICU Readmissions: Development of a Readmission Risk Assessment Checklist

Charlie G Durbin Jr MD FAARC, Charlottesville VA

Content Category: Clinical Practice

The AARC recently developed an "ICU Readmission" checklist to help clinicians identify which patients might be at high risk for ICU readmission. How the checklist was developed, its possible uses and limitations will be discussed in this presentation.

11:40 am – 12:10 pm

What Should Be Done with the "High Risk" Patient at ICU Discharge?

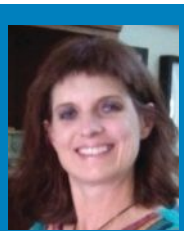
Charlie G Durbin Jr MD FAARC

Content Category: Clinical Practice

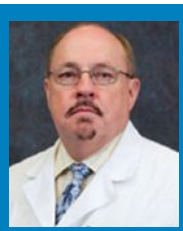
Once an individual patient is identified to be at high risk of returning to an ICU, this obligates the hospital to take efforts in preventing a poor patient outcome. The ways this can be achieved including: delay of discharge, provision of step-down unit care, using remote monitoring systems, and the role of MET teams, will be discussed in this presentation.

Kathleen M Deakins MSHA RRT-NPS FAARC

Amber Galer RRT



Lori D Conklin MD



Thomas M Fuhrman MD MMSC FCCP FCCM RRT

Peter J Papadakos MD FCCM FAARC

Robert F Kopel MD FACP FCCP

Charlie G Durbin Jr MD FAARC

Monday, Nov 18

To Infinity and Beyond: Role of the RT in a Multi-disciplinary Team

10:30 am – 12:10 pm

10:30 am – 11:00 am

Long-Term/Skilled Patient Care: Care and Regulation

James E Wood Jr. RRT, Oakdale PA

Content Category: Clinical Practice

The long-term care environment presents a variety of practice challenges, including various state, federal, and accreditation regulations that govern the delivery of care. This lecture reviews the necessary compliance that RTs working in long-term care must adhere to.

11:05 am – 11:35 am

Respiratory Therapists and Speech Therapy: Multi-Disciplinary Approach to Care

Heather Pazak MA CCC-SLP, Akron OH

Content Category: Clinical Practice

In the long-term care environment, speech therapy operates alongside respiratory therapy in the management of many patients. This lecture reviews the role of the speech therapist working in conjunction with the RT to deliver quality care.

11:40 am – 12:10 pm

Respiratory Therapy's Role in Long-Term Care: A Nurse's Perspective

Donna Cooper-Williams MSN Ed RN, Tampa FL

Content Category: Clinical Practice

The long-term care environment presents an excellent opportunity for RTs and nurses to collaborate in the provision of care. This lecture provides a nurse's perspective of the value of an excellent working relationship and effective collaboration.

AARC CONGRESS 2013

Special Note

The largest respiratory care Exhibit Hall in the world will be open in Anaheim, California Satruday through Monday, November 16-18.

Most all exhibitors will have clinical specialist on hand to answer questions on products, services and technology. Don't miss this unique opportunity with all companies in the respiratory care industry.

James E Wood Jr. RRT

Heather Pazak MA CCC-SLP

RT Asthma Educator… Or Should We Say "Navigator"?

11:05 am – 11:35 am

RT Asthma Educators – Asthma Patient Navigators

Mary K Hart MS RRT AE-C FAARC, San Antonio TX

Content Category: Management

While RTs have provided exemplary clinical services for decades and will continue to do so in the future, their role as "patient navigator" is critically important for managing asthmatic and COPD patients. The value of this "navigator" in terms of quality outcomes, financial performance, and patient/family satisfaction will be shared in a way that the attendees can implement in their organizations.

Neonatal-Pediatric Interactive Cases

11:05 am – 12:10 pm

Neonatal-Pediatric Interactive Cases

Ira M Cheifetz MD FCCM FAARC, Durham NC and Lisa Tyler MSM RRT-NPS CPFT, Philadelphia PA

Content Category: Neonatal/Pediatric

Back by popular demand! This interactive, audience response session returns to the program. Interesting and informative neonatal and pediatric cases will be presented in an interactive, audience-response fashion. Come learn and share your thoughts on the management of difficult critically ill neonatal and pediatric patients with respiratory failure.

Clinical Vignettes and Their Pulmonary Function Test Results

11:40 am – 12:10 pm

Clinical Vignettes and Their Pulmonary Function Test Results

Carl D Mottram RRT RPFT FAARC, Rochester MN

Content Category: Pulmonary Function

This presentation will include case studies of patients that include the initial presentation of symptoms, diagnostic test results (CXR, CT, laboratory, and PFTs), treatment, outcome, and literature related to the disease.

Social Media in Health Care

11:40 am – 12:10 pm

What's the Big Deal with Twitters, Tweets, Blogs, and Status Updates?

Diane Oldfather MHEd RRT, Rolla MO

Content Category: Education

Social media such as Facebook, Twitter, and YouTube are commonly used to communicate feelings and events to others in a group of friends. Is there a place for social media in the classroom? Within the workplace? This presentation will address how social media can be employed in the classroom to enhance learning and how it can be employed in the workplace to enhance training, teamwork, and communication.

Developing an Effective Educational Plan for Respiratory Care Departments

11:40 am – 12:10 pm

Developing an Effective Educational Plan for Respiratory Care Departments

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

Content Category: Management

This presentation will assist participants in identifying pertinent stakeholders affected by RT department education, discussing applicable adult learning principles, and setting goals and objectives. The presenter will identify barriers to effective education among stakeholders, identify ways to engage staff, satisfy accreditation, and avoid duplication of efforts.

Use of Carbogen as a Safer Method for Apnea Testing

11:40 am – 12:10 pm

Use of Carbogen as a Safer Method for Apnea Testing

Maria Madden RRT-ACCS, Baltimore MD

Content Category: Adult Critical Care

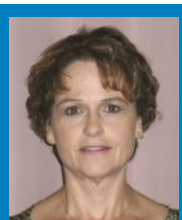
This presentation will review the updated Brain Death Guidelines as suggested by the American Academy of Neurology. The lecture will cover the risks of traditional apnea testing and how the addition of carbogen alleviates many of the risks. A summary of how to administer carbogen for apnea tests including patients on VV and VA extracorporeal membrane oxygenation will be discussed.

Mary K Hart MS RRT AE-C FAARC

Ira M Cheifetz MD FCCM FAARC

Lisa Tyler MSM RRT-NPS CPFT

Carl D Mottram RRT RPFT FAARC



Diane Oldfather MHEd RRT

Shawna L Strickland PhD RRT-NPS AE-C FAARC

Monday, Nov 18

OSA Perioperative Programs for Risk Reduction and Revenue Enhancement

11:40 am – 12:10 pm

OSA Perioperative Programs for Risk Reduction and Revenue Enhancement

Peter Allen RRT-NPS-SDS RST RPSGT, Devon PA

Content Category: Sleep Medicine

This lecture will provide the attendee with tools for implementing a coordinated perioperative screening program for patients at risk for sleep-disordered breathing. Discussion will focus on ways to reduce risk for your organization while increasing revenues in your sleep center.

Sleep Section Membership Meeting

12:15 pm – 12:45 pm

Russell E Rozensky/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Open Forums #13, #14 and #15

12:30 pm – 2:25 pm

Supported by an unrestricted educational grant from

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Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion and interaction among investigators and observers. Posters are used to expand the information presented. The titles and authors of all abstracts will be posted by Aug 31.

Continuing Care/Rehab Section Membership Meeting

12:50 pm – 1:20 pm

Gerilynn Connors RRT FAARC/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Education Section Membership Meeting

1:30 pm – 2:00 pm

Joseph G Sorbello MEd RRT/*Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and to participate.

Anesthetic Agents for Status Asthmaticus: Methods, Evidence and the Therapist's Role

2:10 pm – 2:40 pm

Anesthetic Agents for Status Asthmatics: Methods, Evidence and the Therapist's Role

John S Emberger RRT FAARC, Newark DE

Content Category: Adult Critical Care

Status asthmaticus is a life-threatening situation. When the patient fails to respond to conventional therapy and safe ventilation is difficult, anesthetic agents are an option. Overview of the literature will be presented as well as several cases that benefited from anesthetic agents during status asthmaticus.

Take the "Red Pill": Understanding Methods of Obtaining Optimal PEEP

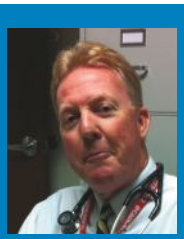
2:10 pm – 2:40 pm

Take the "Red Pill": Understanding the Multiple Methods of Obtaining Optimal PEEP

Joel M Brown RRT, Newark DE

Content Category: Adult Critical Care

Have you been presented with one of the many methods of determining optimal PEEP and struggled with understanding the theory or evidence behind it? This lecture will use the storyline of the sci-fi film "The Matrix" to help the attendees better understand the theories, evidence, and pros and cons of each method. From the ARDS Net approach to electrical impedance tomography, you will get to see what actually happens after you take the "Red Pill."



Peter Allen RRT-NPS-SDS RST PRSGT

John S Emberger RRT FAARC

Joel M Brown RRT

The Pulmonary Education Program: Extending the Benefit of Rehab After Graduation

2:10 pm – 2:40 pm

The Pulmonary Education Program: Extending the Benefit of Rehab After Graduation

Scott Cerreta RRT, Washington DC

Content Category: Clinical Practice

The Pulmonary Education Program (PEP) is designed to assist patients after graduation from rehabilitation and provides quality support materials for PR staff and patients. The program includes an option for COPD Associates to offer motivation and coaching support by phone. This discussion will share outcomes data from the first six months of this ongoing support program.

Update on Portable Sleep Studies

2:10 pm – 2:40 pm

Update on Portable Sleep Studies

Jessica Schweller MS RRT-RCP RN NP-C, Columbus OH

Content Category: Sleep Medicine

Portable sleep studies are becoming as popular as in lab studies. This presentation will provide discussion on the types of portable monitoring devices (PMD) that are available and a decision matrix to use when trying to decide if portable testing is appropriate. The presentation will also cover reimbursement for PMD as well as treatment options for those patients.

RESPIRATORY CARE

OPEN FORUM® Symposia

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Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. Twenty OPEN FORUM Symposia will be presented during the four days of AARC Congress 2013. See pages 98-107 for symposium sessions, abstracts titles and authors.

Non-invasive Ventilation: The Norwegian Perspective

2:10 pm – 4:25 pm

2:10 pm – 2:40 pm

Chronic Hypoventilation: Diagnosis & Patient Selection

Solfrid Indrekvam MD PhD, Bergen Norway

Content Category: Clinical Practice

Chronic hypoventilation is a primary cause of long-term mechanical ventilation. Perhaps of greater importance is proper diagnosis of these patients. This presentation will highlight management strategies of the hypoventilated patient and offer helpful hints in identifying which patients are most likely to thrive when placed on non-invasive ventilatory support.

2:45 pm – 3:15 pm

NIV: Methods & Modes

Ove Fondenes MD, Bergen Norway

Content Category: Clinical Practice

Non-invasive ventilation poses many challenges to the respiratory therapist. Which interface (and size) is most appropriate for the patient? And which modes, settings, and alarms are most indicated for the patient and their condition are just a few of the questions therapists must answer when placing patients on NIV. Attendees will leave this presentation with a better understanding of how our colleagues in Norway tackle these challenges.

3:20 pm – 3:50 pm

Monitoring of Non-invasive Ventilation

Siguard Aarrestad MD, Bergen Norway

Content Category: Clinical Practice

Monitoring of long-term non-invasive ventilator support for chronic hypoventilation is a critical component of providing safe patient care. This presentation will highlight and discuss key monitoring strategies for the NIV patient with the end-goal of improving survival and quality of life. The presenter will discuss pulse oximetry, transcutaneous CO_2, and sleep studies as just a few examples of how RTs can optimize care of the NIV patient. Do our Norwegian counterparts know something about non-invasive monitoring that we don't? You'll have to attend this lecture to find out!

3:55 pm – 4:25 pm

NIV Competencies: The Norwegian Model

Heidi Markussen RN MHSc, Bergen Norway

Content Category: Clinical Practice

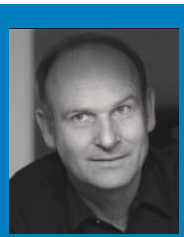
This presentation will provide a comprehensive overview of how competency training and evaluation is conducted in Norway. Is NIV considered a low-volume/high-risk procedure in Norway? How are caregivers educated on the use of NIV? How frequently is competency measured? Is simulation technology used? These and other questions will be answered on the basis of a Norwegian perspective.


Scott Cerreta RRT


Jessica Schweller MS RRT-RCP RN NP-C


Solfrid Indrekvam MD PhD


Ove Fondenes MD


Siguard Aarrestad MD


Heidi Markussen RN MHSc

Monday, Nov 18

Clinical Controversies in Pediatric Respiratory Care

2:10 pm – 4:25 pm

2:10 pm – 3:15 pm

Choice of Ventilator Mode Affects Clinical Outcome

Pro: Robert M DiBlasi RRT-NPS FAARC, Seattle WA

Con: Brian K Walsh MBA RRT-NPS FAARC, Boston MA

Content Category: Neonatal/Pediatric

Each generation of mechanical ventilators brings new and innovative modes of ventilation. Debate continues as to whether such novel modes offer true clinical benefit or simply add to the purchase price. Two experts in the field will debate this controversial topic from outcome and economic vantage points. Time will be allocated for audience participation.

3:20 pm – 4:25 pm

Adjunct Therapies Improve Outcome for Pediatric Acute Lung Injury

Pro: David A Turner MD, Durham NC

Con: Ken Tegtmeyer MD FCCM, Cincinnati OH

Content Category: Neonatal/Pediatric

Most would agree that low tidal volume ventilation improves ARDS outcome, but what about adjunct therapies? Does prone positioning, inhaled nitric oxide, and exogenous surfactant improve clinical outcomes or simply add to the cost and/or RT workload. Two experts will debate this controversial topic from outcome and economic vantage points. Time will be allocated for audience participation.

Management Boot Camp

2:10 pm – 5:00 pm

2:10 pm – 2:40 pm

Affordable Care Act and Its Impact on the Profession

Douglas S Laher MBA RRT, Irving TX

Content Category: Management

2012 officially welcomed in the third reimbursement model of the last 35 years. In the 1970s and early 1980s there was fee-based reimbursement, in the mid-1980s and beyond we were exposed to DRG-based reimbursement, and in 2012 we embarked on a new era of Pay4Performance. While P4P incentives have been in place for a few years prior to 2012, the government got serious about not only incentivizing organizations to commit to quality practice but also began to penalize organizations with poor outcomes. This presentation will give a brief overview of the ACA, but most importantly will focus on how it has affected hospitals and healthcare in general over the last year. Did it accomplish financial and quality improvement or a failed attempt with unintended consequences? You'll have to attend this lecture to find out.

2:45 pm – 3:15 pm

Understanding the Managing Styles of Both Genders

Mark D Babic RRT, Lakewood OH

Content Category: Management

Men and women think and respond in different ways and have managing styles that also differ. Although there are gender differences in management, there isn't any one right way in which to manage. Both men and women can learn from each other to incorporate new skills when dealing with people.

3:20 pm – 3:50 pm

How to Manage Different Generations

Mark D Babic RRT

Content Category: Management

In today's workforce, we have several generations all trying to work together. Each generation differs in their approach to work ethic and what they expect of their leaders. A good leader will learn how to bridge these generational gaps to build a highly functioning multi-generational team.

3:55 pm – 4:25 pm

Excellence in the ICU: Multidisciplinary Communication and Collaboration!

Patti DeJuilio MS RRT-NPS, Winfield IL

Content Category: Management

This presentation will highlight multi-disciplinary best practices of one institution. This hospital transformed two ICUs by utilizing collaboration of team members and a medical director that believed in empowering talented caregivers at the bedside. In this model, RTs attend all patient rounds, play a key role in care planning and delivery, and provide education. After robust rounds model was initiated, mortality was reduced and patient satisfaction scores soared. Attend this presentation and implement a similar program in your institution.

4:30 pm – 5:00 pm

SIT: Systematic Innovative Thinking

Bill Cohagen RCP RRT FAARC, Salt Lake City UT

Content Category: Management

SIT is a process of opening your mind as a leader. Similar to, but quicker and easier than Six Sigma or Lean, SIT lets you channel the power of your team, opens your mind to new horizons, and challenges you to be innovative in your approach to day-to-day activities. Attend this lecture and maximize the performance of your department through a new and innovative way of thinking.

Robert M DiBlasi RRT-NPS FAARC

Brian K Walsh MBA RRT-NPS FAARC

David A Turner MD

Douglas S Laher MBA RRT

Mark D Babic RRT

Patti DeJuilio MS RRT-NPS

Who's in Control…The Patient, the Practitioner, or the Disease?

2:10 pm – 5:00 pm

2:10 pm – 2:40 pm

A Health Plan's Successful Asthma Disease Management Program

Jakki Grimball MA RRT AE-C, Columbia SC

Content Category: Clinical Practice

This presentation will describe the asthma disease management program at BlueChoice HealthPlan, a managed care health plan and subsidiary of BlueCross BlueShield of SC. The Great Expectations® for Health Asthma management program has experienced improved outcomes in reducing ER visits, hospitalization rates and positive ROIs. The program also employs RTs in a non-traditional setting. Attend this lecture and learn how to set up a successful program, as well as how RTs fit into a non-traditional work setting.

2:45 pm – 3:15 pm

Developing an Asthma Response Team for the Emergency Room

Clifton Dennis RRT AE-C, Augusta GA

Content Category: Clinical Practice

This presentation describes an innovative program that provides guideline-based asthma management and patient education in the emergency room setting. The Asthma Response Team (ART) has shown positive measurable outcomes including decreases in admissions, decreases in PICU admits, and an increase in the use of written asthma action plans. Attend this presentation and find out how you can do the same!

3:20 pm – 3:50 pm

Focused Asthma Education and Interventions: A State Perspective

Cynthia Keely RRT LRTR, Charleston WV

Content Category: Clinical Practice

For over a decade, state health departments have been given the opportunity to apply for federal funds through the Centers for Disease Control and Prevention to focus initiatives on asthma. This presentation highlights the successes and barriers of one state health department. The state asthma program manager will share information regarding key issues such as stakeholder engagement, effective activities, coalition building, administrative structure, financial sustainability, and the role of evaluation and data surveillance for rating successes, barriers, and sustainability.

3:55 pm – 4:25 pm

Quality Standards for Asthma Education Programs

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

Content Category: Clinical Practice

This presentation will highlight successful facets of asthma education programs administered in a variety of settings. Program aspects such as program leadership, resources, measurable outcomes, and evaluation will be discussed. The presentation will also explore reimbursement for education and training for patient self-management.

4:30 pm – 5:00 pm

Panel Discussion

Shawna L Strickland PhD RRT-NPS AE-C FAARC/*Presiding*
Jakki Grimball MA RRT AE-C
Clifton Dennis RRT AE-C
Cynthia Keely RRT LRTR

Content Category: Clinical Practice

This session will be an interactive panel discussion, with several asthma experts representing different perspectives on the disease. At the end of the presentation, the panel will be taking questions from participants, talking through the issues that people face every day, etc. This will be a session filled with take-home messages people can really use in daily practices – and a panel that represents the reality of various perspectives that we live and work in every day.

Difficult Airway Management During Pediatric Transport

2:45 pm – 3:15 pm

Difficult Airway Management During Pediatric Transport

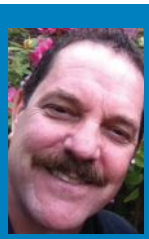
Tabatha M Dragonberry RRT-NPS AE-C, Washington DC

Content Category: Clinical Practice

This lecture will address the risk factors of difficult airways in pediatric patients and how this population is more problematic on transport. What should the respiratory therapist do when encountering an unanticipated difficult airway while on transport? Are YOU prepared for a difficult airway? Attend this lecture to get answers to these and other questions!


Bill Cohagen RCP RRT FAARC


Jakki Grimball MA RRT AE-C


Clifton Dennis RRT AE-C


Cynthia Keely RRT LRTR


Shawna L Strickland PhD RRT-NPS AE-C FAARC


Tabatha M Dragonberry RRT-NPS AE-C

Monday, Nov 18

Lung Protective Strategies: ARDSnet for Everyone?

2:45 pm – 3:15 pm

Lung Protective Strategies: ARDSnet for Everyone?

Ruben D Restrepo MD RRT FAARC, San Antonio TX

Content Category: Adult Critical Care

There have been demonstrated outcome benefits by using low tidal volumes in ARDS patients. Should these strategies be used across the board or only in selected patients? Attend this lecture to find out!

Sleep Deprivation and the Medical Community

2:45 pm – 3:15 pm

Sleep Deprivation and the Medical Community

Brian W Carlin MD FAARC, Pittsburgh PA

Content Category: Sleep Medicine

This session will discuss the evidence behind sleep deprivation and the medical profession. Strategies to reduce the effects of sleep deprivation will then be reviewed.

Exhibit Hours at The Buying Show:

Saturday, Nov. 16, 11:00 am - 4:00 pm

Sunday, Nov. 17, 9:30 am - 3:00 pm

Monday, Nov. 18, 9:30 am - 2:00 pm

Non-COPD Pulmonary Rehabilitation: Modification for ILD and PH Patients

2:45 pm – 5:00 pm

2:45 pm – 3:15 pm

Interstitial Lung Disease

TBD

Content Category: Clinical Practice

This presentation will briefly review the current state of interstitial lung disease to include diagnosis and the latest treatment options.

3:20 pm – 3:50 pm

Pulmonary Rehabilitation Program Modifications for Interstitial Lung Disease

Debra M Koehl MS RRT-NPS, Indianapolis IN

Content Category: Clinical Practice

This presentation will review the program modifications necessary when providing pulmonary rehabilitation to patients diagnosed with interstitial lung disease.

3:55 pm – 4:25 pm

Pulmonary Hypertension

TBD

Content Category: Clinical Practice

This presentation will briefly review the current state of pulmonary hypertension to include diagnosis and the latest treatment options.

4:30 pm – 5:00 pm

Pulmonary Rehabilitation Program Modifications for Pulmonary Hypertension

Gerilynn L Connors RRT MAACVPR FAARC, Falls Church VA

Content Category: Clinical Practice

This presentation will review the program modifications necessary when providing Pulmonary Rehabilitation to patients diagnosed with pulmonary hypertension.

Ruben D Restrepo MD RRT FAARC

Brian W Carlin MD FAARC

Debra M Koehl MS RRT-NPS

Gerilynn L Connors RRT MAACVPR FAARC

Open Forums #16 and #17

3:15 pm – 5:10 pm

Supported by an unrestricted educational grant from

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Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion

Reaching Out: Strategies to Improve Your Outreach Education Efforts

3:20 pm – 3:50 pm

Reaching Out: Strategies to Establish or Improve Your Outreach Education Efforts

Alex Brendel MBA RRT-NPS, Roanoke VA

Content Category: Clinical Practice

Many medical systems have ideas of doing outreach education with their referral hospitals but cannot implement them because of limited resources. This presentation will show some low-cost, high-impact strategies to improve your relationship with your referral hospitals and improve patient outcomes.

Can Bladder Pressure Be Used to Set Optimal PEEP?

3:20 pm – 3:50 pm

Can Bladder Pressure Be Used to Set Optimal PEEP?

Tom Piraino RRT, Hamilton Canada

Content Category: Adult Critical Care

Bladder pressure measurements are the gold standard for measuring intra-abdominal pressure. Intra-abdominal hypertension can affect chest wall elastance. Esophageal pressure can be used to estimate the effects of increased chest wall elastance, to set optimal PEEP, and estimate lung stress. This lecture will discuss the relationship between abdominal and esophageal pressure and discuss whether there is a role for using bladder pressure as a surrogate of esophageal pressure.

Fatigue... How Can We Put This Issue to Sleep?

3:20 pm – 4:25 pm

3:20 pm – 3:50 pm

Are You Sleeping on the Job?

Karla M Smith RRT RPSGT, Bismarck ND

Content Category: Sleep Medicine

Fatigue is a major problem in the workplace. Our bodies do not adapt well to sleep deprivation. This presenter will discuss tools that the average person can use to combat fatigue and will share stories about what happens when we do not make sleep a priority.

3:55 pm – 4:25 pm

Wake Up Before You Kill Someone!

Karla M Smith RRT RPSGT

Content Category: Sleep Medicine

We rely on pilots and drivers to get us to our destination safely. How can we be sure that these people are fit for duty? The presenter will discuss industry safety guidelines for those who are driving on our highways and flying in the air.

A Live Look Inside the Lungs: Electrical Impedance Tomography

3:55 pm – 4:25 pm

A Live Look Inside the Lungs: Electrical Impedance Tomography

John S Emberger RRT FAARC, Newark DE

Content Category: Clinical Practice

Electrical Impedance Tomography (EIT) is a new technology using an electrode chest belt that gives a functional image of the lungs in real-time during ventilation. It is a newer method that allows monitoring of regional ventilation for de-recruitment and over distention. A literature overview will be presented as well as patient cases where EIT was used.

Alex Brendel MBA RRT-NPS

Tom Piraino RRT

Karla M Smith RRT RPSGT

John S Emberger RRT FAARC

Monday, Nov 18

PFT Skills Symposium: HAST and VO_2 Testing

3:55 pm – 5:00 pm

3:55 pm – 4:25 pm

High Altitude Simulation Test Demonstration

Matthew J O'Brien MS RRT RPFT, Madison WI

Content Category: Pulmonary Function

This presentation includes a demonstration that will walk attendees through performing a High Altitude Simulation Test using various equipment set-ups. It will include actual equipment configurations including use of a canopy and mask delivery methods.

4:30 pm – 5:00 pm

VO_2 Demonstration

TBD

Content Category: Pulmonary Function

How frequently do you perform VO_2 testing? If your answer is "very little," then this lecture is for you! This presentation will walk attendees through performing a VO_2 procedure. The presentation will conclude with an actual demo VO_2 test.

Update on Revisions to the CoARC Standards for the Profession of Respiratory Care

4:30 pm – 5:00 pm

Update on Revisions to the CoARC Standards for the Profession of Respiratory Care

Kathy J Rye EdD RRT FAARC, Russellville AR

Content Category: Education

The presenter will describe the process of revision for CoARC Standards and present proposed changes to the existing standards. Time will be allotted for questions and comments from members of the audience.

Sepsis: Ventilator Management of the Septic Patient

4:30 pm – 5:00 pm

Sepsis: Ventilator Management of the Septic Patient

Richard H Kallet MS RRT FAARC, San Francisco CA

Content Category: Adult Critical Care

Mortality continues to be very high in the severely septic patient. How can RTs optimally ventilate these patients and ensure adequate gas exchange, as well as protect them from secondary injury? Attend this lecture to find out!

Surfactant Beyond Neonates: Do We Know the Final Answer?

4:30 pm – 5:00 pm

Surfactant Beyond Neonates: Do We Know the Final Answer?

Nancy A Johnson RRT-NPS, Cleveland OH

Content Category: Neonatal/Pediatrics

Exogenous surfactant therapy is standard of care of neonates, but what about children? The available surfactant data for pediatric acute lung injury remains conflicting. This presentation will review the available literature and potential clinical indications for pediatrics. Thoughts for the future of surfactant beyond the neonatal period will be offered.

Auto-PAP vs. CPAP: Which Is Better?

4:30 pm – 5:00 pm

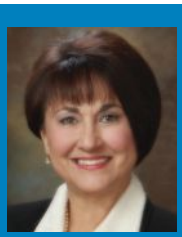
Auto-PAP vs. CPAP: Which Is Better?

Jessica Schweller MS RRT-RCP RN NP-C, Columbus OH

Content Category: Sleep Medicine

Which is better, auto-PAP or standard CPAP? This topic has been debated for years and opinions vary from provider to provider. This lecture will tackle the questions that many providers battle with and provide answers that may change the course of your patients' treatment. The presenter will provide insight from one clinician's perspective on how simply changing a pressure setting may improve compliance.

Matthew J O'Brien
MS RRT RPFT



Kathy J Rye EdD
RRT FAARC

Richard H Kallet
MS RRT FAARC

Nancy A Johnson
RRT-NPS

Jessica Schweller
MS RRT-RCP RN
NP-C

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We want to create a more successful association for you:
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AARC Congress 2013

Tuesday, Nov 19

Overview: Ohio's Quality Collaborative Initiative for Neonatal and Pediatric Interfacility Transport

8:30 am – 9:35 am

8:30 am – 9:00 am

Benchmarking in Neonatal/Pediatric Transport: Do You Meet the Mark?

Kendra Paxton MSN RN CPNP EMT-B CMTE, Akron OH

Content Category: Clinical Practice

This presentation will describe the 23 quality metrics the Ohio Children's Hospital Transport Quality Collaborative benchmark against. The metrics discussed encompass all six of the Institute of Medicine's Domains of Quality: Effectiveness, Efficiency, Safety, Family-Patient Centeredness, Timeliness, and Equity. The presenter will share how using this data can drive best practices across the country.

9:05 am – 9:35 am

Improving Quality in Neonatal & Pediatric Transports

Kendra Paxton MSN RN CPNP EMT-B CMTE, Akron OH

Content Category: Clinical Practice

Historically, transport teams have tracked QI measures without knowing how they compare to other similar organizations. Typically, organizations with transport teams are seen as competitors, rather than collaborators. This presenter will review the process six children's hospitals followed to determine quality metrics for neonatal pediatric transport within the state of Ohio.

National Competitive Bidding: Impact of Round 2 Implementation

8:30 am – 9:00 am

National Competitive Bidding: Impact of Round 2 Implementation

Greg Spratt RRT CPFT, Philadelphia MO

Content Category: Management

National competitive bidding (NCB) is a reality and Round 2, which impacts 91 additional markets, is underway. Combined with Round 1, NCB now affects nearly 70% of Medicare beneficiaries and thousands of HME providers. This lecture examines the potential and real ramifications of NCB.

Value-based Staffing

8:30 am – 9:00 am

Value-based Staffing

Richard M Ford RRT FAARC, San Diego CA

Content Category: Management

Whether you are a new or seasoned leader, you need the tools and resources to apply statistically valid time standards to justify staff. We know that not all positions in the respiratory care department produce "units of service." So what do you do when you have a critical role in your department and cannot rely on units of service to justify the position? Come to this presentation to find out.

Animation and Interactive Technology to Teach Mechanical Ventilation

8:30 am – 9:00 am

Animation and Interactive Technology to Teach Mechanical Ventilation

Ken Tegtmeyer MD FCCM, Cincinnati OH

Content Category: Neonatal/Pediatric

Forget PowerPoint… this presentation will reveal novel 3D technology and cutting-edge animation to augment mechanical ventilation education for the bedside clinician. Whether you are an expert or not, this talk will offer a very unique perspective on respiratory education.

AARC CONGRESS 2013

Kendra Paxton MSN RN CPNP EMT-B CMTE

Greg Spratt RRT CPFT

Richard M Ford RRT FAARC

Tuesday, Nov 19

NBRC Symposium

8:30 am – 9:35 am

8:30 am – 9:00 am

Upcoming Changes to the Credentialing System: The New Therapist Multiple-Choice Examination

TBD

Content Category: Education

The NBRC Board of Trustees has approved significant changes to the credentialing system. Attend this session and hear the rationale as well as the implementation and specific changes that will occur.

9:05 am – 9:35 am

The Value of the Clinical Simulation to the RRT Credential

TBD

Content Category: Education

NBRC representatives will explain the impact that the changes to the combined written exam will have on the RRT Clinical Simulation. Emphasis will be made on the value of the clinical simulation component of the RRT credential.

RESPIRATORY CARE

OPEN FORUM® Symposia

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Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. Twenty OPEN FORUM Symposia will be presented during the four days of AARC Congress 2013. See pages 98-107 for symposium sessions, abstracts titles and authors.

Creating Transition of Care Alignment from Discharge to Home

8:30 am – 11:20 am

8:30 am – 9:00 am

Understanding the New Multidimensional GOLD Guidelines

Brian W Carlin MD FAARC, Pittsburgh PA

Content Category: Clinical Practice

This lecture will give an overall understanding of the 2011 revision of the GOLD classifications and implications for discharge, home care, and pulmonary rehabilitation.

9:05 am – 9:35 am

Implementing Respiratory Risk Criteria into Hospital Discharge Planning

Becky K Anderson RRT, Fargo ND

Content Category: Clinical Practice

Including respiratory risk criteria in hospital discharge planning is integral to the transition of care, thus impacting re-hospitalization rates. Attend this lecture and learn how innovative tools and protocols have improved respiratory readmission rates.

9:40 am – 10:10 am

Creating Value for Home Respiratory Services by Developing an RT Competency Program

Kim S Wiles RRT, Ford City PA

Content Category: Clinical Practice

This presentation will cover the COPD certification program in the context of developing an RT competency program. Highlighted will be how integrating post-acute care focused education and patient performance criteria into RT competencies can contribute to a successful transition of care program.

Brian W Carlin MD FAARC

Becky K Anderson RRT

Kim S Wiles RRT

Cynthia White RRT-NPS AE-C FAARC

Mary K Hart MS RRT AE-C FAARC

Palliative Care Symposium: a Life Span Approach

8:30 am – 11:20 am

8:30 am – 9:00 am

Addressing End-of-Life at the Beginning-of-Life

Marlin Mills MD, Newport Beach CA

Content Category: Ethics and Law

This presentation will provide an overview of palliative care in the neonatal population.

9:05 am – 9:35 am

Pediatric Palliative Care: When Children Hurt

Cynthia White RRT-NPS AE-C FAARC, Cincinnati OH

Content Category: Ethics and Law

This presentation will provide an overview of palliative care in the pediatric population.

9:40 am – 10:10 am

Palliative Care in Long-term Acute Care Hospitals (LTACs)

Mary K Hart MS RRT AE-C FAARC, San Antonio TX

Content Category: Clinical Practice

This presentation will focus on palliative care in long-term acute care hospitals.

10:15 am – 10:45 am

When the Family Says to Do Everything

Paul A Selecky MD FAARC FAASM FACP FCCP, Newport Beach CA

Content Category: Clinical Practice

Facing the approaching end of life for a loved one is difficult, and families frequently are not ready to let go. This presentation will include helpful advice on how to respond to the request to "do everything" at the end-of-life.

10:50 am – 11:20 am

What's the Evidence for Palliative Care?

Helen M Sorenson MA RRT FAARC, San Antonio TX

Content Category: Ethics and Law

Palliative care has been gaining a lot of attention. This presentation will review the evidence for the use of palliative care and describe the beneficial effects before and during end-of-life.

Respiratory Care Symposium

RESPIRATORY CARE

8:30 am – 11:20 am

8:30 am – 9:00 am

What's in the Journal This Month? How Can the Clinician, Manager, and Educator Get the Most from Their Journal? – Part I

Dean R Hess PhD RRT FAARC, Boston MA

Content Category: Clinical Practice

There has been an exponential growth in both the number and quality of papers published in Respiratory Care over the past five years. In 2013, the Journal fully implemented a new website to make the Journal contents more accessible to readers. This presentation will provide a detailed tour of the new website, with suggestions from the editor about how respiratory therapists can optimize their use of all that the Journal has to offer. Bring your laptop, smart phone, and iPad to take full advantage of this session.

9:05 am – 9:35 am

What's in the Journal This Month? How Can the Clinician, Manager, and Educator Get the Most from Their Journal? - Part II

Dean R Hess PhD RRT FAARC

Content Category: Clinical Practice

There has been an exponential growth in both the number and quality of papers published in Respiratory Care over the past 5 years. In 2013, the Journal fully implemented a new website to make the Journal contents more accessible to readers. This presentation will provide a detailed tour of the new website, with suggestions from the editor about how respiratory therapists can optimize their use of all that the Journal has to offer. Bring your laptop, smart phone, and iPad to take full advantage of this session.

9:40 am – 10:10 am

The 5 Best Original Research Papers Published in Respiratory Care in 2013

Richard D Branson MSc RRT FAARC, Cincinnati OH

Content Category: Clinical Practice

An overview of the 5 best research papers published in Respiratory Care in 2012.

10:15 am – 10:45 am

The 5 Best Case Reports Published by Respiratory Care in 2013

Dean R Hess PhD RRT FAARC

Content Category: Clinical Practice

An overview of the 5 best case reports published in Respiratory Care in 2012.

10:50 am – 11:20 am

Artificial Airways and Airway Adjuncts: Summary of the 52nd Respiratory Care Journal Conference

Charles G Durbin Jr MD FAARC, Charlottesville VA

Content Category: Adult Critical Care

An overview of the Respiratory Care Journal Conference on airway management.

Paul A Selecky MD FAARC FAASM FACP FCCP

Helen M Sorenson MA RRT FAARC

Dean R Hess PhD RRT FAARC

Richard D Branson MSc RRT FAARC

Charles G Durbin Jr MD FAARC

Tuesday, Nov 19

Open Forums #18, #19

9:00 am – 10:55 am

Supported by an unrestricted educational grant from

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Researchers will present the results of their scientific studies. Abstracts with a similar focus are clustered into their own Open Forum symposium to encourage discussion

Using Pulmonary Rehabilitation to Prevent 30-day Readmissions

9:05 am – 9:35 am

Using Pulmonary Rehabilitation to Prevent 30-day Readmissions

Trina M Limberg RRT FAARC FAACVPR, San Diego CA

Content Category: Clinical Practice

One of the keys to reducing 30-day readmission rates for patients with chronic lung disease is enrollment in a robust PR program. This presentation will share best practices for optimizing referrals into the outpatient program after discharge from an acute care setting.

Priority One – Value for Our Patients

9:05 am – 9:35 am

Priority One – Value for Our Patients

Richard M Ford RRT FAARC, San Diego CA

Content Category: Management

As health care reform is intended to drive down expenses while incentivizing hospitals to produce favorable outcomes, we may lose sight of ensuring value to patients. What's important to patients is safe care, and what's important to the executives is delivering this care effectively and efficiently.

Adult ARDS Network Data: Applicable to Children?

9:05 am – 9:35 am

Adult ARDS Network Data: Applicable to Children?

Carl R Hinkson RRT FAARC, Seattle WA

Content Category: Neonatal/Pediatric

Lung protective ventilation using low tidal volumes and high PEEP is commonly used in adults with ARDS. Despite compelling adult evidence and laboratory studies, clinical data in children remain lacking. Should these adult-based lung protective approaches be used by clinicians caring for children with acute lung injury? This presentation will review the available data and suggestions for the management of the pediatric patient.

Assisting with Clinical Trials – What's Expected from Your Lab?

9:40 am – 10:10 am

Assisting with Clinical Trials – What's Expected from Your Lab?

Matthew J O'Brien MS RRT RPFT, Madison WI

Content Category: Pulmonary Function

Assisting with clinical trials is sometimes not presented as optional for pulmonary labs. Learn the typical requirements / expectations sponsors have when evaluating your site and how meeting these expectations will improve your lab's overall quality.

Adding Insult to Injury – Dementia and ALS

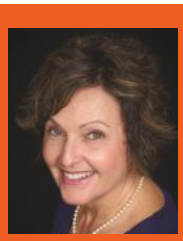
9:40 am – 10:10 am

Adding Insult to Injury – Dementia and ALS

Lee Guion MA RRT FAARC, San Francisco CA

Content Category: Clinical Practice

Not only do people with ALS eventually lose all muscle function, the mind can be affected as well. Find out how to assess your patients for cognitive changes. Explore the implications for lung function testing, assisted ventilation, and end-of-life decision-making.



Trina M Limberg RRT FAARC FAACVPR

Richard M Ford RRT FAARC

Carl R Hinkson RRT FAARC

Matthew J O'Brien MS RRT RPFT

Lee Guion MA RRT FAARC

The Role of the RT: a Look into the Future

9:40 am – 10:10 am

The Role of the RT: a Look into the Future

Timothy R Myers MBA RRT-NPS FAARC, Irving TX

Content Category: Management

This presentation discusses the changes in the RT role in the future: the movement of positions outside the acute care facility and the value it adds to the patient.

Practicing the Art of Getting the Orders Your Patient Needs

9:40 am – 10:10 am

Practicing the Art of Getting the Orders Your Patient Needs

Robin Kidder RRT AE-C, St Louis MO

Content Category: Education

How many times have you thought to yourself.: Why is this therapy ordered? Have you or your peers recommended a treatment option for a patient without being heard? Ever notice some RCPs are more successful than others at receiving the physician orders needed for their patient? Would you like to reduce the amount of unneeded therapy by simply communicating your rationale in a way that will be heard? If so, this interactive workshop is for you! The presenter will provide an overview of the techniques and tools needed for successful interaction and will engage the attendees in examples of typical RCP/MD scenarios.

Noninvasive Ventilation

9:40 am – 10:45 am

9:40 am – 10:10 am

Noninvasive Respiratory Support for the Very Low Birth Weight Infant: How Low Can We Go?

TBD

Content Category: Neonatal/Pediatric

Noninvasive ventilation of the premature infant is advancing as fast as any other field in pediatrics. But, how low can we go? This presentation will review the history of neonatal noninvasive ventilation as well as recent technologic advances. Management strategies to prevent prematurity related chronic lung disease and thoughts for the future will be offered.

10:15 am – 10:45 am

Noninvasive Ventilation in Pediatrics: Turning the Corner?

Nancy A Johnson RRT-NPS, Cleveland OH

Content Category: Neonatal/Pediatric

Traditionally, advances in noninvasive ventilation technology have been focused on the neonatal and adult populations. This trend may finally be changing. This presentation will discuss clinical challenges of noninvasive ventilation for children as well as the recent advances in interface design and technology. Keep in mind, "one size does not fit all."

Race Roulette: How to Pick the Winning Numbers for Your Patients

10:15 am – 10:45 am

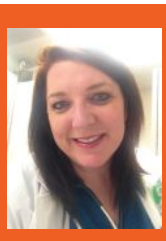
Race Roulette: How to Pick the Winning Numbers for Your Patients

Ralph W Stumbo Jr RRT CPFT, Tacoma WA

Content Category: Pulmonary Function

Selecting the right set of predicted numbers can mean the difference between normal and abnormal PFT results, leading ultimately to the decision to treat or not to treat. What are the recommendations regarding race correction for lung function testing and does this make sense? What do we do in the case of a patient of mixed race? This presentation will help you be prepared to care for all your patients regardless of race.

Timothy R Myers
MBA RRT-NPS FAARC



Robin Kidder RRT
AE-C

Nancy A Johnson
RRT-NPS

Ralph W Stumbo Jr
RRT CPFT

Tuesday, Nov 19

Educating COPD Patients So They Really Get It

10:15 am – 10:45 am

Educating COPD Patients So They Really Get It

Jane M Martin LRT CRT, Miami FL

Content Category: Education

Educating COPD patients can be challenging – even frustrating. But it doesn't always have to be that way. This session will discuss "the bridge" and how keeping it in mind when you teach will help you master simple methods that make a big impact in helping patients "get it," remember it, and use it.

COPD Transitions Coach: Serving COPD Patients from Hospital to Home

10:15 am – 10:45 am

COPD Transitions Coach: Serving COPD Patients from Hospital to Home

Robert B Sobkowiak RRT AE-C, Cape Coral FL

Content Category: Clinical Practice

The COPD Care Transitions Coach bridges care gaps for the COPD patient being discharged from the acute care setting to home. This therapist, in collaboration with other healthcare team members, follows the patient into the home and assists the patient in learning and practicing effective self-management skills. The presenter will share successful outcome measures including improved patient satisfaction and quality of life as well as decreased 30-day readmissions. The goal of a patient-centered COPD Journey is able to be reached through this new and exciting role for the respiratory therapist who has a passion to serve the COPD Community.

Teamwork as a Key Survival Strategy

10:15 am – 10:45 am

Teamwork as a Key Survival Strategy

Ken Thigpen RRT FAARC, Jackson MS

Content Category: Management

In today's rapidly changing healthcare landscape, working effectively together, as a team has never been more critical to the success of an organization, a department, and the respiratory therapist! A high-performing team can position work groups to not only survive but actually thrive as visible and valued members of the healthcare team. Attend this lecture and gather the tools necessary to be a team player.

Getting Beyond New Grad Status

10:15 am – 11:20 am

10:15 am – 10:45 am

New Grad Perspective

Christine Kearney RRT, Seattle WA

Content Category: Management

What does it take to successfully advance from "new grad" to established respiratory therapist? Administrators and educators often teach this topic; but in this novel presentation, a recent grad shares what it takes to be successful at the next level. The presenter will share her most recent experiences and perspective on the subject, and discuss both the do's and do not's of a new grad.

10:50 am – 11:20 am

Medical Director Perspective

Ira M Cheifetz MD FCCM FAARC, Durham NC

Content Category: Management

This presentation will be a continuation discussion of what it takes to successfully advance from new grad to established respiratory therapist. Come listen to advice from the perspective of a medical director. Both do's and do not's will be presented and discussed.

There's Fungus Among Us: When Mold Impacts Our Lives

10:50 am – 11:20 am

There's Fungus Among Us: When Mold Impacts Our Lives

Ralph W Stumbo Jr RRT CPFT, Tacoma WA

Content Category: Pulmonary Function

While mold is an everyday part of our lives, seldom does it impact our lives. Given the recent flooding issues in the Northeast, there are tens of thousands of homes that have had major water damage. If not rehabilitated properly, these homes can become infested with mold and greatly impact the lives of those living there. This lecture will address the scope of the problem, the warning signs to look for, and treatment of those affected by uncontrolled mold.

Jane M Martin
LRT CRT

Robert B Sobkowiak
RRT AE-C

Ken Thigpen RRT
FAARC

Christine Kearney
RRT

The "Aha!" Moment – Enabling Patients to Discover COPD Self-Management

10:50 am – 11:20 am

The "Aha!" Moment – Enabling Patients to Discover COPD Self- Management

Jane M Martin LRT CRT, Miami FL

Content Category: Education

The COPD Conversation Map is a patient-centered learning tool using colorful images and metaphors combined with small group interaction. Participation leads individuals with COPD to discover for themselves methods of effective COPD management and arrive at a personal plan for lasting change. Attend this lecture and learn more about this great educational resource… your patients will be glad you did!

Migrating from Acute Care to Pulmonary Rehabilitation Case Manager: What Does It Take?

10:50 am – 11:20 am

Migrating from Acute Care to Pulmonary Rehabilitation Case Manager: What Does It Take?

Arianna Villa RRT, San Diego CA

Content Category: Clinical Practice

The Affordable Care Act is shifting our focus to managing COPD and other chronic respiratory-impaired patients in the outpatient phase. This is an opportunity for therapists working in pulmonary rehabilitation programs to enhance their acute care assessment skills. Attend this session to learn how to expand your skills and what it's going to take to be successful in the new healthcare environment.

Respiratory Care 2013 and Beyond – Catch the Wave!

10:50 am – 11:20 am

Respiratory Care 2013 and Beyond – Catch the Wave!

Ken Thigpen RRT FAARC, Jackson MS

Content Category: Management

This presentation will highlight the challenges we face as a profession, as a healthcare industry, and as individuals. This presenter will examine the impact of being proactive versus the consequences of being reactive or inactive. We will examine how teamwork and flexibility are key attributes to effectively "surfing" the waves of healthcare versus "wiping out" if we fail to respond.

It's Just a Little Cough… or Is It?

10:50 am – 11:20 am

It's Just a Little Cough… or Is It?

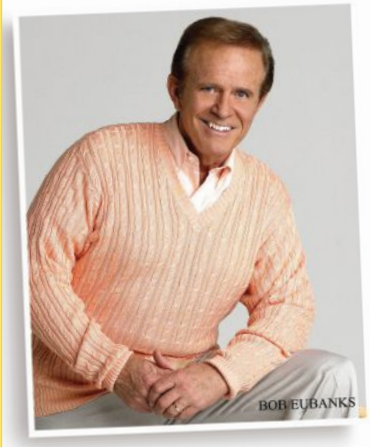
Elizabeth Cooper BHS RRT, Cincinnati OH

Content Category: Neonatal/Pediatric

Chronic coughing in the pediatric patient may be meaningless or a symptom of serious disease. This presentation will explore the various etiologies for chronic cough and will offer potential treatment approaches.

Closing Ceremony

Don't miss out on the first-ever AARC Closing Ceremony. Emmy Award-winning TV host Bob Eubanks from "The Newlywed Game" will share his experiences from his hit TV game show on how he became a better communicator and expert in human relations. This inspiring, motivational and entertaining message will allow Congress attendees to better craft their skill in patient education and disease management. Gain a better understanding of how to reach the soul of your patients and understand what it takes to get them to open up, to be honest and transparent in their communications with you. Not only will Eubanks' message entertain and educate, but his use of outtakes from "The Newlywed Game" will keep it fresh and comical. This event will be the ultimate close to the premier respiratory education meeting in the world.



And, if that's not enough, Eubanks will keep attendees riveted to their seats by hosting a live, on-stage takeoff to his famous gameshow called "Workmates." Whether you're lucky enough to be an on-stage contestant or not, Eubanks will keep you laughing as co-workers get the chance to prove (or disprove) how much they really know about their colleague.

But how could it be a true game show if someone in the audience didn't have a chance to win money…big money? At the culmination of his presentation, Eubanks will bring one lucky attendee up on stage to compete in "America's Greatest Gameshow Challenge" and a chance to win $100,000! AARC Congress 2013 could be life-changing in more ways than one. Be sure not to miss out!


Ira M Cheifetz MD FCCM FAARC


Ralph W Stumbo Jr RRT CPFT


Arianna Villa RRT


Elizabeth Cooper BHS RRT

2013 Exhibitors

as of August 5, 2013

A

AARC
Abbott Point of Care
Aerogen
AG Industries
Airgas Puritan Medical
Airon Corporation
Allergy & Asthma Network
Mothers of Asthmatics
Alpha-1 Foundation
Amico
Apex Medical Corp
ARC Medical, Inc.
Aureus Medical Group

B

B&B Medical Technologies
Baitella AG
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Bio-Med Devices, Inc.
Biovo Technologies
Boston Scientific
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C

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CAIRE
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CoARC
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F

Fisher & Paykel Healthcare
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GCX Corporation
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H

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Hayek Medical Devices
Hill-Rom
Hollister Incorporated
HSINER Co., Ltd.

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Ikaria
Independence University
IngMar Medical, Ltd.
Inova Labs
Instrumentation Industries, Inc.
Instrumentation Laboratory
International Biomedical
International Biophysics Corp.
Intersurgical
IPI Medical Products

J

Jones & Bartlett Learning

K

Karl Storz Endoscopy-America, Inc.
Kettering National Seminars
Kimberly Clark

L

Lambda Beta Society
Legacy

M

MAQUET Medical Systems, USA
Marpac Inc.
Masimo
Maxtec
MediServe/MediWare
Mercury Medical
MES Inc.
Methapharm
MGC Diagnostics
Midwestern State University
Put COPD in the Driver's Seat this October—August 6, 2013RRT-BSRC Online Program
MIR-Medical International Research
Monaghan Medical Corporation

N

NAECB
National Board for Respiratory Care, Inc. (NBRC)
ndd Medical Technologies
NeilMed Pharmaceuticals, Inc.
Neotech Products
Nonin Medical, Inc.
Nova Biomedical
Nspire Health, Inc.

O

Omneotech Inc.
Oricare Inc.

P

Passy-Muir Inc.
Percussionaire Corporation
Philips Respironics
Praxair Healthcare Services
Precision Medical, Inc.
Pryor Products
Pulmodyne

R

Radiometer America, Inc.
RemZzzs
ResMed
Respiralogics LLC
RespirTech
RMS Medical Products
RT/Sleep Review

S

Salter Labs
Schiller America, Inc.
Sentec, by Master Distributor Bemes, Inc.
Seoil Pacific Corp.
Siemens Medical Solutions USA, Inc.
Sleepnet Corporation
Smiths Medical
SSCOR

T

Teleflex
Thayer Medical
Toktome Acoustics, LLC
Tri-anim Health Services
TSI Inc.

U

University of Virginia Health System

V

Vapotherm
Vision-Sciences, Inc.
Vitalograph, Inc.

W

Westmed

Exhibit Hours at The Buying Show:

Saturday, Nov. 16, 11:00 am - 4:00 pm

Sunday, Nov. 17, 9:30 am - 3:00 pm

Monday, Nov. 18, 9:30 am - 2:00 pm

Registration Information

Registration and Fees

REGISTRATION FEES (SEE NEXT PAGE FOR THE FORM)

*You may become an AARC Member prior to registering (www.aarc.org). If you opt to pay the non-member Congress or pre-course fees, you are entitled to a complimentary 12-month AARC membership.

Congress (4 days)	By Sept 27	After Sept 27 And On-site 4 Days
AARC Active/Associate	$390	$415
AARC Student Member	$170	$180
Non-member	$530*	$540*
Non-member Student		$235* (Must register on-site)
Spouse		$50 (Must register on-site)

Congress Daily Fees (Must register on-site)	**Sat., Sun., or Mon.**	**Tues.**
AARC Member	$210	$125
AARC Student Member	$90	$55
Non-Member Student	$140	$105
Non-member	$300	$175
Exhibitor	$175	$125

Active Duty Military
We have a special offer for all health care professionals, not just respiratory therapists, on active duty in all branches of the US armed forces, as well as military reservists recalled to active duty. Go to www.aarc.org/member_services/military/congress.htm.

Congress Day Tripper Packages
Cost-saving group rates are available for AARC members, nonmembers and students.

Plan A–Group Package
$625 for 4 one-day prepaid vouchers
Equates to $156.25 per day, a savings of about 25% from the daily full-day rate for AARC members.

Plan B–Student Group Package
$250 for 4 one-day prepaid student vouchers
Equates to $62.50 per day, a savings of about 30% from the normal daily full day rate for students.

See page 139 for complete details.

Pre-Congress Courses
Course capacities are limited. Pre-registration is required. Deadline: Oct 25, 2013 or when the course is full.

These four courses run concurrently. You may register for only one full-day or two half-day courses. You may not register for two courses with conflicting times. You must attend the entire course to receive CRCE credit; no partial credit will be given.

Pre-Congress Course #1 — Respiratory Care and the Trauma Patient
Friday, Nov 15, 2013 • 8 am to 5 pm

By Sept 27	**AARC Member**	**Non-member**
Course only	$190	$305*
With Congress Registration	$90	$90

Sept 28–Oct 25	**AARC Member**	**Non-member**
Course only	$225	$340*
With Congress Registration	$115	$115

(Continued on page 134)

AARC Congress 2013 Registration Form

November 16–19, 2013 • Anaheim, California, USA

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

or MAIL: *Send this form to: AARC Congress 2013, 9425 N. MacArthur Blvd. Ste. 100, Irving, TX 75063-4706 U.S.A. Full payment must be included with your registration form.*

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

One person per form. No invoices will be issued. Cancellations must be in writing. There will be a either a 25% or $50 processing fee, whichever is less, for cancellations received by October 25, 2013. No refunds will be made thereafter.

PLEASE PRINT INSIDE THE BOXES

AARC Member # ***Membership Expiration Date*** ***Daytime Telephone (if international, include country code)***

First and Last name as you want them to appear on your name badge. DO NOT include credentials here.)

Employer

Preferred Mailing Address (write address below, but first indicate if this is your home or business address) ☐ ***Home Address*** ☐ ***Business Address***

City (and Country if outside US) ***State*** ***Zip/Postal Code***

E-Mail Address _____ @ _____

CREDENTIAL ***(check three to be printed after your name)***: ☐ RRT ☐ CRT ☐ MD ☐ RN ☐ Other _____

JOB RESPONSIBILITY *(check one):* ☐ Dept. Director ☐ Supervisor ☐ Therapist ☐ Educator ☐ Other _____

EMPLOYMENT SETTING *(check one):* ☐ Hospital ☐ School ☐ Skilled Nursing Facility ☐ Subacute Care ☐ Home Care ☐ HMO ☐ Home Health Agency ☐ Manufacturer/Supplier ☐ Other _____

RESPIRATORY CARE AND THE TRAUMA PATIENT

Friday, Nov. 15, 2013 • 8:00 am – 5:00 pm • Anaheim, CA

Pre-registration is required. Deadline: October 25, 2013 or when course is full.

	AARC Member	Non-member
By Sept 27		
Course Only	☐ $190	☐ $305*
With Congress Reg	☐ $90	☐ $90
Sept 28– Oct 25		
Course Only	☐ $225	☐ $340*
With Congress Reg	☐ $115	☐ $115

TOBACCO INTERVENTION AND CESSATION AIDS

Friday, Nov. 15, 2013 • 8:00 am – 5:00 pm • Anaheim, CA

Pre-registration is required. Deadline: October 25, 2013 or when course is full.

	AARC Member	Non-member
By Sept 27		
Course Only	☐ $190	☐ $305*
With Congress Reg	☐ $90	☐ $90
Sept 28– Oct 25		
Course Only	☐ $225	☐ $340*
With Congress Reg	☐ $115	☐ $115

PATIENT SAFETY & THE RESPIRATORY THERAPIST

Friday, Nov. 15, 2013 • 1:00 – 5:05 pm • Anaheim, CA

Pre-registration is required. Deadline: October 25, 2013 or when course is full.

	AARC Member	Non-member
By Sept 27		
Course Only	☐ $100	☐ $150
With Congress Reg	☐ $50	☐ $50
Sept 28– Oct 25		
Course Only	☐ $125	☐ $200
With Congress Reg	☐ $65	☐ $65

PREPARING FOR A PANDEMIC: THE STRATEGIC NATIONAL STOCKPILE MECHANICAL VENTILATORS WORKSHOP

Friday, Nov. 15, 2013

This 3-hour workshop will be offered twice:

8:00 am – 11:00 am and 1:00 pm – 4:00 pm

Congress registration is not required. No course registration fee is required but you must pre-register.

☐ Please register me for the Friday morning workshop: 8:00 am – 11:00 am

☐ Please register me for the Friday afternoon workshop: 1:00 pm – 4:00 pm

CONGRESS REGISTRATION

Payment of appropriate fee entitles registrant to attend all Congress activities and social events November 16-19. Spouses register on-site only.

CHECK ONE:	***By Sept 27***	***after Sept 27 (and on-site 4-Day)***
AARC Active/Associate Member	☐ $390	☐ $415
AARC Student Member	☐ $170	☐ $180
Non-member*	☐ $530	☐ $540

*You may become a Member prior to registering by going to www.AARC.org. If you opt to pay the Non-member fee you are entitled to complimentary, automatic 1 year AARC membership. Check here ☐ if you **DO NOT** wish to receive this complimentary 1 year AARC membership.

Check enclosed for $_____ or Charge $_____ to my

☐ **American Express** ☐ **MasterCard** ☐ **VISA**

Card Holder Name (print) _____

Credit Card # _____

Expiration Date_____ Signature_____

Educational Sessions will be electronically recorded by the AARC. By attendance or participation in discussion, registrant agrees that the AARC may electronically record, copy, and distribute registrant's attendance and involvement in the program discussions and question-and-answer periods. **No individual or entity other than the AARC may record (audio or video) any portion of this program.**

OFFICE USE ONLY: ☐ BC ☐ PC ☐ C ☐ CC

Total Received _____ Check # _____ Date _____

REGISTRATION POLICIES

- American Express, MasterCard, and VISA are the only credit cards accepted.
- Members who have paid the current year's dues and are in good standing or whose applications are in process will be admitted at the member rate.
- Members registering on-site will be required to present their current membership card. Any person who does not present a current membership card must register at the non-member rate.
- All students will be required to pay a registration fee. AARC members with student status can register at the student rate. Students who are not members of the AARC are required to pay the non-member student rate. Non-member students must register on-site and show proof of current enrollment.
- An active member is not permitted to register as an exhibitor or to assist in a booth unless he/she is an employee of the exhibiting firm.
- Spouses may register for the Congress on-site only. Any logical proof indicating that the person is a member's spouse will be accepted.
- Advance registration fees must be prepaid. No invoice will be issued. An acknowledgement will be made of the fee paid.
- **Refund requests must be in writing and must be received by Oct 25, 2013.** A processing fee of 25% or $50, whichever is less, will be deducted from the refund. No refunds will be made after **October 25**.
- No soliciting from exhibitors or attendees is permitted without AARC permission.

Registration (continued)

Pre-Congress Course #2 — Tobacco Intervention and Cessation Aids
Friday, Nov 15, 2013 • 8 am to 5 pm

By Sept 27	AARC Member	Non-member
Course only	$190	$305*
With Congress Registration	$90	$90

Sept 28–Oct 25	AARC Member	Non-member
Course only	$225	$340*
With Congress Registration	$115	$115

Pre-Congress Course #3 — Patient Safety & the Respiratory Therapist
Friday, Nov 15, 2013 • 1 pm to 5:05 pm

By Sept 27	AARC Member	Non-member
Course only	$100	$150
With Congress Registration	$50	$50

Sept 28–Oct 25	AARC Member	Non-member
Course only	$125	$200*
With Congress Registration	$65	$65

Pre-Congress Course #4 — Preparing for a Pandemic:
The Strategic National Stockpile Mechanical Ventilators Workshop
Friday, Nov 15, 2013
This 3-hour workshop will be offered twice:
8:00 am – 11:00 am and 1:00 pm – 4:00 pm

Congress registration is not required. No course registration fee is required but you must pre-register by using the form on page 133 or online.

Online Registration
If you are using a credit card, go to www.AARC.org.

Faxed or Mailed Registrations
Complete the Registration Form and mail or fax it to the AARC. Details are on the form.

Receipts
A receipt for your registration fee(s) will be sent to you prior to your departure for Anaheim, CA. Present the receipt on-site to receive your name badge and registration packet(s).

On-site Congress Registration Hours

Friday—11/15	10 am–6 pm
Saturday—11/16	7 am–4 pm
Sunday—11/17	7:30 am–4 pm
Monday—11/18	8 am–4 pm
Tuesday—11/19	8 am–10 am
	8 am–3 pm CRCE assistance available

You can fill out the Registration Form and bring it with you for on-site registration.

Travel Discounts Information

The companies shown below are offering discounts to AARC Congress attendees, exhibitors, family members and friends.

AIRPORT

The closest airport to the Anaheim resort area is John Wayne Orange County (SNA). This airport is approximately 14 miles from the Anaheim Convention Center.

AIRLINES

AMERICAN AIRLINES

- **Discounts** valid for John Wayne Orange County (SNA), Los Angeles (LAX), Ontario (ONT).
- **Online** at www.aa.com. Enter 94N3AA in the Promotion Code box (no booking fee).
- **Call** AA Meeting Services at 800-433-1790 and refer to Authorization Code A94N3AA (booking fee added).

DELTA AIR LINES

- **Discounts** valid for John Wayne Orange County (SNA), Burbank (BUR), Long Beach (LGB), Los Angeles (LAX) Ontario (ONT).
- **Online** at www.delta.com. Click on "More Search Options." Enter NMFER in the Meeting Event Code box (no booking fee).
- **Call** Delta Meeting Network at 800-328-1111. Refer to Ticket Designator NMFER (booking fee added).

UNITED AIRLINES

- **Discounts** valid for John Wayne Orange County (SNA), Burbank (BUR), Los Angeles (LAX), Ontario (ONT).
- **Online** at www.united.com. Enter ZP93841593 in the Offer Code box (receive an additional 3% off and no booking fee).
- **Call** United Meeting Works at 800-426-1122. Refer to Z code ZM93 and Agreement Code 628224 (booking fee added).

GROUND TRANSPORTATION

BUDGET RENT A CAR

- **Online** at www.budget.com. Click on the "Use an Offer Code" box. Enter U064639 in the BCD box.
- **Call,** 800-772-3773. Refer to Discount Offer Code U064639.

ENTERPRISE RENT-A-CAR

- **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

- **Online** at www.hertz.com. Enter 049T0008 in the Convention Number (CV) discount box.
- **Call,** 800-654-2240 or 405-749-4434. Refer to Convention Discount Code 049T0008.

DISNEYLAND RESORT EXPRESS

- **Direct, Non-stop Scheduled Service** on full sized coaches from John Wayne Orange County (SNA) and Los Angeles (LAX) airports to the Anaheim resort area hotels.
- **No reservation required.** Go to www.aarc.org to download a flyer that includes instructions, departure times, and the discount coupon.
- **To receive the discount,** coupon and credit card for payment must be presented at the time of travel. Non-discounted tickets may be pre-purchased by visiting graylineanaheim.com/shuttles.shtml or calling 714-978-8855 or 800-828-6699.

SUPER SHUTTLE

- **$2 discount on shared ride round trip** reservations made only on-line at www.supershuttle.com/default.aspx?gc=KG47D. Enter the promotion code KG47D.
- **48-hour advance reservations** are required. Discount is valid for John Wayne Orange County (SNA), Long Beach (LGB) and Los Angeles (LAX).

WHAT TO SEE AND DO IN ANAHEIM

Be sure to check out all of the things to see and do in Anaheim at http://microsite.anaheimoc.org/american-association-respiratory-care

AARC Congress 2013 in Anaheim, CA

Convention Site/Headquarters Hotel

All official Congress lectures and exhibits, unless otherwise noted, will take place at the Anaheim Convention Center, 800 W. Katella Ave., Anaheim, CA 92802.

The headquarters hotel will be the Anaheim Marriott, 700 W. Convention Way, Anaheim, CA 92802-3483.

The pre-courses on Friday, November 15 will take place at the convention center and the Marriott; check the Advance Program for locations.

On Saturday the session, "From Resume to Interview," as well as the Opening Reception that evening, will take place at the Marriott.

The Sputum Bowl Finals Monday night will be held at the convention center.

Housing Instructions

Housing Reservation Deadline

Friday, October 25 is the deadline to make your reservation at the AARC discounted rates. After this date, the official AARC room blocks will be released by the hotels and they may charge significantly higher rates for any rooms that are still available.

Hotels (See map on next page for locations.)

1. Anaheim Marriott (Headquarters Hotel)
700 W. Convention Way
Anaheim, CA 92802
$149.00 * Single/Double

2. Hilton Anaheim
777 W. Convention Way
Anaheim, CA 92802
$145.00 ** Single/Double

3. Courtyard Anaheim at Disneyland Resort
2045 S. Harbor Blvd.
Anaheim, CA 92802
$139.00 *** Single/Double

Single/Double represents the number of people in the room, not bed type.

The nightly rates above are plus 17% tax (subject to change without notice) plus fees shown below.
** $0.29 per room per night Anaheim Tourism Improvement District fee.*
*** $1.17 per room per night Anaheim Tourism Improvement District fee.*
**** $0.06 per room per night Anaheim Tourism Improvement District fee.*

(Continued on page 138)


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ARTESIA FREEWAY
91
La Palma Avenue
5
Lincoln Avenue
Anaheim Boulevard
East Street
Lincoln Avenue
College Blvd.
Ball Road
Ball Road
SANTA ANA FREEWAY
OCTA Metrolink
State
Walnut Street
Drive
DISNEYLAND PARK®
DOWNTOWN DISNEY SHOPPING DISTRICT®
Disneyland
DISNEY CALIFORNIA ADVENTURE PARK®
Disney Way
ANAHEIM GARDENWALK
Cerritos Avenue
HONDA CENTER
Street
Katella Avenue
AMTRAK STATION
CITY NATIONAL GROVE OF ANAHEIM
ANGEL STADIUM
Euclid
ANAHEIM CONVENTION CENTER
2
1
3
Convention Way
Transit Plaza
Manchester Ave.
Orangewood Avenue
Haster Street
5
Chapman Avenue
Street
West
HARBOR BL.
N
The Outlets at Orange
The City Dr.
22
GARDEN GROVE FREEWAY
Garden Grove Boulevard
THE ANAHEIM RESORT BOUNDARY
Hotel Locator Map provided by AOCVCB
approx. 1/2 mile
map not to scale

Housing Reservation Instructions

Make Your Reservation

NOTICE: Unauthorized housing entities are contacting attendees and exhibitors to book Anaheim hotel reservations. Only the phone numbers, links and codes shown below are authorized by the AARC. The AARC will not be making unsolicited calls regarding hotel reservations.

Use the links below to go directly to the convention hotels' special AARC Congress web pages or call the specific numbers listed to obtain our discounted rates.

Anaheim Marriott

- **Online at https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=10719336.** Enter AMA13AM.
- **Call** Marriott's dedicated Group Reservations at 714-750-8000 or toll-free 877-622-3056. Enter AMA13AM
  Tell the agent that the name of the meeting is "AARC Congress 2013".

Hilton Anaheim

- **Online at https://resweb.passkey.com/go/AARC2013.** Enter AMA13HA.
- **Call** Hilton at 714-750-4321 or toll-free at 877-776-4932. Tell the agent that the name of the meeting is "AARC Congress" or give the Group Code "ARC".

Courtyard Anaheim at Disneyland Resort

- **Online at www.marriott.com/meeting-event-hotels/group-corporate-travel/groupCorp.mi?resLinkData=AARC%20-%20AMA13CA%5ELAXAD%60AARAARB%60139.00%60USD%60false%6011/13/13%6011/19/13%6010/25/13&app=resvlink&stop_mobi=yes** Code: AMA13CA.
- **Call** the Courtyard toll-free at 800-321-2111. You must tell the agent that the name of the meeting is "AARC Congress 2013".

Guarantee

All reservation requests must be accompanied by a credit card. Cards must be valid through November 2013. Cards accepted: American Express, Visa, MasterCard, Discover.

Special Requests

All Marriotts are non-smoking facilities. Special requests cannot be guaranteed; however, the hotels will do their best to honor all requests. The hotel will assign specific room types upon check-in, based on availability.

Acknowledgements

Internet reservations: Print the confirmation page at the end of the reservation process. You will also receive an e-mail confirmation if you enter your e-mail address in your reservation record.
Phone reservations: You will receive a confirmation number from the agent and can request an e-mailed confirmation.

Making Changes to Reservations

Any changes to a reservation can be made via your original method through Friday, October 25. After that date you must call the hotels at the numbers listed below. Changes will be accepted based on rate and space availability.

- Anaheim Marriott— Call 714-750-8000 or toll-free 877-622-3056
- Hilton - Call 714-750-4321 or toll-free at 877-776-4932
- Courtyard Anaheim— Call 800-321-2111 toll-free

Cancellations/Penalties

Check your confirmation to determine your hotel's specific cancellation policy. If you fail to register at the hotel on your confirmed date it may result in your credit card being assessed one night room and tax by the hotel. Your confirmed hotel may assess an early departure fee for departure date changes after check-in.

Reward your staff and students with a trip to Congress

This year the AARC is offering everyone a more flexible opportunity to attend this premier event with a new program just introduced for 2013. There's a student package, too.

Individual Attendees… Want to attend AARC Congress 2013, but can't get the time off from work for all 4 days of the meeting? Perhaps a single day registration is more affordable and right up your alley. The AARC Day Tripper Program is a great opportunity for you and three other therapists to attend the 4-day event that is loaded with education, exhibits, networking, and many other activities.

Managers… Maybe you've wanted to send your staff in the past, but your budget can't absorb multiple, 4-day registrations. Even more importantly, department staffing won't let you give multiple employees off all at the same time.

Here's how it works:

- Order the Day Tripper Voucher Package any time between now and September 27th.
- You will receive 4 one-day vouchers to Congress 2013 in Anaheim.
- Each voucher is good for one person for any one of the 4 days of Congress (Nov. 16-19).
- The attendee brings the voucher to the onsite Special Services registration counter on the desired day and uses it to register for that day.
- The attendee has all the same privileges as other attendees who purchase a one-day registration onsite at the rate of $210 for members or $300 for nonmembers, a savings of up to $143 per person!

Benefits to the staff whom you select to attend:

- Earn CRCEs at premier educational programs
- Opportunity to visit the largest respiratory care exhibit hall in the world
- Network with other professionals and meet the "who's who" in respiratory care

Make it easy on yourself:

- Decide at the last minute whom will attend – or change it if circumstances change.
- Mix and match any way that you want. Send a different person each day. Or send 4 people on one day. Or give 2 people vouchers for 2 days each. Make it work for you and your schedule.
- Anyone you select can attend…members or non-members.

Plan A - Day Tripper Group Package $625.00

Package includes: 4 one-day vouchers to AARC Congress 2013. Price equates to $156.25 per day, a savings of about 25% from the daily full-day rate for AARC members.

Plan B - Student Day Tripper Group Package $250.00

Package includes: 4 one-day student vouchers to Congress 2013. Price equates to $62.50 per day, a savings of about 30% from the normal daily full day rate for students.

Here's how it works:

- Same rules apply as for the regular Day Tripper Package with the following exceptions:
- Upon registration and presentation of the voucher onsite, students must show proof that they are currently enrolled as a full time student in an accredited respiratory therapy program.
- Student attendees are not eligible for CRCE credit.

ANSWERS TO FAQs:

- Day Tripper is a special advance purchase program available only between now and Friday, September 27th.
- Payment is required in advance with a check or credit card. Sorry, no purchase orders.
- **The package is nonrefundable.**
- Vouchers may be used by AARC members or nonmembers.
- Vouchers are fully transferable by the purchaser or within the purchasing company/school, and are not specific to a day of the event or to an individual. They may be used at any time during AARC Congress 2013.
- *Lectures will be presented November 16 – 19. NOTE that exhibits are on November 16 - 18 only.*
- Registration for specific names and dates is not required in advance. The attendee/student simply brings the voucher to the onsite Special Services registration counter upon arrival.
- Vouchers can be used on four different days, or all on the same day, by 1 person for 4 days, 2 people at 2 days each, or 4 people each attending one day… or any one of the many different combinations. The choice is yours!

To take advantage of this great new Day Tripper program for your staff and students visit **www.aarc.org,** complete the downloadable form and send it with your payment to AARC. Details are on the form.

Questions?
Contact info@aarc.org or call Customer Service at 972-243-2272.

The Differences in State Licensure and NBRC Credentialing

by Chelsea Earhart, MBA

The NBRC frequently receives calls or questions from practitioners who are confused about the renewal of NBRC credentials in relation to the renewal of a state license to practice respiratory therapy. This article addresses the differences between the two distinct entities and the importance of renewing both.

NBRC's Continuing Competency Program

Beginning with credentials issued July 1, 2002, the NBRC's Continuing Competency Program (CCP) was put in place to assure the public and others that individuals credentialed by the NBRC continue to demonstrate a level of excellence in professional knowledge, skills, and abilities as respiratory therapists and pulmonary function technologists. The purpose behind the CCP is to establish standards by which continued competency of credentialed practitioners working in defined areas of respiratory care, including assessment, may be determined. The CCP was designed to enhance and contribute to the continued competence of credentialed respiratory therapists and pulmonary function technologists, as well as demonstrate concern for patient safety. Most individuals required to participate in the program have successfully renewed their national credentials issued by the NBRC by providing evidence that they continue to meet current standards of practice.

All credentials subject to the CCP must be renewed every five years. There are three ways to renew credentials subject to the CCP:

- Retake and pass the respective examination for the highest credential held
- Take and pass a new NBRC credentialing examination
- Provide proof of completion of a minimum of 30 hours of Category I Continuing Education (CE) acceptable to the NBRC.

If a practitioner does not use one of the three routes of credential renewal and allows the credential(s) to expire, the practitioner will no longer be able to use the credential designation(s). The effect of allowing a credential to lapse can be widespread. An expired credential means that unless steps are taken to reinstate the credential, the practitioner is no longer recognized as holding the national designation. For those allowing their CRT credential to expire, a practitioner's lapsed credential may violate their licensure status, causing the state to re-evaluate whether the practitioner has violated the terms of licensure by no longer holding the national credential. This may cause a practitioner to lose their license to practice respiratory care in their state.

No longer holding an NBRC credential may affect a practitioner's status in the workplace. Therapists who no longer hold the CRT credential will lose the ability to become eligible for the RRT credential. Additionally, organizations requiring the advanced-level RRT credential as a condition of employment may re-evaluate the nature of a respiratory therapist's employment or consider adjusting the pay scale for any employee not meeting predetermined professional requirements for respiratory care practitioners.

The main source of confusion usually stems from practitioners believing that renewing a state license to practice also renews their NBRC credential(s). Although

about the author...

Chelsea Earhart, MBA, is the assistant executive director of the National Board for Respiratory Care in Olathe, KS.

49 states use the NBRC CRT credential as the basis for licensure, the state licensing boards and the NBRC are completely separate entities.

All states that require a license to practice respiratory care also require some form of license renewal. Each state has different requirements on the length of time required between renewals and the method of renewal. Additionally, states also differ on the required status of NBRC credentials when renewing a state license to practice. If a practitioner is unsure about what requirements are necessary in their state, it is best to contact the state licensing board directly to find out what is required in the states where the license(s) are held.

In order to ensure that neither NBRC credentials nor a state license to practice lapse, it is important to keep all contact information current with both organizations. This ensures that important notices regarding these two very crucial career tools are received.

It is also imperative to note that state licensure boards, the AARC, and the NBRC do not share common databases, CEU records, or contact information. Each organization has its own database systems and processes for practitioners to submit the necessary information required for renewal.

Getting your questions answered

More detailed information regarding compliance with the CCP can be found on the NBRC website, www.nbrc.org. For questions about how a change in credential status, such as expiration, may affect employment, practitioners are encouraged to speak with their employer.

Additionally, how credential status may affect a state-issued license to practice should be addressed by the individual's state licensure agency. A directory of these agencies can be found on the NBRC web page, www.nbrc.org/Pages/Agency-Directory.aspx.

The NBRC Board of Trustees and its committees are interested in your comments, questions, and concerns. You may contact the NBRC at 18000 W. 105th St., Olathe, KS 66061, by email at nbrc-info@nbrc.org, by phone at (888) 341-4811, or visit www.nbrc.org. ■

Marketplace

Featuring information on products and equipment from manufacturers

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

Industry Watch

DeVilbiss moves production lines back to the U.S.

DeVilbiss Healthcare is relocating its production lines from China to the United States. The company's corporate headquarters are in Somerset, PA. "In an effort to enhance and accelerate the continuous improvement program for our production processes, the decision was made to move all production lines back to the United States," Ed Murphy, president and CEO of DeVilbiss Healthcare, was quoted as saying.

LAM Therapeutics moves ahead wtih LAM project

LAM Therapeutics, a company that plans to conduct research to fight lymphangioleiomyomatosis (LAM), a rare lung disease of women, has closed Series A financing with private investors to launch operations. The company notes that proceeds from the financing will be used for identification of clinical stage drugs with potential activity against LAM and to conduct clinical trials. LAM also is known to affect other organs, including the lymph nodes and kidneys, and is characterized as a destructive, metastasizing neoplasm of smooth muscle-like cells that leads to progressive cystic lung disease. Currently, there is no cure or FDA-approved drug for LAM. (For more information on LAM, read Dr. Richard Sheldon's article "Unusual Pulmonary Diseases" in the October 2009 online *AARC Times* at www.aarc.org/members_area/aarc_times/backissues.asp.)

CareFusion Foundation announces grant recipients

The CareFusion Foundation has issued more than $500,000 in grant funding to 11 American nonprofit health care institutions to help develop and share infection prevention best practices. "We're pleased to help fund new and innovative programs to address infection prevention and support organizations that are prioritizing efforts to reduce health care associated infections and improve patient care," says Dr. Carlos Nunez, chief medical officer for CareFusion. Among the projects: preventing post-operative pulmonary complications at Boston Medical Center and automating surveillance for ventilator-associated events at Wayne State University Hospital.

BI honored for energy efficiency strategies

Northeast Energy Efficiency Partnerships named Boehringer Ingelheim the 2013 State Champion and Northeast Business Leader for Energy Efficiency at the organization's summit gathering in June. "We are honored to be recognized by Northeast Energy Efficiency Partnerships," Paul Fonteyne, president and CEO of Boehringer Ingelheim USA Corporation, was quoted as saying. "As part of our mission to improve health and quality of life, we are dedicated to minimizing the company's environmental impact, conserving natural resources, and promoting environmental awareness both locally and globally." The company was specifically honored for its successful efforts to achieve energy savings at its 300-acre U.S. headquarters in Ridgefield, CT, where it implemented a persistent strategy for energy efficiency that included changes to the energy management system's programming for both space heating/cooling and water heating.

Alios BioPharma begins dosing in RSV drug trial

Alios BioPharma Inc. has begun oral dosing of ALS-8176 in a Phase 1 clinical trial. ALS-8176 is a structurally novel, anti-respiratory syncytial virus (RSV) nucleoside analog being developed for the treatment of acute RSV infection. It is the only known nucleoside analog currently in clinical development for the treatment of RSV. According to the company, ALS-8176 demonstrated potent anti-viral activity across multiple strains of RSV in preclinical studies. The randomized, double-blind, placebo-controlled Phase 1 study is designed to evaluate safety, tolerability, and pharmacokinetics of both single-ascending and multiple-ascending doses in up to 90 healthy adults.

Vortran receives CE Certification

Vortran's Percussive NEB® and Vortran-IPPB™ have received CE Certification. CE Certification confirms that the company has implemented a

quality assurance system for design, manufacture, and final inspection. It will allow Vortran to market the products in European nations, as the company is in the process of seeking European distribution partners.

LMA supports new difficult airway simulation center

The Archie Brain Difficult Airway Simulation Center opened last May at the Cleveland Clinic. The center, which is designed to provide airway management training for health care professionals of all levels, is named after Dr. Archie Brain, who invented and developed the laryngeal mask in 1982. The center is being supported by LMA, the Laryngeal Mask Company Ltd. William Crothers, group CEO, said, "Since its inception more than 20 years ago, the Laryngeal Mask Company has been dedicated to improving airway management not only through innovative products but through excellence in education. The Archie Brain Difficult Airway Simulation Center is the latest evidence of this ongoing commitment." The center is located within the Cleveland Clinic Multidisciplinary Simulation Center.

Spirometry pioneer Mary C. Townsend honored

The American College of Occupational and Environmental Medicine honored Mary C. Townsend, DrPH, with its Health Achievement in Occupational Medicine Award at the 2013 American Occupational Health Conference in Orlando, FL. Dr. Townsend, principal and consultant at M.C. Townsend Associates LLC of Pittsburgh, PA, and assistant professor of environmental and occupational health at the University of Pittsburgh's Graduate School of Public Health, received the award for her contributions to the field of pulmonary medicine. Particularly, she was noted as author of groundbreaking scientific papers on spirometry and respiratory surveillance.

Sanovas and Mayo Clinic collaborate on bronchial thermoplasty innovation

Sanovas Inc. has entered into a patent license and joint development agreement with the Mayo Clinic to commercialize a single-treatment system in the emerging field of bronchial smooth muscle modification. The collaboration is to advance the clinical efficacy of bronchial thermoplasty, a novel outpatient procedure that delivers precisely controlled thermal energy to reduce excess airway smooth muscle associated with airway constriction in patients with asthma. "The development of a single treatment system that can be performed with precision and that can offer real time feedback of treatment efficacy in a single office visit, versus the three treatments that are currently required, benefits patients and providers because it will reduce risk and save time and money," says Craig E. Daniels, MD, associate professor of pulmonary and critical care medicine at the Mayo Clinic and co-inventor of Mayo's patent.

Kimberly-Clark receives group-purchasing agreements

Kimberly-Clark has been awarded three group-purchasing agreements with Premier Health Care Alliance for its Pediatric Microcuff Endotracheal Tube and KimVent Oral Care products. Among the two agreements for its KimVent Oral Care products, one is a contract within Premier's Accelerated Supply Chain Endeavor program. The contracts, which became effective on Aug. 1, provide special pricing and terms for Premier's nearly 100,000 hospitals and other care sites. Earlier this year, the company was awarded a contract through Premier's Technology Breakthroughs Program for its Pediatric Microcuff Endotracheal Tube.

Lung Stem Cell Research Program director named

Barry R. Stripp, PhD, has been named director of the new Lung Stem Cell Research Program at Cedars-Sinai Medical Center in Los Angeles, CA. Dr. Stripp comes to Cedars-Sinai from Duke University Medical Center in Durham, NC, where he was a professor in both the department of medicine and cell biology. The Cedars-Sinai stem cell research program was launched in 2012 to bring researchers and clinicians together to discuss stem cell therapies in lung disease, provide core services that generate clinically relevant stem cell populations, and use disease-specific stem cells to explore mechanisms of cell death in human lung disorders.

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

RC Currents

IN THE NEWS

AARC Mourns Loss of CoARC President Steve Mikles

The AARC joins CoARC in mourning the loss of Steve Mikles, EdS, RRT, FAARC, who lost his battle with cancer on July 4. As president of CoARC's Board of Commissioners, he was actively engaged in leading the organization until the time of his death and will be greatly missed by all of his colleagues.

His loss will also be felt throughout the AARC, where he served in numerous capacities since becoming a member of the Association in the 1970s. "The respiratory care profession has lost one of its best and brightest respiratory therapists, educators, and leaders with the passing of Steve Mikles," says AARC President George Gaebler, MSEd, RRT, FAARC.

Steve Mikles

Mikles earned both his associate's and bachelor's degrees from SUNY Upstate Medical Center, graduating with high honors. He received his master's degree and education specialist degree from the University of South Florida. At the time of his death, he was serving as program director at St. Petersburg College in Pinellas Park, FL, where he had been on the faculty for 34 years.

In addition to his many volunteer activities with his professional organizations, he was a competitive runner for more than 25 years and also enjoyed biking and kayaking. The Stephen Mikles Scholarship Fund has been set up at St. Petersburg College to receive donations in his memory. For more information, see www.aarc.org/headlines/13/07/mikles/steve_mikles.pdf. ■

U.S. Congress Takes Up AARC Initiative

Congressman John Lewis (D-GA) has introduced the AARC-backed Medicare Respiratory Therapist Access Act in the U.S. House of Representatives. The bill, identified as H.R. 2619, will permit qualified respiratory therapists to provide self-management services to Medicare patients in physician's offices.

"We have listened to the feedback from previous years and are positioned to move the profession forward in an era of increasing health care needs," says AARC Federal Government Affairs Chair Frank Salvatore, MBA, RRT, FAARC. "We need your letters going to your U.S. representatives, asking them to co-sponsor H.R. 2619."

The bill has not yet been introduced in the Senate but has backing there from a number of members who are also involved with the Congressional COPD Caucus. "We're at a tipping point," said Cheryl West, MHA, AARC's director of government affairs. She explains that letters help garner attention and they should be sent now to:

- Your member of the House of Representatives asking for their co-sponsorship of H.R. 2619.
- Your two senators, asking them to support the introduction of a companion bill in the Senate.

AARC has an easy-to-use letter system online that allows you to quickly edit a suggested message in order to personalize it and then to easily send those emails on to your members of Congress. Go to AARC Capitol Connection (http://capwiz.com/aarc/issues/) to start the letter-writing process.

Finally, consider meeting with your member of Congress during the August District Work Period when your member is not in DC but carrying out his or her congressional duties back home. You might also consider attending any public events or town hall meetings, which will also provide you with brief opportunities to ask for the member's support of H.R. 2619. You can find contact information by visiting the member's website and the DC office should have the schedule of the member for public events as well as setting up any face-to-face meetings. ■

North Carolina won the 2012 Sputum Bowl

National Sputum Bowl Is Ready To Roll!

State Sputum Bowl competitions may be the lifeblood of the "Nationals" held at the International Respiratory Convention & Exhibition every year, but it is at "Nationals" where the excitement builds to a fevered pitch. Teams from all over the country will convene for the ultimate showdown to see which ends up the best of the best.

This year, the National Finals will take place in Anaheim, CA, on Monday night, Nov. 18. All AARC Congress attendees are invited to share an evening of Sputum Bowl fun and refreshments with friends and colleagues, supported once again though an unrestricted grant from Covidien.

Last year the AARC Sputum Bowl got a big makeover, with lots of new features. National Sputum Bowl Committee Chair Sherry Whiteman, BHS, RRT, says something called Risk/Reward, which is now present throughout the entire game, was begun. That means that if a team buzzes in before the end of a question and answers incorrectly, they lose a point. Also, during preliminary games, each team may utilize a lifeline called Ask the Expert — and then during Finals night, this lifeline becomes Ask the Posse. The posse is a group of people chosen by the state team who are seated at the front of the room near the stage to help answer a question when their team is not sure.

"In addition to adding a new question category to the 2013 Sputum Bowl competition called Patient Assessment, we've renamed an old category to Acute Care/Critical Care. We also plan to use bracket methodology and social media to update the competition. So, anyone can join us on Twitter to learn when teams are playing or follow their state's progress in the Sputum Bowl," explains Whiteman. The Nationals will also have a new Bonus Phase, wherein teams buzzing in early and answering correctly can earn two points instead of the traditional one point.

"We have used the latest technology to create a game that speaks to the next generation of RTs," Whiteman points out. "For example, our Twitter feed will keep more RTs involved in what's going on at the Sputum Bowl, whether they are at the Congress or not." The goal is to create a fun, exciting, updated competition that speaks to what the audience and the contestants want so that it will continue on for another 20 years.

Attendees are also invited to hang around during the half-time break, when an audience participation game will utilize clicker technology to allow everyone to participate in a fun contest. "If you thought last year's half-time was great, you'll love what we have planned for this year," says Whiteman.

"If you ever have an idea you would like to see implemented at the Sputum Bowl, please feel free to contact me on AARConnect, our social media site for AARC members," Whiteman says. "I can't wait to see all of you in Anaheim. Long live Sputum Bowl! ■

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:

Thomas J. Kallstrom, AARC Executive Director/CEO

- Keynote speaker at the Arkansas Society of Respiratory Care's meeting
- Keynote speaker for the annual meeting of the Vermont/New Hampshire Society for Respiratory Care

Shawna Strickland, Associate Executive Director of Education

- Speaking to the Indiana Society for Respiratory Care on the ethics of noninvasive ventilation at the end of life

Jason Moury, DRIVE4COPD/COPD Coordinator

- Participating in the NBC6 South Florida "Renew You" Health Expo in Fort Lauderdale, FL

In the Service of Our Country

Steve Digman put his RC skills to work when transporting the patients in the back of this helicopter to an air ambulance waiting to take them to Germany.

When AARC member Steven Digman, CRT, EMT-P, graduated from high school in 1981, paying for college wasn't an option for his family. So he did what a lot of kids who wanted to get ahead in life did back then (and still do today) — he joined the Army. Digman decided to train as a combat medic and was stationed at Fort Campbell, KY, where he was assigned to the Col. Blanchfield Army Medical Center as an emergency medical technician.

After about three years, though, he wanted to explore new territory and asked to follow other clinicians at the hospital to see what they did and whether it might be for him. When he got to the respiratory therapist, he knew he had found what he was looking for. "The respiratory therapist I followed was great," he says now. "After a few days, I knew I wanted to be a respiratory therapist and help people breathe."

Digman graduated from the Army/Navy respiratory therapy school at Ft. Sam Houston in San Antonio, TX, in 1985 and went on to serve for a year at Ft. Bliss, TX, and then another six in Germany. After a deployment to the Middle East as a part of Desert Shield/Desert Storm, he decided to give civilian life a try. However, it wasn't long before he was back in uniform.

"Every now and then I would see these military helicopters fly over the house," he says. "So in 2000 I signed back up, but this time with the National Guard in Williamstown, WV, as a flight medic. I am currently still serving and hope to be until they make me leave at age 60."

Over the years Digman has been on a number of deployments, including to Camp Bond Steel in Kosovo, a humanitarian mission to Peru, and both Iraq and Afghanistan. He has especially fond memories of the nine months he spent in Kosovo. "I was fortunate to be on the orphanage team," says the father of four. "We visited the orphanage as much as possible and played with, fed, and treated the children.

Kosovo is also where Digman ended up showing the unique value of his respiratory therapy skills while helping to care for two Ukrainian soldiers who were badly burned when static electricity caused a tanker truck to explode while they were transferring gas from one truck to another. "One was trapped in the truck and had third-degree burns over 90% of his body," he says. "The other, who was on top of the tanker, was blown free but still had third-degree burns over 68% of his body."

The soldiers were flown from the site of the accident to the hospital, where Digman and his colleagues stabilized them for helicopter transport to the airport. An Air Force plane was scheduled to meet them there to take the men to definitive care in Germany.

Unfortunately, the oxygen on board the helicopter was not able to produce 50 psi to operate the ventilators needed to keep the patients alive. "I had them bring me an H-tank, found a gauge that had two 50 psi ports, put the tank on the bottom liter pan, and lowered the top one to tightly hold the tank on its side," recalls the AARC member. From there he was able to connect both vents to the tank. "The trip took about two hours from start to finish, not including the hospital time needed to stabilize the patients."

Today Steve Digman is director of cardiopulmonary services at Selby General Hospital in Marietta, OH, where he says his military training and background are still serving him well. "My military experience has helped me in many ways, including decision-making, critical thinking skills, leadership, and knowledge." He credits

A deployment to Kosovo gave Digman the chance to care for youngsters at a local orphanage.

his hospital for unwavering support as well. "The hospital has supported me throughout my deployments. They are like family."

EDITOR'S NOTE
Steve Digman's photo of the Kosovo helicopter transport was a finalist in our 2012 Photo Contest. To enter this year's contest, go to www.aarc.org/members_area/aarc_times/photo_contest/index.asp. ■

"New Members" Column Now Online

The "New Members" column can be accessed at www.AARC.org/new_members. Current AARC members are encouraged to check this site on the first of each month to view the names of individuals who have been approved as "Active Members" of the Association. Any current member may object to a new membership by filing a written objection with the Executive Office at info@aarc.org within 30 days. ■

Enter the 2013 AARC Photo Contest

AARC Times is looking for creative members to enter our AARC Photo Contest. Finalists will receive a free one-year membership renewal and have their photo entered into our Photo-of-the-Year Contest with the chance of it being chosen to appear on the March 2014 cover. For instructions and guidelines, select the *AARC Times* icon on www.AARC.org and click on the "Photo-of-the-Year Contest" link. Deadline to submit photos is Oct. 15, 2013. ■

Persistence Pays Off in Smoke-free Policy

Veronica Gates' quest to make her college campus smoke free is finally coming to fruition.

It gets pretty cold in Worchester, MA. So even though Quinsigamond Community College (QCC) had a designated smoking area for students, Veronica Gates, RRT, would always notice that kids would migrate back to the front doors of the buildings to stay warm while they lit up.

"The designated smoking areas were less than 50 feet from entrances, as well as placed near the walking paths to and from buildings and classes," explains the AARC member, who graduated from the RC program there in 2009 and is now an RT at UMass Memorial Hospital in Holden. "On cooler days, nonsmokers were forced to walk directly through the smoke clouds to get into the buildings."

One chilly day in April 2008, Gates was brainstorming ideas for the senior project she would need to carry out during her next academic term when she was once again confronted by a haze of smoke at the entrance to her building. It occurred to her that educating her fellow students about the dangers of smoking and soliciting their opinions on making QCC smoke-free would make for a great project. Little did she know that her idea would turn into a multi-year effort that would consume much of her final year on campus.

"There was much bureaucracy to overcome to say the least," recalls the RT. "I met from the bottom up — first a bunch of professors, then the Student Senate (whose president at the time supported the idea), then the Office of Health and Wellness, then the dean, then the All College Council — twice — which ultimately votes on the decision." When she decided to survey students on smoking, she even had to have the survey approved by the psychology department. "I guess they wanted to be sure I wasn't asking any inappropriate questions or harassing anyone!"

Along the way, she spent hours researching the issue, developed detailed PowerPoint presentations to illustrate her argument, made speeches to various groups to garner support, and talked with QCC President Gail Carberry, EdD, about her idea. By the time graduation neared, she was ready to present her final proposal to the All College Forum; but ultimately the idea of a smoke-free campus was rejected. Discouraged but undaunted, she kept up the fight even after she graduated, maintaining contact with a few of the All College Forum members and presenting her proposal to a meeting of the student body in the fall of 2010.

From there, the Student Council picked up the ball and continued to work toward the smoke-free campus, but Gates is widely credited with laying the groundwork that will, this fall, finally make QCC smoke free. The new rule goes into effect on Sept. 3, with the start of the new academic year. ■

National Health Observances

- **Healthy Aging Month**; September; Educational Television Network; www.healthyaging.net
- **Respiratory Care Week**; Oct. 20–26; AARC, (972) 243-2272; www.AARC.org/rcweek; materials available
- **Lung Health Day**; Oct. 23; AARC, (972) 243-2272; www.AARC.org/rcweek; materials available

▶ Transitions

Carl Hinkson, MS, RRT-ACCS, FAARC, has received the 2013 Distinguished Alumni Award from Highline Community College in Des Moines, WA. After graduating from the RC program there in 1996, Hinkson went on to earn his bachelor's degree from the University of Kansas and master's degree from Northeastern College. He currently serves as respiratory therapy manager at Harborview Medical Center in Seattle.

Louis Boitano, MS, RRT, FAARC, passed away in June. A long-time AARC member, he worked with neuromuscular disease patients at the University of Washington for many years and also published numerous papers related to the care of patients with muscular dystrophy and neuromuscular diseases. Boitano also served as the first chair of the AARC's Neurorespiratory Roundtable.

Mary Elrod, BSEd, RRT, CPFT, died in a motor vehicle accident last June. She had recently retired from the VA Hospital in Lexington, KY, but had gone back to work part time at the Lexington Clinic.

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

RC Week 2013 — "Bringing Breath to Life"

During RC Week, Oct. 20-26, tell everyone how respiratory therapists are "Bringing Breath to Life." And during this week, honor yourself, your colleagues, and the profession with events for your patients, your community, local students, and your RC team. Use these events for professional recognition, fun, and health education.

As the official sponsor for Respiratory Care Week, the AARC provides a website packed with event ideas, planning tips, photo sharing, and more at www.AARC.org/rcweek. Plus, you can bring your RC Week celebration to life with decorative items, gifts, t-shirts, and other official themed items at the 2013 RC Week store (www.aarc.org/rcstore). RC Week products are offered in partnership with Jim Coleman Ltd. ■

BRINGING Breath TO life
RESPIRATORY THERAPISTS

Web Watch

Lee Guion, MA, RRT, FAARC, and Amy Roman launched www.amyandpals.com, focused on people who have amyotrophic lateral sclerosis (ALS), plus their friends and family. The website provides information about ALS, how it impacts communication and breathing, and offers practical tips and tools for enhancing daily activities. Guest bloggers cover other aspects of living with ALS, from physical therapists, occupational therapists, dietitians, nurses, physicians, social workers, and neuropsychologists at the Forbes Norris Center in San Francisco. ■

RT Treats RT

Heidi Gibson was at the bedside when fellow RT Greg Morgan underwent an innovative new procedure to treat his severe asthma.

National asthma guidelines clearly state that asthma is a disease that can almost always be well controlled with proper medications and treatment. Greg Morgan, RRT, RRT-NPS, CPFT, is the exception to the rule. Diagnosed with asthma at age 11, he was routinely hospitalized with asthma exacerbations as a child; and things only got worse when he entered adulthood.

"I gradually began to get sicker as I worked in the hospital full time, and after a few years it began to impact everything," says the AARC member and staff therapist at the University of Minnesota Medical Center, Fairview in Minneapolis. "We were adjusting and changing control medications, and I was still having multiple exacerbations each year requiring prednisone bursts." Allergy testing revealed that his allergies had significantly worsened since childhood — "I am allergic to almost everything," says Morgan — and his physician decided to place him on allergy shots. Six hours after his first injection in February 2011, he had a severe reaction that landed him in the hospital — and, ultimately, intubated and on mechanical ventilation.

The next year and a half were a constant challenge, with Morgan requiring continuous prednisone. He could not work and, indeed, rarely even went outside. "Last year through the end of October, I was outside less than 60 hours," he says. "Often, I would wear a mask when I was outside; and if I didn't, I paid for it."

Today, however, Morgan is back on the job, doing what he loves — taking care of other people with respiratory conditions. Why the major turnaround? He credits his remarkable recovery to a procedure called bronchial thermoplasty that uses heat to shrink smooth muscle around the airways, thus opening them up and allowing the patient to breathe easier. He became the first commercial patient in Minnesota to receive the procedure on Aug. 22, 2012, treated not only by physicians at his hospital but by one of his own colleagues in the respiratory care department.

Heidi Gibson, RRT, who works in the Fairview endoscopy unit with Erhan Dincer, MD, the facility's pulmonologist specializing in interventional bronchoscopy, has known Morgan for about five years now; and like the rest of her colleagues was concerned about his failing health. Finding out he would be the first patient to receive bronchial thermoplasty at their hospital and that she would be the RT assigned to assist with the procedure, certainly gave her pause. "Seeing Greg suffer over the year and a half prior to his procedure was definitely in my mind," says the AARC member. "However, having worked closely with Dr. Dincer and also knowing Greg's primary pulmonologist very well, I trusted that he would be in safe hands."

Gibson also knew that she was well prepared for the procedure, having attended lectures on bronchial thermoplasty with Dr. Dincer and presented a talk of her own that featured an update on the new technique at the Wisconsin District 1 Fall Respiratory Conference in 2009. She worked closely with the manufacturer's staff as well, even meeting with them on her day off to ensure she knew what her part in the procedure would entail. "The pulmonologist and therapist should be knowledgeable with airway anatomy and have a clear understanding of the equipment involved," she emphasizes. "There should be precise communication between the physician and therapist to adequately ensure that the lung tissue can be

targeted to the greatest degree."

Given Morgan's medical history, his physicians decided to perform his bronchial thermoplasty in the operating room. "We took all necessary precautions; and while the first treatment went flawlessly, we tweaked a few things with the second therapy to give us access to more distal portions of Greg's airways," says Gibson. Morgan had three procedures in all, each of which left him wheezy and in need of nebulizer treatments every four hours at home. He also experienced a little shortness of breath each time and coughed up a lot of sputum, along with some blood, after the second and third procedures.

"I felt worse seven days after the third than with the first two, and actually at day nine post procedure had to get a short prednisone burst," he says. "But after a week I felt a lot better."

Now he feels great. "My life has changed and is still changing dramatically," he says. "I can go outside. I can go to work and not be a burden on my coworkers." Since the final procedure last October, he's been able to decrease his preventive medication routine and believes his usage will continue to go down. "Plain and simple, I have my life back," says the RT. "I know this procedure is not for everyone, but it was and is my miracle."

As for Heidi Gibson, she says her friend and colleague's recovery has been nothing short of remarkable. "Prior to bronchial thermoplasty, Greg had a hard time breathing and needed nebs very often while at work," she says. "Now he's doing so well that I like to chide him that he 'never shuts up!'" ■

▶ Strange But True...

No more steak: Researchers have found that bites from a creature dubbed the Lone Star tick can lead to an allergy to red meat. The allergy stems from the fact that people who are bitten by the tick develop antibodies to a carbohydrate in the tick's saliva known as alpha-gal, which is also present in red meat. Allergic reactions can range in intensity from mild hives to anaphylactic shock.

Under the sea: The New Zealand green-lipped mussel may spell relief for people with exercise-induced asthma. According to Indiana University investigators, an omega-3 supplement derived from the sea creature led to a 59% improvement in lung function following an airway challenge, along with a reduction in airway inflammation, asthma symptoms, and use of a rescue inhaler.

Take your vitamins: Yeshiva University scientists who set out to study how the TB bacteria becomes resistant to the first-line drug isoniazid ended up with a surprising finding: Not only did adding vitamin C to the laboratory culture kill drug-resistant TB bacteria, but the vitamin did the job alone as well. Further study revealed that vitamin C induces what is known as a Fenton reaction, causing iron to react with other molecules to create reactive oxygen species that kill the TB bacteria. Studies in humans are next.

Listen up: Engineering students from Johns Hopkins have developed a new stethoscope for NASA that will allow medics to accurately assess heart and body sounds in astronauts on long missions. The stethoscope uses both electronic and mechanical strategies to help an internal microphone pick up sounds that are clear and discernible — even in noisy spacecraft and even when the device is not placed correctly on the astronaut's body. ■

BACH2 Gene May Play a Role in Asthma, Other Autoimmune Diseases

Scientists at the National Institutes of Health and their colleagues have discovered that a gene called BACH2 may play a central role in the development of diverse allergic and autoimmune diseases, such as multiple sclerosis, asthma, Crohn's disease, celiac disease, and type 1 diabetes.

Previous research had shown that people with minor variations in the BACH2 gene often develop allergic or autoimmune diseases, and that a common factor in these diseases is a compromised immune system. In this study in mice, the BACH2 gene was found to be a critical regulator of the immune system's reactivity. "This may be the first step in developing novel therapies for these disorders," researcher Rahul Roychoudhuri, MD, was quoted as saying.

The study was published in the online edition of *Nature* on June 2. ■

ECMO Transport Team Born Out of Necessity

ECMO Transport Team members at Advocate are there when their patients need them. AARC members in the photo are: Ron Urban, MSRC, Nicole Flores, Jessica Murray, RRT, Jenn Watts, BS, RRT-NPS, Bev Lullo, BS, RRT-NPS, and Jaclyn Bergman, RRT-NPS.

Respiratory therapists play a key role on transport teams across the country, but few have ever transported a patient while on extracorporeal membrane oxygenation (ECMO). Traci Wolfe, BS, RRT-NPS, and her colleagues at Advocate Children's Hospital–Oak Lawn in Oak Lawn, IL, are among them; and she says these infrequent but vital transports have helped to save several children's lives since the facility attempted its first one back in 2004.

"We did our first mobile ECMO out of necessity," says the AARC member, who serves as the clinical education specialist for the pediatric respiratory care department and, thus, is responsible for coordinating the ongoing respiratory education of the RTs who serve as ECMO specialists (herself among them) in conjunction with the ECMO coordinator, another RRT who oversees all the ECMO-related education for the team. "We had a patient with cardiomyopathy who needed a heart transplant, but we could not get the patient off ECMO. Since this patient needed to go to a transplant center and no other area teams would transport patients on ECMO, we evaluated the equipment at our facility and determined that we could do this safely."

Wolfe says that little girl remains in her thoughts to this day. The child was initially picked up from an outlying hospital with flu-like symptoms, but the transport team quickly noted an enlarged heart on her x-ray. Halloween was coming up in a couple of weeks, and the team distracted the child with questions about what she was going to be on the ride to Advocate.

"She was brought back to our hospital and diagnosed with cardiomyopathy," says Wolfe. "Within a few days she deteriorated rapidly and was placed on ECMO." Physicians decided she needed to be transferred to the transplant center, so the team tried to wean her off the ECMO. All attempts failed and the Advocate ECMO Transport Team was born.

"It was decided that the only way to get her to a transplant center was to transport her on ECMO," says Wolfe. Sunday morning was determined to be the best time to attempt the transport because the Chicago area traffic would be lightest on that day. As it turned out, that Sunday was also Halloween. "After we successfully transported her to the transplant center, many of us went home and dressed up our own trick-or-treaters, feeling blessed that we could do that," says Wolfe. "As I was checking the candy that my kids brought home, I received a phone call — she was in surgery receiving her new heart."

Wolfe says she saw the child again about a year later, and she "looked absolutely fabulous." Since then the ECMO Transport Team, which includes a perfusionist, an ECMO specialist (all of whom have the RRT-NPS credential), and pediatric cardiovascular surgeon, has transported about one child per year; but they maintain their skills on a monthly basis by training for various complications during their water runs, working in conjunction with the Neonatal Pediatric Transport Team. ■

Vitamin D Linked to Asthma in Obese Kids

Could the higher rate of uncontrolled asthma in obese children and teens be related to a vitamin D deficiency? Researchers from Walter Reed National Military Medical Center suggest the answer may be yes.

Their study was conducted among 86 subjects ages 10–18 years, 54 of whom were overweight or obese. The remaining 32 subjects had a healthy weight. For each subject, the researchers calculated the body mass index (BMI) standard deviation, called the BMI Z-score. All subjects had a vitamin D blood test, and all obese subjects were vitamin D insufficient.

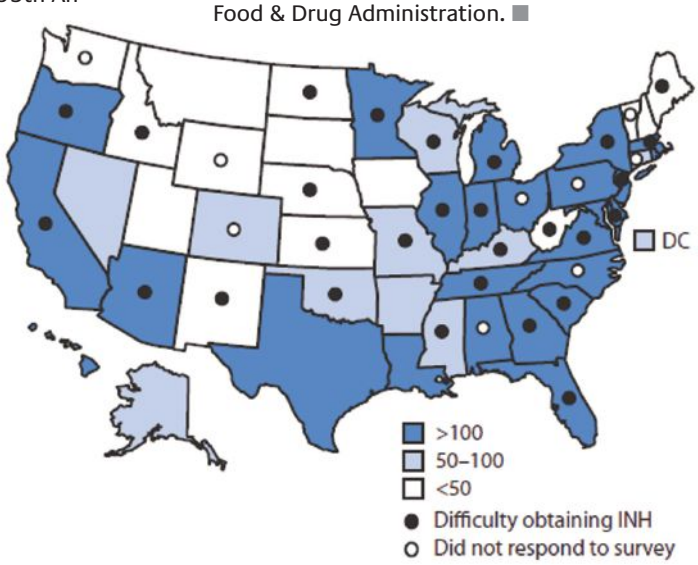
The subjects were also assessed for levels of the hormones leptin and adiponectin, which originate in fat cells and have been shown in animal studies to change with obesity, with leptin becoming elevated and adiponectin decreasing. A subgroup of 39 subjects (19 with overweight or obesity and 20 with a healthy weight) underwent blood tests to measure their levels of immunoglobulin E (IgE) as well. Of these 39 subjects, 36 (17 overweight/obese and 19 healthy weight) also underwent measurements of interleukins (IL) 4, 6, 10, and 13 and interferon-gamma.

Results showed that the higher the BMI Z-score, the higher the level of leptin and the lower the levels of adiponectin and vitamin D. Obese subjects also had increased levels of IgE, IL-6, and IL-13. "This is the first study, to our knowledge, that ties together the relationship of vitamin D deficiency and increased allergy risk and severity in obese and overweight adolescents," study author Candace Percival, MD, was quoted as saying. The study was presented at the Endocrine Society's 95th Annual Meeting last summer. ■

MMWR: Shortage of Key TB Drug Could Compromise Care

Isoniazid (INH) is one of four core drugs used for the first-line treatment of tuberculosis (TB); but according to a recent article in "Morbidity and Mortality Weekly Report," the United States began to experience a severe interruption in the supply of INH in November 2012. To assess the extent of the problem and its impact on TB control programs, the National Tuberculosis Controllers Association conducted a nationwide survey of programs in January of this year (see graph).

Results indicated that the INH shortage was interfering with patient care and could contribute to TB transmission in the United States. Specifically, 79% of the responding health departments reported difficulties procuring INH within the last month, with 15% reporting that they no longer had INH and 41% reporting that they would no longer have a supply within one month of the survey. A report on the survey concluded that potential solutions for alleviating the INH shortage and averting future shortages include maintaining a national supply of first-line drugs, sharing INH among jurisdictions, working with the World Health Organization's Global Drug Facility to obtain INH from foreign manufacturers, and strengthening reporting of shortages and impending shortages by drug suppliers to the U.S. Food & Drug Administration. ■



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 and off work? *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. ■

Creative Thinking Keeps Cystic Fibrosis Patient on His Feet

Ingenuity was the keyword for clinicians at the University of Alabama at Birmingham earlier this year as they brainstormed ways to allow a cystic fibrosis patient awaiting a lung transplant to remain healthy enough for the transplant to take place, despite his need to be on extracorporeal membrane oxygenation (ECMO).

Patients on ECMO are normally required to stay in bed, but this patient had to be able to get up and walk around in order to qualify for the lung transplant. Physicians were able to place him on a portable ECMO unit, which could move with him; but the challenge was keeping the tubes intact during the trip.

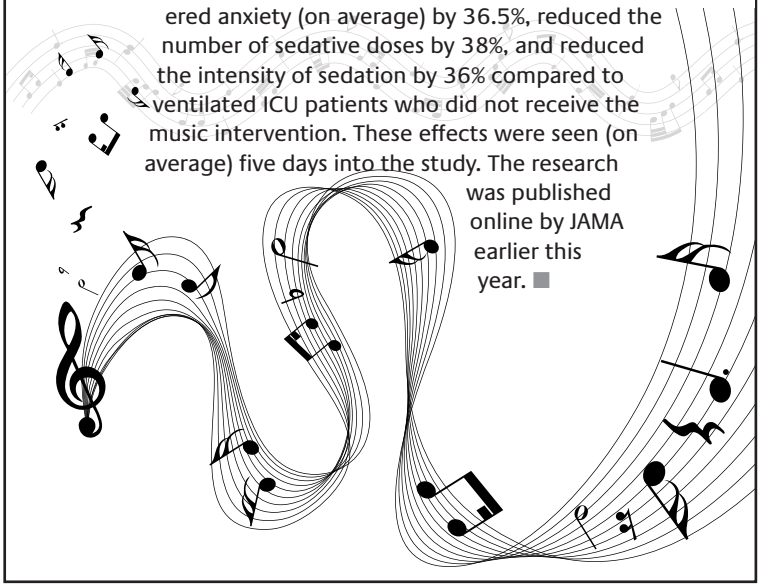
The first solution was to secure the tubes to his head, much like a turban. But that was not only cumbersome, it was uncomfortable for the patient. A perfusionist then had the idea to use a mountain-climbing helmet he had worn during climbs in Bolivia and the Grand Tetons. Fitting the helmet tightly to the patient's head provided a firm foundation for the tubing. That worked well, and the patient was soon up and moving around, accompanied by an array of medical professionals, including respiratory therapists. From there they decided to try using the frame of a surgeon's headlamp to secure the tubing, which proved useful as well.

It all paid off in the end. The patient got the word that a pair of lungs had been found about two weeks after he started his daily walks with ECMO, and the transplant took place. At last account, he was doing great, walking everywhere he could, and thoroughly enjoying his head gear-free excursions. ■

Sweet Music

A new study finds mechanical ventilation patients who are given headphones to listen to their favorite music fare better than those who are not.

Researcher Linda Chlan, who conducted the study along with colleagues while at the University of Minnesota, tested the practice in 373 patients in 12 ICUs at five hospitals in the Minneapolis–St. Paul area. Of those, 126 were randomized to receive the patient-directed music intervention, 125 received usual care, and 122 were in an active control group and could self-initiate the use of noise-canceling headphones. All patients had to be alert enough to give their own consent to participate. The option to listen to music lowered anxiety (on average) by 36.5%, reduced the number of sedative doses by 38%, and reduced the intensity of sedation by 36% compared to ventilated ICU patients who did not receive the music intervention. These effects were seen (on average) five days into the study. The research was published online by JAMA earlier this year. ■



Inflammatory Markers May Predict COPD Exacerbations

COPD patients with elevated levels of the biomarkers C-reactive protein (CRP), fibrinogen, and leukocyte count may be at increased risk for an exacerbation, even if they have only a mild form of the disease. That's the take-home message from Danish researchers published in the June 12 edition of JAMA.

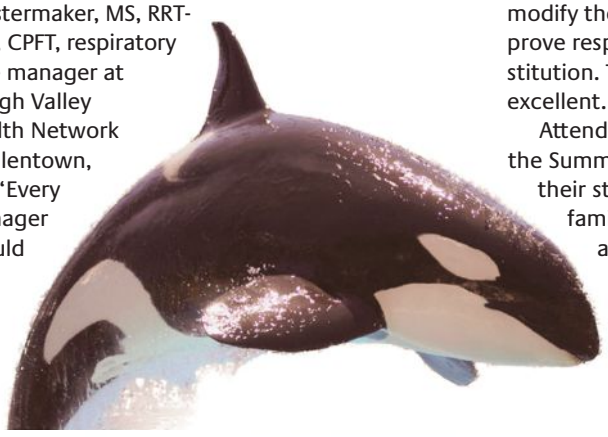
The prospective study examined 61,650 participants with spirometry measurements from the Copenhagen City Heart Study (2001–2003) and the Copenhagen General Population Study (2003–2008). Of these, 6,574 had COPD. Baseline levels of CRP, fibrinogen, and leukocyte count were measured in participants at a time when they were not experiencing symptoms of exacerbations. Exacerbations were recorded and defined as short-course treatment with oral corticosteroids alone or in combination with an antibiotic or as a hospital admission due to COPD.

During a median follow up of four years, 3,083 exacerbations were recorded. The risk of having frequent exacerbations was increased approximately four-fold in the first year of follow-up and three-fold using maximum follow-up time in individuals with the three high-inflammatory biomarkers compared with individuals who had no elevated biomarkers. "Importantly, relative risk estimates were consistent even in those with milder COPD and in those with no history of frequent exacerbations, suggesting that these biomarkers provide additional information to the latest Global Initiative for Chronic Obstructive Lung Disease 2011 grading," note the authors. ■

Summer Forum in Orlando Made a Big Splash!

The AARC hosted an informative meeting for respiratory care educators and managers July 14-17 at the beautiful Renaissance Orlando at SeaWorld. Summer Forum attendees networked with their peers, earned CRCE credits, and took advantage of other events held in conjunction with the meeting, such as a pre-course detailing the practices of effective clinical preceptors.

"I feel the AARC Summer Forum offers managers a great opportunity to discuss those issues that are our highest concern in a friendly and uncompetitive atmosphere," said Chris Fenstermaker, MS, RRT-NPS, CPFT, respiratory care manager at Lehigh Valley Health Network in Allentown, PA. "Every manager should attend the AARC Summer Forum in order to network with other managers from around the country and to gain invaluable information to move the profession forward."



Douglas Pursley, MEd, RRT, program director of respiratory care at Ozarks Technical Community College in Springfield, MO, said, "I thought the presentations were outstanding, particularly the ones on using standardized patients in the simulation lab, mentoring, and flipping the classroom. The Summer Forum always provokes further thinking about how we can apply and modify the take-home points in order to improve respiratory care education at our own institution. The hotel and meeting rooms were excellent."

Attendees always enjoy the casual format of the Summer Forum because they can extend their stay and make it into a vacation with family or friends. The special attractions and theme parks in Orlando offered an extra bonus for members who were able to make the trip this year. ■

Classifieds

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Calendar of Events

AARC & State Society Programs

September 11–13
Ocean City, MD
Maryland/District of Columbia's Conference by the Sea
Contact: Joe Lynott at (202) 877-6086

September 17–18
Honolulu, HI
40th Annual Hawaii State Respiratory Conference
Contact: www.hawaiicps.org or jikehara@lava.net

September 18–19
Las Vegas, NV
AARC's ACCS Exam Prep Course
Contact: AARC, (972) 243-2272, www.aarc.org/education/meetings

September 25–26
Sturbridge, MA
MSRC's 36th Annual Meeting
Contact: Valeri-Ann Bolduc, O2val@aol.com

September 26–27
Lexington, KY
8th Annual State Educational Meeting
Contact: Tami McDaniel at (606) 669-1431

September 25–27
Hot Springs, AR
42nd Annual ASRC State Meeting and Educational Seminar
Contact: John Lindsey, (501) 620-3281

September 26–27
Mars, PA
PSRC's Western Regional Conference
Contact: Thomas Lamphere, (215) 687-2904, www.psrc.net

September 27
Fredericksburg, VA
Virginia Society for Respiratory Care's Pediatric/Neonatal Conference
Contact: Tabatha Dragonberry, dragonberry@me.com or www.vsrc.org/go/events

September 30 – October 1
Frankenmuth, MI
Michigan Society for Respiratory Care's Fall Conference
Contact: (866) 989-6772

October 3–4
Indianapolis, IN
Indiana Society for Respiratory Care's 39th Annual Fall Seminar
Contact: Pat Ingle, (317) 962-5058

October 20–26
Respiratory Care Week
Contact: AARC, (972) 243-2272, www.aarc.org/rcweek

October 23
Lung Health Day
Contact: AARC, (972) 243-2272, www.aarc.org

October 24
Newark, DE
Delaware Society for Respiratory Care's 2013 Annual Trends in Respiratory Care Conference
Contact: www.delawarelung.org

November 1
Urbandale, IA
Iowa Society for Respiratory Care's Annual Meeting
Contact: Amy Weiford, (319) 296-2329

November 16–19 (Saturday–Tuesday)
Anaheim, CA
AARC Congress 2013
Contact: AARC, (972) 243-2272, www.aarc.org/education/meetings

December 5–6
Springfield, MO
MSRC's 9th Annual Fall Specialty Conference
Contact: Christopher Cox, (417) 659-6590

Submissions for the next available issue are due Sept. 19.

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

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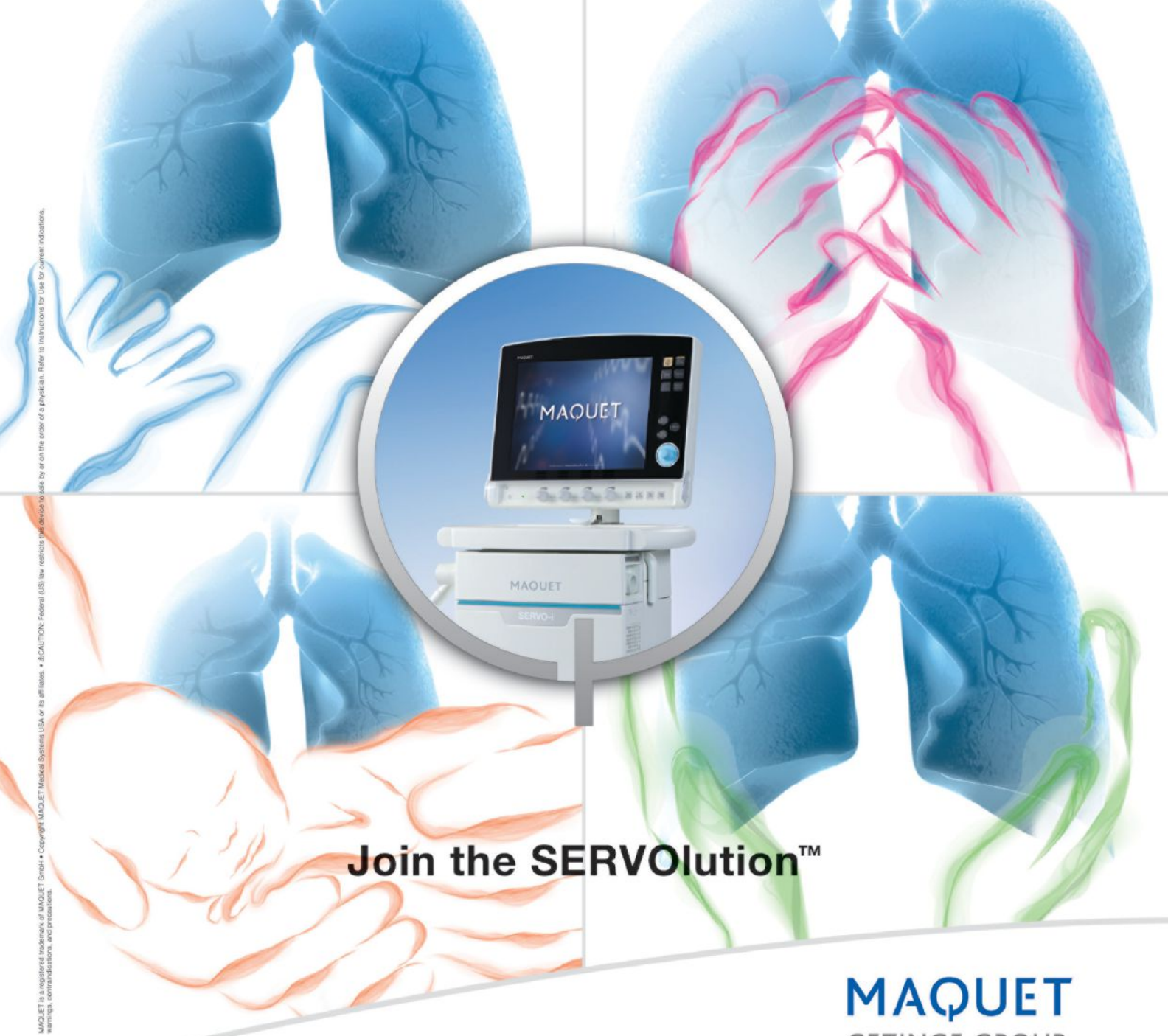

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