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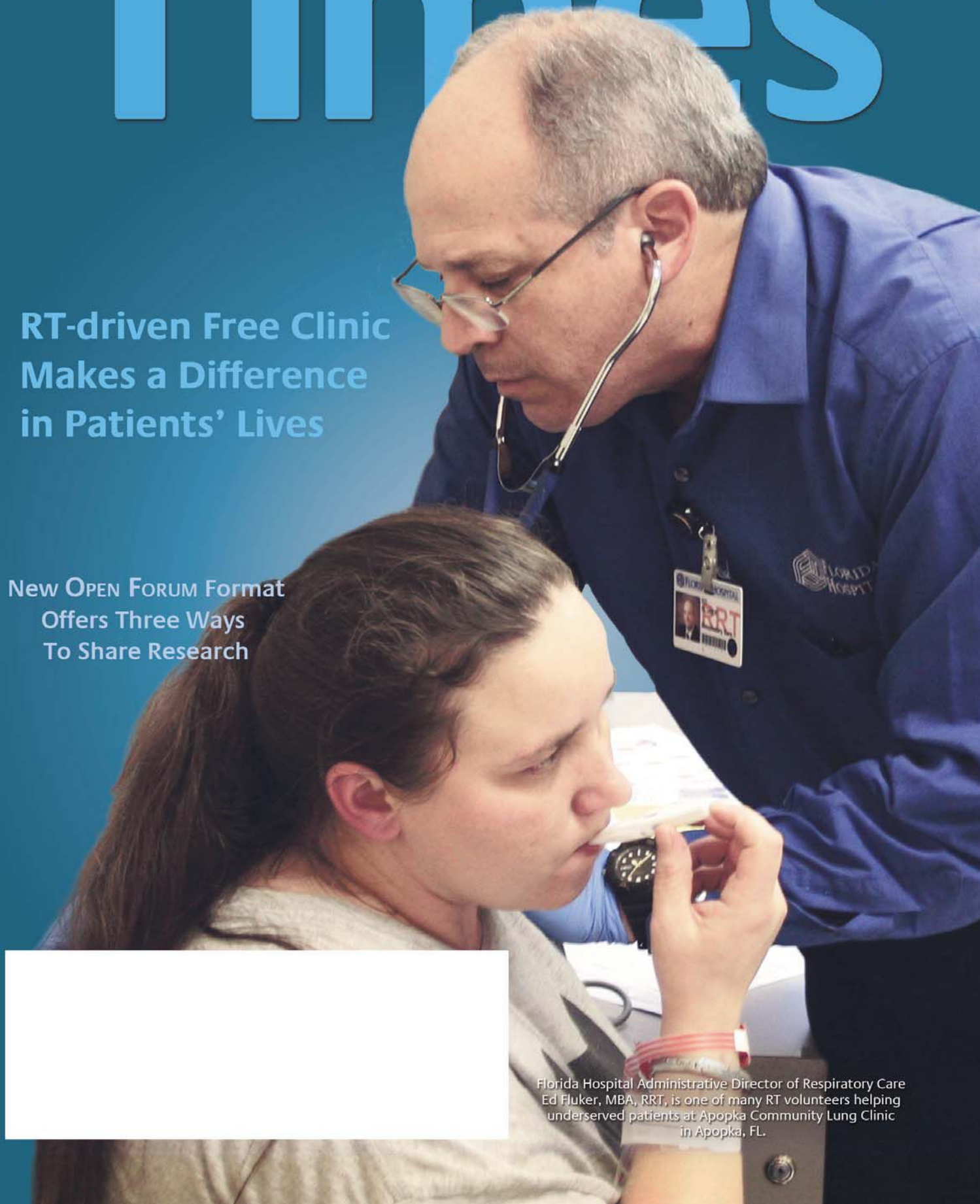
RT-driven Free Clinic Makes a Difference in Patients' Lives

New Open Forum Format Offers Three Ways To Share Research



Florida Hospital Administrative Director of Respiratory Care Ed Fluker, MBA, RRT, is one of many RT volunteers helping underserved patients at Apopka Community Lung Clinic in Apopka, FL.

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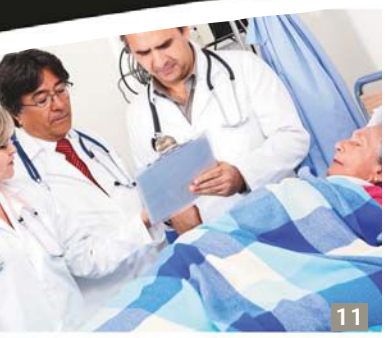

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AARC Strategic Plan

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

AARC Strategic Objectives

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

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

Editor
Marsha Cathcart, BA

Managing Editor
Douglas Laher, MBA, RRT, FAARC

Assistant Editor
Karen Singleterry, BS

Contributors
Debbie Bunch, BA
Sheila Henegar

Art Director
Donna Knauf, BA

Graphic Designers
Jeanette Chawdhury, MBA
Lisa Dudley
Kelly Piotrowski

Advertising Rates and Media Information
Contact: Goldsbury@aarc.org
Tim Goldsbury, 725 N. Highway A1A, Ste. C-106, Jupiter, FL 33477
Voice (561) 745-6793
Fax (561) 745-6795

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

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

Director of Business Development
Dale L. Griffiths, BA

Publisher
Thomas J. Kallstrom, MBA, RRT, FAARC

Printed in USA

Meet the AARC Staff

Steven B. Nelson
Associate Executive Director
nelson@aarc.org

Olga Jusino
Web Application Specialist
jusino@aarc.org

Steve Bowden
Internet Coordinator
bowden@aarc.org

Russell Leighton
IMIS Database Administrator
leighton@aarc.org

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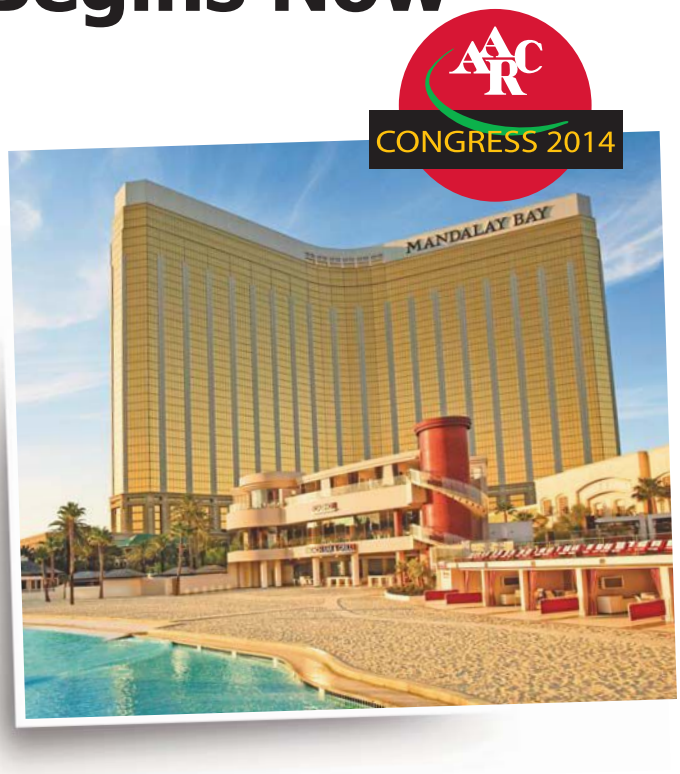

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INDICATION

SURFAXIN® (lucinactant) Intratracheal Suspension is approved by the FDA for the prevention of respiratory distress syndrome (RDS) in premature infants at high risk for RDS.

IMPORTANT SAFETY INFORMATION

SURFAXIN (lucinactant) Intratracheal Suspension is intended for intratracheal use only. The administration of exogenous surfactants, including SURFAXIN, can rapidly affect oxygenation and lung compliance. SURFAXIN should be administered only by clinicians trained and experienced with intubation, ventilator management, and general care of premature infants in a highly supervised clinical setting. Infants receiving SURFAXIN should receive frequent clinical assessments so that oxygen and ventilatory support can be modified to respond to changes in respiratory status.

Most common adverse reactions associated with the use of SURFAXIN are endotracheal tube reflux, pallor, endotracheal tube obstruction, and need for dose interruption. During SURFAXIN administration, if bradycardia, oxygen desaturation, endotracheal tube reflux, or airway obstruction occurs, administration should be interrupted and the infant's clinical condition assessed and stabilized. Overall the incidence of administration-related adverse events did not appear to be associated with an increased incidence of serious complications or mortality relative to the comparator surfactants.

SURFAXIN is not indicated for use in acute respiratory distress syndrome (ARDS).

For more information about SURFAXIN, please visit **www.SURFAXIN.com** and see accompanying brief summary on the next page.

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Surfaxin® (lucinactant) Intratracheal Suspension

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Please see package insert for full prescribing information.

INDICATIONS AND USAGE

SURFAXIN® is indicated for the prevention of respiratory distress syndrome (RDS) in premature infants at high risk for RDS.

CONTRAINDICATIONS

None.

WARNINGS AND PRECAUTIONS

Acute Changes in Lung Compliance

Administration of exogenous surfactants, including SURFAXIN, can rapidly affect lung compliance and oxygenation. SURFAXIN should be administered only by clinicians trained and experienced in the resuscitation, intubation, stabilization, and ventilatory management of premature infants in a clinical setting with the capacity to care for critically ill neonates. Infants receiving SURFAXIN should receive frequent clinical assessments so that oxygen and ventilatory support can be modified to respond to changes in respiratory status.

Administration-Related Adverse Reactions

Frequently occurring adverse reactions related to the administration of SURFAXIN include bradycardia, oxygen desaturation, reflux of drug into the endotracheal tube (ETT), and airway/ETT obstruction.

Increased Serious Adverse Reactions in Adults with Acute Respiratory Distress Syndrome (ARDS)

Adults with ARDS who received lucinactant via segmental bronchoscopic lavage had an increased incidence of death, multi-organ failure, sepsis, anoxic encephalopathy, renal failure, hypoxia, pneumothorax, hypotension, and pulmonary embolism. SURFAXIN is not indicated for use in ARDS.

Clinical Trials Experience

The efficacy and safety of SURFAXIN for the prevention of RDS in premature infants was demonstrated in a single randomized, double-blind, multicenter, active-controlled, multi-dose study involving 1294 premature infants (Study 1). Infants weighed between 600 g and 1250 g at birth and were 32 weeks or less in gestational age. Infants were randomized to received 1 of 3 surfactants, SURFAXIN (N = 524), colfosceril palmitate (N = 506), or beractant (N = 258). Co-primary endpoints were the incidence of RDS (defined as having a chest x-ray consistent with RDS and an $FiO_2 \geq 0.30$) at 24 hours and RDS-related mortality at 14 days. The primary comparison of interest was between SURFAXIN and colfosceril palmitate with the intent of demonstrating superiority. Beractant served as an additional active comparator. Compared to colfosceril palmitate, SURFAXIN demonstrated a statistically significant improvement in both RDS at 24 hours and RDS-related mortality through Day 14. A second multicenter, double-blind, active-controlled study involving 252 premature infants was also conducted to support the safety of SURFAXIN (Study 2). Infants weighed between 600 g and 1250 g and were less than 29 weeks in gestational age. Infants received 1 of 2 surfactants, SURFAXIN (N = 119) or poractant alfa (N = 124).

The safety data described below reflect exposure to SURFAXIN administered intratracheally to infants at a dose of 5.8 mL per kg (up to 4 doses) in either 4 aliquots (Study 1) or 2 aliquots (Study 2) in 643 premature infants.

Comparator surfactants colfosceril palmitate and beractant were administered at the recommended doses (5.0 and 4.0 mL per kg, respectively) while the first dose of poractant alfa administered (2.2 mL per kg) was less than the recommended dose of 2.5 mL per kg. Any subsequent doses of poractant alfa were at the recommended 1.25 mL per kg dose.

Overall, the incidence of administration-related adverse reactions was higher in infants who received SURFAXIN compared to other surfactants (Table 1) and resulted in a greater proportion of infants treated with SURFAXIN who experienced administration-related oxygen desaturation and bradycardia. For Study 1, oxygen desaturation was reported in 17%, 9%, and 13% and bradycardia for 5%, 2%, and 3% of infants treated with SURFAXIN, colfosceril palmitate, and beractant, respectively. For Study 2, oxygen desaturation was reported in 8% and 2% and bradycardia in 3% and 2% of infants treated with SURFAXIN and poractant alfa, respectively. These adverse reactions did not appear to be associated with an increased incidence of serious complications or mortality relative to the comparator surfactants (Table 2).

Table 1. Administration-Related Adverse Reactions in SURFAXIN Controlled Clinical Studies[a]

	Study 1[b]			Study 2[c]	
	SURFAXIN (N = 524)	Colfosceril palmitate (N = 506)	Beractant (N = 258)	SURFAXIN (N = 119)	Poractant alfa (N = 124)
Total Doses Administered	994	1038	444	174	160
	Total Number of Events (Events per 100 Doses)				
ETT Reflux	183 (18)	161 (16)	67 (15)	47 (27)	31 (19)
Pallor	88 (9)	46 (4)	38 (9)	18 (10)	7 (4)
Dose Interruption	87 (9)	46 (4)	30 (7)	7 (4)	2 (1)
ETT Obstruction	55 (6)	21 (2)	19 (4)	27 (16)	1 (1)

[a] Table includes only infants who received study treatment.
[b] Study 1 doses were administered in 4 aliquots.
[c] Study 2 doses were administered in 2 aliquots.

Table 2. Common Serious Complications Associated with Prematurity and RDS in SURFAXIN Controlled Clinical Studies Through 36-Weeks Post-Conceptual Age (PCA)

	Study 1			Study 2	
	SURFAXIN (N = 527) %	Colfosceril palmitate (N = 509) %	Beractant (N = 258) %	SURFAXIN (N = 119) %	Poractant alfa (N = 124) %
Apnea	52	52	46	66	75
Intraventricular hemorrhage, all grades	52	57	54	39	38
-Grade 3/4	19	18	21	13	8
Periventricular leukomalacia	10	10	12	4	9
Acquired sepsis	44	44	44	45	52
Patent ductus arteriosus	37	35	37	43	44
Retinopathy of prematurity, all grades	27	26	25	32	31
-Grade 3/4	6	7	6	5	9
Necrotizing enterocolitis, all grades	17	17	19	13	15
-Grade 2/3	6	8	14	8	8
Pulmonary air leak through Day 7, all types	15	17	14	9	7
-Pulmonary interstitial emphysema	9	10	10	3	5
-Pneumothorax	3	4	2	4	1
Pulmonary hemorrhage	10	12	14	6	9

All-cause mortality through 36-weeks PCA was similar regardless of which exogenous surfactant was administered.

Adverse reactions reported in the controlled clinical studies through 36-weeks PCA occurring in at least 10% of infants were anemia, jaundice, metabolic acidosis, oxygen desaturation, hyperglycemia, pneumonia, hyponatremia, hypotension, respiratory acidosis, and bradycardia. These reactions occurred at rates similar to the comparator surfactants.

No assessments for immunogenicity to SURFAXIN were performed in these clinical studies.

Follow-up Evaluations

Twelve-month corrected-age follow-up of 1546 infants enrolled in the 2 controlled clinical studies demonstrated no significant differences in mortality or gross neurologic findings between infants treated with SURFAXIN and those treated with the comparator surfactants (colfosceril palmitate, beractant, or poractant alfa).

OVERDOSAGE

There have been no reports of overdose following the administration of SURFAXIN.

HOW SUPPLIED/STORAGE AND HANDLING

SURFAXIN (lucinactant) Intratracheal Suspension is supplied sterile in single-use, rubber-stoppered, clear glass vials containing 8.5 mL of white suspension (NDC 68628-500-31). One vial per carton.

Store SURFAXIN in a refrigerator at 2° to 8°C (36° to 46°F) and protect from light until ready for use. Do not freeze. Vials are for single use only. Discard any unused portion of SURFAXIN. Discard warmed vials of SURFAXIN if not used within 2 hours of warming.

To report SUSPECTED ADVERSE REACTIONS, contact Discovery Laboratories, Inc. at 1-877-SURFAXN (877-787-3296) or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

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Medicare Penalty for COPD Readmissions

by Stephen F. Jencks, MD, MPH

The Patient Protection and Affordable Care Act (PPACA) created the Medicare Readmissions Reduction Program (MRRP), under which hospitals are penalized for "excess" readmissions for certain diagnoses or procedures. "Excess" means that all readmissions within 30 days after discharge (except those likely to have been planned) exceeded an expected number. As of Oct. 1, 2014, chronic obstructive pulmonary disease (COPD) is one of the conditions for which readmissions are counted, and the penalty is up to 3% of Medicare revenues.

The MRRP can be seen as just another effort to reduce Medicare payments, but it is a paradigm shift in two ways. Holding a hospital accountable for readmissions within 30 days after discharge makes it accountable for the effectiveness of the care to which it discharges the patient and creates a substantial incentive for the hospital to work closely with other providers in the community. Possibly even more portentous, penalizing "excess readmissions" reverses a fundamental premise of hospital management: that an admission is a source of revenue.

We now have some experience with the MRRP and longer experience with readmissions pilot programs. The following lessons may be helpful to some providing respiratory care for whom MRRP is relatively new.

1. Change is happening. The MRRP has been accompanied by a decrease in both readmission rates and overall admission rates. The result is a reduction in the number of readmissions that is significantly larger than the reduction in the rate per discharge. Maryland, which has an all-payer readmission reduction program, reports similar results. A second change is that many hospitals are asking practitioners and providers to whom they refer patients to join them in reducing readmissions. Nevertheless, hospital response to the MRRP is highly variable.[1] Hospital leadership usually understands that the MRRP is a potential game-changer — but that can lead to avoidance rather than engagement, especially if the hospital is committed to building new beds or conflict exists with its medical staff.

2. Words and ideas matter. For example, the term "preventable readmission" has regularly been misinterpreted to mean that a medical error was made in inpatient care or that the emergency room erred in readmitting the patient. The term "unplanned" might be better.

"Noncompliant" is also troublesome because it is regularly used to blame the patient and avoid asking how the care team might have worked with the patient to create a care plan that was understood, feasible, and followed. Another problem word is "discharge" because it reinforces the problematic model that a hospital's responsibility stops when the patient leaves. In England, a new mother leaving a National Health Service maternity hospital is told that she is going home but that she will not be discharged for a month because the hospital staff still feels its responsibility for her.

3. Patients at high risk for readmission tend to be frail and have multiple serious diseases. It is uncommon for a patient sick enough to be readmitted to have a single major diagnosis. This is the reason that patients are so

about the author...

Stephen F. Jencks, MD, MPH, is a consultant in health care safety and quality, a senior fellow at the Institute for Healthcare Improvement, and a former assistant surgeon general of the United States.

often readmitted for a condition other than the one that caused the index hospitalization. Two-thirds of Medicare fee-for-service medical discharges are readmitted or dead within a year.[2] The result is that both system-wide and disease-specific approaches are needed to reduce readmissions. Disease-specific approaches to system-wide problems (e.g., medication availability) are inefficient, and ignoring other diseases weakens any discharge plan. On the other hand, disease-specific clinical leadership, expertise, and connections to community specialists are easier, and the patient's disease obviously requires disease-specific management.

4. Reducing readmissions requires building a system that encompasses inpatient care, non-hospital care, and communications between them. When the MRRP started, transition from acute hospital to post-acute care in most communities was neither understood by participants nor reliable enough to be considered a system at all. Useful system change rests on clearly defining what we hope we are doing, documenting how often and well we are doing it, and making the system changes to assure that what we intend to do is done regularly. Developing improvements then becomes testable and potentially useful. Improving our plans has limited value until we are actually doing what we plan to do, whether that is sublingual suctioning to prevent ventilator-associated pneumonia (VAP) or communicating with the respiratory therapy program that will see the patient after discharge. Meticulous adherence to protocols can improve care beyond what we imagined possible, as it has with VAP and central line-associated bloodstream infection.

5. Educating patients is always a challenge, but it is a special challenge in the hospital where complexity of message, patient anxiety and desire to get home, and serious impairment by drugs, illness, and disorientation make learning extremely difficult. Even when patients give evidence of understanding, they may remember little a day or two later.

Meticulous adherence to protocols can improve care beyond what we imagined possible, as it has with VAP and central line-associated bloodstream infection.

6. A readmission is a failed transition. Some preventable readmissions result from inpatient problems (occult infection, medication errors) and instability at discharge, and some result from insufficient information and resources in the emergency room; but most appear to result from failure in planning and execution of the transition from hospital to community. Specific deficiencies appear to increase the risk of readmissions, although the evidence is not clear that these specific problems are the most important. Hospital issues include inadequate understanding of and access to medications, lack of an emergency phone contact point or understanding of "red flags" that should prompt contact, and lack of prompt follow-up appointment with an appropriate care source. Community issues include failure of communication between hospital and community, lack of community capability to provide follow-up services, and impractical follow-up assumptions about transportation, co-pays, and living situation.

Above all, the planning process needs to encompass both the hospital and the community. No quarterback, however skillful, can complete passes without downfield receivers with whom he has trained; and no receiver can catch a pass from a quarterback who does not know how and when to throw. Patients are not footballs, but teamwork is teamwork. ■

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2. Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. N Engl J Med 2009; 360(14):1418-1428.

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GLASSIA should be administered at room temperature at a rate not greater than 0.04 mL/kg body weight per minute. Administer GLASSIA within 3 hours of entering the vials.

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

References: 1. GLASSIA [Alpha$_1$-Proteinase Inhibitor (Human)] Prescribing Information. Westlake Village, CA: Baxter Healthcare Corporation; June 2012. **2.** ZEMAIRA [Alpha$_1$-Proteinase Inhibitor (Human)] Prescribing Information. CSL Behring, LLC: Kankakee, IL; April 2013. **3.** ARALAST NP [Alpha$_1$-Proteinase Inhibitor (Human)] Prescribing Information. Baxter Healthcare Corporation: Westlake Village, CA; April 2010. **4.** PROLASTIN-C [Alpha$_1$-Proteinase Inhibitor (Human)] Prescribing Information. Talecris Biotherapeutics, Inc: Research Triangle Park, NC; January 2013. **5.** ASHP guidelines on preventing medication errors in hospitals. American Society of Health System Pharmacists Web site. http://www.ashp org/s_ashp/docs/files/MedMis_Gdl_Hosp.pdf. Accessed June 18, 2013.

 February 2014 USBS/341/13-0003a

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

INDICATIONS AND USAGE

Alpha$_1$-Proteinase Inhibitor (Human), GLASSIA is indicated for chronic augmentation and maintenance therapy in adults with emphysema due to congenital deficiency of alpha$_1$-proteinase inhibitor (Alpha$_1$-PI), also known as alpha$_1$-antitrypsin (AAT) deficiency.

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

DOSAGE AND ADMINISTRATION

- **For Intravenous Use Only.**
- Use aseptic technique for all preparation and administration steps.
- Inspect the vial of GLASSIA. The solution should be clear and colorless to yellow-green and may contain a few protein particles. Do not use if the product is cloudy.
- Administer GLASSIA alone; do not mix with other agents or diluting solutions.
- Administer product brought to room temperature within three hours of entering the vials.

Treatment of Congenital Alpha$_1$-Proteinase Inhibitor Deficiency

The recommended dosage of GLASSIA is 60 mg/kg body weight administered once weekly by intravenous infusion. Dose ranging studies using efficacy endpoints have not been performed. The recommended dosage of 60 mg/kg takes approximately 60-80 minutes to infuse. The infusion rate should not exceed 0.04 mL/kg body weight per minute.

CONTRAINDICATIONS

GLASSIA is contraindicated in immunoglobulin A (IgA) deficient patients with antibodies against IgA.

GLASSIA is contraindicated in individuals with a history of severe immediate hypersensitivity reactions, including anaphylaxis, to Alpha$_1$-PI products.

WARNINGS AND PRECAUTIONS

Hypersensitivity to IgA

GLASSIA may contain trace amounts of IgA. Patients with selective or severe IgA deficiency and with known antibodies to IgA, have a greater risk of developing severe hypersensitivity and anaphylactic reactions. Monitor vital signs continuously and observe the patient carefully throughout the infusion. **IF ANAPHYLACTIC OR SEVERE ANAPHYLACTOID REACTIONS OCCUR, DISCONTINUE THE INFUSION IMMEDIATELY.** Have epinephrine and other appropriate supportive therapy available for the treatment of any acute anaphylactic or anaphylactoid reaction.

Transmissible Infectious Agents

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

The physician should weigh the risks and benefits of the use of this product and discuss the risks and benefits with the patient.

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

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

ADVERSE REACTIONS

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

The most common drug-related adverse reactions considered by the investigator to be at least possibly related to GLASSIA administration observed at a rate of >5% in subjects receiving GLASSIA were headache and dizziness.

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

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

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

Postmarketing Experience

The following reactions have been identified during postmarketing use of GLASSIA in clinical practice. Because they are reported voluntarily from a population of unknown size, estimates of frequency cannot be made. The reactions, which have been chosen for inclusion due to either their seriousness, frequency of reporting, possible causal connection to GLASSIA, or a combination of these factors, include: Headache, Dyspnea, Fatigue and Nausea.

USE IN SPECIFIC POPULATIONS

Pregnancy

Pregnancy Category C

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

Nursing Mothers

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

Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

Geriatric Use

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

PATIENT COUNSELING INFORMATION

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

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Palliative Care for the Patient with Chronic Pulmonary Disease

by Shawna Strickland, PhD, RRT-NPS, FAARC

Many respiratory therapists currently work in the intensive care unit (ICU) or have worked in the ICU at some point in their careers. We have cared for a great number of patients at various stages of their lives with varying outcomes. In the United States, one in five people die in the ICU.[1] Approximately 30% of all Medicare expenditures occur within the last year of a patient's life.[2] These facts demonstrate that many of our patients face a potentially painful end-of-life experience. Even those who survive their ICU admission may be at risk for a lower quality of life than they enjoyed prior to their ICU experience.[1] While we work diligently to reverse disease processes, we must also assist our patients with chronic pulmonary diseases to live their lives as comfortably as possible. As clinicians caring for patients in the ICU confronting these painful experiences, we must be prepared to function as part of the care team providing palliative care.

about the author...

Shawna Strickland, PhD, RRT-NPS, FAARC, is the AARC's associate executive director of education.

What is palliative care?

Palliative care is the application of care strategies to alleviate the patient's suffering. Many times, palliative care is confused with hospice care. Hospice care is the shift in care goals from curative to comfort only. Patients qualify for hospice care when their life expectancies fall to six months.[3,4]

Palliative care is the addition of comfort measures regardless of life expectancy, treatment plan, or whether the patient's disease process is terminal or not. Indeed, palliative care can be an important adjunct to curative therapy. The core components of palliative care include the alleviation of symptoms, communication with patients and family about care goals, alignment of interventions with the patients' unique values and goals, transitional planning, and family support.[5]

There are several perceived barriers to palliative care from many perspectives: that of the patient, that of the family, and that of the health care team.[3] The patient and/or family might not be ready to face the diagnosis or may not completely understand the situation. The health care team might be unsure of the prognosis or not have a complete understanding of the principles of palliative care. These barriers may result in a delay of initiation or complete lack of palliative care for those who need it.

When should palliative care be initiated?

A common myth about palliative care is that it is constrained to terminal diagnoses only and should only be initiated when death is imminent. In fact, palliative care can positively impact patients whose disease processes are not terminal.[4] Many symptoms can cause discomfort. These include physical pain, thirst, insomnia, anxiety, hunger, depression, shortness of breath, and suctioning of the endotracheal tube or tracheostomy.[1] Evidence suggests that effectively controlling physical and emotional distress can affect the patient's health outcomes, most notably shorter duration of time spent on mechanical ventilation.[5,6] This evidence supports not only the initiation of palliative care upon ICU admission but also the early evaluation of all patients for potential palliative interventions.

How is palliative care associated with chronic pulmonary disease?

Chronic pulmonary diseases are just that: chronic. That means that patients live with the disease and its associated symptoms for an extended period of time. They have periods of relatively good health and periods of ex-

acerbation. Regardless, the disease process is not curable. Persons diagnosed with chronic obstructive pulmonary disease, cystic fibrosis, and amyotrophic lateral sclerosis, to name a few, must face the reality of this eventually terminal diagnosis. Even so, the patient's health care can be managed in such a way as to promote the best quality of life within the context of the disease process. Symptom assessment and management is a cornerstone of palliative care.

Persons with chronic lung disease experience a great deal of discomfort in a variety of ways. Physical pain is common among patients with long-term diseases.[1] Symptom assessment and management is a major component of palliative care. Using various assessment methods, pain assessments should be frequently performed to ascertain the type, location, and severity of pain.[5] The World Health Organization advocates a three-step pain management ladder that begins with non-opioid analgesics and steps up to opioid analgesics depending on the level of pain experienced by the patients. It is reasonable for patients to expect that their pain can be managed safely and effectively.[7]

Assessment of dyspnea and cough should also be performed on a regular basis.[4] Clinical practice guidelines recommend correcting any reversible pathology while also providing therapies such as bronchodilators and supplemental oxygen, when indicated. When a patient has a chronic cough, opioid cough suppressants are recommended to control cough and relieve the associated pain.[7]

Interestingly, pain associated with endotracheal or tracheostomy suctioning was found as a leading source of pain in the ICU.[1] This invasive procedure is performed on a regular basis by various health care providers but is usually performed without sedation or analgesia and, many times, without warning.

Why should the RT be involved in palliative care?

Researchers have shown that respiratory therapists may have a poor understanding of palliative care principles[3] and may not be prepared for these chronic disease and end-of-life issues.[8] However, the fact remains that RTs are engaged in the care of these chronically ill patients throughout the disease trajectory. Many experts advocate an interdisciplinary team approach to palliative care,[1,3,5] and guidelines recommend "that clinicians who care for patients with chronic or advanced respiratory diseases and/or critical illnesses should be trained in, and capable of, providing a set of recommended basic competencies in palliative care."[4] The respiratory therapist is a vital member of the health care team and can be a powerful advocate for more effective pain and dyspnea control, as well as other palliative measures, to enhance the patient's quality of life. ■

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Home Oxygen Equipment: It Is Not Hospital Wall Oxygen

by Kent L. Christopher, MD, RRT, FAARC

Our beginnings in respiratory care were as oxygen technicians — but that was, oh, so many decades ago. I remember schlepping large H–cylinders around hospital wards. It then became "magic" when we could plug our backpressure compensated flow meters into ICU wall outlets delivering at 50 psi. Mysteriously, oxygen emerged from a gigantic liquid reservoir behind the hospital. We used the little bouncing ball on the flow meter to deliver 2 L/min of oxygen via a nasopharyngeal catheter and, later, by a "revolutionary" nasal cannula. Mask delivery was reserved for the very sick. Looking back, it certainly was not rocket science.

Utilization of massive liquid reservoirs to deliver oxygen via 50 psi wall outlets remains essentially unchanged. We continue to transport or ambulate patients around the hospital using E–cylinders with regulators operating at 50 psi. Fixed orifice flow meters do not compensate for backpressure but are used for sources that may need to be tipped from side to side during patient transport. The hospital is occasionally used to surgically create the transtracheal oxygen patient's tract and initiate therapy. In patients with hypoxemia refractory to standard nasal or mask oxygen delivery, relatively new specialized heated and humidified "high flow" nasal cannulas may be helpful, although use outside of the hospital is quite limited. Arterial blood gas analysis is still very important, but the pulse oximeter is the RT tool of the trade for proper saturation measured via pulse oximetry (SpO_2) monitoring and titration of supplemental oxygen. Over all, the *status quo* prevails for oxygen delivery by the hospital-based RT.

about the author...

Kent L. Christopher, MD, RRT, FAARC, is a clinical professor of medicine at the University of Colorado School of Medicine in Denver, CO.

Home oxygen equipment: past and present

In the 1950s, Alvan Barach, MD, shared his outpatient ambulatory oxygen vision with Thomas L. Petty, MD, who made it a reality. Well over 30 years ago, Dr. Petty supplied home liquid reservoirs to patients to transfill ambulatory units; he then led the charge for the multi-center, prospective and randomized Nocturnal Oxygen Therapy Trial.[1] Consequently, we now know 24/7 ambulatory long-term oxygen therapy (LTOT) is best for survival and better health. LTOT patients with severe pulmonary disease have potential to reach realistically set quality-of-life goals. That may be a simple trip to the mailbox, venturing out into their community to visit family or attend religious services, or simply enjoying some of what they cherished before becoming chronically ill.

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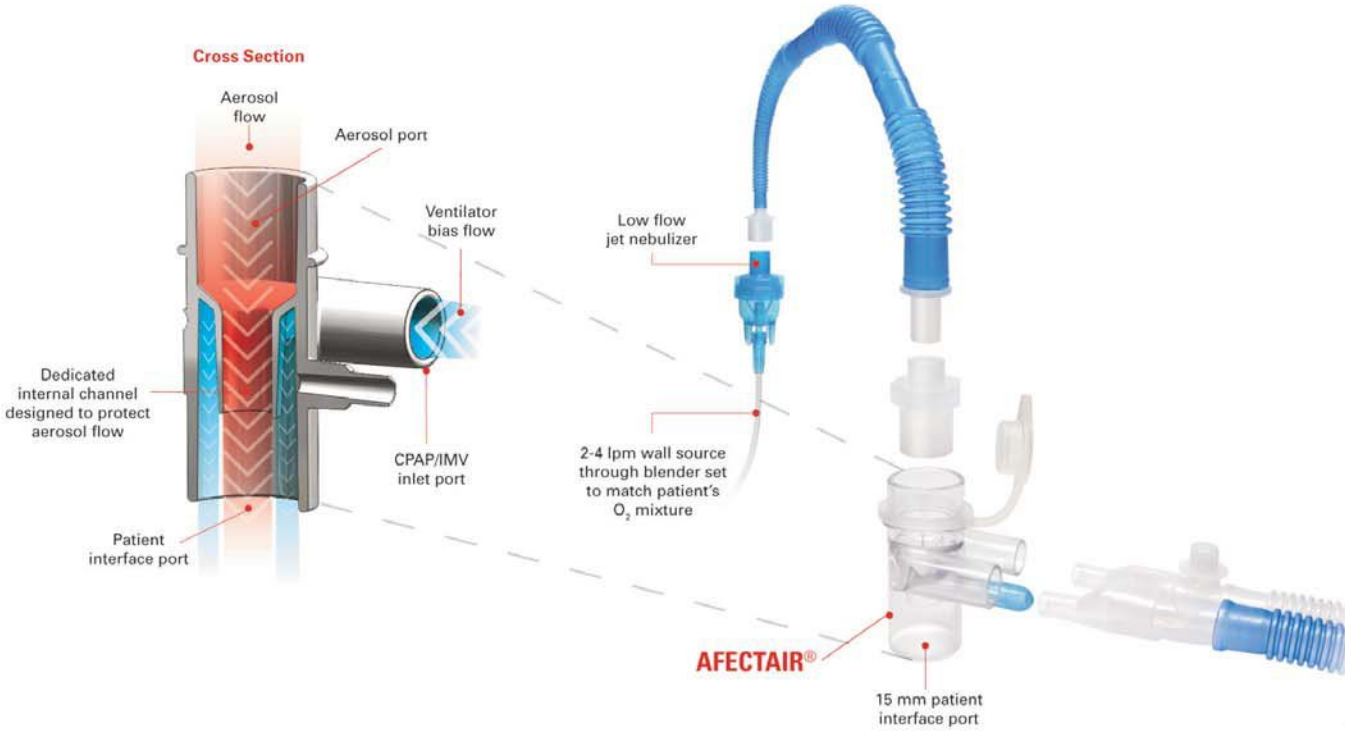

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with oxygen from stationary concentrators, with portable oxygen concentrators, and with newer high-pressure "composite" gas cylinders. Unfortunately, there are no established manufacturing "dosing" standards for IF. Therefore, a setting of "2" on an IF device does not deliver a flow of 2 L/min and, as a result may not achieve the equivalent SpO_2 as that achieved with an oxygen flow of 2 L/min. Some IF devices may meet an individual's rest, exertion, and sleep requirements; others may not. In the hospital setting, we have embraced pulse oximetry for both monitoring and managing hypoxemia through dose titration. Unfortunately, that appropriate use of pulse oximetry has not been either embraced or reimbursed for LTOT management. We have summarized the current status of home oxygen therapy elsewhere.[2]

Role of the RT in home oxygen therapy

Here is a question: Are you a hospital-based or a home-care based RT? If you work for a durable medical equipment (DME) supplier, you are fully aware of the challenges you face. Though you are very familiar with LTOT delivery devices and patient education in their use, you (and your DME employer) realize that payors for DME will not reimburse for patient clinical education, monitoring, and management that you have been trained to provide. You can't function in your role as a respiratory disease manager. Job security is threatened as DME reimbursement continues to decline, especially due to Medicare-capped rental and competitive bidding regulations. The AARC is trying to help watch your back, but it is a tough situation. Health care reform needs to position you to be valued for the care of the respiratory patient that you can bring into the home, and not just the equipment.

If you are a hospital-based RT and are unaware of the dilemma your colleagues face, you should be. At least for now, much of the weight they are not allowed to carry must fall upon you. Hopefully, your medical director, prescribing physicians, and administrators have given you a substantial role in identifying and documenting hypoxemia and qualifying patients for home oxygen therapy prior to discharge. With the shrinking workforce of DME provider-based RTs, you may need to play a major role in both selecting the appropriate LTOT system to address overall patient needs and documenting that the system meets SpO_2 requirements during prescribed use (e.g., rest, exertion, sleep). Finally, as a respiratory disease manager, you should ensure that the patient understands hypoxemia and the importance of correcting it. You have an opportunity to initiate the process of patient self-empowerment in their care.

As a medical doctor, I have learned that many physicians require more education in managing home oxygen therapy; and greater physician participation in the hospital and outpatient environment is required to achieve optimal outcomes. I have also learned that a number of respiratory therapists have embraced the disease manager role and are very effectively caring for patients with chronic hypoxemia. For all of you, keep up the excellent work! ■

DISCLOSURE

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

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High-frequency Oscillatory Ventilation for ALI and ARDS

by Paul F. Nuccio, MS, RRT, FAARC

Acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) have become the topic of daily discussion in most intensive care units. This has been the case since the publication of clinical trials that demonstrated a survival benefit from using a low tidal volume strategy (6 vs. 12 mL per kilogram of predicted body weight).[1] This type of lung protective strategy is intended to limit the amount of alveolar distension, open or recruit collapsed alveoli, and prevent derecruitment. Despite a reduction in the number of patients who develop lung injury from ventilation, the mortality rate in patients with ARDS continues to be high.[2] For those patients who could not be managed effectively using the previously mentioned strategy, some centers began using high-frequency oscillatory ventilation (HFOV). This novel method of mechanical ventilation uses very small tidal volumes, usually less than the anatomic dead space, and very high frequencies in the range of 120–900 breaths per minute (bpm) in an effort to provide adequate gas exchange.[3]

Patients who theoretically would be most likely to benefit from HFOV use would be those who have ARDS and are refractory to conventional mechanical ventilation strategies (low tidal volume, high frequencies, high positive end-expiratory pressure) and have recruitable lung units. Initial frequency settings typically begin at a rate of 300 bpm, with a mean pressure setting at approximately 5 cm H_2O above pressures used with conventional ventilation. The power setting, in conjunction with hertz, controls carbon dioxide clearance; and the FiO_2 control, in combination with the mean pressure setting, will control oxygenation.[4]

Other methods and strategies have also been described. Users must remain cautious to ensure that efforts are made to minimize lung injury rather than simply attempting to normalize arterial blood gases.[5]

Recent findings

Although HFOV had been used primarily in neonatal and pediatric populations, a systematic review and meta-analysis was published in 2010 that selected randomized controlled trials of HFOV compared with conventional ventilation in adults or children with ALI/ARDS. These studies included a total of 419 patients; and the results of the meta-analysis showed a significant reduction in mortality in the HFOV group, suggesting that the use of HFOV may be beneficial with this subset of patients.[6] These results have recently been called into question with the publication of two large clinical trials of the use of HFOV with ARDS.

In the first study, known as OSCILLATE, researchers had planned to randomize 1,200 patients with ARDS, spread over 39 intensive care units in five different countries, to either HFOV or conventional ventilation using a low tidal volume and high PEEP strategy. The trial was stopped early after randomizing only 548 patients because of a higher in-hospital mortality rate (47% vs. 35%) in the HFOV group as compared to the control group. The researchers concluded that the early application of HFOV does not reduce — and may actually increase — mortality.[7]

In the second study, known as OSCAR, 795 patients were randomized to receive either HFOV or conventional ventilation. Their results showed a primary outcome (mortality) of 41.7% in the HFOV group and 41.1% in the control group. The researchers concluded that they "were

about the author...

Paul F. Nuccio, MS, RRT, FAARC, is the director of pulmonary services at Brigham and Women's Hospital & Dana-Farber Cancer Institute in Boston, MA.

unable to find any benefit or harm from the use of HFOV in adult patients with ARDS."[8]

Response to the literature

Much discussion has ensued since the publication of these two studies. Some have questioned the validity of the OSCILLATE study, particularly the high levels of airway pressure utilized in the HFOV group. Comparing an HFOV strategy using mean airway pressures that most would consider dangerous (up to 38 cm H_2O) to a lung protective ventilation strategy using low tidal volumes and low plateau pressures (< 30 cm H_2O) may not be a fair comparison. Others have questioned the differences between sedation strategies used in the two groups studied. Questions were raised about differences in illness-severity scores at randomization between the two studies. In the OSCAR trial, the use of a non-standardized tidal volume strategy may have impacted outcomes related to the control arm, thus clouding the possible benefit in the HFOV strategy group. Also in the OSCAR trial, patients who received HFOV required higher doses of sedatives and greater use of neuromuscular blocking agents compared to those in the conventional ventilation group. This was also true in the OSCILLATE HFOV patients. Other questions have been raised related to time of initiation of HFOV and level of experience with the use of HFOV technology. Protocol variations have also been questioned.[9]

What about H1N1?

Many perhaps recall the increased use of HFOV to treat patients who developed severe ARDS due to the H1N1 flu pandemic in 2009. HFOV and extracorporeal membrane oxygenation (ECMO) were both used as salvage techniques for treating profound hypoxemia, along with prone positioning, inhaled vasodilators, and recruitment maneuvers. At that time HFOV was considered successful as a rescue strategy for severe respiratory failure.[10] A recent health advisory to clinicians from the Centers for Disease Control and Prevention describes "Early Reports of pH1N1-Associated Illnesses for the 2013–2014 Influenza Season."[11] This news will likely rekindle the questions related to using rescue strategies such as HFOV for treating patients in the event they develop severe respiratory failure.

Conclusion

Survey results were recently presented at the AARC Congress Open Forum that suggested some institutions have already experienced a reduction in HFOV use and an increase in proning, ECMO, and airway pressure release ventilation (APRV) directly as a result of these publica-

2014 *AARC Times* Photo Contest

Call for Entries

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5. **Put yourself in the best position** to get the shot, even if that means getting down on the floor or up on a chair.
6. **Make the picture tell a story** about the respiratory care profession. A picture that conveys some emotion about your patients is always preferable to one that does not.
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tions.[12] Is this an overreaction? Following evidence-based practice is always the right thing to do whenever possible. We must pay close attention to the methods we use to ventilate every patient by considering the following:

1. When using a low tidal volume strategy, apply this concept correctly.
2. Adjust the ventilator to provide for more patient synchrony, without requiring heavy sedation and neuromuscular blocking agents.
3. Follow established protocols.
4. Provide newer techniques at the appropriate time.
5. Have documented competencies for staff that demonstrate knowledge of the subject and competency of application.

Following these suggestions may help us as health professionals to provide our patients with optimal care and ensure that we "do no harm." ■

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Emerging Accreditation Pathways in Respiratory Care Education

by Tom Smalling, PhD, RRT, FAARC

New and innovative pathways to formally educate respiratory therapists for an increasingly complex and challenging health care environment have emerged in recent years. As the Commission on Accreditation for Respiratory Care (CoARC) undergoes the process of revising its existing accreditation standards and developing new sets of standards for educational programs beyond that of entry into the profession, it is important for those involved in the profession to understand how these emerging pathways relate to each other and the role that the CoARC has in ensuring quality.

about the author...

Tom Smalling, PhD, RRT, FAARC, is the executive director of the Commission on Accreditation for Respiratory Care in Bedford, TX.

Post-entry pathways in respiratory care practice

Completing pre-professional requirements and graduating from an accredited entry into respiratory care professional practice degree program are only the first steps for therapists wishing to advance in their field and maintain the competency needed in this ever-changing health care environment. Interest in post-entry into the profession's programs is running high among current practitioners wishing to add to their existing skill level. CoARC defines a post-entry into the profession degree program as "an educational program designed to provide graduates of entry into respiratory care professional practice degree programs with enhanced knowledge and competencies necessary to meet their professional goals along with current and future expectations for respiratory care practice." CoARC is a strong supporter of academic progression through formal, degree-granting programs and lifelong learning experiences to enhance the science and practice of respiratory care. CoARC encourages all associate's degree respiratory therapists to continue their education in programs that grant baccalaureate, master's, and doctoral degrees. CoARC further recognizes that RTs with advanced education are needed in large numbers to serve as educators, researchers, managers, clinical specialists, and leaders throughout the health care delivery system.[1]

While most post-entry into the profession programs have some type of focus or concentration (i.e., research, education, or advanced clinical practice), all programs aim to advance the skill set of the practicing therapist so that the graduate can assume both additional or new roles and responsibilities within the profession. Further, many of these programs are offered online or in a blended online/on-campus format in an effort to accommodate the varying work schedules of many practitioners.

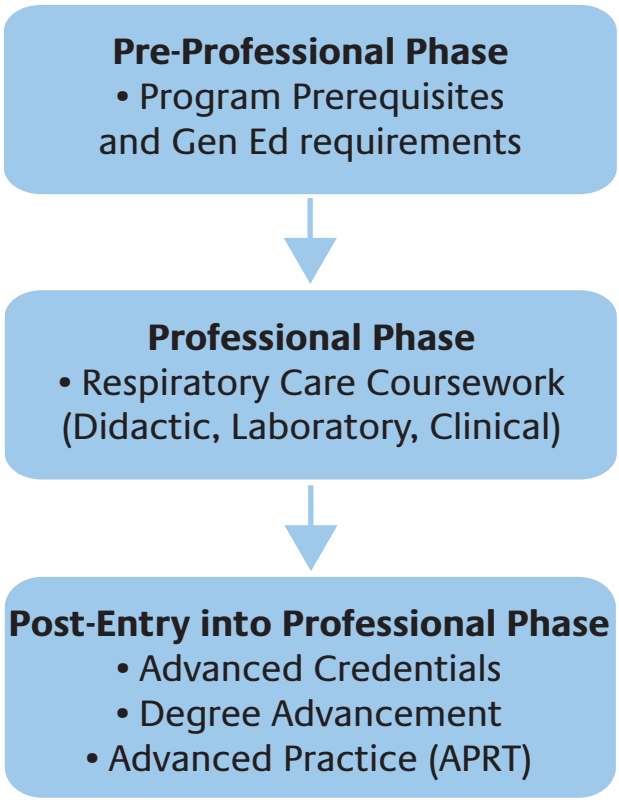
Degree advancement programs

CoARC Policy 12.03 defines a Degree Advancement Program as "an educational program designed especially to meet the needs of the practicing respiratory therapist who, having already completed an accredited respiratory care program with an earned entry into respiratory care professional degree is returning to school to obtain an advanced degree." Degree advancement programs focus on teaching professional skills at an advanced, intensive level. Degree advancement programs do not include coursework designed to prepare graduates to be eligible for the National Board for Respiratory Care (NBRC), CRT,

or RRT examinations as such coursework should already have been covered in the entry into respiratory care professional practice degree program.[2] Degree advancement programs provide an essential pathway for associate's degree- and baccalaureate degree-prepared therapists who wish to expand and enhance previous knowledge and advance in their careers. Associate-to-baccalaureate and baccalaureate-to-master's degree programs build on entry knowledge and competencies with course work to enhance professional development, prepare for a broader scope of practice, and provide a better understanding of the cultural, political, economic, and social issues that affect patients and influence care delivery.

Currently, CoARC does not provide accreditation services for degree advancement programs, but many of these programs obtain accreditation with their institutional (i.e., regional or national) accreditor. According to a recent CoARC survey conducted in June 2013, approximately 67 of the 318 institutions that responded offer a degree advancement program with an additional 96 institutions indicating plans to offer this type of program in the future. Given this recent growth and interest, CoARC has begun the process of developing accreditation standards for these types of programs that should be available by the end of 2014.

Phases of Academic Progression in Respiratory Care



The Advanced Practice Respiratory Therapist (APRT)

In an effort to proactively address the growing prevalence of post-entry into the profession programs and the implications it may have for accreditation, the CoARC Board in March 2011 established an ad hoc committee that reviewed the educational models and accreditation pathways of other health professions in an effort to:

- identify the similarities and differences as compared to current career pathways and academic progression in respiratory care practice; and
- develop an accreditation pathway that is based on current and future needs for an advanced, mid-level practitioner that can be integrated into CoARC's accreditation review process.

This post-entry into the profession program is envisioned to provide an experienced respiratory therapist with advanced knowledge, clinical skills, and professional behaviors, usually in a specific specialty practice area — such as critical care, education, research, or leadership/management. The working title for this type of practitioner is the Advanced Practice Respiratory Therapist (APRT). APRTs would function as mid-level providers who assess patients, develop care plans, order and provide care, and evaluate and modify care based on the patient's needs and response to therapy. The APRT would provide and direct care under the guidance of a supervising physician, often directed by clinical protocols.

This past year the AARC endorsed, in principle, the development and implementation of standards for the accreditation of educational programs to train APRTs. In addition, a workgroup was formed with representatives from the AARC, NBRC, and CoARC to review the APRT concept and make recommendations for further development and implementation. With input from the APRT workgroup, CoARC recently published the first draft of the "Standards for Accreditation of Advanced Practice Programs in Respiratory Care."[3] The APRT workgroup continues to work on defining the emerging roles and responsibilities, educational requirements, expected competencies, practice act, and reimbursement implications of this mid-level practitioner with input from the AARC,

It is incumbent on the profession to clarify the evolving role of entry into professional respiratory care practice and post-entry into the profession programs, as well as to specifically define and differentiate the competencies of expected graduates from both types of programs.

NBRC, collaborating physician organizations, and other stakeholders in respiratory care.

Concluding remarks

Education after entry into professional practice in the form of degree-advancement programs is proliferating at the baccalaureate level and at the master's level; however, formal review and approval of such programs are provided, in some cases, by either a state education agency and/or institutional accreditor rather than by CoARC. This creates a lack of clarity for practitioners and the public and poses challenges for the profession in responding to the needs of consumers of respiratory care services. The clarity is also further compromised by the fact that in degree advancement programs, the varied expectations for prerequisites in the undergraduate degree likely contribute to varied levels of professional competency among graduates. Further, the varying quality of degree advancement programs indicates that education after entry into professional practice is driven as much by market need as by any consistent set of expectations developed by the profession or enforced through the accreditation process.

It is incumbent on the profession to clarify the evolving role of entry into professional respiratory care practice and post-entry into the profession programs, as well as to specifically define and differentiate the competencies of expected graduates from both types of programs. Although commonly understood definitions and established competencies will provide greater clarity, the CoARC Board has determined that the most appropriate way to maintain consistency and ensure academic quality for post-entry into the profession programs is to offer accreditation services since accreditation is a process of peer review meant to ensure and improve the quality of educational programs. This accreditation review process will recognize the "value added" above and beyond the entry into professional respiratory care practice degree, so the accreditation standards and guidelines will understandably be more rigorous. It is important to point out that more rigorous accreditation requirements will not be driven by CoARC but rather developed in response to demands by professional organizations, testing and regulatory agencies, and employers. The development of accreditation standards beyond that of entry into the profession is a natural process in the evolution of this profession as with other similar professions.

Inquiries regarding this article can be addressed to CoARC Executive Director Tom Smalling, PhD, RRT, FAARC, tom@coarc.com, 1248 Harwood Rd., Bedford, TX 76021-4244. ■

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Honoring Our Past and Preparing for the Future

by Thomas J. Kallstrom, MBA, RRT, FAARC

The profession of respiratory care will be celebrating its 67th anniversary April 15 of this year. Through the years dating back from the days of the "oxygen orderlies" and "respiratory technicians," we have steadily gained respect from our patient partners, hospital administrators, lawmakers, government agencies, as well as other medical associations. One thing that we all have in common is that our focus is to provide the best care to our patients while being an advocate for them. This will continue to be part of our mission in the years to come.

Over the past 67 years we have seen change, and we have also witnessed an explosion of technology — as well as best practices — in uses of this technology in patient care. Since the time that I entered respiratory care in the mid-1970s, I can only attest and marvel at how much better and advanced the provision of care is today compared to those early days. Our profession's history has been written about for posterity in several books, but I am pleased to tell you that we will soon have another way to highlight our profession. It is called the AARC Virtual Museum. Construction has already begun.

AARC Virtual Museum

Once completed, the Virtual Museum will provide a way for practicing and retired respiratory therapists and friends of the profession to memorialize and honor our history. In 2013, AARC President George Gaebler, MSEd, RRT, FAARC, formed an ad hoc committee chaired by past AARC President Trudy Watson, BS, RRT, FAARC, who has identified five areas that will be highlighted in the first wave of construction. They include: oxygen, mechanical ventilation, legends and leaders, aerosol therapy, and history of associations/agencies. Not a bad start, but that is only the beginning. Each of these areas will have their own area in the museum, which will house a timeline along with pertinent documents, audio and visual recordings, and photos pertinent to the topic.

In early 2014, construction of our virtual museum began. The official launch of the effort began at the AARC Congress 2013's American Respiratory Care Foundation's fundraiser. It was there that "seed money" was raised for the construction of the museum. With a generous grant from Teleflex Medical and members making donations by purchasing a "virtual brick," we got off to a good start.

Of course, that was just the beginning. You also can become a part of this by going to www.arcfoundation.org/news/museum/.

There you can view a video prototype of the museum and purchase a virtual brick for $25 or a block for $100. Both allow you to have your name affixed to the museum wall where you will be able to write a message that will be attached to the virtual brick. Many have used this as a means to honor colleagues, patients, family, and friends. Once purchased, the virtual brick will forever be a part of the museum with the donor and message there for others to see.

The last AARC Human Resources Survey completed in 2009 identified a trend that is not surprising given the aging demographics of today's work force. The survey uncovered that over the next 10 years, approximately 30% of the then current workforce would be retirement age and that in another 10 years 60% of the 2009 work force would be in that category. As this large contingent of RTs get ready to "hang up their hats," this is yet another way to support this living history museum and forever memorialize their ef-

about the author...

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

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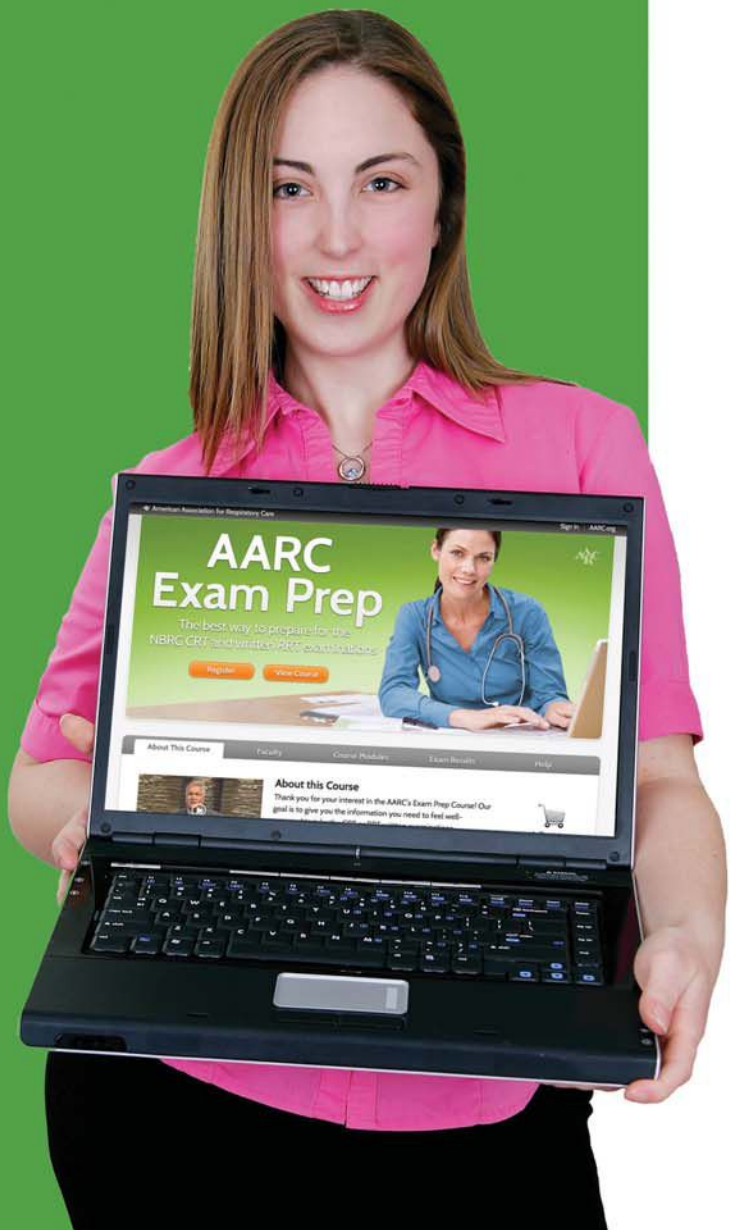

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forts. I can't think of a better way to support the construction of the museum and at the same time give back to the profession in a way that memorializes all who were associated with it. I urge you to check out our website, buy a virtual brick, and be part of our museum.

Preparing for the future

In early April, a team of Political Action Contact Team members descend on Washington, DC, for our annual Hill Day event. As in past years, we will have representation from our state affiliates along with patients and industry partners who will be there to support our efforts to secure more support for H.R. 2619. This bill, once it becomes law, will allow Registered Respiratory Therapists with a bachelor's degree or higher to be eligible to work in physicians practices and provide disease management to patients and families.

This important legislation would amend Medicare Part B to add coverage of pulmonary self-management education and training services when furnished by qualified RTs in the physician practice setting to Medicare patients who have been diagnosed with COPD, asthma, pulmonary hypertension, pulmonary fibrosis, and cystic fibrosis. If enacted, this new benefit will not only enhance patient access to respiratory therapists, it will also provide pulmonary patients who receive Medicare with the tools they need to lead healthier lives through self-management of their disease.

Now more than ever this bill needs to become law, and I urge you to help us make this happen. To learn more about this and how you can help, go to http://capwiz.com/aarc/issues/.

Once there you will be walked through the easy process of writing and emailing your congressional representative and senators. Please take time to learn more about this bill and support our profession as we become more accessible beyond the walls of the hospital.

Honoring our past and positioning RTs for the future

The Virtual Museum and H.R. 2619 are just two important initiatives that the AARC is working on today. We are a member organization and, as such, we need member support. Both will require the sum of the efforts of many to be successful. The Virtual Museum honors our past, and H.R. 2619 will position us for the future. Join us as both of these efforts move forward. ■

Document Retention

by Anthony L. DeWitt, JD, RRT, FAARC

How do you know you're about to be sued? One good indication may be the receipt of a letter from a lawyer that goes something like this:

We represent Mrs. X who was a patient of yours in the ICU on January 7, 2014. We are investigating a potential wrongful death claim. This letter is to put you on notice that you should suspend all document destruction policies regarding email, documents, policies, procedures, clinical protocols, and similar items of evidentiary value that were available as of this date.

Usually the letter is sent by certified mail so that an attorney can later prove in court that it was received and who received it.

A document retention letter is designed to serve notice on potential defendants that if they destroy emails, documents, policies, or procedures after receipt of the letter that they may face court sanctions for "spoliation of evidence." Those sanctions can be as severe as making the defendant pay legal fees, to an instruction that a particular defendant is negligent.

Courts do, indeed, from time to time sanction companies when they destroy evidence. In *Micron v. Rambus*, the Federal Circuit Court of Appeals dealt with a claim that Rambus — a company that engaged in "shredding days" — had purposefully deleted evidence that was needed in litigation.

The U.S. Supreme Court has noted that document retention policies are sometimes created "to keep certain information from getting into the hands of others" but has also said that it is not wrong for an employee "to comply with a valid document retention policy under ordinary circumstances."[1] The duty to preserve evidence begins when litigation is "pending or reasonably foreseeable."[2] Thus, "[s]poliation refers to the destruction or material alteration of evidence or to the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation." Courts employ an objective standard, asking not whether the party in fact reasonably foresaw litigation, but whether a reasonable party in the same factual circumstances would have reasonably foreseen litigation. If that makes your head spin, the simple translation is this: If a reasonable person in your position would know that a lawsuit is likely, then it is not a good idea to destroy records (and that includes policies and procedures).

Sweet v. Sisters of Providence

In at least one case from Alaska, spoliation had the effect of turning the normal principles of proof (that the plaintiff had to prove the case) inside out. In "Sweet v. Sisters of Providence" in Washington, an infant with a localized infection was admitted to the hospital and over the course of the first night began to experience "stiffening spells," which apparently both the nurses and the physician regarded as seizures. IV antibiotics were haphazardly administered by nursing because the nurses had a hard time keeping an IV line open. At 1:00 a.m. the child "crashed," coded, and even though this "crash" was addressed quickly, the infant suffered severe brain damage.

When the child was in the neonatal ICU — indeed, during the child's entire hospitalization — the records of the nursing notes during the critical period prior to the

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.

"crash" were in the chart. After litigation was filed, the records of the nursing notes for the evening when the crash occurred went missing. They were never found.

It is not uncommon for a client to think that if they remove the evidence of their own negligence that there will be no "hangman's noose" crafted from it. All too often, however, the omission of documents that should be in the file points the finger of guilt directly at the parties accused. Worse, it cannot be explained to a jury.

As is common in tort litigation, when the hospital could not produce the missing records, the judge told the jury that there was a presumption that the missing records would indicate that the hospital was negligent; but that was as far as the judge went. He did not tell the jury that they could presume that the negligence of the hospital caused the brain damage — a subject about which the experts disagreed. The plaintiffs appealed to the Alaska Supreme Court.

The Alaska Supreme Court let providers everywhere know that destruction of records would not be tolerated when it said:

As discussed above, Judge Shortell shifted the burden of proof to Providence on the issues of its duty and breach on the Sweets' medical negligence claim. However, the court refused to shift the burden of proof as to causation. The burden remained on the Sweets to establish that medical negligence was the legal cause of Jacob's injuries. The Sweets argue that Providence should have borne the burden of proving that Jacob's injuries were not caused by the hospital's negligence. We agree.

Just as the missing records may have impaired the Sweets' ability to prove medical negligence, they would in the same way impair the Sweets' ability to prove a causal connection between any negligence and Jacob's injuries. It is for this very reason that a number of courts in other jurisdictions have created a rebuttable presumption shifting the burden of persuasion to a health care provider who negligently alters or loses medical records relevant to a malpractice claim.

The Court then went on to cite a number of cases where courts had imposed sanctions for missing records. It then concluded:

Applying these observations to the present case, we hold that the trial court should have adopted a rebuttable presumption that Providence was medically negligent in treating Jacob and that this negligence legally caused Jacob's injuries, absent a jury finding that Providence's failure to maintain Jacob's records was excused.

Always secure your records

The Sweet case is important because it underscores the need to keep records safe and secure and to always ensure that records do not go missing in the mistaken belief that a case cannot be defended. It is always easier to explain the truth than try to manufacture an explanation for a lie, and that's what missing records are: they're a lie. If the records existed at one point but do not exist now, it's like a written confession that you deviated from the standard of care. Trust your lawyer. She can explain bad documentation — she can't explain no documentation! ■

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2. Silvestri v. General Motors Corp., 271 F.3d 583, 590 (4th Cir. 2001).

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Hill Day 2014

by Cheryl West, MHA

In just a few weeks the 15th annual respiratory therapy Capitol Hill Lobby Day ("Hill Day") will once again take place in Washington, DC. This joint AARC and state respiratory care societies event sends to DC well over 100 respiratory therapists who have made the long-term commitment to be their state's Political Advocacy Contact Team (PACT) representatives. These RT PACT representatives are appointed by their state society leadership and have volunteered to be the "point persons" and lead contacts for federal and state health policy issues impacting the profession and pulmonary patients. For the 2014 Capitol Hill Lobby Day, PACT representatives will meet with their members of Congress to garner support for H.R. 2619, the Medicare Respiratory Therapist Access Act.

When enacted, H.R. 2619 will change the Medicare law to permit qualified respiratory therapists to provide self-management and education services in a physician's office to Medicare pulmonary patients. In addition to making it easier for physicians to hire RTs to provide in-office self-management and education services to pulmonary patients during their physician visits, the bill will increase the recognition of respiratory therapists in the Medicare statute — a significant step forward for all RTs whether working in a physician's office or not.

It is important to emphasize that your PACT representatives going to Washington don't just make "cold calls" on Congress members (i.e., dropping by congressional offices and hoping there will be someone available to discuss our issues). For our Hill Day, every visit the RTs make is for a scheduled and confirmed meeting. Before coming to DC, your PACT representatives personally set up the meetings — which is not an easy task, often requiring dogged and persistent multiple contacts and requests to a congressional office. We're pretty proud of the fact that for the 2013 Hill Day we had over 322 confirmed meetings, and we're right on track for the same number this year. Your PACT representatives are armed with fact sheets and supporting documents that make the case for supporting H.R. 2619. The background information shows why passing this bill fits seamlessly into the new direction health care services are taking: reducing excess hospital readmissions, improving care transitions, and lowering costs. Respiratory therapists are perfectly aligned to provide all of these as long as outdated Medicare provisions can be revised to permit RTs to do so.

about the author...

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

Other team members

Your RTs will not be going up to Capitol Hill alone to deliver this important message. We've been most fortunate to partner with pulmonary patient organizations, most recently from the COPD Foundation. Typically we have over 20 patient advocates who have joined us on our Hill Day. We welcome support and participation from other patient organizations as well, including the Allergy & Asthma Network Mothers of Asthmatics (AANMA), the Alpha-1 Foundation, and the Pulmonary Hypertension Association. Plus, some state respiratory therapy societies have found the resources to sponsor a patient advocate from their state to accompany their own state PACT representatives.

In addition, over the last several years, regional respiratory therapy societies have arranged to have RT students from respiratory education programs around the Washington metro area to attend Hill Day. (It should also be noted that last year both the New York and Pennsylvania societies joined in and brought in a student RT as well.)

The AARC Virtual Lobby Week webpage (www.aarc.org/advocacy/lobby_week/) makes it easy to email your members of Congress and encourage them to support H.R. 2619.

We can't think of a better way to showcase to our future therapists the respiratory care profession and the value of the AARC and RC state societies than to have students see firsthand what the profession is doing (beyond the "clinical" aspect) not only for them but for the patients that they will serve one day.

Virtual Lobby Week

As much as your PACT representatives do in preparing and delivering the message to members of Congress, they cannot do it alone. You, too, can provide a huge boost to the impact of the message your RT PACT representatives will be delivering to members of Congress on Hill Day. The AARC has set up a Virtual Lobby Week webpage (www.aarc.org/advocacy/lobby_week/) that makes it easy for you and other supporters to email your members of Congress and let them know that you want them to support the issue the RTs will be delivering March 21 through April 2 — that you want them to support H.R. 2619. In 2013, using our Virtual Lobby Week site, we had over 10,000 email messages delivered to members of Congress by the time the PACT representatives got to Capitol Hill. With your help, we can exceed that this year.

The Virtual Lobby Week page explains what the legislation is all about and provides a simple link to our Capitol Connection page where respiratory therapists, RT students, pulmonary patients, physicians, etc., can send an editable email to their House of Representatives member and their two senators. As this is an election year, you will find that members of Congress who are up for re-election (the full House of Representatives and one-third of the Senate) tend to listen to their constituents a bit more closely than in other years.

Follow the AARC's main webpage (www.AARC.org) to keep up with the latest developments on our Hill Day efforts. Furthermore, please gather your colleagues, patients, friends, family, and respiratory therapy supporters and use the Virtual Lobby Week feature to send out messages of support to Congress. Your voices will increase the impact of the message your RT PACT representative will be delivering in person to Congress on April 1. ■

Pulmonary Rehabilitation: Helping One Patient at a Time

by Lynda Ferris, MS, RRT, CPFT, AE-C

If at first you don't succeed, try again! This phrase certainly applies to Laurie Trifeletti, a proud recent graduate of Rome Memorial Hospital's pulmonary rehabilitation program in Rome, NY. Her story is proof that determination and a positive attitude can help overcome obstacles that may have prevented successful completion of the program the first time around.

Laurie was first diagnosed with COPD in 2000 when she was still in her 40s and working. She had started smoking at the age of 15 and by the time of her diagnosis was smoking up to two packs a day. By 2001, she was unable to work any longer, and by 2011, she was on oxygen.

Originally referred to the pulmonary rehab program shortly after it started in the summer of 2008, Laurie was only able to attend seven sessions due to other health issues, including a history of fibromyalgia, degenerative disk disease in her back, anxiety disorder, severe adrenal insufficiency, and pancreatic disease.

Hospitalized at least twice a year for her COPD, Laurie became increasingly frustrated by her situation. She wanted to return to the rehabilitation program but did not feel that she could get through it because she was almost completely bedridden.

Finally, in September 2012 she asked her physician to again refer her to the rehab program. Although she was anxious to return, problems from other health issues again prevented her from starting.

Laurie was admitted to Rome Memorial Hospital in January 2013 and spent more than two weeks there for an exacerbation of her COPD. During her hospitalization, therapists from the pulmonary rehab program visited her and discussed her concerns about returning to the program. She explained that she had anxiety about attending an outpatient program three days a week, but the therapists assured her that the program could be started very slowly and increased as she improved.

about the author…

Lynda Ferris, MS, RRT, CPFT, is the coordinator of the pulmonary rehabilitation program at Rome Memorial Hospital in Rome, NY.

After a few more health setbacks, Laurie was finally able to start the program in March 2013. She arrived to her first appointment in a wheelchair because she felt too weak and short of breath to walk much distance. However, this time Laurie had an added incentive for completing the program. Her daughter Dawn, after 16 years of trying to get pregnant, had just announced that she was expecting a baby in the fall. Laurie wasn't sure she would be able to make the trip to her daughter's home in New Jersey when the baby arrived, but she was determined to try.

"At my first session I was full of self-doubt and fear, along with feeling a great deal of hopelessness," Laurie said. "By the end of that first session, I felt much better. The program's therapists are such compassionate and caring people. I felt like a weight was lifted off my shoulders. Even though I had many needs, I had *more* hope that I was going to get better."

Because Laurie had been mostly bedridden for many years, her initial exercise capacity was very low. At her first session, she was encouraged to try using a walker with wheels and a seat instead of a wheelchair when coming to the program. She was also advised to walk slowly and take as many rests as needed on her way in to exercise. She found she was able to walk with much greater confidence using the walker, since she had something to hold onto and support her upper body while walking. She was able to place her oxygen tank in the basket attached to the walker, which lightened her load, and knowing that she could stop at any point and sit in the attached seat helped lessen her fear of having to stop because of shortness of breath.

Laurie started coming to the program two days a week; but as her confidence grew, she decided she could attend three days. By the time she graduated, she no longer needed the walker or any type of assistance when coming to the program. Once she completed the program, she enrolled in the optional maintenance portion and continues

to attend on a regular basis. "The pulmonary rehab program is inspirational and uses a holistic approach that helped me greatly," Laurie says. "Not only does the program include physical exercise, I also learned techniques for controlling my breathing, was given a wonderful education on COPD, and received consultations with other specialty caregivers tailored to my needs. Every patient has different needs and goals, and the program takes that into consideration."

"I had been housebound and isolated for many years without much socialization, and I really am grateful to be able to be sociable once again. It has been quite a journey and a lifesaver for me."
— Laurie Trifeletti

All patients enrolled in the pulmonary rehab program are asked to set personal goals to work toward during the program. In addition to being able to travel to see her new grandchild, Laurie's goals included being able to cook a meal, go to the grocery store, increase her strength and endurance, and decrease anxiety. As she slowly progressed in the program, her confidence grew. She started venturing out of the house more frequently and proudly told of taking a walk outside with her husband and dogs for the first time in years.

"I'm thrilled to say I can now cook a meal for my hubby and me, walk the entire supermarket, and so much more, without being in a wheelchair or using a walker," she reports. "My husband is thrilled and so proud of me." With each goal she achieves, Laurie sets new ones. She was aiming for her trip to New Jersey to be at the end of October when her grandchild was due, but she was feeling so good she decided to make the trip in September to attend her daughter's baby shower. It was a good thing that she had worked so hard in pulmonary rehab too because the same day she got home, they received a call that Dawn was in labor. The couple turned right around and made the five and a half hour trip back to be there for little Joey's birth, the Trifeletti's first grandchild. Although he was born about a month early, Joey is doing just fine and Laurie couldn't be prouder. "He is such a little miracle, and he is just the most beautiful baby," Laurie said. "And I am not just saying that because I am his grandmother. Everyone thinks so." She now has a portable concentrator and is becoming a seasoned traveler to see her grandson, most recently spending time with him during the holidays. One of her next goals is to resume driving (something she has not done in seven years) so that she can become even more independent.

Laurie is very grateful to the respiratory therapists in the pulmonary rehab program. "They have been so good to me and helped me so much," she says. "I cannot say enough about the benefits of the pulmonary rehabilitation or even find the words to express how joyful and thankful I am for this wonderful program. I am so grateful to have been able to complete the program. I had been housebound and isolated for many years without much socialization, and I really am grateful to be able to be sociable once again. It has been quite a journey and a lifesaver for me." ■

Serving the UNDERSERVED

The free clinic is housed in space leased from a local high school.

by Debbie Bunch

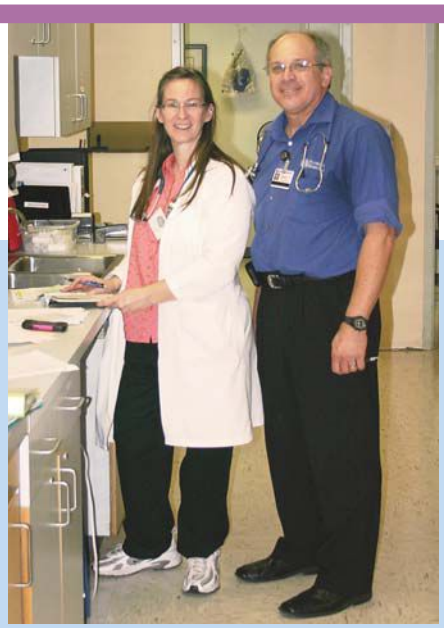
Despite the access to health insurance created by the Affordable Care Act, millions of Americans are still going without health care. The only price they can afford is free, and Florida RTs are helping them find it.

RT-driven clinic is making a real difference in patients' lives

Back in January of 2012, Florida Hospital's administrative director of respiratory care, Edward Fluker, MBA, RRT, sat down with their director of the respiratory care department, Thomas Berlin, DHSc, RRT, to come up with a multi-part plan to help respiratory therapists better care for their patients after discharge from the hospital.

On the agenda: a respiratory case manager position to assess inpatients for their discharge needs, expansion of the pulmonary rehabilitation program, and respiratory care visits in the home — all topics being discussed in other RT departments across the nation. However, these AARC members took it one step further by considering the development of an outpatient clinic where underserved post-discharge patients could be seen by a respiratory therapist and nurse practitioner within just a few days of discharge.

The reasoning behind the clinic was simple: Too many patients were leaving the hospital with prescriptions for medications they could not afford, with the upshot being a greater likelihood of return emergency department (ED) visits and readmissions. Thanks to their vision — and the unprecedented willingness of nearly a third of the 300+ RTs who work at the Orlando-based hospital to volunteer their services — the Apopka Community Lung Clinic opened in July of last year.



Edward Fluker and Sherri Ferguson, ARNP, at Apopka Community Lung Clinic.

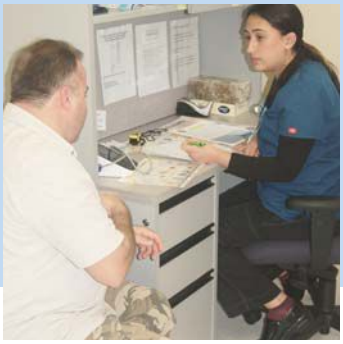
Acquiring grant dollars

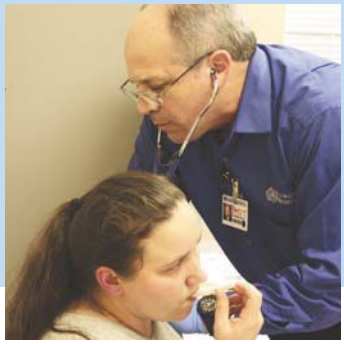
Fluker and Dr. Berlin got the ball rolling by contacting an organization in the Orlando area called the Community Health Impact Council. The organization provides seed money for ideas deemed to be of great benefit to the community; and after a second proposal, the free clinic was approved for grant dollars. "Getting the grant dollars was the first of several barriers," says Fluker. "Next was finding space that was suitable and affordable." He and Dr. Berlin began searching for a location; and six months later struck a deal with Apopka High School for a reasonably priced space. In the meantime, Fluker also began the groundwork that would have to be completed in order to use RT volunteers to deliver services.

"I took us through the process of partnering with the Florida Department of Health to secure protection under the state's Sovereign Immunity Statute for our clinic, which is essential to provide liability protection for volunteer health care workers," he explains. While the clinic would be open just one night a week to start, Fluker knew he would need a healthy list of therapists willing to donate their time in order to ensure adequate staffing.

He had nothing to worry about on that score. "I am blessed to be associated with a team of over 300 very dedicated respiratory therapists at the eight Florida Hospital campuses in the Orlando area, and already 105 have become clinic volunteers," he says. Nearly 100 non-clinical volunteers have also been recruited to serve as interpreters and help with office functions; and two part-time ARNPs (advanced registered nurse practitioners) who

Volunteers Elisa Gonzalez, RRT, and Ed Fluker see patients at the clinic.





work under the guidance of the department's medical director, Jorge Hernandez, MD, round out the roster.

Daily report

Before opening day on July 22, 2013, Fluker and his colleagues provided multiple training sessions for the volunteer staff to ensure everyone was up to speed on clinic operations; and they also held several practice clinic nights, using test patients to ensure everything would run smoothly once real patients began coming in. "Between July 22 and December 17 we saw 85 patients," says Fluker. "The majority were post-discharge patients, but we also saw walk-up patients from the community."

He identifies patients who can benefit from the clinic by working closely with case managers at the hospital. "I receive a daily report of all inpatients who are uninsured with a pulmonary diagnosis who live within 19 targeted zip codes that are within a reasonable distance to the clinic," he says. "I provide the daily report to case management, and they visit the patient and provide information on the clinic." He has also met with case managers from other facilities, and they are now referring their underserved patients to the clinic as well.

In addition, AARC member Kathy Cirilo, RRT, RN, volunteers her time to meet with patients at the hospital who qualify for clinic referrals to share with them how the clinic can help and make appointments for them before they are discharged.

Thanks to the work of this team in spreading the word about the clinic, plus the increased need that occurred with the advent of the winter season, attendance at the clinic picked up; and by the first of the year, Fluker was ready to expand clinic services to encompass a second night of the week.

Partnership pays off

RTs who volunteer their time at the clinic provide an extensive list of services. The visit begins with an initial assessment of the patient that includes vital signs and a health history. RTs perform spirometry, provide aerosolized nebulizer treatments as needed, and educate patients on the use of their inhaled medication devices. Since one of the biggest reasons for starting the clinic was to ensure patients would have greater access to the medications they need to treat their conditions, Fluker has also worked closely with GlaxoSmithKline (GSK) to provide medications free of charge. "From July 22 through the end of the year, we were able to connect patients with over $160,000 in meds at no cost to them, specifically Advair® and Ventolin® HFA," he says. "With GSK providing these expensive meds, we can then better use our grant dollars for other meds and needs the patients may have, such as nebulizer compressors and oxygen concentrators."

Fluker says the full year of medications provided to patients through the arrangement with GSK gives them a good chance of really getting a handle on their respiratory conditions. "When we follow up with the patient in two weeks, we almost always see a remarkable change." Feedback from patients themselves has been overwhelmingly positive. Fluker recalls one Spanish-speaking woman who stopped at the door on her way out one evening and expressed her gratitude in her native language. "Our interpreter that night told us she said the clinic was like a gift from God."

View a video of Apopka Community Lung Clinic here: www.youtube.com/watch?v=K5b5fnvlZ34

Outcomes back up those sentiments. Fluker says he's been tracking readmissions for post-discharge patients seen at the clinic, particularly 30-day readmissions; and in the first four months of clinic operation, only two of 51 patients were readmitted. "During 2012, 21.2% of our COPD discharges were readmitted within 30 days," says the manager. "Though this sample of 51 patients is small, it represents a readmission rate of only 4%, which is well below the 21.2% readmission rate that we had previously seen."

Volunteers Daniel Ward, RRT, and Selina Richardson, RRT, go the "extra mile" for patients.

Going the extra mile

While the free clinic is only officially open a couple nights a week, Fluker and his colleagues have gone above and beyond to help patients who could not make it to the location on the given nights. One 62-year-old man who was in remission from lung cancer and also suffered from COPD, for example, could not find transportation, so Fluker and one of the nurse practitioners agreed to meet him at the clinic on another night. "He only had four puffs of albuterol left in his inhaler and had a bag with at least eight different empty containers of sample medications," says Fluker. "He could not get the medications he needed anywhere because, although he had Medicaid, he could not afford his monthly share of the cost."

They gave him an aerosol treatment at the clinic, and then Fluker called GSK and was able to qualify the patient for a year's worth of Advair and Ventolin MDIs, free of charge. The prescriptions were ready for him to pick up at a nearby pharmacy as soon as he left the clinic. "If we had not seen him at the clinic that night, his only alternative would have been to go to the Florida Hospital Apopka emergency department," says Fluker. "He still would have been discharged with prescriptions that he would not have been able to fill."

Services are expanding

Now that he's gotten a handle on providing free medication to clinic patients, Fluker is expanding the operation to include disease management and pulmonary rehabilitation as well. The grant received has allowed him to start a pulmonary rehabilitation program at Florida Hospital Apopka that provides free pulmonary rehabilitation to the clinic patients who qualify based on spirometry results, explains Fluker. The RT-run program, which kicked off in January, is also open to any patient in the community referred by a local physician, with payment based on income and insurance coverage. "Because our time is limited with our patients at the clinic, the pulmonary rehab program is providing us the real opportunity to perform disease management beyond the

Volunteers Kathy Cirilo, RRT, RN, and Neysa Miller, RRT, volunteer their time to serve the underserved.

Volunteers Talyna Garcia, RRT, and Michael Carter, RRT, RN, provide disease management.

education we are able to provide at the clinic," says the manager.

Fluker and his colleagues are also looking at how they can incorporate asthma action plans into the clinic services, though he admits they are facing some barriers on that front, such as time available to spend with each patient during the clinic visit, cost of the peak flow meters they would need, and difficulty in following up with patients. "We schedule return visits for most patients but have many no shows," he says. He is hopeful that the new pulmonary rehabilitation program will facilitate follow up but notes that not all asthma patients will be taking part in the program.

However, clinic patients are getting a chance to get some help with their smoking addictions. "We started a smoking-cessation program based on the American Lung Association's Freedom from Smoking curriculum in February," says Fluker. The eight-week program is being led by RTs, and patients are encouraged to sign up during their clinic visit. Like the other services provided by the clinic, the smoking-cessation program is offered at no cost to clinic patients.

Ongoing need

The Apopka Community Lung Clinic has already come a long way since it opened last July, and Ed Fluker has big plans for the enterprise going forward, too. Noting that the need in Florida is not likely to subside even under the Affordable Care Act (Florida was one of several states that opted not to expand its Medicaid program, thus forgoing billions of dollars in federal assistance), he wants to eventually open other locations as well. "Our grant dollars will run through the winter of 2015, but it is our intention to gain the support of our hospital based on our outcomes to not only continue this clinic but to expand it to two additional locations within the central Florida area," he says. By continuing to collect readmission outcomes on post-discharge and walk-in patients alike, Fluker believes he can provide the data needed to convince hospital executives.

"My plan is to demonstrate how inexpensively we can operate this clinic and the benefit to the community — both in the health benefits provided and the reduction of hospital resources that these patients will require, such as ED visits and readmissions," says the manager. "My prayer would be that someday free clinics like this would not be needed, but we are nowhere close to that yet." ■

Two for the "Price" of One

Why would the woman pictured at the Apopka Community Lung Clinic along with AARC member Edward Fluker, MBA, RRT, on this month's cover be wearing hospital bracelets? According to Fluker, she came to the clinic directly from the hospital.

"Her mother picked her up at discharge from Florida Hospital Orlando and drove her straight to our clinic after an eight-day admission," says the administrative director of respiratory care. "She had been intubated at our ED in a near fatal asthma incident and had been on a ventilator." He and his colleagues were able to provide her with the medications she needed without even missing a dose following discharge.

They were able to help her mom as well. "While the woman was being seen… I noticed that her mother, who was sitting in our waiting room, appeared very short of breath," he says. "In talking to her, I discovered she had been discharged herself three weeks earlier with emphysema, could not afford her medications, and was not doing well."

The free clinic staff stepped in again to evaluate her, then get her set up for a year with Advair and Ventolin. ■

RESPIRATORY MANAGERS:

2014 Requires Best Outcomes at the Lowest Cost

Use AARC's Benchmarking System to Identify Best Practices Among Your Peers

This tool is designed to assist respiratory managers in their performance evaluation and implementation of new processes by comparing metrics and best practices of similarly structured leading facilities.

Compare Your Facility with Top Performing Facilities:

- Improves the ability to make comparisons in workload performance on high-volume procedures.
- Allows subscribers to design their own set of custom compare groups so you can select similar departments or investigate what differences exist.
- Once you learn there is some variation in your performance – finding out why is a click away or you can email the respiratory care "consultants" within the group.

MISSED TREATMENTS	VENT DAYS - PATIENTS
75% ILE	75% ILE
50% ILE	50% ILE
25% ILE	25% ILE
See Website About These Metrics	See Website About These Metrics

These metrics represent the mean values of all hospitals reporting data into the AARC Benchmarking System during the most recent quarter.

METRICS ARE UPDATED BY THE 15TH OF EACH MONTH.

RENEWALS ARE OFFERED EXCLUSIVE PRICING AT $395

ONE-YEAR SUBSCRIPTION

Nonmember Price: $600

AARC MEMBER PRICE: $500

Member savings $100

6-MONTH SUBSCRIPTION

Nonmember Price: $350

AARC MEMBER PRICE: $300

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Cost Effective Internal System Benchmarking:
Add any hospital within your healthcare system for only $199 more.

"The impact of this tool has opened for us great opportunities to utilize our resources to improve patient care and respiratory care practice"

— **Mohammed AlHejji**, MSRC RRT NPS CCT
Head of Respiratory General Care Section
King Fahad Medical City, Saudi Arabia, Riyadh

Open Forum Triple Play

New format for 2014 offers three ways to share original research

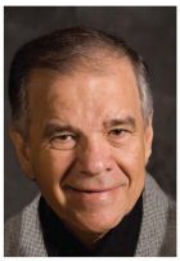
While the AARC Program Committee met in February to develop plans for Congress 2014, the Respiratory Care staff were busy in their own right finalizing changes to the Respiratory Care Open Forum that will offer some interesting new ways to present and experience research. Attendees at this year's AARC Congress in Las Vegas will be able to pick and choose between Editors' Choice, Poster Discussions, and Posters as they make their way through the Open Forum.

Every year hundreds of researchers — veteran and novice alike — flock to the AARC International Respiratory Convention and Exhibition to present their findings in the Respiratory Care Open Forum. Armed with results on bread-and-butter issues in respiratory care ranging from aerosol therapy, to mechanical ventilation, to neonatal and pediatric care, to education and management, and every other mode of practice in our profession, they have been allotted two to three minutes to deliver a summary about their poster and then take questions from the audience.

This year's OPEN FORUM, coming up at AARC Congress 2014 in Las Vegas, Dec. 9–12, will add two additional formats for researchers to present the results of their investigations. RESPIRATORY CARE Editor in Chief Dean R. Hess, PhD, RRT, FAARC, and Managing Editor Ray Masferrer, RRT, FAARC, explain the changes in this Q&A.

For the last 20 years or so, the OPEN FORUM has been using the *poster discussion format only*. What prompted the decision for changes in 2014?

Dr. Dean Hess: Early in its history, all abstracts were slide presentations. More than 25 years ago, when I first presented at the OPEN FORUM, some abstracts were slide presentations and others were posters.



Ray Masferrer: To follow-up on Dean's comment, our format this year captures the best of what we have done over the years — slide presentations, poster discussions, and poster presentations. We have attended sessions at other professional meetings that have also informed the possibility of improving the way that we manage the OPEN FORUM. The changes for 2014 reflect the feedback we have gotten at the AARC Congress and what other societies are currently doing. We feel certain the changes in the 2014 OPEN FORUM will result in greater participation by researchers and attendees.

The new OPEN FORUM will offer three formats for presentations. Explain a little more about each of these.

Dr. Hess: The three categories are Editors' Choice, Poster Discussions, and Posters. Authors in the select group of Editors' Choice will prepare a poster for prominent display during the first two days of the Congress. On the third day of the Congress, each Editors' Choice presenter will give a 10-minute slide presentation, followed by 10 minutes of audience questions and discussion.

Masferrer: Authors in the Poster Discussion group will prepare a poster of their work to be presented in a session grouped by topic. This is exactly the same as the sessions that have occurred in the recent past. A brief oral presentation and audience questions and discussion allow presenters to expand on the work featured on the poster. The majority of accepted abstracts will fall into this category.

Dr. Hess: For the Poster category, authors will prepare a poster to be displayed during Exhibit Hall hours on an assigned day. Presenters are required to stand beside their posters between 12 noon and 1 p.m. that day to discuss their work with Congress attendees.

Deadline Approaching!

The deadline for submitting abstracts for consideration for the 2014 RESPIRATORY CARE OPEN FORUM is **June 1**. All abstracts should be submitted online at **http://aarc2014.abstractcentral.com.**

From the descriptions of the three categories, it looks like you are assigning more weight to some abstracts than others. How will you decide which abstract is assigned to which category?

Dr. Hess: At the time of submission, authors can request that their abstract be considered only for the Poster category. It remains to be seen, but I would not be surprised if many authors will select that option. First-time presenters often experience considerable anxiety about the abstract presentation. This format might be less intimidating, especially for first-time presenters.

Masferrer: All Open Forum abstracts are peer-reviewed by at least five reviewers. The results of the peer-review process will help decide which abstracts are assigned to each category. This process determines the final decisions about which abstracts are accepted and, as the name implies, those that are selected for Editors' Choice.

Will the introduction of these three categories mean more people will end up having their abstracts accepted?

Dr. Hess: Abstracts are accepted based on their merit, and that will not change. However, these three categories will provide some flexibility on how abstracts are presented. In recent years, some of the sessions have become crowded with presenters, which diluted the ability of all authors to discuss their work in the allotted time.

Masferrer: We feel confident that the new Open Forum formats should result in more submissions, higher acceptance of abstracts, a better learning experience for novice researchers, and more attendees at the AARC Congress. This has been the case at other medical society meetings, and we see no reason for us not to duplicate those results.

What will the new format for the OPEN FORUM mean to people who attend the Congress? How do you believe it will facilitate their abilty to learn more about the scientific evidence presented there each year?

Dr. Hess: We expect this to enhance the experience of the Congress attendees. Because the new Poster Discussion sessions may be less crowded than in recent years, it will allow more interaction with the authors. The Posters are beneficial because attendees can study the posters at their leisure.

Masferrer: The Editors' Choice presentations will allow reviewers and attendees to recognize those abstracts that reflect the most important science and have high potential for translation into practice. As an attendee of the Congress myself, I look for variety; and the variety of the OPEN FORUM should enhance the experience of every attendee.

How do you believe having these three different categories – or levels of presentation – will help build the OPEN FORUM for the future?

Dr. Hess: We expect that this could make the OPEN FORUM more inviting for presenters. For the first-time presenter, there is the opportunity to present one's abstract in a less intimidating format. For the seasoned investigator, there is the opportunity to have one's work recognized as an Editors' Choice presentation.

OPEN FORUM authors are asked to comply with specific guidelines to avoid conflict of interest, similar to authors of manuscripts submitted to RESPIRATORY CARE. Will these guidelines also apply to the new formats in the OPEN FORUM?

Dr. Hess: Indeed, as in RESPIRATORY CARE, abstracts submitted by industry or their representatives will not be considered. All authors must disclose industry relationships for the previous two years. Abstracts will not be accepted if ghost written or if the study was conducted solely by industry employees.

Masferrer: It is expected that some authors will have financial and other ties to commercial entities related to products, services, or other aspects of the abstract, either at the time of submission or previously. We do not consider such potential conflicts of interest to be unethical. However, failure to *disclose* such potential conflicts is unethical. For more information on what constitutes a conflict of interest, see the information for authors on our website, www.rcjournal.com. ■

RESPIRATORY CARE Assistant Editor Sara Moore, BA, contributed to this article. As the logistical onsite and support person, she provides help to researchers interested in presenting their work at the OPEN FORUM. All abstracts should be submitted online at **http://aarc2014.abstractcentral.com**

Back in 2004, most people had no idea what "COPD" even was. Thanks to John Walsh and his fellow patients, today many of them do.

Celebrating a Decade of Patient Advocacy

by Debbie Bunch

The COPD Foundation marks its 10th anniversary

Ten years ago, COPD was barely on the radar screen of policymakers, and the general public knew even less about the condition. Over the past decade, COPD has gained a lot of respect, not only from health care providers but also from Congress and others in charge of making decisions that impact people with the condition.

The AARC has always played a role in championing early diagnosis and treatment for the disease and continues to help it earn the respect it deserves. AARC Executive Director and Chief Executive Officer Thomas J. Kallstrom, MBA, RRT, FAARC, is currently leading AARC's effort to promote vital knowledge about COPD. Celebrities like Danica Patrick and Leonard Nimoy (who recently announced that he has the disease) have also helped raise awareness. But a lot of credit must also go to patient-driven organizations whose missions are to further the COPD cause.

The leading organization in that category is turning 10 this year, and we thought now would be a great time to look back at how it formed and all that it has accomplished.

On a mission

The COPD Foundation (www.copdfoundation.org) was born back in 2004, brought to life by John Walsh, a successful businessman in the telecommunications industry — who, along with his twin brother Fred, was diagnosed with the genetic form of COPD, alpha-1 antitrypsin deficiency (AATD), in 1989 when they were 40 years old. While the brothers had lost their mother to what was then called "early onset emphysema" when they were just 13, like most people at the time, they knew little or nothing about chronic lung diseases like alpha-1 or COPD. However, unlike many of their fellow patients, they made it their mission to find out.


COPD
FOUNDATION
Everyone Over 18 Years of Age Is Welcome To Participate EXCEPT Those Who:
Have Had a Heart Attack
hin the Last 90 Days
Had Eye Surgery
Last 2 Weeks
Had Surgery Within
st Month
ntly Have a Cold
g Infections
Experiencing Nausea
Dizziness
re Having Chest Pain
re Coughing Up Blood
✓ Are Pregnant
✓ Have TB

"We immediately joined a National Institutes of Health (NIH) Natural History Study of AATD," says Walsh. "We wanted to find out everything there was to know about alpha-1, and the experts had very little information and there were no patient education materials available." He and Fred decided they would do what they could to change that for the better; and when the NIH decided not to continue the alpha-1 research project in 1994, they gathered some other Alphas they had met and together formed the Alpha-1 Foundation.

A few years later, Walsh was approached by COPD investigators who asked him to apply his alpha-1 experience to the development of a nationally focused organization devoted to COPD as well. The businessman in him knew it was the right way to go. "It was very strategic for both alpha-1 and COPD to benefit from our alpha-1 experience," he says. By taking advantage of a resource-sharing platform, operating costs would be significantly reduced; and with $500,000 seed money in hand, the COPD Foundation was off and running.

AARC a key partner

Walsh describes the Foundation as a unique hybrid "voluntary health association" or "patient advocacy organization" that's a true partnership between the patient community and scientific and clinical community. "Expanding and adapting on the Alpha-1 model of establishing our scientific credentials, building the infrastructure to support research, and taking an entrepreneurial approach to launching initiatives to accelerate growth and respond to the actual needs of the community built the momentum to move from a start-up to a maturing organization," says the president and founder. "Our board of directors is comprised of an incredibly committed group of individuals who have dedicated themselves to helping the Foundation establish strategic relationships with government, industry, and the global scientific community."

The AARC has been a key partner from day one. Walsh notes that since inception, the COPD Foundation has recognized the critical role that respiratory therapists play in early diagnosis: improving health outcomes, educating the individual with COPD about the importance of taking direct responsibility to participate in our care, and the value that they provide to the broader health care system as physician extenders, researchers, and coaches to our patient community. "The leadership of the AARC has set the example of patient-centered care and has created a collaborative environment to work with organizations like ours and be our allied health

"The leadership of the AARC has set the example of patient-centered care and has created a collaborative environment to work with organizations like ours and be our allied health partner in the truest sense of the word."

— John Walsh

partner in the truest sense of the word," says Walsh.

He cites the key projects and programs the two groups have worked on over the years as shining examples of this collaboration:

- the Mobile Spirometry Unit, which utilized AARC members to provide spirometry testing at health fairs and other events;
- the Case Finding Validation Study, which validated the use of a risk screener and electronic peak flow prior to spirometry and paved the way for the next phase funded by the National Heart, Lung, and Blood Institute (NHLBI); and of course,
- the DRIVE4COPD campaign, which has screened more than 3 million people for COPD to date.

Thomas Kallstrom serves as a member of the COPD Foundation's Medical and Scientific Advisory Committee. Many of the paid members of the Foundation staff are respiratory therapists who have been active in the AARC for many years. In addition, Foundation members always support the AARC's Capitol Hill Lobby Day by attending our Political Advocacy Contact Team's annual trip to Washington, DC, to promote legislation important to respiratory patients and the respiratory care profession.

"We view RTs as on the front lines, focused on helping patients, and commend the AARC leadership for promoting the professionalism and creating an environment of collaboration, compassion, and community service," Walsh emphasizes.

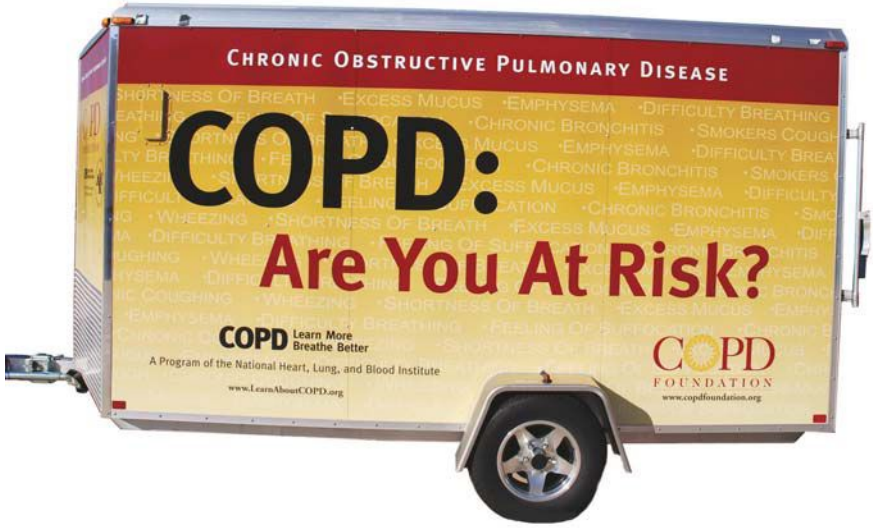
Amazing growth

The growth experienced by the COPD Foundation over the past 10 years has been nothing short of amazing. In addition to its advocacy and research efforts, the organization has developed a wealth of educational materials for patients, including the "COPD Big Fat Reference Guide," and supports a COPD Information Line to offer patients one-on-one assistance from fellow patients. Next month the Foundation will launch its own journal as well, *Chronic Obstructive Pulmonary Disease: The Journal of the COPD Foundation*.

COPD SHUTTLE:

This 20-seat, state-of-the-art mobile motion simulator has helped bring COPD up close and personal for those who have stepped inside, including many AARC members at the AARC Congress and other events. The Foundation estimates more than 10,000 people have taken the ride so far.

The next 10 years and beyond will allow the COPD Foundation to reaffirm its commitment to making a difference in the COPD community in communities around the world.



Other major accomplishments include:

Learn More, Breathe Better: Sponsored by the NHLBI, this ongoing campaign was founded in 2007 to increase the public's knowledge of COPD. The COPD Foundation took the lead from the beginning, working alongside the AARC and other groups to spread the word about the condition so that more people could be tested and diagnosed in the early stages of the disease.

The COPDGene Study: Initially funded by a $37 million grant from the NIH, this study was spearheaded by the Foundation to identify key genes other than alpha-1 that are involved in COPD so better treatments can be developed for patients with specific genetic markers. A successful Phase 1 project has now led to another $30 million grant to further the research.

COPD Coalition and Congressional COPD Caucus: The Foundation played a major role in the creation of these entities. The first brought together key organizations involved in COPD advocacy, while the second is made up of members of Congress who have pledged to support COPD patients and COPD research through their legislative efforts.

COPD Advocacy Driver's License: Foundation members can watch a 30-minute video to get informed on ways to raise COPD awareness, improve diagnosis for the condition, and advocate for greater funding for COPD research.

COPD Research Registry: This confidential database of COPD patients and those at risk for COPD serves as a resource for investigators around the world who are looking for patients to include in their studies.

COPD Employer Toolkit: With this resource, companies can learn more about COPD and help their workers find out if they are at risk for the condition.

More to come

Clearly, the COPD Foundation has come a long way since its inception 10 years ago. However, Walsh says the organization isn't ready to rest on its laurels. As he looks to the next 10 years and beyond, he says the focus will be on growing the COPD community and building upon the successes to date.

"We will continue to offer resources, programs, and educational information that will help those living with COPD, and their friends, family, and caregivers achieve their highest quality of life," says Walsh. "We are proud of the progress that we've made and are so grateful to the many individuals and organizations who are also dedicated to bringing hope to everyone affected by COPD. The next 10 years and beyond will allow the COPD Foundation to reaffirm our commitment to making a difference in the COPD community in communities across the nation and around the world." ■

Industry Watch

Adamis Pharmaceuticals acquires 3M intellectual property

Adamis Pharmaceuticals Corporation has acquired from 3M Company and 3M Innovative Properties Company intellectual property and assets relating to 3M's Taper Dry Powder Inhaler technology under development for the treatment of asthma and COPD. Adamis reports it intends to utilize the assets to develop a dry-powder inhaler device for the treatment of asthma and COPD to deliver the same active ingredients as GlaxoSmithKline's Advair Diskus®. The intellectual property includes patents, patent applications, and other intellectual property relating to the Taper assets.

Masimo expands to India

Masimo is opening offices across India to meet the health demands of the burgeoning Indian market. According to Jon Coleman, president, Masimo Worldwide Sales, "We have found that India is an important market for several reasons — the most important is that the penetration of high-technology devices is very low, a factor that could lead to thousands of avoidable instances of death and illness." The company notes it is currently working with India's top medical and nursing practitioners to raise greater awareness of the clinical and cost challenges that Masimo's innovative technologies can solve.

Nonin product named a finalist

According to Nonin Medical Inc., its 3230 Bluetooth® Smart finger pulse oximeter was selected as one of 12 finalists for the 2014 Bluetooth Breakthrough Awards Program. The award, which is sponsored by the Bluetooth Special Interest Group (SIG), recognizes products launched in 2013 that are innovative, easy to use, convenient, reliable, and have a large market appeal. Bluetooth SIG reports it received more than 200 entries.

NY city council bans e-cigarettes

The New York City Council has voted to prohibit the use of electronic cigarettes in indoor public areas where smoking regular cigarettes is also banned. The measure, which was backed by Health Commissioner Thomas Farley and Council Speaker Christine Quinn, is the latest in a series of initiatives by the city to curb tobacco use.

UVA Health System wins video award

The University of Virginia Health System (UVA) has been selected as one of four winners in the Robert Wood Johnson Foundation "Voices of Quality" video contest. The contest aimed to highlight how hospitals and health care providers use performance data to improve quality. The video is based on the work of an interdisciplinary UVA team — including nurses, doctors, respiratory therapists, and performance improvement experts — to redesign the care toolkit for asthmatic children. Within nine months, 100% of children with asthma admitted to UVA Children's Hospital received all of the treatments and the home care plan outlined in the toolkit.

ATS Foundation, ALA team up to fund research

The American Thoracic Society Foundation and the American Lung Association are co-funding an $80,000 grant that will support research into the mechanisms underlying Hermansky-Pudlak syndrome (HPS), a rare inherited disease that affects a number of organs, including the lungs. The two-year grant will fund research being performed by Souheil El-Chemaly, MD, MPH, assistant professor in the division of pulmonary and critical care medicine and the clinical director of the Center for LAM Research and Clinical Care at Brigham and Women's Hospital. Understanding HPS, which causes fibrosis of the lungs, may accelerate the discovery of therapies for more common lung diseases such as cystic fibrosis and idiopathic pulmonary fibrosis.

Revive Therapeutics initiates proof-of-concept study

According to Revive Therapeutics Ltd., its Phase 2a proof-of-concept study of REV-001 (tianeptine) for the pre-

vention of opioid-induced respiratory depression is well underway. The study is being conducted at the Leiden University Medical Center in The Netherlands and is a placebo-controlled, double-blind, randomized, two-way crossover trial in healthy adult subjects. Investigators are evaluating the effect of an oral dose of tianeptine on alfentanil-induced respiratory depression and antinociception.

Vital Connect seeking FDA approval

Vital Connect is seeking FDA approval for its HealthPatch MD, which the company believes is the next generation of patient monitoring technology. A small, non-obtrusive device that looks like an adhesive bandage, the HealthPatch MD is the first biosensor of its kind capable of measuring, calculating, and storing clinical grade readings of vital signs and other health indicators, Vital Connect says. HealthPatch MD can monitor heart rate, heart rate variability, respiratory rate, body position, etc., and use that information to calculate secondary health indicators such as stress, likelihood for hospitalization, and other parameters.

Phase 2a study of RSV medication

Alios BioPharma Inc. has initiated a Phase 2a study designed to evaluate the safety, pharmacokinetics, and antiviral activity of multiple doses of AL-8176 against respiratory syncytial virus (RSV) infection in a virus challenge model. The clinical trial follows the successful completion of a Phase I clinical trial on the drug, which is an orally delivered, structurally novel anti-RSV nucleoside analog being developed as a treatment for RSV in infants.

EKOS announces study results

According to the EKOS Corporation, results of its Ultrasound Accelerated Thrombolysis of Pulmonary Embolism (PE) trial, or ULTIMA, have been published in *Circulation*. They note the study is the first prospective, randomized, controlled trial of patients with submassive PE treated with either standard-of-care intravenous anticoagulation or the EKOS EkoSonic® Endovascular System, which uses ultrasound to accelerate the action of clot-dissolving drugs and rt-PA. Patients treated with the EKOS system demonstrated a statistically significant reduction in right heart strain within 24 hours with no adverse effects from the catheterization. Those treated with the anticoagulant heparin alone showed no significant improvement according to EKOS.

PF Foundation selects sites for new program

The Pulmonary Fibrosis Foundation (PFF) has selected nine pilot sites for its newly established Care Center Network and the PFF Patient Registry program. Included in the sites are the University of Louisville, University of California San Francisco, University of Chicago, University of Michigan, National Jewish Health, University of Pittsburgh, Vanderbilt University, University of Washington, and Yale University. "To make progress with this disease, we need a multidisciplinary approach by teams of expert medical professionals, we need more data, and we need to track the natural history of the disease," Daniel M. Rose, MD, CEO and board chair of the PFF, was quoted as saying. "The PFF Care Center Network and Patient Registry will provide these critical cornerstones for improved patient care and progress toward a cure."

Forest Laboratories acquires Aptalis

Forest Laboratories Inc. reports it has entered into a definitive agreement to acquire Aptalis, a privately held U.S.-based specialty gastrointestinal (GI) and cystic fibrosis company. "Aptalis is an excellent strategic and financial fit for Forest because of its strong product offerings in two therapeutic franchises that are complementary to Forest — GI in the U.S. and Canada and cystic fibrosis in Europe," Forest CEO and President Brent Saunders was quoted as saying.

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

Calendar of Events

AARC & State Society Programs

April 2
Topeka, Kansas
Kansas State Society Seminar
Contact: Suzanne Bollig, (785) 623-5376

April 3
Ogden, Utah
Utah State Society Seminar
Contact: utahsrc@gmail.com, (801) 626-7141

April 9–11
Big Sky, Montana
Annual Montana State Respiratory Therapy Conference
Contact: Pattie Stefans, (406) 559-6482, www.msrcmt.com

April 13–15
Spokane, Washington
The Respiratory Care Society of Washington's 41st Annual Pacific Northwest Regional Respiratory Care Conference and Scientific Assembly
Contact: Garth Arkell, mlungs@yahoo.com; Patti Martin, bapjmartin82@hotmail.com; www.rcsw.org

April 23–25
Baton Rouge, Louisiana
LSRC 44th Annual Educational Meeting & Exhibits
Contact: Raymond Pisani, www.LSRC.net/

April 24
West Des Moines, Iowa
IaSRC Lung Conference
Contact: kimberlydkuiper@gmail.com, (605) 595-5333

April 30 – May 2
Vail, Colorado
2014 State Conference
Contact: www.colosrc.org

May 1–3
Scottsdale, Arizona
AARC's and the American Sleep & Breathing Academy's Sleep & Wellness 2014: A Conference for Professionals
Contact: www.americansleepandbreathingacademy.com

May 5–6
Minot, North Dakota
North Dakota Society for Respiratory Care Annual Spring Convention
Contact: Cherri S. Larson, www.ndsrc.org

May 14–15
Portland, Maine
Maine Society for Respiratory Care's annual conference
Contact: Amanda S. Albee, amandaalbee@gmail.com, www.mesrc.org

May 28–30
Oak Brook Terrace, Illinois
46th Conference & Exposition, Respiratory Care
Contact: www.isrc.org or Audrea Hardwicks-Williams, (773) 827-5855

July 15–17 (Tuesday–Thursday)
Marco Island, Florida
AARC Summer Forum
Contact AARC, (972) 243-2272, www.aarc.org/education/meetings

July 29
Bedford Heights, Ohio
Ohio Society for Respiratory Care's State Meeting
Contact: jgh578@aol.com

December 9–12 (Tuesday–Friday)
Las Vegas, Nevada
AARC Congress 2014
Contact AARC, (972) 243-2272, www.aarc.org/education/meetings

Other Meetings

May 1–2
Columbus, Ohio
5th Annual Pediatric Asthma Conference
Contact: Nationwide Children's Hospital, (614) 355-0676, www.NationwideChildrens.org/courses-conferences

May 16–21
San Diego, California
ATS 2014: Pulmonary, Critical Care, and Sleep Medicine
Contact: http://conference.thoracic.org/2014/

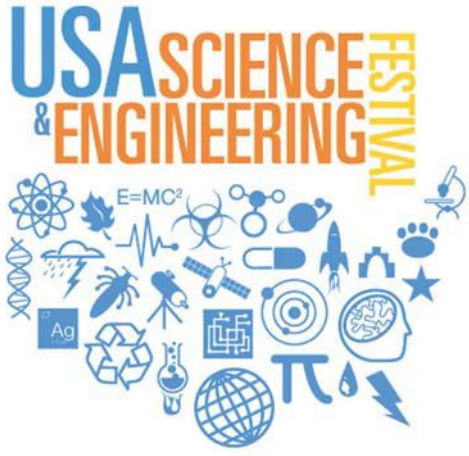
Submissions for the next available issue are due April 17.

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

RC Currents

IN THE NEWS

AARC Participates in National Science Festival



The AARC is proud to be an official partner of the third USA Science & Engineering Festival, to be held April 24–27 in Washington, DC. Over 250,000 K–12 students and parents, 5,000+ teachers, and more than 3,000 science, technology, engineering, and math (STEM) professionals will experience the largest celebration of STEM at the festival.

"We're very excited to participate for the first time this year," says Shawna Strickland, PhD, RRT-NPS, FAARC, associate executive director of education. "What a perfect venue for us to meet children, teens, and their families and introduce respiratory therapists to them as health care professionals and as a potential career choice."

The AARC will be an exhibitor alongside organizations such as NASA, the National Science Foundation, Johns Hopkins University, and the National Institutes of Health. The festival will also host science celebrities Bill Nye the Science Guy, Mike Rowe of the Discovery Channel's "Dirty Job" series, and David Pogue of PBS' NOVA "ScienceNow" series. For more information about the festival, visit www.usasciencefestival.org. ■

Drive4COPD Events Coming Up

The Drive4COPD initiative has ramped up quickly this year. In partnership with PepsiCo, we will be participating in 15 events across the country. We'll announce the exact times and places later. If you live or work near one of these cities, just be aware that a Drive4COPD event will occur near you in 2014: San Fernando, CA; Mesquite, TX; Piscataway, NJ; Albany, NY; Las Vegas, NV; Baldwin Park, CA; Aliso Viejo, CA; Buena Park, CA; Denver, CO; Hayward, CA; Tolleson, AZ; Atlanta, GA; Stone Mountain, GA; San Antonio, TX; and Carson, CA.

For more information, contact Jason Moury at moury@aarc.org. ■

AARC "New Members" Column Now Online

The "New Members" column can now be accessed at www.AARC.org/new_members. Current AARC members are encouraged to check this site on the first of each month to view the names of individuals who have been approved as "Active Members" of the Association. Any current member may object to a new membership by filing a written objection with the AARC Executive Office at info@aarc.org within 30 days. ■

COPD Foundation Launches Online Community

As key clinicians in the care of COPD patients, respiratory therapists are being invited to join a new online community established by the COPD Foundation (COPDF) to promote greater understanding of COPD treatment guidelines and give clinicians a place where they can network with one another about best practices.

The Pocket Consultant Guide Community is an offshoot of the Foundation's Pocket Consultant Guide (PCG) card and mobile phone app. Based on the latest COPD guidelines from the Global Initiative for Chronic Obstructive Lung Disease, American Thoracic Society, European Respiratory Society, American College of Physicians, and American College of Chest Physicians, the card and app provide a quick overview of diagnosis and treatment recommendations and are designed to be easy to use for busy clinicians.

Both are limited by their formats, however; and Scott Cerreta, BS, RRT, director of education at the COPDF, says that's where the new community comes into play. "The PCG community brings together a cadre of lung health professionals in a secure social collaboration community," he says. "Respiratory therapists, among others, will have the opportunity to learn, share ideas, and pick the brains of top COPD experts and physicians in the world." Well-recognized thought leaders in COPD treatment and research will lead the discussion.

Cerreta urges RTs to download the PCG card and/or app (available in the iTunes app store), and then log on to the site (http://pocketconsultantguide.copdfoundation.org) and request to become a registered user of the community. ■

Educators: Help Recognize Outstanding Students

The American Respiratory Care Foundation (ARCF) is accepting applications for its undergraduate and postgraduate Education Recognition Awards now through June 15 and is asking RC educators to help get the word out to their students. So check out the list of available awards and then encourage your best and brightest students to apply.

The ARCF offers awards to students who are currently enrolled in accredited respiratory care educational programs and to respiratory therapists who are pursuing an advanced degree. Awards include registration and airfare to attend AARC Congress 2014, to be held Dec. 9–12 in Las Vegas, NV.

To see all of the awards bestowed by the ARCF every year, go to the Foundation's Grants, Awards and Fellowships page at www.arcfoundation.org/awards/. For more information, contact April Lynch at lynch@aarc.org. ■

National Health Observances

National Asthma and Allergy Awareness Month; May; Asthma and Allergy Foundation of America; (800) 727-8462; info@aafa.org

Air Quality Awareness Week; April 28–May 2; National Oceanic and Atmospheric Administration; (301) 713-1867; www.airquality.noaa.gov

World No Tobacco Day; May 31; WHO Tobacco Free Initiative; www.who.int/tobacco/wntd/en

Alabama Member Breaking New Ground

Darrell Fixler says he is training to be the first RT on a VA SWAT team.

With nine years of experience as an EMT/paramedic under his belt, AARC member Darrell Fixler, RRT, EMT-P, knew his way around an ambulance well before he ever decided to expand his skill set by enrolling in the RT program at Pickens Tech in Aurora, CO. So it was no surprise after graduation that he went right to work in critical care transport at the University of Alabama at Birmingham.

That was eight years ago, and this former Marine has been expanding his skills ever since. Today he serves as a firefighter-respiratory therapist for the U.S. Department of Veterans Affairs Fire Department, where he's working closely with VA facilities in his area to develop a new ambulance service that will transport patients from one VA facility to another.

To top it all off, he says he's also training to become the first respiratory therapist on a SWAT team.

The VA-specific ambulance service has been planned for awhile now. "Chief Jay Longerbeam had a vision that he brought from up north from another VA hospital," explains Fixler. "He wanted to start an internal ambulance transport service for VA hospitals to other VA facilities." Fixler was enlisted to help the VA hospital in Tuskegee write policies governing the new service, as well as teach classes in advanced cardiac life support and cardiopulmonary resuscitation, and assist with teaching intraosseous infusion to physicians and RTs. The service is expected to be up and running by October, if not sooner. "It will be a ground unit, but will work with local air units — if a veteran needs to be flown, we can get them that service." The VA believes that by having its own ambulance service, it can "provide higher standards, faster service, and better customer service to our nation's heroes," explains Fixler.

His involvement in the SWAT arena came about after the VA police chief asked him to attend a SWAT training course. The chief felt having an RT on the VA SWAT team could be beneficial in a situation involving an active shooter, or even in incidences occurring out in the community. He has since been asked to be a part of the U.S. Marshals, and the Montgomery County Sheriff's Tactical Team is also considering his participation.

"My specific role on the tactical team is to be an operator first," says Fixler. "I'm trained the same way a police officer is trained. My second duty is to carry a medical bag and provide medical support to the team." Most tactical teams now include MDs and RNs, but to his knowledge, he is the first-ever respiratory therapist to get involved. So far, he's attended a week-long training course in Anniston, AL, the only program in the country that provides Basic SWAT and Medical Course certifications in one course, and the only one that offers Peace Officer Standard and Training certification.

Fixler says the concept of including medical personnel on SWAT teams is relatively new, spurred in part by a white paper published by the National Tactical Officer's Association calling for these teams to page medical support when they are activated. Part of the job involves acquiring information on area hospitals, finding out what kinds of patients they can take, putting a helicopter on standby, and being well trained on the treatment of injuries that could occur at the scene — including any that may be incurred by police dogs.

"We also train and qualify in shooting," says Fixler, though he notes that not all medical personnel are armed during raids. "Some may sit outside or down the street, but all are trained to the same standard."

While Fixler has yet to participate in an actual SWAT raid, he notes that the training he received in Anniston included some simulation exercises that gave him a good idea of what he might face. "In school, we had a hostage situation. We came in two stacked, so some of the officers peeled off to search rooms and I moved up from last spot to now third," he recalls. A woman came screaming down the hallway, covered in blood. One of the officers took her outside to await help, as Fixler's primary duty was to be there to provide immediate medical care to the team in case of need. He kept moving with the rest of the team, which eventually encountered the suspect, who was then shot with dummy rounds. "It was then that I could start my RT skills to save a life," he says. ■

CALL FOR OPEN FORUM ABSTRACTS FOR AARC CONGRESS 2014

The AARC invites you to submit abstracts for the OPEN FORUM at AARC Congress 2014. Considered by many to be the premier event at the AARC Congress, the OPEN FORUM is your opportunity to gain recognition for your research in cardiorespiratory care by submitting an abstract for presentation at the Congress and having it published in RESPIRATORY CARE. New in 2014: three different ways you can present your poster at AARC. See http://rc.rcjournal.com/site/open_forum/2014_call_for_abstracts.xhtml for more details. The deadline to submit abstracts for the OPEN FORUM is **June 1.** ■

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

- **Lifesaving moment for AARC member** — www.aarc.org/headlines/14/02/ballif.cfm
- **RTs have concerns about changes to coding edits** — www.aarc.org/headlines/14/02/coding.cfm
- **AARC applauds CVS Caremark** — www.aarc.org/headlines/14/02/cvs
- **OSHA launches new website on hospital worker safety** — www.aarc.org/headlines/14/01/safety

Enter the 2014 AARC Photo Contest

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

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:

George Gaebler, AARC President
- Attending the Canadian Society of Respiratory Therapists' educational conference and trade show on May 22.

Thomas J. Kallstrom, AARC Executive Director/CEO
- Speaking on The Affordable Care Act and Opportunities in Respiratory Care at the Michigan Society for Respiratory Care's spring conference on April 8.
- Attending the Louisiana Society for Respiratory Care's convention on April 23.
- Attending the Canadian Society of Respiratory Therapists' educational conference and trade show on May 22.

Cheryl West, AARC Director of Government Affairs
- Speaking on state and federal updates of legislation and regulation issues at the Louisiana Society for Respiratory Care's convention in April.

RT Student Members: Send Us Your Stories and Editorials

AARC Times is always looking for good stories from AARC student members that relate special experiences and give the RT student perspective on the respiratory care profession they have chosen as a career. We have published the stories of several student members in *AARC Times* recently, and we continue to encourage you to share your experiences.

Have you volunteered at a summer asthma camp or helped organize the DRIVE4COPD program in your state? Have you advocated for respiratory therapy in your state capitol or on Capitol Hill? Maybe you and your RC student friends have collaborated to build a house with Habitat for Humanity. Perhaps you witnessed a life-saving event outside the hospital setting or experienced something that took your breath away. Whatever the story, we are interested in seeing it.

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

Total Smoking Bans Foster Quitting, Says Study

Total home smoking bans, as well as comprehensive smoking bans in cities, were more likely to lead people to quit smoking, note investigators at the University of California San Diego. But the effectiveness of the strategies varied among groups, according to their study published in a recent online issue of *Preventive Medicine*.

In the survey of 1,718 current smokers identified as a representative sample of the adult population in California, the investigators found:

- Total home smoking bans were significantly associated with reduced consumption and successful quitting while partial bans were not.
- Smokers who reported that smoking is broadly banned in their city were more likely to attempt to quit and succeed than those in places where smoking is not banned.
- Total home bans were more effective in reducing smoking among females and people 65 years and older.
- City smoking bans were significantly associated with quit attempts in males, but not females.
- Total home bans were more effective in households without children, suggesting the ultimate goal was cessation rather than primarily reducing children's secondhand smoke exposure.
- Links between total home bans and smoking reductions were not affected by race or income. ■

ARCF Now Accepting Applications for the 2014 International Fellowship Program

If you provide respiratory care outside of the United States and would like to share and expand your knowledge, please consider applying for our International Fellowship Program.

The International Fellowship Program is a sponsored activity of the ARCF. Since 1990, health professionals from more than 50 countries have shared experiences, knowledge, and lasting friendships through this exceptional program.

The three-week program takes each participant to two host cities in the United States and concludes with attendance and acknowledgement at AARC Congress 2014 to be held Dec. 9–12 in Las Vegas, NV.

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

Combo Therapy for Nicotine Addiction Increases Abstinence Rates

Combining two common stop-smoking drugs could help more people quit. That's the take-home message from Mayo Clinic researchers publishing in the January edition of JAMA.

They randomized smokers to 12 weeks of varenicline and bupropion SR or varenicline and placebo, with follow-up through 52 weeks. Combination therapy was associated with significantly higher prolonged smoking abstinence rates at 12 (53% vs. 43.2%) and 26 (36.6% vs. 27.6%) weeks compared with varenicline alone. However, those on the combined therapy reported more anxiety and depressive symptoms, 7.2% vs. 3.1%, and 3.6% vs. 0.8%, respectively. The beneficial effects of combination therapy were stronger in heavier and more dependent smokers. ■

International Fellowship Program Looking for City Hosts

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

Learn more about the program and apply by the June 1 deadline at www.irccouncil.org/fellowship/. The fellowships take place in the fall just prior to AARC Congress 2014, scheduled this year for Dec. 9–12 in Las Vegas, NV. For more information, contact April Lynch at lynch@aarc.org. ■

STRANGE BUT TRUE...

Toxic halitosis: Hornworm caterpillars have found a good use for the tobacco plant: eating it produces such bad breath that predatory spiders take off running.

Who knew? Investigators from Missouri and Iowa have proven that odor sensors in the lungs cause the release of hormones leading to airway constriction when faced with noxious substances such as cigarette smoke. The study was published in the March issue of the *American Journal of Respiratory Cell and Molecular Biology*.

Smart bottle: Adhering to oral medications may get easier as early as next year. Inventor Emil Jovanov, PhD, of the University of Alabama has developed a smart pill bottle capable of reminding people to take their meds, and it could be on the market in 2015. The bottle would send automatic refills to the pharmacy, letting physicians know how well the patient is complying with his prescriptions.

Copy that: It may not be long before physicians will be able to use 3D printers to make exact copies of their patients' organs, including the lungs. The Cardiovascular Innovation Institute suggests scientists will be capable of printing fully functional hearts from a patient's own cells within the next decade. ■

24-Hour Visitation?

Should your patients be able to receive visits from friends and family whenever they want? Yes, report investigators from Morristown Medical Center in New Jersey who reviewed patient satisfaction scores before and after the implementation of a 24-hour visitation policy at their facility.

In the first eight months of the new policy the medical center had 14,444 visitors between 8:00 p.m. and 5:00 a.m., but there was no increase in the number of complaints by patients or visitors. A security officer greeted after-hours visitors at a reception desk, and every patient had the right to determine who may or may not visit. Two visitors were allowed in a room at a time. Patient satisfaction survey scores rose after the open visitation policy went into effect, and family members expressed positive comments about being able to visit their loved one before going to work.

"Supporting patients in a way that allows them to be with family and loved ones can be an important component of the healing experience and may reduce the anxiety and social isolation associated with illness," notes David J. Shulkin, MD, FACP, president of the hospital. ■

E-CIGARETTE CONCERNS ABOUND

Researchers from the University of Michigan C.S. Mott Children's Hospital recently found that adults in the general population are concerned about e-cigarettes since they entered the market. In a poll conducted last November among 2,124 adults age 18 and over, they found:

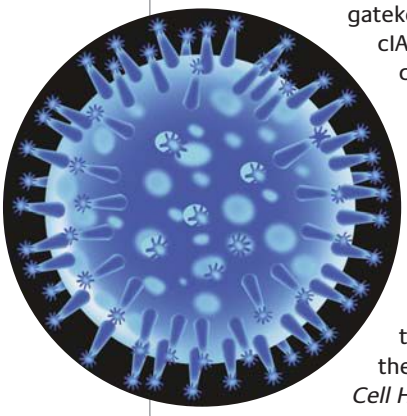
- 44% worry e-cigarettes may encourage children to try the smoking habit; that figure rises to 48% among parents.
- 65% believe e-cigarettes should carry health warnings similar to those required for tobacco cigarettes and nicotine products.
- 88% think manufacturers should be required to test e-cigarettes for safety.
- 86% favor prohibiting the sale of e-cigarettes to minors.
- 71% support restricting the marketing of e-cigarettes on social networking sites.

All of the participants in the survey were first informed of the current pros and cons of e-cigarettes before being asked to answer the questions. Overall, 86% said they had heard of the products (up from just a third in a similar study three years earlier), but only 13% had ever tried them. ■

Influenza Drug Target Identified

According to researchers from McGill University an enzyme called cIAP2 may one day lead to new treatments to stop tissue damage in the lungs resulting from infection with influenza.

In a mouse model, they found cIAP2, which functions by modifying and activating survival factors in the cell, steers the body away from an inflammatory and auto-destructive process known as necrotic death, in effect making it a gatekeeper of cell death. When cIAP2 is absent, a harmful form of cell death is induced. cIAP2 not only protects the infected cells from dying, but also protects uninfected neighboring cells in the same tissue, thus increasing the resistance of the lung to influenza infection and associated pathology, according to the researchers, who published their findings in a recent issue of *Cell Host & Microbe*. ■



Dual-eligible Patients Pose a Readmissions Problem

The Hospital Readmissions Reduction Program appears to be hitting hospitals that treat more seniors on both Medicare and Medicaid the hardest. According to a recent study in *Health Services Research*, these dual-eligible beneficiaries are significantly more likely to have excessive numbers of hospital readmissions leading to monetary penalties from the government.

The authors note hospitals that treat these patients are more likely to be in areas with fewer or lower-quality primary care resources, which could help explain why more of their patients come back to the hospital within 30 days of discharge. In fact, they believe the communities in which dual-eligible patients live may explain more of the reason for readmissions among this group than the care they actually received during their inpatient stay.

"The hospital can do everything right and yet these patients will still come back," noted Bradley Flansbaum, DO, MPH, a hospitalist at Lenox Hill Hospital in New York City, who commented on the research. ■

Study: Use of Fever Reducers May Help Spread the Flu

Patients are advised to use fever-reducing medications when they have the flu, but new research out of McMaster University in Canada suggests treating influenza with fever reducers could help spread the disease. Investigators arrived at that conclusion after assembling information from experiments on human volunteers and ferrets (considered the best animal model for human influenza) and other sources. From there, they used a mathematical model to determine how the increase in the amount of virus given off by people taking fever-reducing drugs would increase the overall number of cases in a typical year.

Results showed that fever suppression increases the number of annual cases by approximately 5%, corresponding to more than 1,000 additional deaths from influenza in a typical year across North America. The study was published in the Jan. 21 edition of the *Proceedings of the Royal Society B*. ■

New Drugs Hold Promise for Mesothelioma Patients

Working with a colleague in Italy, researchers from the Sbarro Health Research Organization in Philadelphia, PA, have made two discoveries that could one day lead to new treatments for mesothelioma, an aggressive cancer associated with the inhalation of asbestos.

In the first study, the investigators found a drug called RITA caused mesothelioma cells, but not healthy cells, to undergo apoptosis, or programmed cell death. The drug also appeared to work in synergy with the chemotherapy drug cisplatin, which is currently the main treatment for mesothelioma.

In the second study, a new drug called MK-1775 was tested in combination with cisplatin. Results showed MK-1775 selectively sensitized mesothelioma cells to the genotoxic action of cisplatin.

The first study was published in the journal *Cell Cycle*; the second appeared in a recent online issue of *Cancer Biology and Therapy*. ■

Industry Update

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.

Pediatric Mask Kits

AG Industries now offers Pediatric Mask Kits in large and small sizes. Each kit includes two sizes of interchangeable, ergonomically designed mask cushions designed to provide a variety of fits for growing faces. Uniquely designed frames adjust to 4 possible angles to ensure a comfortable seal. Kits also include 5-point adjustable headgear, which paired with the mask frame and cushions, provides a highly customizable fit. An extended AG Flex Tube reduces torque on the mask for restless little sleepers. www.agindustries.com

Full Face PAP Mask

Circadiance's SleepWeaver® Anew™ is designed especially for CPAP users who breathe through their mouths while sleeping. It features a dual interface design that seals around both the nose and mouth, with only soft cloth touching the skin, allowing the skin to breathe without moisture accumulating between the mask and the user's skin. The unique loose fit provides added comfort and eliminates strap marks, and the open-face headgear design accommodates eyeglasses and allows virtually unrestricted vision. The mask is available in three sizes.
www.circadiance.com

Disposable Infant T-Piece Resuscitator

Neo-Tee from Mercury Medical is the first and only disposable infant T-Piece resuscitator with a color-coded manometer on the tee for immediate viewing of airway pressures. The device is flow-controlled, pressure-limited, and offers the ability to measure PIP and PEEP. Neo-Tee provides more consistent pressure than either the self-inflating or flow-inflating bag, and the clinician is not subject to hand fatigue. It can also attach to a face mask, endotracheal tube, or laryngeal mask airway.
www.mercurymed.com

EtCO2 Monitor

Prefense™ — Early Detection and Notification System™ from Nihon Kohden America enables hospitals to monitor at-risk post-surgical patients on opioid drips for end tidal CO_2 ($EtCO_2$). The system also allows medical personnel to monitor and track trends on vital statistics on a continuous basis during ambulation via a wireless transmitter. Prefense monitors four out of the seven key triggers (respiration rate from $EtCO_2$ or impedance, oxygen saturation, heart rate, and blood pressure) that are early indicators of patient deterioration. www.nkusa.com/monitoring

Bedside Monitor

Covidien's Capnostream® 20p bedside monitor with Microstream® technology features the Apnea-Sat Alert™ algorithm, which measures and reports recurring apnea and oxygen desaturation events. The Apnea-Sat Alert feature detects apneas per hour and oxygen desaturation fluctuations, displaying the values on the Capnostream 20p monitor screen without requiring additional equipment or clinical workflow changes. The monitor is further differentiated by the Microstream-enabled microMediCO$_2$™ module measurement bench. It offers easy integration into host monitor configurations. www.covidien.com

Rechargeable Digital Transmitter

Innovo, a rechargeable digital transmitter from the ScottCare Corporation, incorporates an intelligent power-save mode that puts the unit to sleep after 5 minutes of inactivity, helping to conserve battery power and reduce operating costs. The Innovo also extends battery life and simplifies use by adding an on/off switch and is more than 30% smaller and lighter. The unit is compatible with all ScottCare digital telemetry systems and still features both 3-wire and 5-wire leads to meet customer needs.
www.scottcare.com

Classifieds

ADVERTISING SECTION

For Sale/For Rent

ET-CARE Endotracheal Tube Fixation Device

The new ET-CARE™ Endotracheal Tube Fixation Device — no tape, built-in bite block, sliding track for oral hygiene, includes NG-tube holder. The firm fixation with ET-CARE lessens excessive x-rays, decreases the potential for VAP, reduces accidental extubation. Manufactured in USA (patent pending) by IPI Medical Products Inc. (561) 330-7820, www.ipimedicalproducts.com.

AARC Times Classified Advertising Information & Requirements:

Classified Word Advertisements

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

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

We reserve the right to make editorial changes for reasons of clarity and consistency. Every effort is taken to avoid mistakes, but *AARC Times* cannot be responsible for clerical or printing errors. **Deadline for Ad Placement/Cancellation** Deadline for ad placement and written cancellations for the next available issue is April 17. Blind ads available. **For Recruitment Advertising Information, Contact Classified Advertisement** Andrea Conté • Alhambra Plaza • 725 N. Highway A1A, Suite C-106 • Jupiter, FL 33477 • (561) 745-6793 • Fax (561) 745-6795 • AARCAD@aol.com

Recruitment Display Advertisements

For Recruitment Display Ad Rates, go to www.aarc.org/marketplace/media_kit/media_planner_2014.pdf, or contact Tim Goldsbury and Associates, Alhambra Plaza, 725 N. Highway A1A, Suite C-106, Jupiter, FL 33477, (561) 745-6793, Fax (561) 745-6795

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Christiana Care Health System is currently recruiting for a full time (12 month) instructor for Respiratory Care Program. In this role you will instruct and supervise Respiratory Care students in the didactic, laboratory and clinical phases of their education.

Requirements: Bachelor's degree completed or in progress. Graduate of a CoARC approved respiratory therapy program, be a registered respiratory therapist through the NBRC, and licensed to practice in Delaware. A minimum of four years of recent experience as a licensed Respiratory Therapist required. Previous teaching or education experience preferred.

Previous Minimum of 2 years teaching experience within a Respiratory Care education program required.

Christiana Care Health System is an equal opportunity employer whose staff is representative of its community and considers qualified applicants for open positions without regard to race, color, gender identity or expression, religion, sex, sexual orientation, national origin, age, marital status, disability, or genetic information.

Apply Link: http://careers.christianacare.org/job/Newark-Respiratory-Care-Educator-Job-DE-19702/42186300/?utm_source=nicheboard&utm_campaign=R-PB

Advertiser Index

To advertise, contact: Tim Goldsbury, Advertising Sales, Alhambra Plaza, 725 N. Highway A1A, Suite C -106, Jupiter, FL 33477, (561) 745-6793, Fax (561) 745-6795, goldsbury@aarc.org. Or contact Beth Binkley, Advertising Assistant, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706, (972) 243-2272, Fax (972) 484-2720, binkley@aarc.org.

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Discovery Labs www.surfaxin.com	5,6
Discovery Labs (855) AERO-RX1 www.afectair.com	15
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CRCE
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216
Total Hours of CRCE Available on the AARC Website

51
CRCE Hours that are FREE to AARC Members

Courses available

21 LIVE* COURSES

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107 COURSES AVAILABLE ON AARC WEBSITE

* Live courses are required by some state boards and are those in which you have the opportunity to interact with the presenter. Non-traditional courses are self-directed.

216 online CRCE Credits Available Through AARC Website

144	15	7	6	5	4	5	15	15
CLINICAL PRACTICE	ADULT CRITICAL CARE	NEONATAL PEDIATRICS	PULMONARY FUNCTION	PATIENT SAFETY	SLEEP	ETHICS	EDUCATION	MANAGEMENT

By the Numbers

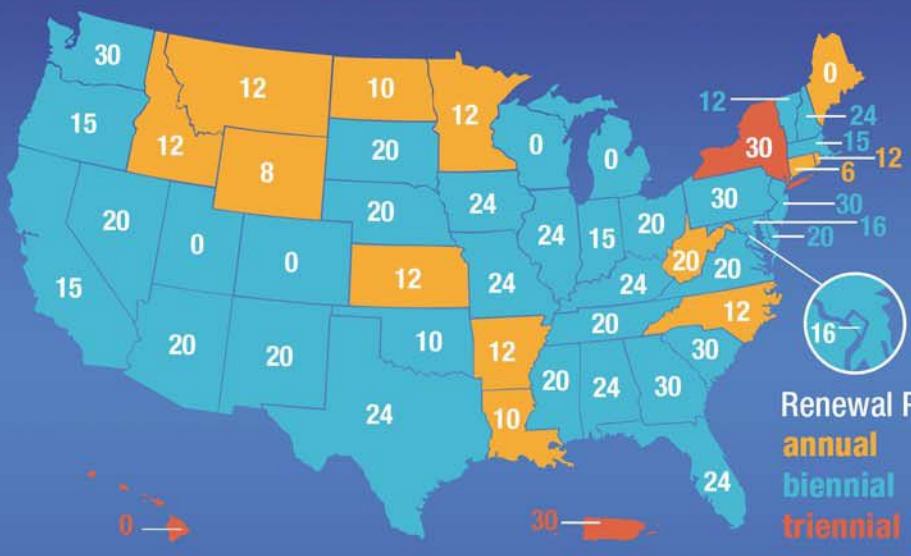
383,282 AARC-sponsored CRCE credits earned 2011-2013

7511 CRCE earned in 2013 through live webcasts

$0 Amount of money AARC members pay for 51 CRCE credits

2,223,248 CRCE credits earned from all AARC –approved providers from 2011 to 2013

Number of continuing education hours required by state



Numbers compiled on Jan. 1, 2014.

American Association for Respiratory Care
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