Home Care Bulletin

Jan./Feb. '02

2
Notes from the Co-Editor: *The Need to Apply Evidence-Based Medical in Home Care*

3
FYI...

Invacare Award for Excellence in Home Respiratory CareL: *Joe Lewarski, RRT*

4
CD-ROM Addresses End-of-Life Issues

HHS invests $50 Million to Improve Patient Safety

Get It on the Web

5
JCAHO Accreditation Report

American Association for Respiratory Care

Notes From the Chair

by Joseph Lewarski, BS, RRT

As I write this article in late December, the New Year is just around the corner. It's hard to think about the coming year without reflecting on the events of the past year. The year 2001 is one that will be in our minds forever, and one that should not be forgotten. I hope you and your families enjoyed and safe and wonderful holiday season.

As always, the home care industry had much to contend with this past year, yet at the same time we had some modest successes. Here is a brief summary of some of the 2001 home care highlights:

- The AARC's 47th International Respiratory Congress in San Antonio was a great success and another strong showing for home care. We had so many home care related lectures and symposiums that the primary complaint was that the overlap of topics prevented people from participating in all of them. I am very grateful to the speakers, attendees, and manufacturers who supported us this past year. Look for us to have another strong presence in Tampa at the 2002 Congress!
- The AARC responded quickly and presented strong clinical and logistical arguments opposing the government's proposed changes to the home oxygen policy and the policy guiding the use of non-invasive ventilation. In fact, the AARC's position on the suggested changes to the Medicare oxygen policy was the foundation for many of the other industry position papers and comments that were used to present the concerns to Medicare. The AARC made sure there were representatives available to present the information at all of the public comment sessions held by the DMERC medical directors.
- *AARC Times* published articles related to home respiratory care, and because of the success of these articles, plans to include more home care topics in 2002.
- More home care clinicians participated in research and published their work. A number of home care RTs had papers published in peer review journals. Authors included Greg Spratt, James Stegmaier, Bob McCoy, and Pete Bliss, just to name a few. Congratulations, gentlemen. We are very proud of your work.
- The Home Care Section earned its seat on the AARC Board of Directors. I was sworn in as your representative to the Board at the AARC meeting in San Antonio. I will do my best to represent the interests of home care RTs and patients.

I continue to promote the idea that in the near future the hospital will be the "alternate site," and the home and outpatient environments the primary and most important points of care. Thank you for all of your support over the last couple of years. Please feel free to contact me if there is something we can do to assist you. ■

Notes from the Co-Editor: *The Need to Apply Evidence-Based Medicine in Home Care*

by James Stegmaier, RRT, RPFT, CCM

The use of evidence-based medicine is increasing at a swift pace within the health care system, and the practice of respiratory care is beginning to experience the effects of this process. This is not a concept or course of action only for critical or acute care respiratory therapists, but one which can and should be applied across all the subspecialties within the profession of respiratory care. Indeed, those of us in home respiratory care need to embrace this concept even more so than some of our peers in other subspecialties because home care lacks consistent standards of practice for many of its therapies when compared to other subspecialties within respiratory care.

Evidence-based medicine is defined by Mishoe and Hess as the judicious identification, evaluation, and application of the most relevant information to make medical decisions. The process involves in-depth searches for the most recent and relevant information to provide the optimal care to the patient. This information is then used to develop and define the standards of practice for the care of the patient. The process is continuous in nature, similar to continuous quality improvement theories where procedures and therapies are constantly being reviewed to determine if performance improvement can be accomplished.

The use of evidence-based medicine provides the home care practitioner with two unique challenges: effectively and efficiently searching for the evidence and the need to provide the outcomes research necessary to develop the standards of practice for home respiratory care.

Outcomes research in respiratory care is and must continue to be utilized to define optimal practices. The subspecialist in home respiratory care needs to be involved in outcomes research to aid in determining the standards of practice and the future of the subspecialty. Outcomes research must also shift from being equipment- and procedure-oriented to patient-oriented in focus. The research must center less on equipment and procedures associated with the equipment, and more on the broader issues of patient outcomes and the economic issues associated with these outcomes.

After attending the 47th AARC International Congress in San Antonio, I believe the subspecialty of respiratory home care is headed in the appropriate direction. The subspecialty was well represented in both lectures and attendance. This has been the trend for the past few years, and the trend needs to continue. Research must be done and presented in order for the standards of practice to evolve for our patients. If the respiratory therapist in home care is going to be a credible health care professional, then the home care therapist must take the lead in determining the standards of practice within in the home care setting. The Home Care Section has made great strides over the past few years in performing and reporting on research projects within home care. A continued effort must be made by all professionals in the field to maintain this effort until the appropriate standards of care can be developed based on the research performed.

The challenge of effectively and efficiently searching for the appropriate research studies and data can be handled in a variety of ways. It cannot be an acceptable answer to claim that the resources are not available to gather the appropriate data. The home care therapist can and should, if necessary, seek out assistance in learning this portion of evidence-based medicine from a local college with a respiratory care program or from an acute care hospital where research is being performed. Research is about sharing information. If you are unsure how to perform a literature search successfully yourself, ask and learn from your peers within your community.

Evidence-based medicine is going to continue to grow and will ultimately improve the quality of care provided to the patient. Now is the time to learn about this process and incorporate it into the practice of respiratory care within your organization. The standards of practice, which do not exist for home care now, will exist in the near future, and as a home care therapist, you should be a part of this process. Do not sit on the sidelines and allow your peers to determine the future of our subspecialty. Evidence-based medicine will help determine the standards of practice for home respiratory care, so learn it and use it. The patients you serve will ultimately benefit from an improved quality of care that, in the end, will improve the quality of their lives as well. ■

Home Care Bulletin

is published by the
American Association for Respiratory Care
11030 Ables Lane
Dallas, TX 75229-4593
(972) 243-2272
FAX (972) 484-2720
e-mail: info@aarc.org

Debbie Bunch
Bulletin managing editor

Edwards Printing
Bulletin typesetting

Section Chair
Joseph Lewarski, BS, RRT
Director, National Respiratory Network
The MED Group
24400 Highland Road Suite 23
Richmond Heights, Ohio 44143
(216)486-2139
Fax: (216) 486-7456
joerrt@aol.com or
JLewarski@medgroup.com

Bulletin *Editors*
Barry Johnson, CRT, RCP
(972) 780-0327
flydaddy@therapist.net

Jim Stegmaier, RRT, RPFT, CCM
(216) 255-4468
jim@hytree-hytech.com

Invacare Award for Excellence in Home Respiratory Care: *Joe Lewarski, RRT*

Every year at the AARC International Congress, the Invacare Corporation, in conjunction with the American Respiratory Care Foundation, honors a member of the home respiratory care field with its Invacare Award for Excellence in Home Respiratory Care. The 2001 winner was none other than our own section chair, Joe Lewarski, RRT, who received the award during the Awards Ceremony in San Antonio in December. Joe was honored for the many, many hours of volunteer efforts he has expended on behalf of the section and the Association over the past few years as they have worked to increase awareness of the important role that we play in the care of patients.

In addition to these activities, Joe is also a strong proponent of the RT's role in home care on the job. Recently named director of the newly created National Respiratory Network, a service being offer by the MED Group (MED), a 240-member home care network based in Lubbock, TX, he is working to bring focus to the specific and distinct needs of the respiratory providers in the MED organization.

Prior to joining MED, Joe was a vice-president and partner in Hytech Homecare, a division of Hytree Pharmacy, Inc., in Cleveland, OH. While there, he was responsible for directing the day-to-day operations of the 100-employee firm, overseeing the adult and pediatric clinical and respiratory care programs, sales and marketing efforts, profit and loss accountability, managed care contracts, and policies/procedures for accreditation purposes. Before joining Hytech, he held positions in both distribution and hospital settings, and he is a distinguished honor graduate of the respiratory therapy program at the Academy of Health Sciences in San Antonio and a Summa Cum Laude graduate in business administration from Myers College in Cleveland, OH.

Congratulations, Joe! ■

FYI . . .

New study looks at gender's role in OSA

Statistics show that men are more likely to suffer from obstructive sleep apnea (OSA) than women. But the mechanisms behind this phenomenon are not well understood. In an investigation of the influence of gender on upper airway structure and function, researchers from John D. Dingell Veterans Affairs Medical Center and Wayne State University School of Medicine in Detroit, MI, attempted to clarify the matter by conducting an investigation using two protocols.

Protocol 1: *Measurement of upper airway resistance*

Measurements of upper airway resistance (Rua) were collected from studies performed on 33 men and 27 women. These subjects had either no sleep complaints or mild snoring on history. Studies in which apneas and hypopneas were demonstrated were excluded from analysis. In the majority of subjects (85%), breaths for analysis were chosen from a five-minute segment of stable stage 2 sleep. For the remaining subjects, a total of five minute stable stage 2 sleep was chosen from multiple segments. Airflow and supraglottic pressure were recorded, and for each breath, a pressure-flow loop was generated from which resistance was measured at two points. Resistance levels were computed and analyzed. For each subject, the percentage of inspiratory flow limitation (IFL) breaths was calculated as the number of IFL breaths divided by total breaths. Approximately 50-100 breaths were analyzed per subject.

A simple t-test was used to compare men and women for age, body mass index (BMI), neck circumference (NC), resistance at a fixed flow of 0.2 l/s (RL), and resistance at peak airflow (Rpk). Multiple linear regression was utilized to determine whether gender, age, BMI, or NC predicted the resistance at 0.2 l/s and resistance at peak airflow during non-rapid eye movement (NREM) sleep. Because neither resistance at 0.2 l/s nor resistance at peak airflow was normally distributed, the research team first transformed the values to the natural logarithm. Multiple logistic regression analysis was used to determine whether gender, age, BMI, NC, or RL predicted whether a subject had >10% of the analyzed breaths showing flow limitation.

The study found no gender differences in upper airway resistance during stable stage 2 NREM sleep and corroborates recent work demonstrating no gender difference in the changes in upper airway resistance (Rua) between the awake state and NREM sleep. These findings agree with previous work by these researchers which found no gender difference in Rua during stage 2 NREM sleep.

Protocol 2: *Measurement of Pcrit*

Measurement of Pcrit was performed in eight men and eight women recruited from the general population. The subjects were free of sleep complaints, including snoring. If, during the course of the study, the subject demonstrated sleep-disordered breathing, the study was terminated because only normal subjects were needed. In addition to the above measurements, pressure was also monitored at the nasal mask (Pn) in each subject. Pcrit measurements were performed in a manner similar to a previously published report on this measurement.

Patients were allowed to fall asleep breathing at atmospheric pressure. During periods of stable stage 2 sleep, Pn was abruptly reduced, maintained

" FYI..." continued on page 4

"FYI..." continued from page 3

for two breaths and then raised back to atmospheric. Complete airway collapse was achieved in all subjects.

The study found no gender difference in Pcrit, which suggests that the upper airway of men is not more prone to collapse than that of women.

The study was published in the November issue of the *Journal of Applied Physiology.*

Study highlights medication problems

A new study from the Agency for Healthcare Research and Quality (AHRQ) highlights the problem of inappropriate prescribing in elderly patients in the United States. According to the findings, which were published in a recent issue of *JAMA*, about one fifth of the approximately 32 million elderly Americans not living in nursing homes in 1996 used at least one or more of 33 prescription medicines considered potentially inappropriate. Nearly one million elderly used at least one of 11 medications which a panel of geriatric medicine and pharmacy experts advising the researchers agreed should always be avoided in the elderly. These 11 medications include long-acting benzodiazapines, sedative or hypnotic agents, long-acting oral hypoglycemics, analgesics, antiemetics, and gastrointestinal antispasmodics.■

CD-ROM Addresses End-of-Life Issues

A new CD-ROM developed at Michigan State University is helping people with advanced illnesses address the important issues they face as they approach the end of life.

The resource, "Completing a Life," is divided into three main content areas:

- Taking Charge: staying active in decisions about health care, family, and everyday living.
- Finding Comfort: easing pain and suffering, and living with dignity at this time of life.
- Reaching Closure: coming to terms with the past, present, and future, and exploring the possibilities for spiritual growth.

A Personal Stories section also features the real-life narratives of people who have confronted terminal illness. To find out more about the CD-ROM, go to: http://www.completingalife.msu.edu ■

HHS Invests $50 million to improve patient Safety

HHS Secretary Tommy G. Thompson has released $50 million to fund 94 new research grants, contracts, and other projects to reduce medical errors and improve patient safety. The initiative represents the federal government's largest single investment to address the estimated 44,000 to 98,000 patient deaths related to medical errors each year.

The six major categories of awards include:

Supporting Demonstration Projects to Report Medical Errors Data: These activities include 24 projects to study different methods of collecting data on errors or analyzing data that are already collected to identify factors that put patients at risk of medical errors.

Using Computers and Information Technology to Prevent Medical Errors: These activities include 22 projects to develop and test the use of computers and information technology to reduce medical errors, improve patient safety, and improve quality of care.

Understanding the Impact of Working Conditions on Patient Safety: These activities include eight projects to examine how staffing, fatigue, stress, sleep deprivation, and other factors can lead to errors.

Developing Innovative Approaches to Improving Patient Safety: These activities include 23 projects to research and develop innovative approaches to improving patient safety at health care facilities and organizations in geographically diverse locations across the country.

Disseminating Research Results: These activities include seven projects to help educate clinicians and others about the results of patient safety research.

Additional Patient Safety Research Initiatives: The remaining projects will cover other patient safety research activities, including supporting meetings of state and local officials to advance local patient safety initiatives and assessing the feasibility of implementing a patient safety improvement corps. ■

Get it on the Web

Want the latest news from the section in the quickest manner possible? Then access the *Bulletin* on the Internet! If you are a section member and an Internet user, you can get your section newsletter a week and a half to two weeks earlier than you would get it in the mail by going to your section homepage at: http://www.aarc.org/sections/section_index.html. You can either read the *Bulletin* online or print out a copy for later.

The AARC is encouraging all section members who use the Internet to opt for the electronic version of the *Bulletin* over the mailed version. Not only will you get the newsletter faster, you will be helping to save the AARC money through reduced printing and mailing costs. These funds can then be applied to other important programs and projects, such as ensuring effective representation for RTs on Capitol Hill.

To change your option to the electronic section *Bulletin*, send an email to: mendoza@aarc.org.■

JCAHO Accreditation Report

The AARC is currently seeking information on JCAHO accreditation site visits. Please use the following form to share information from your latest site visit with your colleagues in the Association. The information will be posted immediately on the AARC web site at http://www.aarc.org/members_area/resources/jcaho.html and will also be featured in the *Bulletin*.

Accreditation visit you are reporting (choose one):

❏ Home Care
❏ Hospital
❏ Long Term Care
❏ Pathology & Clinical Laboratory Services

Inspection Date: _____

Facility Name: _____

Contact: _____
(Please provide name and e-mail address.)

1. What was the surveyors' focus during your site visit? _____

_____

_____

_____

2. What areas were cited as being exemplary?

_____

_____

_____

3. What suggestions were made by the surveyors?

_____

_____

_____

4. What changes have you made to improve compliance with the guidelines?

_____

_____

_____

Additional comments:

_____

_____

_____

_____

Mail or fax your form to:
William Dubbs, RRT
AARC Associate Executive Director
11030 Ables Lane
Dallas, TX 75229-4593
FAX (972) 484-2720

American Association for Respiratory Care
11030 Ables Lane
Dallas, TX 75229-4593

Non-Profit Org.
U.S. Postage
PAID
Permit No. 7607
Dallas, TX