



Subacute Care

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Victory on Capitol Hill: HCFA Study of RT Competencies Bodes Well for Profession

As most of you know, the AARC has been lobbying key decision-makers in Washington, DC, for more than a year now for better coverage of respiratory therapy services in skilled nursing facilities. While many RTs have already been laid off in this setting, hope for the future remains strong. Largely as a result of two landmark studies commissioned by the AARC from Muse and Associates, a well-known Washington, DC consulting firm, Congress passed, and President Clinton signed, legislation last November calling for an 18-month study of respiratory therapy competencies in SNFs. The study, which will be conducted by the Health Care Financing Administration (HCFA), will compare the respiratory care competencies of respiratory therapists with that of other health care professionals being used to deliver respiratory care in this setting.

What does the AARC expect the study to reveal? The Association is fairly confident that the study will show that no other health care professional is as thoroughly trained in the delivery of respiratory care as

the respiratory therapist. Much of this confidence lies in previous studies conducted by the AARC which compared the respiratory curriculum in respiratory therapy programs with the respiratory curriculum in nursing programs. Those studies showed that nurses do not receive the same level of training in respiratory care as respiratory therapists.

Many RTs – particularly those who have already lost their jobs in the SNF setting – may see this development as “too little, too late.” But change is an ongoing phenomena. Should the HCFA study indicate that other health care professionals do not possess the competencies necessary to safely and effectively deliver respiratory care in SNFs, RTs are likely to see their services back in demand in these facilities.

As of this writing in late December, the details of the study had yet to be determined. But stay tuned to your *Subacute Care Bulletin*. We'll keep you informed of the latest developments as the study is designed and carried out over the next year and a half. ■

FYI . . .

Helping quadriplegics breathe

Abbott J. Krieger, MD, a neurosurgeon in private practice in Livingston, NJ, who has been working for more than 20 years to repair the phrenic nerve damage that confines many patients paralyzed from a spinal cord injury in the cervical or neck area to a ventilator for life, has developed a procedure to regenerate the damaged phrenic nerve.

“This procedure will open up a tremendous opportunity for patients who have lost the ability to move and breathe on their own due to spinal cord injury or disease, or damage to the phrenic nerve,” says Dr. Krieger. “It marks the first time that nerve restoration surgery has been used to free

permanent prisoners of a ventilator from their misery.”

The procedure, which has been successfully performed in six patients with dead or damaged phrenic nerves, works by grafting a living, intercostal nerve into the phrenic nerve. After approximately six months, nerve regeneration occurs and takes over the electrical functions of the phrenic nerve. A pacemaker is inserted to help the fused nerve send the correct “breathe” signal to the brain.

The pacemaker, similar to the ones used in cardiac patients, consists of electrodes sutured to the phrenic nerve, radio receivers implanted into subcutaneous

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pockets, and an external transmitter/antenna that provides power to the system via a 9-volt battery. The external transmitter and antenna send energy and stimulus information to the receiver implant, which are translated into radio waves, or stimulating pulses, and delivered to the phrenic nerve via the electrodes. The repetitive stimulus patterns to the phrenic nerve result in smooth, rhythmic contractions of the diaphragm, which allow the patient to breathe on his or her own.

“Pacing the phrenic nerve is not new, per se; it has been done for more than 20 years on patients with an intact phrenic nerve, but in whom the spinal cord is not sending appropriate signals,” says Dr. Krieger. “This trial, however, marks the first time nerve transfers have been used to re-animate the phrenic nerve in patients with damage to the nerve itself or with damage to the nerve cells in the spinal cord.” (Congress of Neurological Surgeons meeting)

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New hope for spinal cord injury patients

Autologous macrophage therapy for the regeneration of neurons damaged by physical trauma is offering new hope for acute spinal cord injury patients. The therapy is expected to help individuals with debilitating motor dysfunction return to increasingly normal lives.

This new spinal cord cell therapy, which has shown encouraging results in recent animal studies, was recently approved by the U.S. Food and Drug Administration (FDA) for a Phase I trial in humans. The trial, which began last November, will eventually involve 6-10 new spinal cord injury patients at two medical centers in Israel. Initial signs of recovery are expected about nine to twelve months after receiving the therapy.

The procedure works by taking white blood cells, known as macrophages, and processing them in a laboratory for approximately one day. The cells are then injected into the spinal cord at the site of injury. Macrophages, which promote healing in most body tissues, are suppressed in the spinal cord, thereby making cell regeneration impossible. However, therapeutic administration of active macrophages directly into the damaged spinal cord may overcome the suppressive environment and encourage nerve regeneration. In order to be effective, the cell therapy must be started within two weeks of the injury. (Congress of Neurological Surgeons annual meeting)

Melatonin does not go down as age goes up

Advertisements promoting the use of melatonin for health problems ranging from obesity to insomnia often target the elderly, who are encouraged to take commercial melatonin preparations to restore levels that the ads say are lost with aging. Is there any truth in this advertising?

No, say investigators from the National Institutes of Health, Harvard University Medical School, and Brigham and Women's Hospital in Boston. They studied 34 healthy older men and women ranging in age from 65 to 81, and found that their nighttime melatonin levels did not differ significantly from those of 98 younger men whose ages ranged from 18 to 30. The group was followed for five years, during which time scientists regularly took blood

samples in order to assess melatonin production. (*American Journal of Medicine*, 11/99)

Many elderly ignore hearing loss

Despite mounting evidence that hearing loss affects health, a significant number of elderly people don't seek treatment for the problem, even when their hearing loss is substantial, say University of Florida researchers.

Their study, which took into account both race and gender, involved 81 white volunteers and 71 blacks, aged 60 to 90. Each received a hearing test and was then questioned about his or her hearing and health in general. Members of both races and genders who were found to have substantial hearing loss reported more health problems than those with less or no hearing loss. But 60 percent of them indicated that they were not inclined to do anything about their hearing problem.

Researchers believe the findings point to a need for hearing-care providers to reach out to elderly hearing loss victims. (University of Florida)

Inhalable insulin on the horizon

Freedom from painful self-injections may be close to reality for the 16 million Americans who suffer from Type I and Type II diabetes. Researchers have developed a very stable formulation delivered by a spray that disperses insulin into the bloodstream through tissues in the mouth. What's more, the inhalable insulin doesn't need refrigeration like conventional insulin and is tasteless. The device, called pMDA™, is currently poised for human trials. (American Association of Pharmaceutical Scientists annual meeting)

Positive thinking results in quicker step for the elderly

Walking speed can predict future health and independence in older persons. How can health care professionals get them to pick up the pace? According to researchers from Beth Israel Deaconess Medical Center in Boston, MA, the power of positive thinking can do the trick.

For the study, 47 healthy men and women with an average age of 70 were assigned randomly to one of two groups.

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Individuals in each group played a 30-minute computer game that flashed words associated with aging stereotypes on the screen. The words flashed by too quickly to read, but slow enough to be perceived subconsciously.

Those who received the subliminally delivered positive words, such as “wise,” “astute,” and “accomplished,” subsequently increased their walking speeds by 9 percent. Those who received negative words about aging, such as “senile,” “dependent,” and “diseased,” maintained the same walking speed.

Researchers say the 9 percent gait improvement reported in this study is similar to the gains reported in other studies that measured the effects of 12 weeks of strength training on walking in older persons. (*Journal of the American Geriatrics Society*, 11/99)

Depression as bad as smoking in causing disease in the elderly

Older Americans who have symptoms of depression are as likely as those who smoke to develop a new disease within two years, according to a University of Michigan study of more than 6,000 Americans age 70 and over.

To evaluate the link between disease and depressive symptoms, researchers analyzed data collected from the same older people in 1993 and 1995. At the start of the study, the average age of respondents was 77 years old. Approximately 62 percent were female and 87 percent were white. Respondents had an average of 2.1 chronic diseases each. Between 1993 and 1995, 48 percent reported that they had developed new diseases, while 52 percent had the same self-reported “disease burden” they started the study with.

After controlling for gender, marital status, education, the number of diseases at the start of the study, and the presence of men-

tal or sensory impairments and disabilities, researchers analyzed how age, race, body mass index, smoking, physical limitations, and depressed symptoms were related to the odds of developing a new disease during the two-year period. The diseases reported included the most common chronic conditions of older adults, such as diabetes, stroke, arthritis, and cardiac disease.

Physical limitations, such as limitations in the ability to walk several blocks, climb stairs, or lift a 10-pound object, were the strongest predictors that a person would develop a new disease two years later, increasing the odds of developing at least one new disease by nearly 50 percent. But older people who smoked or had multiple symptoms of depression, such as feeling lonely or sad in the past week, were 34 percent more likely than those who did not have such symptoms to develop a new disease. Older people with a high body mass index were 18 percent more likely to develop a higher disease burden in the following two years. (*Gerontological Society of America*)

Less aggressive care doesn't equal lower survival rates

The less aggressive care typically given to older people who are severely ill does not account for age-related differences in survival, say researchers from Beth Israel Deaconess Medical Center in Boston, MA. They found that age plays only a small role in the risk of short-term death among seriously ill people; instead, people who are the sickest have the highest risk of death.

The study was based on an analysis of data from 9,105 hospitalized patients in five teaching hospitals in Boston, Cleveland, Los Angeles, Marshfield, WI, and Durham, NC. Patients had one or more of nine common serious conditions, including heart failure, liver failure, lung failure, coma, or cancer. Patients ranged in age

from 18 to 100, with an average age of 63. Overall, 44 percent were female, and 16 percent were black. (*Annals of Internal Medicine*, 11/16)

Caregiving trends

Caregiving has become a critical issue facing today's society. Due to longer life expectancy, delayed child rearing, and dual income households, many people are becoming caregivers at both ends of the child and elder care spectrum. Frequently referred to as the “Sandwich Generation,” this group of adult children who are caring for aging parents while raising their own children is more than 9 million strong, says the National Alliance for Caregiving.

CareGuide.com, the leading information source for child and elder care services on the Internet, is seeking to realize and meet the growing needs of this population by launching a newly redesigned web site at <http://www.careguide.com>. Through extensive research and user feedback, the redesign offers a new, easier-to-use site architecture, a more comprehensive child and elder care directory, and content-driven channels designed to address the unmet needs of caregivers.

The new and improved search functionality will help users easily find answers to their questions about caregiving. Currently, the site provides information on over 90,000 licensed child care providers and 70,000 licensed elder care providers, which is over 90 percent of all licensed child and elder care providers nationwide.

In addition to these enhanced tools and listings, an array of new articles and information about caregiving is also available throughout the site. Extensive content written by experts in the caregiving field helps place each stage of the caregiving process into perspective while adding valuable insight and guidance. (*CareGuide.com*)

UF forms new Institute on Aging

The University of Florida (UF) has created a new Institute on Aging to address the many challenges being faced by the state's increasing elderly population, such as the threat of Alzheimer's disease, the rising cost of prescription drugs, and inaccurate public perceptions about older Americans.

As the state with the largest proportion of the population over age 65, Florida is

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focusing on issues other states will need to address in the next 25 years as their own residents age. According to the U.S. Census Bureau, the national elderly population will more than double by 2050, to 80 million.

“The decision to establish the Institute on Aging shows the value the university places on this topic and its commitment to putting the resources and energy behind making UF a premier academic environment for aging-related research and education,” says Jeffrey Dwyer, a national leader in gerontology research and health policy who is director of the new institute.

The institute, which was approved last September by the Florida Board of Regents, will build on nearly 50 years of aging-related research at UF. It will serve as an umbrella organization to foster multidisciplinary research, education, and service; stimulate increased funding; and influence public policy. (University of Florida)

Elder abuse

We are losing too many of our elders to an epidemic rarely talked about or even acknowledged, say officials from the American Academy of Family Physicians (AAFP), one that leaves some ashamed,

some afraid, and too many dead.

The group estimates that more than two million older adults are mistreated each year in the United States. Abuse can take many forms, including physical abuse like hitting or slapping; psychological abuse, including demeaning behavior; financial exploitation or stealing money or other assets; and neglect. Neglect is by far the most common, and ranges from leaving an elder isolated to withholding a hearing aid or glasses.

Almost all victims of elder mistreatment are abused by a caregiver, usually a relative, says the AAFP. Abuse sometimes starts when there are other troubles in the family like job loss or divorce. Many times the abuser has drug or alcohol addictions.

The AAFP is advising older patients to talk to their family physicians if they feel they are being abused. (American Academy of Family Physicians)

Online rehab for spinal cord patients

A new computer program currently in the testing phase may one day help reduce some of the difficulties associated with a spinal cord injury by providing at-home

rehabilitation assistance.

The Rehabilitation Learning Center is a new online learning environment being established as a resource for spinal cord injury patients by researchers from the Washington University School of Medicine in St. Louis, MO. Using a web-based computer tool called Pachelbel™ developed at the Department of Energy’s Pacific Northwest National Laboratory for the National Security Agency, they are providing training and reference materials to patients on everything from the types of spinal cord injuries and lifestyle changes to how to correctly move from a wheelchair to a bed.

The program was tested last fall on spinal cord patients who had completed rehabilitation and could provide feedback. It is expected to be tested on new rehabilitation patients early this year. The project has been funded through a grant provided to the medical school by the Centers for Disease Control for studying the impact of environmental barriers to people with functional limitations or disabilities. The work began in 1998. (Rehabilitation Learning Center) ■

Subacute Care Resource Directory Posted Online

In the last issue of the Bulletin I requested updates for your Resource Directory and announced that an updated version would be printed and mailed with this issue. However, upon examining the current list more closely, I realized that merely “calling for updates” wasn’t sufficient to get the list into prime condition. For example, many people on the list have not given me current contact information including email addresses which for many is a key networking tool.

I have decided to spend some serious time rebuilding your Resource Directory into a tool that will be the most helpful possible. While that process is underway, I believe it is best to simply post the current list on your section’s home page on AARC Online. In doing so I can make regular updates and the information you access will be entirely accurate. Until new lists are compiled and printed, I recommend you refer to your section’s home page for current information. If you do not have access to the Internet, you should use your printed list from 1999 keeping in mind that some of the information is no longer accurate.

So now, again, I am calling for your support of the Subacute Care Directory. If you are on the current list, please send me confirmation of your contact information as listed and also give me your email address. If you want to be added to the list, please send me the information requested in the form below. You may complete the following form and mail or fax it to me (11030 Ables Lane, Dallas, TX 75229 / 972/484-2720) or the best option would be to email me (hagen@aac.org). With your help we will soon have a truly helpful Resource Directory filled with names of people who are dedicated to helping others in their field succeed — and you will have accurate contact information to make it as easy as possible to take advantage of their expertise and advise.

Name _____

Address _____

Phone _____ FAX _____

E-mail _____

Areas of Expertise: (Check all that apply)

Patient Assessment

Reimbursement – MDS

Reimbursement – Managed Care

Clinical Pathways & Protocols

Contracting Respiratory Care

Services

Geriatric Respiratory Care

Pediatric Subacute Care