



Adult Acute Care

Jan./Feb. '02

Bulletin

2

2001 Specialty
Practitioner of the Year:
Jeff Whitnack, RRT

A Respiratory Student
2.5 Years Later

3

CCM-L Discussion
Part Six

5

FYI...

Get It on the Web

American Association
for Respiratory Care

Notes from the Editor: *The Death of the Hypoxic Drive Theory*

by Jeff Whitnack, RRT, RPFT

I'd like to begin this issue by thanking all of you for honoring me as your 2001 Specialty Practitioner of the Year. I am very sure there are many more RTs out there far more deserving of the award than I. But as I write this column on the eve of my departure for San Antonio, TX, and the AARC International Congress, I am feeling quite blessed to have received the award this year, and am looking forward to meeting many of you at the meeting.

My ten-year-old, however, has been terrified that I'd be flying to San Antonio, and that provided a forum for us both to have a very nice talk. I can certainly understand her fears, given the world we live in today. It seems that during the past month the news has been filled with the war on terrorism and the military matters that go along with it. And in many ways, perhaps our role in critical care and emergency medicine may be likened to soldiers going into battle.

Certainly, when reading Keith Lamb's article in this issue, I was struck by the resemblance that our jobs have to that of a newly trained soldier getting accustomed to life in combat. Many of us are so used to "life in the trenches" that it is perhaps healthy for us to stop and give ourselves a pat on the back for both surviving the stress we subject ourselves to and the service we provide our patients.

Years ago, a few months after I graduated from RT school, I worked at a facility where we did the intubations, especially during codes. I went through the two weeks in the OR, learning all the fussy proclivities of the anesthesiologists, along with some real tips to help tube that patient lying on the floor in a pool of vomit. I had done a few intubations and was pretty good at it.

Then one night at about 11:30 p.m. I was looking over a chart on a monitored step-down cardiac unit. The unit nurse supervisor came in off-duty in her street clothes to drop off some educational material for the nursing staff. She was a friend of mine, and we said "hi." Suddenly, one of the patient's monitors erupted in a display of V-tach with the alarm

sounding. "Oh #\$\$#," she exclaimed, and trudged into the patient's room with her platform shoes a cloggin'. I followed suit. The patient was shaking his arm and looked distressed in the extreme. I quickly raised his O₂ to 6 l/m. I grabbed the phone to call a code, suddenly realizing I knew not what room number I was in. I almost pulled the phone out of the socket stretching it in order to crane my neck up to look at the room number.

The RN barked out an order: "I'll get the crash cart, you walk him out of here." She meant his roommate, of course, but I thought she meant the arresting patient. She said it with such a ring of authority, and I was real green. So I ran up behind him and briefly started to raise him up. In my head were dueling messages (much like the Devil and Angel speaking to Pinto in Animal House during the party) — "that's ridiculous, to walk him out of here" . . . "but maybe it's something like a precordial thump?"

All this took place in a matter of seconds. Just then the code team arrived and saw that I had the patient raised up. The patient had just arrested to the point of unconsciousness. One of the code team members smiled appreciatively. She thought I had the patient raised up in order to place the board under him, not as a prelude to a little stroll out in the hallway.

The board was placed, and I intubated the patient with aplomb. But I sometimes wonder what would have transpired had the code team arrived to find an empty bed, then looked down the corridor and seen me, blue patient in tow, exclaiming, "Hey, uh, I don't think this walking technique is working too well."

Back to the military . . .

Awhile back I picked up a book sitting out in the discount pile at a local bookstore. The title was *Embattled Courage, The Experience of Combat in the American Civil War*, by Gerald F. Linderman (The Free Press).

This book starts out by describing the

"Notes from the Editor" continued on page 2

“Notes from the Editor” continued from page 1

general conception of battlefield courage during that war. Courage, manliness, and godliness were all tightly interwoven and thought to be guiding beacons for behavior. A person’s word of honor even infringed into the military realm in a manner we would find ludicrous today. From page 12, “Prisoners of war, for example, were often paroled pending exchange. Ulysses Grant released the Vicksburg garrison on parole. Each was liberated solely on the basis of his assurance that he would not return to soldiering until informed that a captive held by his own side had been released, freeing both to return to duty. In the interim the paroled soldier was expected to proceed on the basis of his word of honor — to go home, or, in a few cases where states forbade the return of parolees, to report to one of the detention camps maintained by his own side.”

Battlefield courage often involved steadfastly marching in formation upon the enemy. In previous wars the musket range was only 100 yards, which meant that often the defenders could only get off one volley before being

descended upon. But by the time of the Civil War, the muskets had become rifled. The effective deadly range was now 300-400 yards. The old concept of battlefield courage now became a recipe for massive slaughter, and charges against entrenched positions became recipes for battlefield defeat. Still, the old concepts persisted. It took a man who was a failure in both formal military training (last in his West Point class) and in personal ventures to begin to recognize this shift and change how war was fought. That man was Ulysses Grant.

From page 210, “One of the peculiar results of Grant’s inurement to failure was that it diminished his investment in the system of values others bought to the Civil War and thus provided a detachment making visible and reasonable possibilities hidden or unthinkable to others.”

But remnants of the old concept of battlefield courage continued on into World War I, until as described on page 17, the soldiers, “were likely to feel themselves so subordinated to the destructive processes of war that they came to think of themselves less as actors in war than as victims of war. Men were compelled to concede the limits of indi-

vidual will and the exhaustibility of courage.”

So, the courage which was to serve them in battle became in itself embattled courage.

I find a corollary in today’s health care environment with caring. Many of the caring professions are embattled by a shrinking base for staffing, technology that allows us to keep people technically alive much longer, specialization, professional turf rivalries, and the intrusion of economic models that have little if anything to do with the caring concepts or images of Marcus Welby, MD, or Florence Nightingale.

As I look around I see that today it is caring which is embattled. It’s not that clinicians didn’t start out with every intention of providing quality care for patients. But just as marching into rifled muskets guaranteed a slaughter in 1862, so now in 2002 will believing in the traditional concepts of caring become a recipe for ultimately burning out and feeling betrayed?

I think this is a problem we have to acknowledge. Some of the best have already fallen or deserted. Others are trying to mix caring with new tactics of digging in and flanking. From where will come our General Grant? ■

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11030 Ables Lane
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(972) 243-2272
FAX (972) 484-2720
e-mail: info@aacrc.org

Debbie Bunch
Bulletin managing editor

Edwards Printing
Bulletin typesetting

Section Chair

Nick Widder RRT

Department of Respiratory Care
Gwinnett Medical Center
1000 Medical Center Boulevard
Lawrenceville, GA 30245
(678) 442-4545
FAX (770) 682-2233

NJMacmillan@ConsultWithOTB.com

Bulletin Editor

Jeff Whitnack RRT/ RPFT

825 Addison Ave.
Palo Alto, CA 94301
(650) 321-9062
whitnack@pacbell.com

2001 Specialty Practitioner of the Year: Jeff Whitnack, RRT, RPFT

The Adult Acute Care Section was proud to honor Jeff Whitnack, RRT, RPFT as its 2001 Specialty Practitioner of the Year during the Awards Ceremony held at the AACRC International Congress in San Antonio in December. As most of you know, Jeff is a tireless volunteer for the section, serving in numerous capacities, including editor of this *Bulletin*, where he has increased submissions from the membership and treated us all to a very entertaining — and enlightening — look at RT through the eyes of health care providers around the world through the CCM Discussion series.

Jeff, who has been a member of the profession since 1982, is currently on the staff at the

VA Hospital in Palo Alto, CA, where he has worked hard to increase his professional skills over the years. When a hospital-wide redesign effort took place several years ago and consultants wanted to rename all RTs in the institution “Clinical Partners 1,” Jeff responded by doing all he could to improve his skills and knowledge base, taking the CPFT, RPFT, and Perinatal-Pediatric Specialty exams and devoting more time to professional activities such as reading journals and keeping abreast of the latest developments. These actions, along with those made by his colleagues and their determination not to accept the name change, resulted in the swift demise of the “Clinical Partner 1.” ■

A Respiratory Student 2.5 Years Later

by **Keith D. Lamb, RCP, RRT**

I was no doubt the class clown. At 32 years old and just a couple of years out of the Marine Corps, I wasn’t the oldest student in our class, but I was by no stretch the youngest either. I had spent some time as a criminal justice major a while back, so college life wasn’t totally new to me. With the exception of our first pulmonary pathophysiology class and maybe my first chemistry class, most of the subject matter came pretty easy to me. I managed to ace most of my classes, and when I finally did graduate I did so magna cum laude.

But back to being the class clown. I pretty

much thought that everyday college life was pretty funny. I actually enjoyed being in class, and like a lot of folks, I could probably have made a career out of being a student if the pay wasn’t so incompatible with life. I liked making jokes and the attention that it sometimes got me. I spent every day Monday through Friday in class and every evening and weekend working for a retail outlet store in a nearby ocean city in Maryland. The drive each way to and from school was about 40 minutes on a good day and almost double that

“A Respiratory Student” continued on page 3

“A Respiratory Student” continued from page 2

during the summer, with beach traffic.

My clown days ended when I landed in an ICU for the first time during my first clinical rotation. I was absolutely scared to death. And if I had really been aware of the significance of it all, I probably would have been even more so.

We had practiced ABGs all week. A rubber arm with red Kool-Aid coursing through its arteries served as our victim. I could never really get the hang of performing this feat on a rubber arm and thought for sure that I would never be able to successfully perform the task on a human. I found out on my very first clinical day in the ICU of Beebe Hospital in Lewes, DE. I can't remember the pathology involved with the elderly gentleman or his name or even what had landed him in the ICU to begin with. What I remember most vividly was his extremely edematous arms. The pores in his arms were seeping like nothing I had seen before. The “pitting” was severe and could be seen where others had handled his extremities and palpated them for various reasons. Our clinical director had chosen me to be the first in our class to perform an ABG. I'm still not sure what got me this dubious distinction — he probably just happened to look my way first. No matter the reason I found myself preparing to draw the sample while at least half a dozen others looked on. I got the sample on the first try with no re-direction of the needle. My hand shook before and after the stick, but not a bit during. Almost unbelievable! What made this particularly rewarding was that after the whole thing was over I was told that during the night several seasoned therapists had tried to stick this guy with no success.

The smallest things would scare the hell out of me back then. Just walking into the ICU would cause my stomach to hurt. I felt sick almost every time I got near a patient. Suctioning someone was an ordeal that most likely took a year off my life every time I performed it. Placing an inspiratory pause so that I could calculate static compliance and airway resistance? Forget about it! I was so afraid that I wouldn't get the pause taken off before the next breath and surely kill the patient. Nurses? I was scared to death of every nurse I ever met — even step down nurses. They could surely kill with a glance, and I rarely looked a nurse directly in the eye.

In short, clinicals made me enjoy the classroom even more. I felt safe in the classroom.

That was a place where I could laugh and cut-up. ICUs were a place where I was sure I didn't belong. I felt that for a long time. I felt that when I graduated and took a break before starting work.

In June of 1999 I moved back to northern Delaware and went to work at the largest hospital in the state. My new workplace was also the only level one trauma center in the state. It is an 800+ bed facility which includes a level three nursery, surgical/neurosurgical shock trauma unit, cardiovascular ICU, coronary ICU, and medical ICU. I began orientation with five other newly coined therapists, only three of which still work here. One of them graduated with me. Our orientation was comprehensive to say the least. We rotated through every area of every floor, including each of our five ICUs and every kind of step-down known to man. But just as fast as this orientation marathon started, it was over.

I can remember my first assignment to an ICU like it was yesterday. It was the SSTU, or surgical shock trauma unit. Once again I was scared to death. I remember clearly having a head cold and having taken a couple of pseudophedrine before coming to work on the evening, 3-11, shift. I felt terrible. My gut hurt, my head hurt, and I was sure that I would never get through the night.

Once again, I felt like I didn't belong. The funny thing is that once I got report and the unit was mine, I forgot all about my gut and my head, and, yes, even the murderous nurses were not my biggest concern. I started my rounds. I think I probably had seven or eight intubated patients, probably a couple of treatments, and maybe a patient being ventilated non-invasively. I did a couple of transports to CT, extubated a patient, intubated a patient, and then it was 2300 and time to go home. Nothing traumatic. I probably hadn't saved any lives, but I was sure I hadn't killed anyone either. Overall a very routine and non-eventful evening.

Our SSTU has since been moved and combined with our neurosurgical ICU to form what some affectionately call the “mall.” It is a 22-bed state-of-the-art ICU which forms a big circle that to the uninitiated is very intimidating. I have since covered this unit when 19 of the 22 rooms had patients being mechanically ventilated, and covered it by myself, as have many of my colleagues. It is quite a chore and not for the meek or the weak at heart.

I love critical care. I love to be called to look at patients because they don't “look

good.” I love trying to figure out why they don't look good and what we can do to make them look better. Sometimes I can figure it out, and sometimes I can't. I love it when I can. I really like to assess a patient — looking at his vital signs, cardiodynamics, CXR, breath sounds, lung compliance, airway resistance, I/Os, and then at the second-year resident and saying that this patient doesn't need bronchodilators; he needs diuretics. I especially enjoy explaining myself. I love when a physician or a nurse asks me to explain a particular mode of ventilation. I am actually more likely to explain it before they ask. I like looking at an ABG and telling the resident the best way to fix it. I like making recommendations like APRV, TGI, HFOV, ILV, and proning. I like it that when I say I think someone needs to be intubated that I am taken seriously. I place inspiratory pauses on patients just for sport and stare down the best of seasoned critical care nurses — and haven't been wounded by one yet!

I spend a lot of my free time reading. I think to be an effective respiratory care practitioner you have to constantly be attempting to learn as much about sick people as you can. An RCP should know what elevates CVPs, what left ventricular dysfunction is and how it affects the pulmonary system. An RCP should know what a pulmonary artery catheter is and what can be learned by trending the numbers. A good RCP knows what elevates wedge pressures and pulmonary artery pressures, and what these changes mean. A good RCP should know how insufficient expiratory times can adversely affect a patient with increased ICPs. A good RCP should know that peak inspiratory pressures are just that, and to pay more attention to static pressures.

I learn something new every day. I hope my colleagues do, too. Do I still get nervous when I walk into the hospital? I sure do. It just takes different things to make me feel that way now. I get a little worried every time I hear a pediatric trauma code. Not because I won't know how to treat the patient once he gets here, but because I have three children. It makes me a little nervous when I come to work and our helicopter isn't where it should be. What will they be bringing in? It makes me a little nervous when I come in and one of my staff has called out. How will I make assignments so that the whole hospital is covered with one less therapist? I think being a little nervous is healthy. It shows that you are aware that there is potential around every corner. ■

CCM-L Discussion Part Six: *Evolution is a Funny Thing*

Editor's Note: *The final installment of the CCM discussion takes us full circle, as health care professionals from around the world realize what a respiratory therapist is and how the responsibilities we hold here correlate to those abroad.*

New Zealand MD #3: (South African MD #1) tells me he is hurt at being ignored in my list of predictions. Leaving aside the veracity of his assertions and my difficulties at verifying them by email, I predict that RTs are rare in South Africa. Perhaps there are a very few. I wonder if the unique schizoid history of health care in South Africa, coupled with the rising expectations of many of the

populace and the difficulties of a cash-strapped government, could lead to an opportunity for RTs to occupy a place in South Africa. (I just don't think many U.S. RTs would want to work there — unless perhaps they were ex-pats wanting to return home.)

“CCM-L Discussion” continued on page 4

"CCM-L Discussion" continued from page 3

South African MD #1: You are right — they do not exist here in Durban as yet, but we are in the process of building this VERY, VERY fancy new academic hospital in Durban. We are turning people away from dialysis etc., etc., yet we are building the golden cow!?

The public service nursing services have not collapsed, but the standard of nursing has changed radically over the last few years. Aside from that there are many nurses who have been trained in my unit and who are now scattered to all four corners of the globe — I can think of four in Australia/New Zealand at this moment. Because of this we have now introduced, with the permission of the authorities, the concept of the "Critical Care Technologist." As for being regarded as a replacement for doctors, the government in its wisdom has slapped a moratorium on all registered doctors from the UK, NZ, Australia, etc. Now, given the fact that 70% of doctors working in rural areas here are foreign trained, this is disaster. So, I doubt it will be too long before the government recognizes the value of these individuals in replacing various medical and nursing personnel.

Canadian RN #1: I work in a busy invasive coronary intensive care unit in a large teaching hospital in Toronto. Without respiratory therapists we would be lost. I certainly am not proud of this fact; but it is true none-the-less. Our cardiologists, residents, and nurses are often lost when it comes to ventilating and/or weaning patients. The heart seems to be the only organ they know how to deal with.

We frequently deal with patients in our unit who are ventilated, have PA catheters, intra-aortic balloon pumps, inotropes, vasodilators, and CAVHD. Without the input of our skilled RTs many of our patients would either be over-ventilated far too long or inappropriately extubated too early.

I can't tell you how often ABGs are looked at only for pO₂ levels and not for pCO₂, pH, and bicarbonate levels. Most of our patients are on Furosemide infusions and have bicarb levels through the roof. Many times our staff cannot appreciate that we need to normalize the pH before attempting to extubate (in a non-COPD patient). They often do not understand that the patient will not have the drive to breathe when we take the "tube" out. We continually chase K⁺ levels without any thought to alkalosis contributing to the problem.

This is where skilled RTs come into play to offer their suggestions. Ideally, I believe it should be the RN at the bedside or the resident/staff physician looking out for the patient's ventilatory health. Unfortunately, where I work we give excellent cardiac care and not so great pulmonary care (in my unit). Therefore, RTs will always have a great value in our CICU.

USA RT #7: You have pretty much just

made the point I was trying to make — i.e., just because the systems are "different" from each other does not mean one is automatically superior or inferior. I submit that there may be no single "right" system. You do what works for you. And if you don't need a respiratory therapist because you are totally available 100% of the time you're on duty, then that's wonderful. I am sure nobody wants to force a respiratory therapist on you. But, my friend, it isn't so everywhere in the world. In your specific situation, they may well not be of benefit to you. But, as (USA MD #5) and others have noted, things aren't the same in everybody's units. The fact that a respiratory therapist would be unnecessary in YOUR unit doesn't mean they would be useless EVERYWHERE.

The respiratory therapy profession wasn't invented by a bunch of folks who just decided on a whim to invent a new profession and push their way into places where they weren't needed or couldn't be of use. Respiratory therapists came about to fill a need, and they do fill a need. The absence of that need in your ICU doesn't do away with the need that may exist in other ICUs. And, of course, the converse of your statement, "just because the system is the way it is in the U.S. doesn't mean it is the right system," is just as true as your statement, "just because the system is the way it is in the Netherlands doesn't mean it is the right system."

South African MD #2: (New Zealand MD #3) wonders if we have RTs in South Africa. We have clinical technologists who deal with technology and the patient-technology interface. They service ventilators; troubleshoot and change their circuits, etc., when necessary; set-up transducers and monitors; and troubleshoot problems with these, etc.; but they don't do intubations, administer nebs, and all the other things that an American RT does. Nurses are such a scarce resource here (many of our units caring for the sickest patients have one trained ICU nurse to two or more patients), and the clinical technologists take a lot of these burdens off them.

He also commented on the schizoid health system. In fact, until very recently virtually all the clin techs were working in the public sector (the least funded and resourced), which is just as well, as they have proven very good at holding ventilators, monitors and other bits and pieces together with string and recycled chewing gum. Some clin techs have started to migrate to the private sector but find it hard going as the medical funders don't like to pay for their services. So, in most private hospitals in South Africa it's the nurses who do most of this (often with very little formal training). Very schizoid — the best staff looking after the most decrepit equipment and all the really high tech stuff looked after by people who would often be better doing what they do best, and that's caring for patients.

In the South African system it seems that if a niche opens up in a hospital (e.g., clean-

ers or porters "rationalized"), the omnipotent but numerically limited nursing force has to take up the slack.

New Zealand MD #3: This thread is probably drawing to a close, but I have a couple of thoughts first. I agree entirely with (New Zealand MD #2). We (Australia and NZ) don't use RTs, BUT we have/need "ventilator competent" nurses (i.e., you can't just grab a good nurse off a general ward for a ventilated patient), and this causes staffing problems/shortages at times. We have respiratory technicians in many hospitals looking after the purely mechanical side of things (I, for one, can't strip down, repair, calibrate, and maintain an Evita 4), physiotherapists keen to do chest physio (Does a busy nurse really always have the time to do all the physio?), and intensivists in (generally) closed units with a really good handle on respiratory physiology. I have worked in Canada with RTs whose applied physiology knowledge was streets ahead of a lot of residents and plenty of non-intensivist attendings and maybe some others, and who were really helpful with research projects as well. And I work here in Australia where things work well too.

USA RT #3: Quoting from (South African MD #2), "(New Zealand MD #3) wonders if we have RTs in South Africa. We have clinical technologists who deal with technology and the patient-technology interface. They service ventilators; troubleshoot and change their circuits, etc., when necessary; set-up transducers and monitors; and troubleshoot problems with these, etc.; but they don't do intubations, administer nebs, and all the other things that an American RT does. Nurses are such a scarce resource here (many of our units caring for the sickest patients have one trained ICU nurse to two or more patients), and the clinical technologists take a lot of these burdens off them.

Clinical technologists? A rose is a rose, by any other name . . .

Evolving technology and economics are bringing us around.

Interesting that respiratory care protocols should be confused with disease pathways and cookbook medicine, that salaried respiratory therapists should be confused with expensive specialty consultants, or that no one has explored the sensitive subject of the draconian MD reimbursement changes which would truly tend to cast us out of the USA health care system.

Lead, follow, or get out of the way.

Pa rum pa pum pum, me and my drum

United Kingdom MD: The fun of it all — the rich tapestry of life. Thanks for all the messages saying what RTs do. As (New Zealand MD #3) says, the docs, nurses, and physios do all of that in many places, and that's why from where I sit I could not imagine what you did. Evolution is a funny thing. ■

FYI . . .

Decoding lung cancer genes

Researchers at Stanford University have uncovered a group of genes that could distinguish between different forms of lung cancer. The finding, published in the November issue of the Proceedings of the National Academy of Sciences, may help predict individual treatment strategies and someday lead to better lung cancer drugs.

Lung tumors are generally categorized into one of four types: small cell, squamous cell, large cell, and adenocarcinoma. When doctors diagnose a small-cell tumor, they can provide a fairly accurate prognosis. But other tumor types, particularly adenocarcinomas, respond very differently to standard treatment.

To find out whether genetic differences exist between lung tumors, they analyzed RNA from 67 lung tumor samples and six normal lung samples. In most cases, samples that had been assigned to the same category by light microscopy also fell into the same genetic grouping. The adenocarcinoma samples, however, fell into three distinct genetic subtypes. Patients within those subtypes had different outcomes. Patients with a subtype 1 tumor had about 40% survival over a five-year period, whereas none of the patients with subtype 3 survived during that same period. All patients with subtype 2 tumors were still alive at the end of the study.

ED good place to spot adverse drug reactions

A new study finds emergency departments are often the best place to identify adverse and potential drug reactions among the elderly. Canadian researchers found that about 10% of 283 emergency department visits of people 65 years and older were directly related to an adverse drug reaction, and 30% of the patients had potential adverse drug interactions.

The five most frequently found potential adverse drug interactions noted in the study

involved the following medications:

- Furosemide and digoxin potentially leading to electrolyte disturbances and arrhythmia.
- Salicylic acid interfering with the antihypertensive effect of beta-blockers by inhibiting renal prostaglandins.
- Salicylic acid decreasing insulin requirements.
- Enalapril and potassium supplements predisposing electrolyte imbalances and arrhythmia.
- Acetaminophen increasing the anticoagulant effect of warfarin.

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. ■

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