An Editorial:

Do We Need an Adult Critical Care Specialist Certification?

by William S. Demaray, BS, RRT

Does the respiratory care profession need an adult critical care specialist certification?

That’s a question that’s been on the mind of our section chair, Nick Widder, since he took office. Nick has broached the subject with the AARC Board of Directors, and the Board plans to take it under advisement after reviewing the results from the recent NBRC job survey.

In the meantime, I’d like to invite all members of the Adult Acute Care Section to join in a dialogue to air opinions on this topic. The discussion can take place via the e-mail list, or through letters to the editor published in the pages of this Bulletin. I’ll get the ball rolling.

I, too, see a clear value in the development and implementation of an advanced credential for adult critical care RTs. In the current atmosphere, it is imperative that we support a ladder system of professional development. As nurses have both CCRN and non-CCRN practitioner credentials, we also should have practitioners who hold basic and advanced credentials. The holder of...
Send Us Your Email Address!

Beginning this year, the Bulletin will be published on a quarterly, rather than bimonthly, basis. But that doesn’t mean we’ll be communicating with you less often than before. The plan is to increase communication to members via a monthly email which will feature items of interest to the section. If you’re already receiving email messages from the AARC, you will automatically receive these e-mails. If you aren’t getting AARC email, that means we don’t have your email address. To ensure you don’t miss out on these timely publications, send your email address to: mendoza@aarc.org. ♦

Want to receive this newsletter electronically?
E-mail: mendoza@aarc.org for more information.

Adult Acute Care Bulletin
published by the American Association for Respiratory Care
11030 Ables Lane
Dallas, Texas 75229-4593
(972) 243-2272 • (972) 484-2720 fax
e-mail:info@aarc.org

Chair
Nick Widder, RRT
Department of Respiratory Care
Gwinnett Medical Center
1000 Medical Center Boulevard
Lawrenceville, GA 30245
(678) 442-4545 ph
(770) 682-2233 fax
NAWidder@aol.com

Editor
Jeff Whitnack, RRT/RPFT
825 Addison Avenue
Palo Alto, CA 94301
(650) 321-9062 ph
whitnack@pacbell.net

Continued from page 1
ADVANCED MEDICAL TECHNOLOGY AND END OF LIFE ISSUES RELATED TO THE INTENSIVE CARE UNIT: THE RESPIRATORY THERAPIST’S PERSPECTIVE

loss of oxygenation or the elevated PaCO₂. So I increase the PEEP to 8 while the physi-
cian observes the pulse oximeter for an increase in oxygen saturation. Meanwhile, the
patient is becoming even more agitated and pulls out two IV lines, although the nurse and
I are trying our best to calm the patient.

We now have to suction the patient, which only agitates him even more - to the point
that I am really afraid he may dislodge his trach tube. Finally, the physician orders ad-
ditional sedation to include neuromuscular blockade. Now that the patient is paralyzed I
ask the physician if it is okay to switch the ventilator to pressure control, but he insists
that increasing the SIMV rate is the best strategy. So now I increase the SIMV rate from
6 to 15/minute while the physician requests that I increase the PEEP to 15 cm H₂O, since
the oxygen saturation has not improved.

As I slowly increase the PEEP, I notice at 12 cm H₂O the volume pressure loop has a
definite over-distension pattern. I immediately inform the physician, who is listening to
the patient's breath sounds. The physician tells me that the lung sounds have improved and
asks that I please increase the PEEP to 15. I increase the PEEP to 15, and 30 minutes later
the nurse tells me that the urine output has decreased by 50% and the patient's blood pres-
sure is very labile. I know now that we are doing harm to this poor patient and there seems
to be nothing to do except just watch and hope for the best. Three hours later the patient's
gas exchange has not improved and he is now developing a metabolic acidosis along with
his respiratory acidosis. The physician enters the room making evening rounds and tells
the nurse that he wants to place a Swan to assist with the fluids management, but he will
wait for the night physician to make the final decision. It is at this point that I realize that
despite the use of the most advanced technology in the ICU, patients still die - but not always in a dignified manner. In fact, these technologies may prolong the suffering of critically ill patients.

Before I prepare for report to the oncoming RT, I log onto the Internet to review the cur-
cent published research into ventilating patients in multi-organ failure similar to our patient…I immediately find that the literature is so controversial that it becomes very frustrating to locate current evidenced-based medicine. For every article that presents one point of view, there is at least another documenting a completely different way to provide the same clinical outcome. Just as I finish reviewing an online paper, the patient's daugh-
ter comes up to me and asks how her father is doing today. I tell her that he is not quite as
good as yesterday, but that she should talk to the physician to find out the details. She then
tells me that she has done her own research on the Internet and feels that we are not treat-
ing her father according to current literature. At this time the nurse comes to join us and
assures the daughter that we are doing everything possible for her father. The daughter
then tells us that she wants everything done for her father, but that she does not want him
to “suffer.” Both the nurse and I inform her of the day's events and what the physicians
plan to do if they decide to place the Swan later in the evening.

In the meantime the unit's medical director comes into the room and inquires about the
patient's condition. The medical director is very knowledgeable about mechanical ven-
tilation and associated lung mechanics monitoring. I point out the volume pressure loop
as well as the decreased urine output following the increase in PEEP to 15. Our director
then asks for my impression and I suggest decreasing the PEEP and switching the venti-
lator to pressure control. He agrees. Two hours later as I am preparing to leave for home,
the nurse tells me that the patient's urine output has increased and his blood pressure has
improved from earlier in the day. At the same time the night physician asks the nurse and
myself why the day physician wanted to place a Swan in this patient since he was much
improved. We could not answer his question, but we were very glad for his insight.

The next morning I arrive in the ICU to find the patient's wife and daughter at his bed-
side looking very grim to say the least. They tell me that the physicians are considering
exploratory abdominal surgery…suddenly, “green ooze” pours from around the
tracheotomy stoma and runs down the patient's neck and onto the pillow case. Both wife
and daughter decide that surgery would only prolong the man's suffering and take away
his dignity during his last days alive. Six hours later our patient dies from a sudden car-
diac arrest, and at the family's wishes, we do not perform CPR.

Continued on page 4
Case Study: Why Did This Patient Recover?

by William A. French, MA, RRT, Lakeland Community College, Kirtland, OH

EP is a 61-year-old male in the intensive care unit of a small, semi-rural hospital. He has a ten year history of COPD and CHF. He had coronary artery bypass surgery eight years ago. Four years ago, because of difficulty clearing secretions, he had a tracheostomy tube inserted. Since then, he has been a frequent inpatient. The current admission is his second in the past month.

Currently, he has a No. 8 uncuffed Shiley tracheostomy tube with no inner cannula. He keeps his trach plugged most of the time and receives oxygen via nasal cannula at four liters per minute. He also receives 2.5 mg albuterol and 0.5 mg ipratropium Q4 hours. Throughout the early evening, EP is alert and oriented. He exhibits some mild respiratory distress, especially with exertion; however, that is normal for his condition. His SpO₂ on the nasal cannula is 94%. His heart rate is 122, which is normal for him. His breath sounds are decreased throughout.

At approximately 2300 hours, he begins to complain of increased shortness of breath. Physical examination reveals absent breath sounds on both sides with moderate to severe shortness of breath. Heart rate is now between 140 and 150. SpO₂ on the nasal cannula is 90% and dropping. Stat chest radiograph is non-revealing. At this point, the trach is unplugged and the patient is placed on a trach collar connected to a large volume nebulizer set at 40%. In addition, an inner cannula is inserted into the trach, and the patient is given several breaths with a manual resuscitator, lavaged with small boluses of normal saline, and suctioned. However, after several attempts, no mucus is removed and the patient continues to deteriorate. The patient is then given two treatments with 2.5 mg albuterol plus 2 mL of 20% acetylcysteine. At the end of the second treatment, the suction is repeated with the same negative result. At 2330, the patient's heart rate is still around 150 and the SpO₂ is now 88% on 60% trach collar. In addition, the patient is intubated.

Arterial blood gases are obtained with the following results: pH 7.15, PaCO₂ 125, PaO₂ 116, HCO₂ 49. The patient's attending physician and family are notified and are on their way in. Preparation is made to change the tracheostomy tube to auffed No. 8 Shiley and to place the patient on ventilatory support. The patient begins to have runs of ventricular tachycardia.

However, at approximately 2350, the attending physician meets with family members. The result of this meeting is a decision to make EP a do-not-resuscitate and to keep him as comfortable as possible without any additional respiratory intervention. The FiO₂ on the trach collar is reduced to 40%. The patient is given Ativan. The monitor is turned off and the family gathers at the bedside to await EP's death.

At approximately 0530, EP wakes up and asks for a cup of coffee. After that, he continues to become more alert, and by that evening, his vital signs are back to what was normal for him. He indicates that he has no memory of what happened to him between 2345 and 0530. Seven days later, he is transferred to a transitional hospital for additional rehabilitation.

There are many possible explanations for EP's recovery without any active intervention, and certainly most experienced respiratory therapists have witnessed similar situations. The question is: is there a lesson to be learned from it and, if so, what is that lesson?

Let us know what you think of NewsNow@AARC and the new section E-bulletins. Don't know what we're talking about? Make sure we've got your current e-mail address.

What's Your Commute Like?

We all have to get to work somehow, right? To find out how RTs manage it, we posted a question on our e-mail list recently seeking input from our members. Take a look at a few "sound bites" from the discussion -

I roll out of bed, dress, get out the door, and am at work in 10 minutes. Eat your heart out! — Lisa Bennett

60 miles and one hour one way at 0500 to arrive at the parking garage in San Francisco where I pay for parking and catch a shuttle to the hospital. — Name withheld to protect the innocent.

45 miles from driveway to parking lot. — Bill Farnham

About 15 minutes mostly at 70 mph on Interstate 81. The only excitement is the morons who don't clear the snow off their windows or lights. — Bob Fluck

I can leave the house a 5:45 a.m. and be clocked in and have time to socialize before taking report at 6. — Penny Kuzmeskus

About 4 hours per day. I now know every landmark on the New Jersey Turnpike. — Hyacinth Johnson

A 20 minute drive on city streets with little traffic. No stress. — Lonnie Frye

The distance from house to hospital is 21 miles - not bad for this area. — Sharon K. Gannels

37 miles each way through country roads...wouldn't change a thing. — Kevin Stacy

Only about eight city miles. Actually an easy and enjoyable commute. — William S. Demaray

I live 28 miles east of Presbyterian Hospital of Dallas. I make this trip 3 days a week, as I work 12 hour days. — Mark Rose

35 miles each way. Not a bad commute, as it is all highway. — Jeffrey Davis

I live on the Chesapeake Bay, with a 50 minute commute to Southern Maryland Hospital. Most nights I really enjoy a great sunset … — Howard Mc Donald

92 miles one way. Wonderful! 1.5 hours to get ready for the day and 1.5 hours to unwind before I get home. — Roger Berg

I recently returned to the night shift at the nearby community hospital. So, I've resumed bike commuting when the weather permits. It's about a 50 minute ride each way. But in the morning I often wish I could just be beamed home… — Jeff Whitnack, your Adult Acute Care Section editor
AN EDITORIAL: DO WE NEED AN ADULT CRITICAL CARE SPECIALIST CERTIFICATION?

The advanced credential becomes a role model, expert resource, and mentor; identifying and supporting potential candidates for advanced credentialing. The precedent for this type of credential for respiratory therapists was set with the institution of the Neonatal-Pediatric Specialist (NPS) certification. Most of us working with the adult population accept and appreciate the breadth of difference between the pediatric and adult patient, and the value of an advanced credential for those who specialize in pediatrics and newborn critical care. That difference, coupled with the speed of technological advancement in the adult care arena, is why the implementation of an adult specialist credential is appropriate. ◆

EDITOR'S NOTE: Is there another side to this debate? Would you like to chime in in support of Bill's arguments? Please send any and all comments to the editor at the addresses/numbers listed on page 2.