American Association for Respiratory Care's

Transport Bulletin

September / October 2002

Notes from the Editor

by Steven E. Sittig, RRT

As this edition of the Bulletin reaches you, we are all experiencing cooler fall weather, with the kids back in school and summertime activities drawing to a close. I have always liked the fall, but the reality of what is to come - the snow and cold of winter - has never been appealing to me living up here in Minnesota.

In this issue, we have an excellent Program Focus from Wes Ware, an RT in the Angel Flight Program at Arkansas Children's Hospital. You will be amazed and proud of the role RTs are playing in their busy program.

Now, to matters at hand. At their summer meeting, the AARC Board of Directors (BOD) voted to institute several changes pertaining to the Specialty Sections. First, as of January 2003, all of the section newsletters will become quarterly rather than bimonthly publications, a change instituted to save on mailing costs and (hopefully) make it easier for us to fill our issues with content from section members rather than news item "fillers" that are usually out of date by publication time.

Secondly - and most importantly for our section - the BOD also decided to implement a new policy calling for a minimum number of members for a section to remain in operation as a standalone section. As of December 31, 2003, all sections must have at least 350 members to remain a Specialty Section. Sections with less than 350 members will transition to Roundtables. A Roundtable will be an Internet-only operation with no printed newsletter, operating more along the lines of an online discussion group, with the listserve becoming the primary path of communication

The new membership requirement is based on the costs incurred by the AARC to operate each section. Although all section positions (such as section chair and

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Section Connection

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SECTION LISTSERVE:
Start networking with your colleagues via the section listserve. Go to the section home page on www.aarc.org and follow the directions to sign up.

The New Helicopter's on the Way: Program Focus

by Wes Ware, RRT, Arkansas Children's Hospital

The Angel Flight transport program located at Arkansas Children's Hospital in Little Rock, Ark., had its meager beginnings in 1978. It was the vision of the Arkansas Department of Health, St. Vincent's Hospital and Arkansas Children's Hospital to provide a means to transport premature infants to a hospital that could provide a higher level of care than that which could be provided by the small rural hospitals in the state. We started with one specially-made ambulance equipped with a blood gas machine, an open warmer, a transport isolette and a Bourns BP-200 ventilator to transport approximately 100-200 patients a year.

In the early days of the program, the neonatal transport team consisted of a neonatologist, a nurse and a respiratory therapist, if the patient was on a vent. The program caught on quickly with the hospitals in the state. We put over 9000 miles on the "Angel 1" ambulance during the first six months of operation, consuming more than 1500 gallons of gasoline in the process. Fifty-five patients were transported during that period. The new "Angel 2" ambulance was dedicated by then-Governor Bill Clinton in 1983. Soon afterwards, the "Angel 1" was retired, after having racked up over 160,000 miles, replaced by a new "Angel 3" ambulance.

In 1982 the need for a team specialized in pediatric transport became apparent, and Angel Flight expanded its service to include a pediatric transport team. This team responded to pediatric trauma and any pediatric patient except for newborns who had not left the hospital. The team consisted of a pediatric resident, a PICU nurse and a respiratory therapist, but again, only if the patient was on a vent. This new service caught on quickly as well. In response to the growth of the program, we began using a Beechcraft King Air (fixed wing) in 1983.

1985 was a big year for Angel Flight. Early in the year, a helipad was built with $20,000 donated by the local newspaper. In December the hospital purchased a Bell Long Ranger and began offering air transport. The helicopter went into service on Christmas Day. By early the next year, 85%-90% of the patients being transported were by air.

Two years later on a December morning, an explosion from the helipad rocked the hospital. Two RTs were transfilling the oxygen system when they heard a popping noise. They had made one step away from the aircraft when they were blown clear of it. They suffered first and second degree burns to their arms and faces, but fully recovered after a short stay in the hospital's burn unit.

News about the helicopter was not as good: it was destroyed in eight minutes. The local fire department saw the smoke before they even received the call and were on the scene in two minutes. By the time the fire trucks arrived all they could do was prevent the fire from spreading to the hospital building. Nothing was left of the aircraft except for ashes, the landing skids, and half the tailboom.

The reaction from hospital administration was swift and immediate. They knew how important the helicopter was to the children of Arkansas and immediately began the search for a replacement. The new helicopter was an MBB-BO105. It was put into service in early 1987. This helicopter is still in service today and is scheduled for retirement in the fall of this year.

In 1990, our ECMO program had an amazing concept; they wanted to be able to go out to other hospitals, put patients on ECMO and fly them back to Arkansas Children's. After a lot of innovation and planning, Arkansas Children's Hospital became the first civilian

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The AARC Needs You!

Did you know it takes more than 500 active volunteers to successfully run the vast and varied programs and services offered by the AARC every year? Who should take on these responsibilities? How about you?

President-elect David Shelledy, PhD, RRT, is currently seeking volunteers to serve on various AARC committees and in numerous other capacities during his presidency in 2003. If you'd like to sign up – or just find out more about how you can become more involved in your professional association – check out the following link on AARC Online: aarc.org/headlines/volunteer. ◆

Want to receive this newsletter electronically?

E-mail: mendoza@aarc.org for more information.

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THE HELICOPTER'S ON THE WAY: PROGRAM FOCUS

hospital to perform mobile ECMO. The first flights were performed in a Huey that was supplied by the army.

In 1992 the Angel Flight program was so busy that a second helicopter was added to the fleet. A Sikorsky S-76A was purchased and put into service in July. This is a much larger aircraft than our first, and allows us to transport two patients at the same time. The S-76A is capable of flying under instrument flight rules and can fly when most other helicopters cannot. It has also allowed our mobile ECMO team to perform mobile ECMO in our own aircraft, without assistance from the army.

Presently, Angel Flight consists of four specialty teams: neonatal, high risk OB, pediatric and mobile ECMO. Our mode of transport is dictated by availability of aircraft, not by patient acuity. We generally perform 75% of our transports by helicopter, 23% by ground and 2% by fixed wing. In FY 2000 we performed 1643 transports, in FY 2001 we did 1679 and in FY 2002, we performed 1785. We average five patient transports a day. Due to our high volume of flights, the members of the flight team work exclusively for Angel Flight and do not staff in the hospital during down times.

The neonatal team performs approximately 50%-60% of the transports. This team consists of a neonatal flight nurse and a flight therapist. They bring in 99% of the patients that are admitted to our almost 70-bed Level III Neonatal Intensive Care Unit (we have no labor and delivery unit). There are two neonatal teams available at all times, and we routinely have both out at the same time. These teams have the capability of utilizing nitric oxide on all modes of transportation, as well as providing all levels of intensive care while on transport.

The pediatric transport team performs approximately 40%-50% of the transports. This team consists of a pediatric flight nurse, a flight therapist and a resident who has completed checkoff by our medical director. The PICU team transports patients from seven days old to approximately 21 years of age. They also transport burn patients of all ages, as we are the only burn center in the region. This team brings in approximately 20%-25% of the patients who are admitted to the PICU and approximately 1%-2% of patients admitted to the ED. The majority of the diagnoses transported by the pediatric flight team are (in order): respiratory illness, other medical, and trauma/surgical. About 70%-80% of the patients transported by the PICU team are direct admits to the PICU. The pediatric flight team offers heliox therapy and nitric oxide therapy on transport, as well as all levels of intensive care. There are two pediatric transport teams available at all times.

The high-risk obstetrical transport team consists of a neonatal flight nurse and a flight therapist. This team is a joint effort between Arkansas Children's Hospital and University of Arkansas Medical Center; Angel Flight performs the transports while the patients are taken to University Hospital. This aspect of our flight team was started in January and is still in an experimental stage. If this team continues out of the experimental stage we expect to transport approximately 25-150 patients a year. Our data have shown that the morbidity of a patient born at University Hospital is lower than that of a patient born at an outlying hospital and transported to an NICU by any transport means. The few mothers we have transported so far have had very good results, and the future looks promising.

Our mobile ECMO program is still going strong today. They perform approximately 4-7 mobile ECMO transports a year, serving all of Arkansas and the surrounding states. They have never had a death on a mobile ECMO transport and are one of only two teams in the U.S. that perform mobile ECMO by air. The mobile ECMO team consists of a cardiac surgeon, a perfusionist, an ECMO coordinator and either a cardiologist, pediatric intensivist or neonatologist (patient specific).

The flight therapists are a strong part of the Angel Flight team. We work on all the transport teams except for mobile ECMO. When the team began, RTs only went on flights that were for vented patients. Today, a flight therapist goes on all flights. The RTs are not specialized to one team or patient population. As a flight therapist on Angel

Flight, you may go pick up a 500 gram neonate in the morning and a 200 pound 75-year-old burn patient in the afternoon. We work hand-in-hand with the flight nurses and routinely perform or assist with "nursing duties." The flight RTs are heavily involved with the day-to-day maintenance of equipment and are the ones who gather much of the equipment for each flight. The ten flight therapists who are on staff today have worked for Angel Flight for an average of nine years apiece.

The future of Angel Flight at Arkansas Children's Hospital is very bright. The hospital recently purchased two brand new Sikorsky S-76C+ helicopters for the measly sum of $15 million. As of this writing in late summer, these aircraft were scheduled to arrive in September. The interior was designed by the crew members and the hospital really gave us carte blanche to build it. We had to do some fancy talking, but we even put a DVD player and a 10" LCD screen in the back medical wall. The aircraft will be on display at the CAMTS conference in November in Kansas City. This year we expect to perform over 1700 transports, and our numbers have been steadily increasing over the past 5-7 years.

If you ever find yourself in Little Rock, AR, stop in for a tour of Angel Flight and Arkansas Children's Hospital. We think you'll be impressed by all we have to offer. ◆

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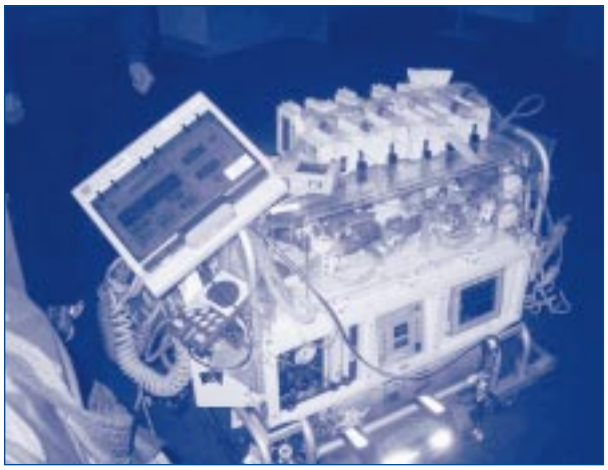
NOTES FROM THE EDITOR

Bulletin editor) are strictly volunteer positions and thus do not cost the Association anything, printing and mailing the newsletters is a costly endeavor, and without adequate numbers, one that soon becomes cost-prohibitive.

I strongly believe that, as RTs who work in the transport environment, we need a forum where we can be recognized and promote our specialty. Whether we transport our patients by ground ambulance or by air, the services we provide are as valuable as those of any team member. And in the struggle to recruit new students into the field of respiratory care, our role in transport can be a huge drawing card.

Currently, our section only has around 230 members, but the good news is that we have slightly over a year to increase our numbers to the 350 necessary to maintain our status as a Specialty Section. If every current member would recruit at least one - and, preferably two - new members to the section, we could not only meet, but exceed, that goal. The added benefit would be to increase not only our section membership but membership in the AARC as well.

In the next Bulletin, I will share some ideas put forth by section members on how we can help improve our professional standing and the section's visibility on a national basis. Until then, may all of your transports end safely for both you and your patients. ◆



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Did you know the AARC sends weekly news updates to AARC members through its *News Now@AARC* e-mail newsletter? Or that the executive office staff conducts surveys, issues AARC Store sales announcements, and sends other general messages via e-mail? If you aren't receiving these important updates, it's probably because your current e-mail address is not in your membership record. To update your membership information and receive all the AARC 4-1-1, contact Catalina at mendoza@aarc.org. ◆

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