

Cardiovascular Care Update

The physicians and staff at Carolinas Medical Center (CMC) have developed a system to organize emergency response protocols to treat patients in record time. One of the many initiatives includes Sanger Heart & Vascular Institute's STEMI (ST elevation myocardial infarction) toolkits. These toolkits have been distributed to referral hospitals throughout the region. The purpose of this outreach effort is not only to improve patient care, but also to reduce stress at bedside as healthcare providers prepare the STEMI patient for transfer to CMC, CMC-Northeast or CMC-Mercy for Percutaneous Coronary Intervention (PCI). Tools in the kit include: STEMI medication recommendations, family and patient education, driving directions to PCI center, PCI facility information and the STEMI patient report sheet.

The STEMI patient report sheet has increasingly become one of the most valued pieces of the toolkit. This patient centered report is concise and was created to outline pertinent information needed for the PCI center. It has assisted with conveying an appropriate report to multiple healthcare providers at the receiving facility by simply faxing it within 20 minutes of paging a STEMI response. The bedside RN no longer needs to give a verbal report if the STEMI report sheet is faxed and received. The report sheet is then utilized for report to the transport personnel and sent with the patient, expediting the transfer.

If there are any questions or comments related to the STEMI toolkits, please contact heather.d.helms@carolinashealthcare.org.



Taking off

Upcoming Events

EMS Night Out
Rowan County
September 2011

EM Today
Greensboro, NC
October 2011

Air Medical Transport Conference
St. Louis, MO
October 2011

For more upcoming events:



MedCenter Air helicopter and Charlotte Fire Department rushing to the aid

OMNIFLIGHT
LANDMARK
AVIATION
camts

1000 Blythe Blvd., Charlotte, NC 28203
MEDCENTER AIR



MedCenter Air Celebrates 25 Years

In May, MedCenter Air celebrated 25 years of service. The first flight of the program was completed May 26, 1986, transporting a famous NASCAR driver injured in a race from Charlotte Motor Speedway. The program began as a single helicopter operation and was a single-engine Bell 209G helicopter. The goal of the initial flight team was to serve as secondary responders bringing capabilities of the hospital to the patient. Today, MedCenter Air is recognized across the United States as a comprehensive transport service offering helicopter, fixed-wing and ground transport.

The rotor wing aircraft was first based on the front lawn of Carolinas Medical Center but then moved to the rooftop in 2003. Out basing daily, crews would report to Carolinas Medical Center and then fly to the out base for the day shift hours. With time, it was recognized that the helicopter was a huge asset to rural communities and was saving lives. The decision was made to permanently relocate the aircraft to the base of the Blue Ridge Mountains, subsequently naming the "Blue Ridge" base. In 2008, it was evident that a third helicopter was needed to meet the needs of the community. The Rock Hill base became operational from Rock Hill Airport. Another milestone for the helicopter operations came in March of 2010 when MedCenter Air took delivery of three brand new helicopters. The new aircraft standardized the fleet and added value to MedCenter Air and the community.

Fixed wing service was added in 1987 as transports were growing in regional

demand. The first airplane was a King-Air 200. In 1997, the King Air was being used for transports requiring longer distances and the decision to add a Citation Jet was made. Today the fixed wing fleet transports international and completes more than 620 transports per year.

Ground transport was added to the MedCenter Air team in 1991 for the neonatal population. The addition of the neonatal truck was needed to bring patients from Mercy South (now CMC-Pineville) and similar facilities back to the main campus. The first critical care ground unit was added in 1994. Today our ground service has expanded and critical care ambulances are stationed at the Blue Ridge Base and Carolinas Medical Center-Union, as well as at Carolinas Medical Center in Charlotte.

Twenty-five years later MedCenter Air as well as Carolinas HealthCare System are well known in the

Continued on page 3



MedCenter Air's original crew



Choosing the Right Landing Zone

Marty Fisher, Lead Rotor Wing Pilot

One of the most frequent questions EMS pilots are asked is, "What kind of LZ is a good LZ?" Well, we would always like to be in a nice open, well-lit field with no wires, trees or buildings. We also know this is not realistic. So how do you as the first responders pick the correct LZ? The first and easiest LZ to chose is one that has been identified and certified as a helicopter LZ. Pre-designated LZ's help speed up the entire scene call process. Pre-designated LZ's have known locations, names and most importantly GPS coordinates that can be pre-loaded in aircraft GPS systems. When an aircraft is dispatched the coordination center can tell the crews, "Your LZ will be County LZ 1". This lets the pilot make a quick entry into the GPS and off they go. From the perspective on the ground, a short drive in an ambulance with



MedCenter Air landing in a safe zone

the patient to a known, pre-designated LZ, will save time trying to drive or walk around the scene looking for a proper place to set up a LZ. If a pilot gets over a scene LZ and feels it is not safe to land we are now back to square one and are using valuable time to find an alternate safe LZ. Local fire stations or EMS should look to recon potential landing zones and periodically check on the viability to land an aircraft in the area (a newly placed cell phone tower may render a once useful LZ now unworkable).

During the flight brief, before each shift, the pilot and crews discuss landing zone briefs for scene calls. A quick reference to use is O.S.S.S. (obstacles, size, shape and slope). Crews will ask the LZ commander to give a LZ brief and the pilot will be listening for these four main things. The best LZ will have limited

obstacles (trees, wires, cars, light poles, etc.) a large size, (at least three times the size of the helicopter's rotor diameter), a long shape (so the pilot and crew can get an idea of what the zone will look like from the air and what may be the best entry and departure routes) and the flattest area possible (helicopters have limits to the slope they can land on).

If a LZ needs to be established because no pre-designated LZ exists, the first rule to follow is, the bigger, the flatter, the better. A small LZ limits the pilot's ability to get in and out of the landing zone. During the summer months, hot conditions limit the helicopter's ability to carry large loads. When you combine the aeronautical limitations of a helicopter with a small LZ, the aircraft may not be able to take off. A large zone gives

a pilot flexibility and options in his or her decision to land and take off. If obstacles around the LZ can't be avoided it is best to identify those obstacles from the ground. Placing vehicles underneath wires and lighting poles will help crews find and avoid the obstacles.

Using these steps when identifying a LZ will help you choose the best and safest zone to use. **Please contact MedCenter Air if you or your agency would like us to come out and give an in depth LZ operations class.**

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MedCenter Air Celebrates 25 Years

(Continued from page 1)



Original MedCenter Air helicopter on the front lawn

national and international transport community. The program maintains Commission on Accreditation of Medical Transport Systems (CAMTS) certification. Preferred provider agreements are maintained with many of our customers and crews constantly undergoing education to ensure the highest quality care is provided.

A 25th anniversary celebration was held May 14 at Charlotte-Douglas International Airport. More than 150 people attended to celebrate and support the successes. The current MedCenter Air team is composed of over 30 registered nurses, 20 respiratory therapists, 10 EMT-paramedics, 12 EMT's, 14 certified aero medical dispatchers, 30 pilots and eight mechanics. The crews and administration would like to thank every one who has contributed to the success of MedCenter Air.

Hot Load Training



MedCenter Air unloading a patient

With many referral hospitals choosing to meet the flight crew near the helipad and assisting with the "hot loading" of patients falling into certain criteria, a safety course has been developed. A MedCenter Air crew member will travel to your hospital and provide a lecture. Weather and call volume permitting, the helicopter will land and allow staff to assist while the helicopter is not running. Staff will also be able to see the workspace and better understand why certain interventions are made prior to loading into the helicopter.

If you feel that your facility would benefit from training please contact our outreach department by emailing Abby.walden@carolinas.org. Abby Walden Peterson will forward your request to the appropriate base liaison.



Helicopter hovering

Code Baby Expedites Care

By: Kearston Rorrer and Amanda Williams



MedCenter Air team assists an infant in need

In March, the neonatal transport team began a new process to expedite the transfer of neonates requiring a higher level of care. The new process has been named "Code Baby". Both the receiving physicians and the MedCenter Air communicators have been trained on the process. There is a list of diagnosis and treatments that trigger the initiation of the Code Baby. Once the process is activated, a nearby helicopter responds to Carolinas Medical Center to pick up the dedicated neonatal transport team. The team loads the isolette and departs for the referral facility. If weather prohibits flight, the same priority is placed on ground transport.

Examples of diagnosis that will trigger a Code Baby include meconium aspiration, respiratory distress syndrome, prematurity and neonates requiring nitric oxide.

The team has completed more than 25 Code Baby transports. Every Code Baby transfer is evaluated for QA purposes as the team constantly strives to improve. Adult team members have been trained to assist with expediting the loading of equipment to assist the team with decreasing the dispatch to en-route times.

With research confirming that the faster a neonate reaches tertiary care, the better Code Baby designation can be life-saving for the neonatal population.

