



Beating the “Window of Time” by Helicopter Faster STROKE and STEMI Transfers Thanks to Community Hospitals and now--EMS!

Air Care is well known for stabilizing and expediting scene trauma, but stroke and heart attack victims must also reach definitive care quickly for their best chance of survival. EMS providers are increasingly making these diagnoses rapidly in the field. Like community hospitals, they can also request immediate transfer to a stroke center or heart center by air. In fact, Air Care has been activated seven times this year by EMS services to a scene location involving a stroke or heart attack. Those practicing this progressive use of resources include **Three Rivers Ambulance Service, Reading Emergency Services, and Huron Valley Ambulance.**

STEMI* and stroke care should begin as soon as possible. Each condition has a narrow window of time to reach definitive care for the best possible outcome. Many patients initially require blood pressure control, airway management, and other stabilizing measures commonly performed in an emergency department. Air Care’s flight nurses can begin these measures on scene just as we do in the hospital while quickly moving the patient to definitive care.

Air Care should be activated immediately when stroke is identified by history and physical exam. Paramedics that identify stroke in the field can call Air Care to begin stroke care as the patient is flown directly to a stroke center like Borgess or Bronson in Kalamazoo. Likewise, Air Care should be mobilized immediately for patients who present at community hospitals with clinical signs of stroke *before* the patient is taken to CT (computed tomography) so no time is wasted. These patients will be transferred to a stroke center regardless of head CT results.

Similarly, Air Care can be activated for heart attack victims with classic symptoms

and ST-elevation on ECG. These patients require no further confirmation of diagnosis and need immediate transport to a facility with heart catheterization capability, such

Rapid Air Care Activation:

*Stroke identified by history
and physical exam.*

*Heart attack presentation
with a STEMI on ECG.*

as Borgess or Bronson in Kalamazoo. Again, deploying Air Care *upon diagnosis* can greatly shorten transfer times. The medical crew carries advanced cardiac therapies like heparin and nitroglycerin infusions and will implement these as indicated en route so no time is lost.

The Air Care flight team is a not only a great option for improved outcomes, but also prevents the temporary loss of EMS and nursing resources from the community when a critical patient must be transferred. Activate Air Care for stroke or STEMI presentations without delay!

*ST-elevation myocardial infarction (heart attack)

Does Helicopter Transport Make a Difference for Medical Patients?

Over the past four years West Michigan Air Care has actively been involved in the national effort promoting appropriate utilization of helicopter resources for trauma patients. This effort culminated with the 2011 publication of the ‘Fly Guides’ which help EMS personnel in making the appropriate triage decisions for when helicopter transport can provide definitive care and speed of transport for trauma patients.

As a leader in appropriate utilization of helicopter resources, West Michigan Air Care also is developing utilization criteria for scene medical patients. **Several studies completed throughout the United States and Canada show impressive results for acute STEMI and stroke patients when aggressive, early intervention by critical care specialists and rapid transport are employed.^{1,2}** These studies and other research are leading West Michigan Air Care to develop the first “Fly Guides for Medical Patients” in the State of Michigan. Stay tuned as we develop these new guidelines that will help improve the morbidity, mortality, and overall cost associated with critical medical patients.



Critical Care Transport at the Highest Level

When you call Air Care for assistance, you're requesting critical care transport at the highest level in our region. As an extension of Borgess and Bronson Hospitals the Air Care medical crew sets a high standard not only for experience and qualifications, but also for continuing education. Two experienced nurses that are also certified paramedics are our standard medical crew, and difficult airways are our specialty. The team performs RSI intubation only after careful evaluation of the patient's airway needs.

"No one at any level has a better, more consistent airway training program than West Michigan Air Care," said Dr. Glenn Ekblad. The Medical Director of 18 years at WMAC monitors medical crew performance through intensive review of patient transport documentation. Dr. Ekblad's enthusiasm is reflected in the agency's rigorous education schedule:

- » Weekly airway training
- » Twice monthly education and case review meetings
- » Intensive chart review process
- » Surgical labs for chest tube insertion and surgical cricothyrotomy
- » Standard evaluations and simulation labs for scenario testing



"Physicians at community hospitals may not realize they are liable for their patient's care during transport," said Dr. Ekblad, who also is an ED physician at Borgess. "The literature and our own region has seen poor outcomes when a single individual with infrequent experience in critical care is tasked with transporting a complicated patient."

The medical crew's experience is a welcome addition to the consulting process. DeWayne Miller, Flight Nurse for WMAC says the medical crew gives regional care

providers a friendly team to collaborate with on critical patient decisions.

"We're just extra help," said DeWayne, who has saved many busy ERs a lot of time over the years by assuming care of a complicated patient with airway needs.

The Air Care medical crew works with thousands of health care providers in Southwest Michigan each year to help improve patient outcomes. When you need a rapid response consult for a critical patient transfer, activate Air Care.

Photo Submission

Thanks to Travis Rader, Paramedic at **Medic One Ambulance** for capturing this wintry moment at **Lakeland Community Hospital Watervliet**.



*Have a great Air Care shot? Send it to photo@aircare.org.
If we use it in print we'll send you a hat and t-shirt.*



CISM – Taking Care of Emergency Personnel

Sometimes a traumatic call can haunt us and begin interfering with life. The cumulative stress of witnessing trauma and death can ultimately lead some to walk away from rescue work.

“I’ve seen too many leave the field because of this,” said Mike Norris, Team Coordinator for Southwest Michigan Critical Incident Stress Management.

The loss of well-trained, compassionate professionals is not only a loss to the public it’s very costly for organizations. Critical Incident Stress Management (CISM) is a systematic debriefing process that can help mitigate traumatic stress. This has proven to be a healthy coping strategy, preventing health care and rescue workers from facing psychic trauma alone.

Large institutions like hospitals have long-recognized the value of CISM, frequently maintaining their own debriefing teams in-house. Fortunately, CISM in Michigan can be requested by anyone at any level. A CISM team leads providers through a series of questions in a group format so they can process the emotions associated with a traumatic incident. Further one-to-one counseling may also be offered. When

a CISM team is called, all individuals involved in a critical incident should be invited to participate. Personnel like medical examiners and dispatchers, for example, are frequently overlooked but can be deeply affected by critical events.

The statewide number to request CISM services is 1-800-969-0025. Life Care Ambulance of Battle Creek funnels requests to Michigan Crisis Response Association (MCRA). MCRA leads critical incident stress management efforts throughout Michigan and more information can be found at www.mcrainc.net. For long-term, cumulative traumatic stress, individual counseling is recommended to promote healthy coping and functioning. Your employer may provide this benefit, or you can find a local counselor at www.mhweb.org.

Our thanks to Mike Norris, Portage Firefighter, Southwest Michigan Critical Incident Stress Mgt. Team Coordinator, and Michigan Crisis Response Association Board Member.



Announcements

Air Care Finds Missing Man. Go to www.aircare.org for a link to this story.

Helipad Openings! Plans are in place to open a helipad at Bronson Battle Creek. In addition, the existing helipad at Bronson Vicksburg Urgent Care has been inspected and is now available. Helipad installation is a cost-effective way to extend the resources of community hospitals and EMS systems.

Physician Educational Opportunity! Review of Emergency Medicine topics Thursdays at West Michigan Air Care in Kalamazoo from 6:30-8:30 p.m. This review follows the emergency medicine residency core topics and changes monthly. For more information contact Dr. Glenn Ekblad at (269)568-0409 or email at glennekblad@yahoo.com.

The Air Care Fitness Challenge!

We hope you were as inspired as we were by Master Trainer Troy Huggett’s “911 Fitness” presentation at our 2011 Fall Conference. Now watch as your favorite flight team lays off the donuts and shapes up. Follow our progress at www.aircare.org

Fly Guides are always available.

These quick references help you decide if your patient needs to be flown. You can print a quick copy off our website by going to the “When to Request” tab. For a laminated copy, call 1-800-922-1234 and ask for Melanie.

Congratulations

CAMTS is often referred to as the “Joint Commission” of helicopter EMS agencies. Air Care’s Director of Clinical Operations, **Jan Eichel**, is a site surveyor for the Commission of Air Medical Transport Services (CAMTS). Recently CAMTS honored Jan with the prestigious Peggy Calhoun Memorial Award for her leadership:

“Jan coordinated a very complicated survey that involved 5 site surveyors, many bases and over several weeks of time. Jan has been a consistent leader and mentor to less experienced surveyors and always has a positive spirit.”

Flight Nurse **DeWayne Miller** has been contributing regularly to EMS One. Look for his articles at www.EMS1.com.

Flight Nurse **Dawn Johnston** received her Bachelor of Science in Nursing from Western Michigan University in August 2011.

A&P Mechanic **Timothy Lechota** was recently awarded the position of Safety Manager at Air Care.

Air Care Medical Director **Glenn S. Ekblad, D.O.**, received the “2011 Outstanding Teaching Award by Emergency Medicine Faculty” from Michigan State University – Kalamazoo Center for Medical Studies.

SAFETY CORNER

Air Care Exceeds 10,000 Safe Patient Transports *A Culture of Safety is No Accident*

Air Care passed a milestone this summer that should not be overlooked with regard to exemplary safety in aeromedical transport. On June 30, 2011 Air Care completed its 10,000th safe patient transport just before 6 a.m.

The FAA has reported that most HEMS accidents are preventable. Air Care is non-profit and non-competitive which means that flights are accepted without the unsafe pressure of competition found in many other areas of the U.S. Air Care's highly trained pilots heed weather warnings and do not accept flight requests

that are potentially dangerous. Should unsafe weather conditions develop during a patient transport (this is Michigan after all), a safe landing is made and the transport is completed by Air Care flight nurses via ground transport.

There are many factors that go into a safe operation including good communication and situational awareness of potentially dangerous conditions. We hold ourselves and our EMS colleagues to standards that promote everyone's safety through landing zone classes and on-the-spot feedback at helistops and scene landing zones.

Thanks for your part in getting everyone home safely!

References: 1) Le May, M., Davies, R., Dionne, R., Maloney, J., Trickett, J., So, D., et al. (2006). Comparison of early mortality of paramedic-diagnosed ST-segment elevation myocardial infarction with immediate transport to a designated primary percutaneous coronary intervention center to that of similar patients transported to the nearest hospital. *The American journal of cardiology*, 98 (10), 1329-33. 2) Ahl et al. (2009). Defining and developing a specialty stroke transport team. *Air Med Journal*, vol. 28 (3) pp. 133-8.



The 2012 Calendars have arrived! First dibs went to our attendees at the Fall Conference. If you haven't received your calendar in the mail, stop by our office and pick up a copy.



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