

# Get Air Care to the Patient Quickly for RAPID STABILIZATION

Air Care doesn't just transfer patients; we help halt the progression of acute illnesses and injuries because we have the protocols and experience to do so.

### Time to Stabilization

"Time to the hospital" is not the only consideration when choosing between air and ground transport. "Time to stabilization" is also very important for any critical patient's outcome. Our flight nurses have the ability to perform rapid sequence inductions (RSI), give blood and tranexamic acid (TXA) for hypovolemic shock, administer medications to reduce intracranial pressure, and provide many other vitally important interventions otherwise reserved for the first 15 minutes in the emergency department. Short of surgery, our crew provides stabilization measures on scene and en route similar to the emergency department that can make a life-or-death difference.

No ground unit in Southwest Michigan has as much consistent training

and extensive protocols to cover the emergent needs of patients.

### What Does Air Care Do Differently Than Ground EMS?

#### **Our Services**

When you call Air Care, you'll get TWO highly trained critical care nurses (who are also paramedics) to assist you. We operate from frequently updated critical care protocols and procedures that are targeted to maintain adequate vital signs while providing interventions such as:

 Complex treatment plans for sepsis, diabetic ketoacidosis (DKA), cardiogenic shock, head injury, and many other conditions

- » Packed red blood cells (PRBC), TXA, and fresh frozen plasma (FFP), if available, for hemorrhagic shock
- » 3% saline for increased intracranial pressure in neurologic emergencies
- » Highly specific ventilator strategies
- » Difficult airway interventions
- » Sedation and pain control

Stabilization is combined with speed, and the flight nurses will take the time to stabilize the patient before and during transport, completing therapies demanded by the patient's condition or those ordered by the receiving physician. <u>In other words,</u> <u>Air Care doesn't just *transfer* patients;</u> we can halt the progression of acute illnesses and injuries because we have the protocols and experience to do so.

#### (continued on page 2)

### Better Sight at Night - Night Vision Goggles Now in Use at Air Care

West Michigan Air Care recently received approval to conduct night vision goggle (NVG) operations by the Federal Aviation Administration (FAA). All pilots and flight nurses have completed the required classroom and practical training and are utilizing NVGs to increase safety at night.

NVGs are passive light amplification systems that can intensify light 6,000 times to allow crew members to see in the dark. Normal visual acuity at night is 20/200, but with NVGs the crew members can see as well as 20/20 at night!

The main reason we are now using NVGs is to improve safety when landing in scene landing zones (LZs) such as fields, county roads, and highways. NVGs also allow our crew members to see other aircraft at greater distances and to identify hazards to and from outlying hospitals.

A sudden light source appears blindingly bright through the NVGs. What does this mean for you? At night time scenes, LZ coordinators should remember it's extremely important to avoid shining bright lights directly at the helicopter. The crew may also ask you to turn off certain lights if they interfere with the NVGs.

Thanks for all you do to keep us safe on scene. By Mark Brynick, Chief Pilot, West Michigan Air Care

### Get Air Care to the Patient Quickly for RAPID STABILIZATION (continued from page 1)

» Ondansetron

» Packed red blood

cells (depending

on patient type)

» Saline 0.9% (warm)

degrees Celsius)

» Sodium bicarbonate

» Succinvlcholine

Terbutaline

» Saline 0.9% (cold – 4

» Oxytocin

» Phenytoin

» Promethazine

» Rocuronium » Saline (3%)

Air Care stocks a large number of medications on board, almost all of which are not used by ground EMS. Depending on patient requirements, our critical care nurses may request medications from the hospital that are not listed here:

- » Adenosine
- Albuterol »
- » Amiodarone
- » Aspirin
- » Ativan
- » Atropine
- Calcium chloride »
- » Ceftriaxione
- Dextrose »
- » Diphenhydramine
- Dopamine »
- Epinephrine 1:1,000 »
- Epinephrine 1:10,000 »
- Esmolol »
- » Etomidate
- » Fentanyl
- » Furosemide
- » Glucagon

### Air Care's Intensive Training Program

Weekly airway skill training: intubation practice rotations that include direct laryngoscopy, AirTraq, and our own Glidescope. Training also includes basic airway skills and supraglottic rescue airways like laryngeal mask airways (LMAs.)

**Education meetings twice monthly:** includes case reviews, guest physician speakers, protocol reviews, scenario training, and surgical skills labs for chest tube placement and surgical airways.

Ongoing clinical experience: consistently transporting the sickest patients provides ongoing familiarity with targeted therapies.

Air Care's medical director, Dr. Glenn

- » Heparin » Hydrocortisone
- » Ipratropium bromide
- Ketamine »
- » Labetolol
- Lactated ringers »
- (warmed)
  - » Levetiracetam
- » Lidocaine
- » Magnesium sulfate
- » Methylprednisolone
- » Metoprolol
- » Midazolam
- » Naloxone

- » Nicardipine

- Nitroprusside »
- » Norephinephrine
- » Nitroglycerin
- Tranexamic Acid (TXA) » Vasopressin

S. Ekblad, D.O., is arguably one of the most involved medical directors of any aeromedical agency. He devotes considerable time to the training and development of the eleven flight nurses that operate under his license. The medical crew is responsible for updating protocols and procedures with current evidence-based medicine, and reading assigned journal articles and studies that affect our scope of practice.

There is no one better to call than Air Care when a critical patient needs transport. For assistance in determining appropriate patients to fly, see our Fly Guides at www.aircare.org.



Have a great photo for our calendar? Email yours to photo@aircare.org. Our thanks to Rob Wetterholt for this action shot as we lift off from Fabius-Park Fire and Rescue.

#### **Air Care Protocols**

Airway/Oxygenation Medication Assisted Intubation Mechanical Ventilation CHF/Pulmonary Edema/Cardiogenic Shock Hypovolemic Shock **Distributive Shock Blood Component Administration Toxic Ingestion** Hypothermia Thermal/Inhalation Injury/CO Poisoning Nerve Agent/Organophosphate Exposure Acute Coronary Syndromes Anaphylaxis Neurologic Emergencies Asthma Hyperkalemia Vascular Emergencies Disorders of Glucose Regulation-Pediatric Electrolyte Replacement Neonatal Resuscitation **Obstetrical Emergencies Discontinuing Resuscitation** Alteration in Level of Consciousness Post-Exposure Prophylaxis Pulseless Arrest Bradycardia Tachycardia Post-Arrest Induced Hypothermia Sedation/Analgesia Nausea IV Reversal Agents and Antidotes Multiple Trauma Orthopedic/Soft Tissue Trauma

#### **Air Care Procedures**

Orotracheal Intubation Surgical Cricothyroidotomy Needle Cricothyrotomy Esophageal Tracheal Combitube (ETC) Verification of ETT Position Verification of ETC Position Tracheal Tube Introducer (TTI) Needle Thoracentesis Tube Thoracostomy Peripheral Venous Cannulation Intraosseous Infusion Nasogastric Tube Insertion **Emergency Childbirth Traction Splinting** 

## Air Care/WMed Poster Presentation Wins Awards!

Air Care recently participated in a research project that won the Best Poster category and also placed first among the Emergency Medicine Presentations. The poster was entitled "Maximum Helicopter Flight Distance That Allows Timely Percutaneous Coronary Intervention for ST-Segment Elevation Myocardial Infarction Patients." The team included Daniel W. Robinson, Matthew L. Heffelfinger, and Glenn S. Ekblad.

The awards were announced at the end of the 32nd Annual Research Day held by Western Michigan University Homer Stryker M.D. School of Medicine at WMU's Fetzer Center on May 13th, 2014.



Daniel W. Robinson



Matthew L. Heffelfinger



Glenn S. Ekblad

## Search and Rescue on April 10, 2014

### A Thank You from Dowagiac Police Department

I am writing this letter to express my appreciation and heartfelt thanks for West Michigan Air Care's assistance in locating a suicidal subject who had taken several pills on April 10, 2014.

On the afternoon of the 10th, our department was advised of a subject who was talking with his daughter by cell phone who was attempting to commit suicide by taking several pills. The subject was beginning to show signs of distress and we knew that our time to locate him was short. We were able to get a general location from a cell phone "ping" however it was a large area and resources were short.

We requested the MSP helicopter and South Bend Medflight to assist in locating the subject however we were denied by both. I called West Michigan Air Care and your crew responded quickly and began communicating immediately with the ground personnel in the area searching.

Within a few minutes of the helicopter being in the area the subject told his daughter he could hear and see the helicopter. This allowed us to send ground units to the area and he was located. He had taken several narcotic medications and was admitted to the hospital and is currently recovering and getting the medical and psychiatric help that he needs.

Your crew did an excellent job and helped bring a positive conclusion to this incident. I believe that if your crew had not decided to fly we would not have located this subject in time and he would have been in much worse condition or worse. Because of your crew and the work of the searchers on the ground a life was saved.

It is comforting to know that we have a partner we can call on to assist when needed to help serve our community. I thank you for the hard work and dedication of your crew for helping us find this subject and keep a family together.

Sincerely, Chief Steven L. Grinnewald Dowagiac Police Department

## Avoid Close Calls - Scene Safety Reminders

- 1. Maintain your "situational awareness."
- 2. Look for and anticipate dangers, don't stumble over them.
- Do not enter violent scenes/ drug overdoses; wait for the "all clear" from law enforcement.
- 4. Wear proper safety gear and equipment every time.
- 5. Operate all vehicles, including yours, in a safe manner.
- 6. Prepare effectively: inspect your vehicle and gear at the start of your shift or after calls.

- 7. Avoid all cell phone usage while driving.
- Always request a "backer" when backing up large trucks and apparatus.
- 9. Use proper body mechanics (and adequate personnel) to avoid lifting injuries.
- 10. Avoid drugs and alcohol when on duty AND when it will interfere with preparatory rest.

-Adapted from EMSWorld: http://www.emsworld.com/article/10319072/10-scene-safety-tips-to-get-you-home-safe-and-sound



## LZ Classes Now in Progress

Air Care has given several Landing Zone (LZ) safety classes already this Spring. Now is a good time to review your Fire Department education schedule and call to request an LZ class. LZ classes are strongly encouraged every two years. We provide all education materials, a live fly-in demo, and it's free! Click "Event Request" on our website www.aircare.org, or call us to schedule: 269-337-2500.

### Now Take Us Anywhere! Air Care's Mobile Website

Go to **AirCare.org/mobile** and save our AC icon to your home screen.

- » Set up a landing zone
- » Use the Fly Guides, step-by-step
- » Request a transport
- » Much more!

### Air Care's Fall Conference — Save the Date!

Our Fall Conference is always the first Saturday in October, so put it on your calendar today! See you October 4th for food, fun, prizes, and stimulating speakers. Nursing and EMS credits available, including Critical Care Paramedic credits. Keep checking our website for more details. See you there!

Find electronic copies of AirWaves at our website: www.AirCare.org Please email comments to AirWaves Editor and Flight Nurse Dawn Johnston at dmjohnston@aircare.org.

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A Cooperative Program of Bronson Methodist Hospital and Borgess Medical Center



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