Miracle “Made” in Manitowoc County

By Pam Witt-Hillen, Flight Nurse

When working through the tough stuff, I remember my fourth-grade parochial school teacher saying, “God provides the wind, but you must raise the sails.” So it is in healthcare, too, where some miracles also require a little earthly intervention.

We are reminded daily that it takes a coordinated effort by many people to save one life. Especially in sudden cardiac arrest, it becomes an “all hands on deck” situation for the resuscitation and chain of survival for our patient. What is the chain of survival? It is an American Heart Association metaphor that uses the links in a chain to describe the actions needed to save a victim’s life. Many people doing the right thing at the right time can positively change the outcome.

Out-of-hospital cardiac arrest (OHCA) is the leading cause of death worldwide. In the United States, only 8 percent of victims survive to go back home with their families. Bystander CPR significantly improves patient outcomes. Well-trained emergency medical dispatchers can help elevate rates of bystander CPR by providing “just in time” CPR instructions to 9-1-1 callers.

This is exactly what happened in the case of a young mother, Sue Rogne, who suffered cardiac arrest at her home on February 21, 2013. With her husband Mark at work and both sons already in bed, Sue laid down with her 7-year-old daughter Emily. “We said our prayers and I turned over and fell asleep,” said Sue. “Shortly after I fell asleep, Emily said I started making noises like coughing and choking. Emily started shouting, ‘Mom! Mom!’ Jacob, my 18-year-old son, came into the room and sent Emily to wake up Adam, our 23-year-old son. Adam dialed 911…”

The word “brave” is not big enough to describe the actions of Sue’s children. Adam and Jacob lifted Sue from the bed and placed her on the floor. With the cordless phone on speaker, Jacob started CPR as guided by a strange voice on the other end of the line.

Continued on page 3
Landing Assured
By Nic Hightill, ThedaStar Lead Pilot

We are in the business of air medical transportation. Almost everywhere we go, we get there by flying. We do this because flying to locations has its benefits. Most notably is speed. When we fly, we can get to where we are going in half the time or better. We also do not need to deal with traffic congestion…very often. And the view…you cannot beat the view.

But just flying isn’t enough. In a helicopter, our options for landing increase drastically, whether it be pre-planned or for an in-flight emergency. We do not need an airport, or a runway, or even a long stretch of road that is free of trees, cars, bridges, and poles. We can land in the parking lot of a rural hospital or in a field next to a small road. In an emergency, the pilot can land anywhere he or she feels is safe.

Although a helicopter can fit in fairly small locations, we have guidelines set forth for our safety and the safety of those nearby. If we are called to the scene of an accident, these guidelines are used to help the fire department or law enforcement officers determine the best place for us to land.

Landing zones shall be a minimum of 100 feet by 100 feet. This is to help ensure we have adequate rotor clearance from trees or other obstacles on our approach path in and to help us maintain an acceptable angle of approach. The landing zone should be fairly flat to help facilitate patient loading and enhance safety in and around the aircraft. Paved surfaces are ideal, but a helicopter can land just fine in sod, gravel, or dirt. Hard paved surfaces are less likely to catch a helicopter skid, which can cause the helicopter to roll over. Gravel and dirt surfaces are more likely to have loose debris that can be blown into the air and can cause a situation called “brown out,” where the pilot cannot maintain visual contact with the ground and surrounding areas because of the blowing dust. Most important of all, the landing zone requires communication. The three crew members on board the aircraft are communicating among each other and with personnel on the ground. On board we are discussing the approach path in, an escape route out, and where all the obstacles are. Trees, poles, and wires do not mix well with helicopters.

From the ground, we will receive information about wind strength and direction, surface type and slope, proximity to the scene, security of the landing zone, and, most importantly, location of obstacles. Personnel on the ground might have a better view of poles and wires that are hard to distinguish from the air. They also have the opportunity to walk through the landing zone to make sure there are no hidden areas of concern or loose debris that can be blown into the helicopter, preventing us from taking off again.

Traumatic scenes truly are a team effort. Multiple agencies are working in close proximity and under increased stress to help save lives. Without proper communication, coordination is lost, errors increase, and potentially disastrous events can occur. We are truly grateful for all of our brothers and sisters on the ground that watch our back when we fly in. Their concern, hard work, and attentiveness help make sure that our landing is assured.
A Change in STEMI Protocol
By Nina Schaeve, Flight Nurse

Every day the FDA is approving new medications that we can hope will make an improved impact on the well-being and safety of our patients. Brilinta, or Ticagrelor, is one of these drugs and it has made its way into the ThedaCare CODE STEMI process in September 2013 as the latest and greatest inhibitor of platelet aggregation. Ticagrelor is indicated for the prevention of thrombotic events (for example, stroke or heart attack) in patients with acute coronary syndrome or myocardial infarction with ST elevation. Not only has ThedaCare jumped on board here, but so has Valders Fire and Rescue! We are eager to hear who else has made this transition out in the field.

A very large study, PLATO, was performed on more than 18,000 patients, showing a decrease in cardiovascular death, myocardial infarction (MI), and stent reocclusion after percutaneous coronary intervention (PCI) or balloon angioplasty even after 12 months when compared to Plavix. Due to this, Brilinta will replace the use of Plavix in our population of heart attacks in both the hospital and field worlds. A big pro in the use of Brilinta is that its absorption rate is much quicker. After only 30 minutes, more than 40 percent of the drug is absorbed, and around 88 percent after two hours. It can take longer than eight hours for these levels of the drug to occur with Plavix. The 180 mg Brilinta loading dose should still be paired with a 325 mg dose of aspirin. Then, similar to the protocol for Plavix and Aspirin use post-MI, the maintenance dosing of Brilinta is cut in half and paired with a baby aspirin only.

Brilinta is more likely to cause dyspnea and increased bleeding than Plavix does. Both drugs interact with a large number of other drugs, but what drug on our market today doesn’t? For many of the above reasons, ThedaCare supports the use of Brilinta.

Sue’s Chain of Survival that saved her life!

Sue went home from the hospital neurologically intact with an implanted automatic internal cardiac defibrillator! Mission or miracle accomplished! Whichever you prefer….wish granted! A young mother will celebrate many more Christmases with her family for years to come because of the concerted efforts of so many. Sue’s family is eternally indebted to all those who helped save Sue. And we applaud our dispatchers like Katie for thinking outside the box on any given workday. A miracle like Sue’s validates what we all do for a living!

It’s a good time not only to tell stories of miracles, but to think about miracles in your own life and be grateful for them.

FOCUS ON SAFETY

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Sparking Community Support for Needed AEDs and Defibrillators

Early defibrillation is the most important intervention ensuring survival from sudden cardiac arrest. By improving both public access to early defibrillation and public education regarding AED operation, significant lives can be saved.

The purpose of early defibrillation is to reestablish a normal spontaneous rhythm in the heart. Damage from a heart attack most commonly makes the heart susceptible to ventricular fibrillation, or V-fib, in which the muscle cells in the lower chambers of the heart start to fire erratically. This causes the heart to twitch unproductively rather than contract forcefully enough to eject blood throughout the body. The result is sudden death. Sudden death can be prevented only by the application of defibrillator electricity that will discharge the erratic signals all at once so normal heart rhythm can ensue.

It All Started with a Single Donation
Green Lake County

It started with a single donation by siblings Pat Prill and Jon Wilsnack of Markesan in memory of their father this past March. It ended in early October with the delivery of 18 brand new automated external defibrillator (AED) units to the Green Lake County Sheriff’s Department — one for each emergency vehicle in the department’s force. Current statistics say only 5 percent to 8 percent of people survive cardiac arrest outside the hospital setting. However, this survival percentage jumps to 70 percent when an AED is available.

Sheriff Deputy Mark Podol recognized that his deputies are only minutes away from cardiac victims when they need help. He originally spoke to his rotary club in Green Lake about the idea of raising money for needed AEDs, and “the campaign was off and running,” he said. Green Lake community members responded in force. He stated, “It was a wonderful thing to be able to see this whole thing start with an idea and end with a brand new AED unit in each emergency vehicle!”

Golfing for an AED
Gold Cross Ambulance

Gold Cross Ambulance held its 15th annual HeartStart Golf Outing on July 22, 2013. This year more than $8,600 was raised, with 121 golfers participating.

Since its inception in 1999, GCA has funneled almost $93,000 to the Gold Cross HeartStart Foundation. Over these 15 years, it has donated 54 AEDs, 44 replacement pads, 32 AED signs, nine AED cabinets, and three AED trainers. These items were donated to parks, schools, pools, churches, public facilities, and both the Appleton and Neenah Downtown AED projects.

Way to go, Gold Cross!

Next year’s outing will be held on July 28 at Royal St. Patrick’s Golf Club.
AED Pumpkin Fest
Kiel

ThedaStar was honored to attend Pumpkin Fest, where the community of Kiel came together to help raise funds for AEDs for the city’s ambulance. Piggly Wiggly in Kiel sponsored the annual Pumpkin Fest and “is always looking for ways to contribute to their community,” said Store Director Rick Saeger.

This year’s fest on September 28 was used as an opportunity to feature fire and emergency medical services (EMS) and help local EMS raise money for two defibrillators for Kiel Fire and Rescue Ambulance.

Mark Beitzel is owner of the store, and because his daughter Jenny works for the ambulance service, Piggly Wiggly was aware of the department’s need for AEDs. The turnout was great! All proceeds for the brat fry will go toward the new AED. Piggly Wiggly has also donated a “chopper” motorcycle, which is on display in the store for a future raffle to help support the purchase of the AEDs.

Increased public access to defibrillators means increased lives saved!

The Burden of Heart Disease
by the CDC (Center for Disease Control)

❤ About 600,000 people die of heart disease in the United States every year — that’s 1 in every 4 deaths.

❤ Heart disease is the leading cause of death for both men and women. More than half of the deaths due to heart disease in 2009 were in men.

❤ Coronary heart disease is the most common type of heart disease, killing more than 385,000 people annually.

❤ Every year about 715,000 Americans have a heart attack. Of these, 525,000 are a first heart attack and 190,000 happen in people who have already had a heart attack.

❤ Coronary heart disease alone costs the United States $108.9 billion each year. This total includes the cost of health care services, medications, and lost productivity.
Emergency and Health Care Workers “Not Immune” to Illness or Injury
By Holly Gunderson, RN, Wild Rose Hospital ED and Certified Wound Care Nurse, Wild Rose Hospital

Claire Morgan Hood was born to Amanda and Brandon Hood on July 28, 2013. Brandon, a Waushara County Sheriff’s Department detective, and Amanda, a registered nurse at Wild Rose Hospital, brought baby Claire home on July 31, 2013.

At home to greet their new bundle of joy was their golden retriever, Kenzie. Brandon and Amanda — who took family leave time together so they could enjoy their lives as first-time parents and bond with Claire — were somewhat concerned over the reaction Kenzie was going to have to the baby, as she was afraid of everything that was being bought and set up for their baby’s arrival. However, Kenzie came running and gave Claire kisses all over her face and was not afraid of her at all.

On August 5, 2013, Brandon and Amanda received a phone call that changed their lives forever. They were advised that the newborn screening done on Claire was positive for Severe Combined Immune Deficiency (SCID). Additional blood tests had to be done, and Claire had to be admitted to UW Children’s Hospital. It was there that they determined Claire had T negative, B positive, NK positive SCID. This refers to the three types of white blood cells that are produced by bone marrow. SCID causes an infant to have very little to no immune system and, as a result, be unable to fight off infection. Many people remember this disease as the bubble boy disease when a boy in the 1970s had to live in a bubble to prevent infection.

Luckily for Brandon and Amanda, Wisconsin is one of a handful of states that test for SCID as part of the newborn screening. Many states do not do this, and many cases of SCID go undiagnosed and are generally fatal in the first year of life due to infection. A bone marrow transplant can cure baby Claire from SCID, but she has to be 3 months old before for the transplant can be done. Amanda and Brandon have found a match for baby Claire and are in the final stages of preparation for the transplant. Claire has to go through chemotherapy before receiving the bone marrow transplant. She will then need to be in the hospital for approximately five weeks.

At a time when new parents like to show off their pride and joy, Brandon and Amanda have to protect Claire from being exposed to infections — especially those that are potentially life-threatening. They are unable to have visitors at their home or take her out in the public because of the risk. She is able to go to doctor appointments, but then she has to be heavily covered to prevent any infection exposure.

Please keep Brandon and Amanda in your thoughts and prayers as they go through this difficult time with baby Claire.

FOCUS ON SAFETY

Accidental? Preventable!
By Kathi Hegranes, Injury Prevention Coordinator, Theda Clark Medical Center

Now that the leaves are falling, it won’t be long before snowflakes follow. So while you rake away fall, get ready for winter by going over this snow blower checklist.

- **Never** try to clean the auger or discharge chute with your hand. This is the most common way to be injured by a snow blower.
- **Keep** your hands and feet clear of all moving parts.
- **If** you need to clean an auger or discharge chute, shut the snow blower engine off and clear it with a broom handle or the special shovel that some new machines come with — not your hand.
- **Make sure** that the discharge chute is aimed away from people and pets.
- **Be careful** of the muffler and other hot engine parts that can cause a burn.
- **Never** add fuel to a snow blower that is running.
- **Avoid** wearing scarves and other loose clothing that could become entangled in the snow blower’s moving parts.
- **Never** leave your machine running unattended.

**Remember,** even after a snow blower is turned off, tension and pressure are stored in the rotor blades, and anything stuck in the discharge chute or auger is at risk for being mangled or amputated. Do not disable safety features, and read the owner’s manual to identify the safest way to operate your snow-throwing helper.
ThedaStar Dispatch

ThedaStar SPOTLIGHT

Theda Clark Reverified as Level II Trauma Center
By Tabitha Uitenbroek, trauma coordinator for the Trauma Center at Theda Clark

The Trauma Center at Theda Clark Medical Center was recently verified as a Level II trauma center for the sixth time, the longest continuously verified Level II trauma center in Northeast Wisconsin. The Level II verification is a national program by the American College of Surgeons (ACS) Committee on Trauma.

Theda Clark is one of only eight Level II trauma centers in Wisconsin; the state has three Level I hospitals with the main difference being that those facilities are considered teaching hospitals. In 1998, the Trauma Center at Theda Clark became the first Wisconsin hospital outside of Milwaukee and Madison to be verified. Each verification lasts three years.

Raymond Georgen, MD, medical director of the Trauma Center at Theda Clark, said the Aug. 14 shooting of an employee at the Wal-Mart in Neenah and how quickly she received treatment shows the importance of having a Level II facility in the Fox Cities.

“The resources and staff here to treat a variety of trauma-related injuries. The verification from ACS shows we are ready at any time a person suffers a traumatic injury and that we are providing the best possible care,” he said.

According to the National Trauma Data Bank, the Trauma Center at Theda Clark treats patients with more severe injuries than the national average. Yet, Theda Clark has a similar mortality rate and better outcomes than similar national programs. In 2012, the top two types of injuries treated at the Trauma Center were motor vehicle crashes (31 percent) and falls (27 percent).

The Trauma Center at Theda Clark serves 10 counties, including Winnebago, Outagamie, Calumet, Waupaca, Shawano, Menominee, Waushara, Green Lake, Fond du Lac, and parts of Sheboygan.

Crusaders for the cure

Crusaders for the cure, Dale Fire and Rescue held their annual Cancer Walk on October 5th. The turnout was great. Did you know someone in the U.S. is diagnosed with breast cancer every 3 minutes and dies every 8 minutes from breast cancer? Pink is not just a color; pink is an attitude.

Thanks Dale Fire and Rescue!
• Congratulations to the Shawano Area Fire Department, which received a new portable Jaws of Life. The department purchased the equipment with money raised at fundraisers.

• Congratulations to Anita Loose on her retirement from Hilbert Potter First responders after 13 years of service to her community!

• Congratulations to Seymour police officers T.J. Hilgenberg and John Fuller, for receiving Outagamie County District Attorney’s Best Badge Award for work in a sexting case in 2012.

• Congratulations to Ann Christensen, NICU nurse at Children’s Hospital of WI, Fox Valley. She received a NICU Hero Award for 2013 from Hand to Hold and Mead Johnson Nutrition.

• Congratulations to Jennifer Fredriksen, new manager of Theda Clark’s Emergency Department. Welcome Jennifer!

• Congratulations to Jim Welch, the founder of Gold Cross Ambulance, and Barry Tomaras, founder of Waupaca Area Ambulance. They were both honored with the Professional Ambulance Association of Wisconsin’s Stars of Life Awards.

• Our Condolences to the friends and family of Robert H. “Gundy” Gunderson who passed away on Saturday, October 26. He was a member of the Iola Fire Dept, worked for the Village of Iola street Dept. and Iola Police with Don Loken, and served in the the National Guard.
Stories of Whole-Hearted Gratitude

By Pam Witt-Hillen, Flight Nurse

Amazing Anniversary of 3’s

Three-year-old Ethan Luedke and his parents, Kevin and Erin, made their annual trek to Children’s Hospital of Wisconsin and Theda Clark to thank all the “people that came to our rescue” three years ago when Ethan was born three months early and suffered from respiratory distress syndrome due to prematurity. Children’s NICU team flew Ethan from Aurora Hospital to Children’s Hospital via ThedaStar. They are grateful “that all the right people were in the right place at the right time,” resulting in the best possible outcome for Ethan.

“Amazingly, despite being born at 29 weeks gestation, Ethan avoided all possible complications, such as brain or retinal hemorrhages. We hope to make our gratitude trip an annual tradition,” Erin said.

Thank Goodness

One can rarely watch the evening news without viewing a story about EMS workers risking harm to rescue someone in need. Countless human lives are saved every day because of the brave actions of our emergency first responders. Thank goodness for these selfless people who risk their own lives to save others! EMS workers are called upon to be mission-ready in a moment’s notice. They throw on their “suit of armor,” or boots and uniform, and find themselves on the front lines, thrust into some pretty unimaginable situations with very little information available. And then we call upon them to bring an out-of-control situation to order and hopefully save a life.

Thank goodness Alex Peterson, firefighter and first responder for the Saxeville-Springwater Volunteer Fire Department, escaped serious injury when he hit a deer with his truck after he was paged out for an emergency call in Waushara County.

The importance of volunteers to the delivery of emergency care to a community cannot be overstated. As volunteerism is a rich tradition in the United States, so has emergency medical services depended on volunteer support for many years. Individuals volunteer their time, capabilities, and energy for the benefit of the EMS agency and the accomplishment of its lifesaving mission! People volunteer for a variety of personal reasons, such as “wanting to help others, giving back what I got, for a sense of citizenship, or interested in the type of work being done,” etc.

Please remember to always buckle up! Then remember to thank the many amazing first responders making a difference in your town with their public service. We owe a debt of gratitude to these selfless people.

Birthday Giving Feels Good

On her eighth birthday, Peyton Blaylock decided that instead of receiving presents from her friends who were invited to her birthday party, they should please bring some type of non-perishable food item to be given to those less fortunate. She also went shopping with her dad, Dan, who is a ThedaStar communication specialist, to buy toothbrushes, toothpaste, shampoo, and soap to add to these items. The best part of the story was after she delivered the items to the Fox Valley Emergency Shelter, when she asked her father, “Can I do this same thing next year for my birthday?”

Even in a world so focused on me first, one little girl put the needs of others over her personal wants on that one day of the year that was truly about her! She showed us that giving feels good.

Consider the nature of the work, sometimes the rescuer needs rescuing. Alex became a first responder in January of 2012 because he finds great satisfaction in helping people in need. He said, “There is no better feeling than when someone you helped comes up to say thank you and you truly know you made a difference in someone’s life.” After hitting the deer, Alex would be the one thanking his own first responder group who “rescued” him. He was treated at Wild Rose Hospital and “luckily walked away with a bruised trachea, whiplash, and some bruises on his shoulder and hip from his seatbelt.” He stated, “If I wouldn’t have been wearing my seatbelt, I am sure the outcome would have been a lot worse for me!”

The moral of Alex’s account is twofold. Seatbelts save lives and so do the many EMS personnel who put their own lives on the line daily for those needing help in our communities. If perhaps you are considering a few New Year’s resolutions, now might be a good time to consider these.

Stories of Whole-Hearted Gratitude continued on back.
Stories of Whole-Hearted Gratitude

By Pam Witt-Hillen, Flight Nurse

Saving Christmas in Rome

On an October evening back in 2009, I was having dinner with my wife and two teenage sons at Applebee’s in Wisconsin Rapids. While waiting for our food order, I heard a commotion at a table across the restaurant. I looked over and saw an older gentleman in obvious distress sitting at a booth. I realized he was choking and could not breathe. I jumped over my son, went over and got myself in behind the man, and proceeded to administer the Heimlich maneuver. After several abdominal thrusts, a large piece of steak dislodged and he started breathing. I made sure he was all right and told the manager that an ambulance was not needed.

I returned to my table and my oldest son asked me, “What just happened?” I told him, “I paid attention in school, and I guess my training had paid off.” Several people came over and thanked me for my quick action in helping him.

The next week at our fire department drill night, I was in an officers meeting when there was a knock on the door. I was told someone was here to thank me. I met the gentleman from the restaurant. He had come to thank me for saving his life and wanted to buy my dinner, since he felt he ruined mine that evening. I assured him he had not and I was glad I could help.

Later, several members of my department came to me and asked how I came to meet this gentleman. One officer told me he was a beloved member of the community. He was a retired bus driver for the local school district, and every child over the past 40 years knew him. He also was Santa Claus every year at the community Christmas party. So, I was given credit for saving Santa Claus that evening.

Make a Wish for Jack

In EMS it is impossible not to be touched by our patients and make significant human connections.

Twelve-year-old Jack Goerlinger recently received a wish through the Make-a-Wish Foundation. While he is extremely grateful, Jack said with uncanny honesty, “My real wish is that this never happened to me.”

Jack has microscopic polyangiitis (MPA). The annual incidence of MPA is three cases per million people.

Microscopic polyangiitis (also known as microscopic polyarteritis) is an autoimmune process of unknown etiology that causes systemic inflammation of blood vessels. When blood vessels become inflamed, they become weakened and stretch, forming aneurysms, or become so thin they rupture, bleeding into the tissue. Vessels also can close off entirely, causing organs to become damaged from the loss of oxygen or nutrients that were being supplied by the blood. Kidney (renal) or lung involvement can lead to organ damage, as in Jack’s case.

Just less than a year ago, Jack suddenly experienced fatigue, headache, fever, and weight loss, which quickly led to renal failure. When told he was in renal failure, Jack’s mother, Amy, responded with, “What’s renal?”

Today Jack, Amy, and Jack’s father, Mark, are near experts on renal failure now that Jack is on dialysis three times a week and restricted to a “renal” diet.

EMS workers are not immune to such life-changing events. Jack’s father, Mark, is a Waupaca County Sheriff’s Deputy who encounters ill or injured people daily in the 911 system; and now it would be his own son in crisis. Because of all this, Jack is so grown up “head and shoulders above other 12-year-olds.” Jack’s mother told us outcome is strongly related to the severity of the disease and “Jack’s determination.”

Because of prompt treatment, Jack is currently in remission. While his lung function has returned, he will need a kidney transplant, but he must wait one year to begin the transplant process, ensuring no more flare-ups that could put his new kidney at risk. Jack is a universal kidney recipient or AB positive; his parents hope one of them is able to be a donor.

Jack’s seventh grade class and his EMS caregivers stitched together a quilt to let him know how much they care (see photos above). As diverse as the colorful squares, so are the bonds with our patients woven into the fundamental fabric of our EMS hearts.

Our wish for Jack is a full recovery to a healthy, normal, disease-free life!