## HEARTBEAT SERVING WOUNDED WARRIORS

Let the Healing Begin.....



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### Let the Healing Begin .....

Heartbeat Serving Wounded Warriors was founded in 2009 by Janice Buckley. Following the events of 9-11, Janice had a desire in her heart to help military service members. She volunteered with USO as well as baked brownies for the Washington National Guard members. In 2004, she connected with Operation Homefront National and founded the Washington State Chapter. For five years Janice managed this chapter and the many volunteers that helped. However, in 2009 she felt a God given passion to serve only Wounded Warriors and their families and launched Heartbeat Serving Wounded Warriors. She has been managing this nonprofit for the last twelve years.

Heartbeat's two therapy programs, Back in the Saddle Warriors (BITS) and Scuba Warriors, also started in Janice's heart. After a significant amount of research regarding Wounded Warriors and the healing of Scuba Diving, she initiated the therapy program in March of 2010. She also received some guidance from one Wounded Warrior who also did Scuba. The goal of the program was not only to learn how to dive and receive the certification to do so, but to help improve the lives of Wounded Warriors both physically and psychologically. The classes have always been composed of small groups of warriors, the instructor, and some assistants. This program continues to be a successful and clinically based therapy.

Back in the Saddle Warriors was also initiated in March of 2010. The first class was a retreat with a number of Wounded Warriors being exposed to horses and the program over a two day period. It was extremely successful and warriors, who had previously feared working with such a large animal, were now equine enthusiasts. This program has changed over time and now incorporates learning how to ride horses as well as utilizing the horse as a physical therapy tool and a psychological tool. In October 2017, Back in the Saddle Warriors expanded to help Wounded Warrior families with developmentally or physically disabled children. It seemed there were numerous warrior families that also had disabled children which added to the stress in their lives. When several families were asked if they would be interested in such a program for their child, there was a resounding yes. BITS KIDS was born.

Finally in November 2020, BITS COUPLES was established to help the marital relationships of Wounded Warriors. Now Heartbeat's equine program is caring for every member and every relationship of Wounded Warriors.

In April of 2015, Heartbeat initiated a service dog program called K9 Healing Warriors. This program requires a significant time commitment to train their canine companion, nine months to a year. The pilot consisted of one Wounded Warrior and her service dog, which was just a puppy. It was a huge success, so in October 2016, K9 Healing Warriors was open to Wounded Warriors. Janice was equally concerned about the warrior as well as the dog. The training partner Heartbeat joined forces with has turned out to be an individual that shared all of Heartbeat's concerns.

Each of these therapies individually would be overwhelming to a small organization such as Heartbeat, but Janice and the therapists in each program have worked especially hard to make each of these successful.

#### BACK IN THE SADDLE WARRIORS

"Every single second with him was time spent with a totally forgiving, non-judgmental, soft, warm, empathetic, loving friend. He was the love of my life and my soul mate. I could bury my face in his mane and cry when I needed to cry and he would turn and lay his head on my shoulder. I could climb on and fly and there were no worries or pain. He asked only for love, his basic needs and an open heart. He gave me back strength and confidence and faith in myself."

#### Personal blog from a Navy officer on equisearch.com forums

Back in the Saddle Warriors (BITS) was initiated in 2010. This program combined Janice's love of horses and her devotion to Wounded Warriors. The program consists of three parts: BITS WARRIORS, BITS KIDS and BITS COUPLES. BITS WARRIORS is used to capture those warriors who do not fit in the "normal box" for treatment. For many warriors, sitting in a room with a therapist does not bring the desired results. Using the horse in Equine Therapy allows the warrior to "be outside the box," to enlarge the healing process. This therapy is presently being used for warriors with traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), spinal cord injuries, traumatic amputations, and other injuries due to shrapnel damage.

Horses and humans have something in common: a pelvis that works and moves in the same way. Both have identical hip movements when walking. Sitting on a moving horse allows the warrior's body to move naturally. It strengthens muscle groups. Staying upright on a horse requires balance, coordination, and muscle strength. Injuries from war may have affected those abilities, and these can be improved with this type of therapy. In addition to the increase in strength, balance and coordination, being outdoors, learning new skills and forming a bond with an amazing animal are an added bonus.

There is also a grooming component to the therapy. The care and closeness given to the horse is beneficial to the warrior. The grooming can be calming and help even the most isolated warrior. Grooming and communicating with the horse helps the warrior overcome his emotional numbness and increases his ability to communicate. It can also help the warrior with issues of trust, relationships, patience, and boundaries.

Warriors are natural protectors. It is their job to take charge and perform brave acts every day. Injuries sometimes make it impossible to contribute in a meaningful way. This dramatically changes the warrior's role within the family, job, and society. The relationship between humans and horses has long been a special one. Horses, gentle and sensitive, have a unique ability to sense human emotions. This special bond helps warriors to work through difficult issues. This can build confidence and change their outlook on life. In short, it can help bring

about healing. Many of these warriors have never been around horses and are apprehensive at first. But, after a few times, they begin to relax both their minds and their bodies.

The therapies are individual to each warrior, depending on the need. The therapy involves both riding and a therapeutic exercise regime, which uses the horse as a tool. Many of the warrior's state that they cannot replicate the benefits they achieve on the horse compared to a standard gym. One Wounded Warrior in our Equine Therapeutic Riding Program shared his story:

Prior to beginning our program, J. was prescribed 18 different meds and could not walk without a cane. After participating in our program for several months, he is only requiring 2 medications and can walk without his cane. He attributes these changes completely to the BITS Program. Our program has also helped him psychologically with his PTSD. He is able to communicate better with his family and his affect is so much calmer now. Much of his anger is gone. His wife has also commented that there is a dramatic improvement with him and she also feels that this is due to his work in the BITS Program.

This program is available to any warrior wounded or injured from the Global War on Terrorism or from the Vietnam era in Washington State. The sessions are individual and take place every Tuesday and Saturday of each month.

Beginning in October of 2017, Heartbeat instituted BITS KIDS. This program is specifically for disabled or special needs children of Wounded Warriors. The therapy is for children age 3 to 13 and can improve joint mobility, balance and coordination, relaxation of spasticity, increased muscle tone, self-confidence and improved learning. Goals are discussed with the child, parent, and our PATH instructor to determine the individual plan. Each session is one hour and takes place every Tuesday and Saturday each month.

Beginning in October of 2020 we introduced a new program: BITS COUPLES. This therapy also takes place on Tuesday and Saturday each week for an hour for each couple. This therapy utilizes the horse to help the couples communicate better. The horse actually retrains them by not allowing them to act out or react off of each other. Instead, they will learn to respond to each other. They retrain their brains to learn how to achieve a "calm space". This calm space is a good space to be in for interactions with the horse and with each other. Each individual works with a horse but the couple uses each other to help with the task.

Recent studies showed a significant number of suicides demonstrate a direct correlation to the dissolution of a marriage or intimate partnership. PTSD, depression, anxiety and substance abuse are often related to a failing, failed or absence of a relationship at home. BITS COUPLES can help mend some of these tension filled relationships.

The objectives for BITS WARRIORS are multiple: to reduce pain symptoms, to increase personal self-confidence and self-reliance, to decrease the harmful psychological symptoms resulting from TBI and PTSD, and to increase levels of balance, coordination, muscle strength, flexibility, and motor development. A second benefit is that the warrior actually learns how to ride as well.

For BITS KIDS the objectives are also multiple: to improve muscle strength, psychological well-being, motor development, balance and coordination and to facilitate problem solving, confidence and self-esteem with the addition of also learning how to ride.

BITS COUPLES objectives are to improve their ability to communicate with each other and to strengthen the marriage while learning how to ride and do an activity together.

As with all of Heartbeat's therapy programs, BITS is also cost free for the warrior or family member. The cost for 1 warrior, or 1 child or 1 couple is \$600.00 per month. Heartbeat is happy to pay these costs as the therapy has been so successful. At this time we have 2 children in BITS KIDS, 2 warriors in BITS WARRIORS, and 2 couples in BITS COUPLES.







Healing Hearts Ranch is a beautiful and serene equine facility located in Olympia Washington. It is 22 acres and the home of Heartbeat's Equine Therapy Programs. The ranch itself is tranquil and the horses are very well cared for by the owner, Kristy Dees. There is an indoor arena when the weather is not cooperating and acres of trails through lush woodlands, a perfect place for Wounded Warriors to heal. In addition, Kristy is licensed not only as a PATH (Professional Association of Therapeutic Horsemanship International) Instructor, but she is also a certified Peer Counselor for Mental Health Support. Heartbeat feels extremely blessed to have both Kristy and her facility for our programs.



A female warrior lying back on the horse while it is moving. This soldier is so comfortable with this horse that she has used for several weeks. She is able to lie back and hold this position while the horse is moving. This requires a significant amount of trust between the horse and the rider. As the warrior rides feelings of peace, balance and trust are cultivated. Many of the warriors have stated that they look forward to the program with feelings of joy, which is new to them. Sometimes the joy is anticipatory, experienced several days before the session itself.



A Wounded Warrior spends time with his horse after the therapy session. The close bond these Warriors develop with the animals is part of the therapy. Horses like to bond and they even feel that with humans. The human response to this bonding experience is to release "feel good" chemicals like oxytocin and dopamine. This enables the warriors to relax and many state that they look forward to the program with a feeling of joy. In a recent study by the HeartMath Institute this healing that occurs when humans are around horses is explained:

...the heart has a large electromagnetic field. A magnetometer can measure the heart's energy field radiating up to 8 to 10 feet around the human body. While this is certainly significant, it is perhaps more impressive that the electromagnetic field projected by the horse's heart is five times larger than the human one and can actually directly influence our own heart rhythm.

Horses have a "coherent" heart rhythm, which explains why we feel better around them. A coherent heart pattern is a robust measure of well-being and consistent with emotional states of calm and joy.

A coherent heart pattern is indicative of a system that can recover and adjust to stressful situations very efficiently. In fact, research shows that people experience many physiological benefits while interacting with horses, including lowered blood pressure and heart rate, increased levels of specific neurotransmitters that suppress pain, decreased stress levels, reduced feelings of anger, hostility, tension and anxiety, and increased feelings of trust patience and empowerment.



A Wounded Warrior saying goodbye to his horse after the riding session. It is not just the children that develop attachments to the animals. Horses provide the opportunity for safe and rewarding bonding which can help reduce tension, elevate mood, and combat emotional numbness. A study that tested warriors over a period of six weeks found that there was a 66.7% decrease in PTSD scores at three weeks and a decrease of 87.5% in six weeks. Another study showed improvement in communication and clarity of thought.



This male soldier is riding without hands to improve balance. This is very difficult to do and also involves a significant amount of trust between horse and rider. Many times the exercises not only help physiologically but also psychologically. Here, core strength, balance and trust are worked on all at the same time. Many warriors state that for the first time they are able to reconnect with feelings of peace and balance and because of this are able to sleep better.







Micah begins the therapy day grooming and preparing his horse for riding. Horses are gentle and sensitive and have a unique ability to sense human emotions. This special bond helps warriors to work through difficult issues. Grooming reinforces that bond. It helps the warrior slow down and enter into a calm place that the horse picks up on and responds to positively. It is beneficial for both.

(Pictures courtesy of J. James Photography, <a href="mailto:iim.flynn@aol.com">iim.flynn@aol.com</a>, 360-463-0018)



Micah grooming his therapy horse. The warrior really has to slow down with the horse; he can't rush any of the movements. This is a learning process for the warriors and the horse helps him learn it. According to Kristy a traumatized brain is regulated by rhythms such as heart rates, breathing, sleep cycles and physical movement such as walking or grooming a horse. Regulating these rhythms helps regulate their emotions which affects their state of mind.

(Pictures courtesy of J. James Photography, <a href="mailto:jim.flynn@aol.com">jim.flynn@aol.com</a>, 360-463-0018)







Riding like this requires a large amount of balance and core strength while the horse is moving. Micah is getting much better at both. Almost all of our equine warriors state that this type of exercise cannot be duplicated in a gym.

(Pictures courtesy of J. James Photography, <a href="mailto:jim.flynn@aol.com">jim.flynn@aol.com</a>, 360-463-0018)







Micah is working on his riding skills and posture with help from Kristy in the arena and on the trail. Micah is learning how correct posture and breathing can also help the horse. Warriors are taught in the military to stand and sit perfectly straight, but this posture does not allow you to breathe normally when on a horse. In many ways the reins do not guide the horse, the warrior's sitting position does. Kristy stated that "your body is the horse that your mind rides around on and learning to be calm in his body helps his mind."

(Pictures courtesy of J. James Photography, jim.flynn@aol.com, 360-463-0018)



"I have become more aware of my anxiousness and stress that affects my body posture, which the horse somehow detects and identifies for me."

"My social anxiety and emotional discomfort have diminished to a lifechanging degree! I am getting better and better at being able to converse outside of the US Army."



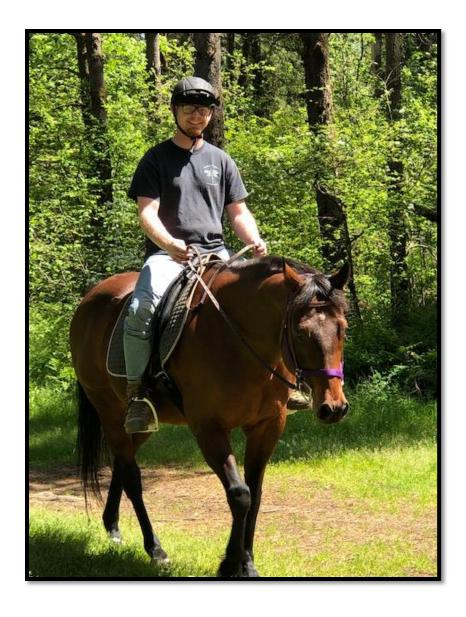
"My daily life has become more relaxed and positive and less tense and nervous. I have learned how to stay calm and steady during trot and canter movements."

"My sessions have allowed me to identify problems with my body movements and habits related to my VA disability."

There is something about the outside of a horse that's good for the inside of a man.

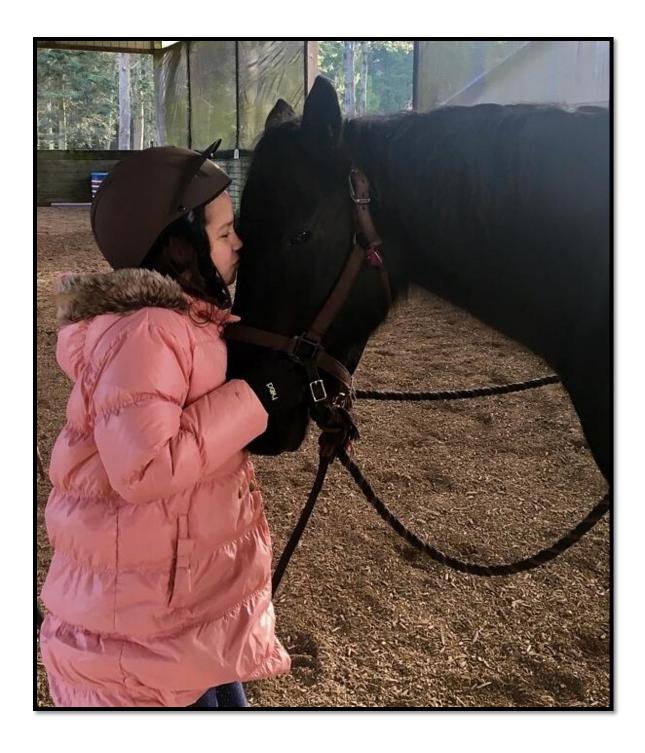
Winston Churchill

(Pictures courtesy of J. James Photography, jim.flynn@aol.com, 360-463-0018)

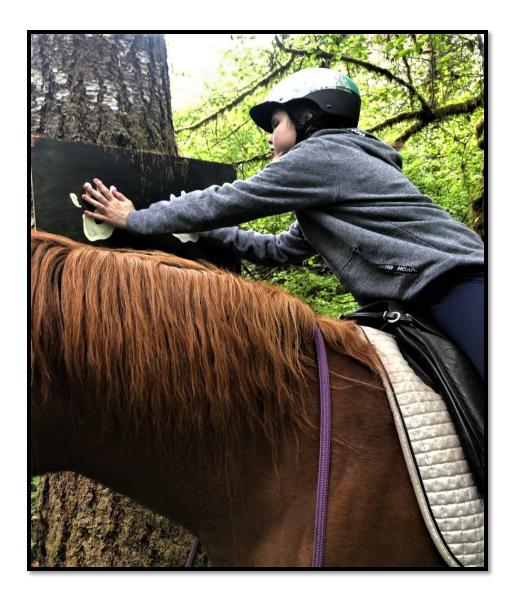


Jordan riding on the trail. Understanding the horse enables the warrior to be a better rider. The following is a quote by A. Pinto Miremadi that Krisity shared with one of our warriors:

Balance is of great importance to horses. A physically imbalanced horse is a prime target for predators. A psychologically imbalanced horse is a liability to the herd, usually spurned and therefore a prime target for predators. If I am off balance in the saddle, I am compromising my horse's chance of survival by negatively affecting their balance. If I am off balance psychologically, perhaps the same. I can't create anything in my horse unless I can create it in myself first.



Here is Heartbeat's first BITS KIDS enrollee. This program is open to disabled or special needs children of Wounded Warriors. The emotional attachment by the child to the horse can be overwhelming at times and is incorporated into the therapy.



BITS KIDS during a session. Jilly needed a lot of work to increase her muscle strength and flexibility at the same time. Doing this exercise where she has to cross her midline and reach for the hand board mounted on the tree does just that. She is also learning right and left and is performing a rotational stretch for her hips. Three things accomplished in one exercise.





What a difference a few weeks in Equine Therapeutic Riding can accomplish. Jilly is one of our disabled children to participate in BITS KIDS. According to her mom, she has always kept her head down whether walking or riding. Her mom now states that since she has been in our program, she is getting much better at holding her head upright. She has also improved both the strength and the function of the muscles in all her extremities.



Kylee is learning to stay calm and focused with the pony. These are mental states that she has been working on since the beginning. Since the horse mirrors the child's behavior, it is easier for Kylee to see when she is agitated or in a hyper excited state.





Healing Hearts Ranch is home to more than just the horses. Olivia loves the resident kitties and dogs that often accompany them on the trail. It makes for a relaxing and fun atmosphere for the children. It truly is a place of healing.

(Pictures courtesy of J. James Photography, <a href="mailto:iim.flynn@aol.com">iim.flynn@aol.com</a>, 360-463-0018)



One of our newest BITS KIDS learns how to get her horse ready for riding. It helps them get familiar with the equipment as well as getting comfortable being around such a large animal. The horse picks up on any anxiety, so the child needs to be in a calm and steady place.

(Pictures courtesy of J. James Photography, <a href="mailto:iim.flynn@aol.com">iim.flynn@aol.com</a>, 360-463-0018)





Olivia, who has been in multiple foster homes, is learning confidence and establishing healthy boundaries. She identifies strongly with the horse Pegasus because he has been abused and in "foster care" before coming to his forever home at Healing Hearts Ranch. Olivia frequently talks about how much she loves Pegasus and how happy she is that he is here. She stated that helping him really helps her. Since Olivia's foster parents are also involved in horse riding, they are becoming a "good" horse family.

(Pictures courtesy of J. James Photography, <a href="mailto:jim.flynn@aol.com">jim.flynn@aol.com</a>, 360-463-0018)







Olivia is working on flexibility in her hips and torso as well as balance during BITS KIDS. This also builds overall confidence in her body. Crossing the midline and rotating through helps the brain as well. Sensing the movement of the horse while riding and moving your own extremities gently helps the brain calm down by rebooting the nervous system and re-integrating mind and body. It is important in working with horses to be in a calm state and there are many ways to do this. Olivia is also learning confidence with each maneuver that is learned correctly.

(Pictures courtesy of J. James Photography, <a href="mailto:iim.flynn@aol.com">iim.flynn@aol.com</a>, 360-463-0018)



During the shutdown, one of our BITS Warriors asked if it would be possible for his wife and two children to come and just watch as they were having a tough time being housebound. They not only came, we let them do some riding and they had such a great time. The children said it was the best day ever and of course Heartbeat paid for all of it.







**BITS COUPLES** 

One type of training technique that Kristy uses is called "Two eyes on me" which teaches the horse to connect calmly to the human without being totally distracted by the other horse or the environment. When the horse is calm and focused on the person, praise and affection are offered as a reward. Both Nowell and Amy tried this technique with their horses and were extremely successful. Over time the horses got calmer and more connected with Nowell and Amy. After the riding session, there is always time to talk about the horses reactions and how this applies to the couple.

(Pictures courtesy of J. James Photography, <a href="mailto:jim.flynn@aol.com">jim.flynn@aol.com</a>, 360-463-0018)



Amy from BITS COUPLES: I am learning to lead without forcing an agenda.

According to research, bidirectional healing occurs when we are near horses. Sometimes we need only be in a horse's presence to feel a sense of wellness and peace.

(Pictures courtesy of J. James Photography, <a href="mailto:iim.flynn@aol.com">iim.flynn@aol.com</a>, 360-463-0018)









Pictured here is Kristy with Nowell and Amy getting ready to ride in BITS COUPLES. It is important for the couple individually as well as a team to approach the horse with confidence and in a calm state. Horses reflect our emotional state and prefer to be around calm regulated people just as people like to be around calm horses. Those warriors or spouses that have experienced trauma or that live in a hypervigilant state have forgotten how to regulate these emotions, which affects relationships. The horse is like a 1,000 to 1,800 pound biofeedback organism and helps the warrior realize where he or she is in the process. With this in mind, Kristy weaves the brain science of trauma into the horsemanship piece that she teaches.

(Pictures courtesy of J. James Photography, <a href="mailto:im.flynn@aol.com">im.flynn@aol.com</a>, 360-463-0018)







Some of the things that Amy has learned from BITS COUPLES:

- Greater self-awareness of tension and how that translates to others.
- Breathing to help with emotional regulation when frustrated.
- A see/do opportunity, watching someone do it, then do it yourself. Also learning to pay attention to how the other person is doing and provide positive feedback.
- Complement each other's abilities/weaknesses and learn techniques that apply to body feedback and self-awareness in everyday life and all relationships.
- Parenting: how tone and tension affects kids.
- I always felt nervous around big, strong animals, but as I learn to "read" them and communicate back, I feel much more at ease. Nowell is a more relaxed person, so he got a little further in his horsemanship lessons that I did.
- The need to keep our core strong, especially as we age, for better posture, balance and a strong presence.
- My relationship with myself and others is coming into better perspective from working with the horses and Kristy.

(Pictures courtesy of J. James Photography, <a href="mailto:im.flynn@aol.com">jim.flynn@aol.com</a>, 360-463-0018)



Nowell and Amy ride on the trail during BITS COUPLES. Kristy had Amy see how relaxed Nowell was from behind and the movement with the "X" in his torso. She said it really helped riding behind him and watching. Amy also did some stretching on the trail. After returning to the arena, Nowell performed both a trot and canter while Amy watched. Then Amy did a sitting trot and according to Kristy: "She looked the best she has looked."

(Pictures courtesy of J. James Photography, <a href="mailto:iim.flynn@aol.com">iim.flynn@aol.com</a>, 360-463-0018)



Nowell pictured with a rescued pony. He has to stay in his center to turn and he also has to stay calm and keep the boundaries with the other horse. In other words he has to multitask and stay calm at the same time.

#### BETTY'S STORY

Betty is a Wounded Warrior that was in our BITS: Warrior program quite some time ago. She loved the program and stated that it helped her both physically and psychologically. She also volunteered in our Christmas Programs.

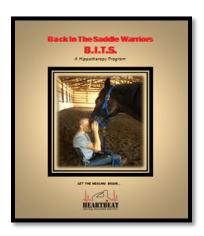
We recently received a text from her stating that she graduated from college with a BS degree in Justice Studies and a minor in Psychology. This is amazing as Betty struggled with multiple injuries from the war as well as trauma from her personal life. At times, she would retreat to the Idaho woods to isolate herself from people. Her text is as follows:

Thank you for getting me through so much. If not for your programs, I would still be where I was while at Ft. Lewis. I can't thank you enough.

#### ADAM'S STORY

On this particular day, Adam just wanted to groom as that is what really helps calm him down the most and doesn't require him to think too much about riding lessons. While grooming a new horse, Sully, he noticed that Sully was less calm. Kristy pointed out the tension in the horse's body. Sully was mismanaged in his previous residences which caused him to stay in an "at attention" position. Adam stated that he could relate to how it feels to have to "stand at attention" for too long and how it stresses the body. He stated "maybe I've been standing at attention too long".

After this conversation, Kristy showed Adam how to relieve some of Sully's stress which in turn also helped his own stress. This is the bidirectional learning that can take place between horses and humans.



# The Effectiveness of Heartbeat's Equine Therapeutic Riding Program Validated Statistically by Janet Raulerson

#### Definition and background of statistical analysis:

Statistical Analysis is defined as the science of collecting and presenting large amounts of data to discover underlying patters. Heartbeat utilized statistical analysis to compare the effectiveness of our Equine Therapeutic Riding Program, BITS Warriors. We utilized 6 aspects to evaluate: pain level, mood, flexibility, anxiety, physical tension and ability to focus. Heartbeat wanted to see if there was a significant difference between the before rating and the after rating of the therapies; and if there was a difference, was that difference only due to chance or results of the therapy. The use of the p value in statistical analysis helps decide this. The p value represents the probability that the results of the therapy are caused by chance alone, therefore, the smaller the p value, the less likelihood that the results are due to chance. Most analysis use a p value of 0.05 to determine that the results are not by chance but are due to the therapy. In our analysis, the p value was calculated to be 0.0001. This means that the difference between the before and after results was attributed to chance only 1 time out of 10,000. This level of difference is very significant. Bottom line, the therapy is making a substantial difference in the Wounded Warriors' lives. Heartbeat has been collecting and analyzing this data since December 2012.

#### Defining Equine Therapeutic Riding:

In 2010, Heartbeat Serving Wounded Warriors initiated a clinical, cutting edge Equine program, appropriately named Back in the Saddle Warriors.

Heartbeat's program emphasizes posture and balance in equine therapeutic riding along with muscle strengthening and flexibility. The program not only teaches the warriors how to ride but we have incorporated different physical therapy maneuvers while on the horse. This requires the warrior to perform these exercises and respond to the horse's movements at the same time. The net effect is improved muscle tone, balance, posture, coordination, strength and flexibility as well as psychological healing.

Our therapist at Healing Hearts Ranch incorporates the science of brain trauma into the horsemanship. The horse can be utilized as a biofeedback system for the warrior. Any tension or anxiety in the warrior will be reflected back by the horse. This allows the warrior to visualize the problem. Also many of the maneuvers performed while riding can change the chemical make up in the brain leading to a sense of calmness and peace.

With Heartbeat's newest program BITS COUPLES, we are in the process of developing a new evaluation form that we can analyze but that reflects the issues of a couple.

#### SCUBA WARRIORS

"Man has only to sink below the surface of the water and he is free...he can fly in any direction - up, down, sideways – by just turning his hand. Underwater, man can fly like an angel."

Jacques Cousteau

Scuba Warriors was one of Heartbeat's first therapy programs. It was started in the same year as our Equine Therapy Program, 2010. Heartbeat's Scuba Warrior program not only teaches each warrior and spouse how to dive, but the process incorporates therapy into each activity. The end result is an open water scuba certification card and healing. The program is the only one in the western United States that is dedicated entirely to Wounded Warriors and their spouses at no cost to them. Additionally, each participant receives their own bag of equipment to give them a head start to continue diving. The course is taught by lead dive instructor Chris Voss. Chris is a PADI (Professional Association of Diving Instructors) certified dive instructor and utilizes a buddy system that allows each warrior to once again be part of a team. A warrior may have lost all of his team in the war, and the spouse may have lost the cohesiveness of the family unit, but now they have a chance to reconnect and form new bonds. From the classroom to the final dives in Puget Sound, team building is the mandate. It is because of this team building, that the idea of including spouses and children of Wounded Warriors into the program was initiated.

Because the classes are small, 4-6 warriors, a close bond develops between all of the team members and students. Each warrior works on specific tasks and maneuvers. When they are successful, they move onto the next step. Each success builds on the previous one, giving the warrior a sense of accomplishment and helping to make their lives whole again. This is how muscle memory is acquired and it enables the warrior to perform a task without conscious effort. As an added benefit, scuba diving is an activity the warrior can enjoy for the rest of their life. A previous safety diver once stated, "as a medic, you patch kids up and move them out. I'm still patching kids up and helping them return to their families as a provider and loving parent". With these positive changes, everyone benefits: the warrior/spouse, the family and our society.

Many spouses suffer "secondary PTSD", and many of the children are put on suicide watch. Trust and communication are destroyed during multiple deployments. Our Scuba Warrior Program addresses these issues. The tasks that need to be mastered prior to diving in open waters reinforce communication. Communication in the form of signs is even required underwater. Because each member relies on the other member of their team during the dive, trust is obtained. This can have a very positive influence on the entire family.

Many subjects are covered during the class time in addition to becoming familiar with the equipment, how to use and more importantly what to do if something goes wrong. Other topics include: the science of diving, safety rules and regulations, physics, how the human body reacts underwater, conservation and importance of the marine environment. Woven into the academics of diving is team building – lots of team building.

The diving itself is fun and peaceful at the same time. The sound of soft bubbling and the weightless environment is healing to all the members. It is also exciting. The warrior is exploring a new environment, underwater, that they may have never experienced before. The weightlessness is easy on joints, or any areas of the body racked by pain. Diving allows the warriors to move limbs previously injured during the war, which may be too painful to move on land. The water greatly reduces the forces of gravity, which is hard on the body, and, instead, offers a weightless and cushioning environment that gently supports muscles and limbs that have been ravaged by combat. The ability to move in a way that is relatively pain-free can contribute to positive changes in attitudes. Also, with the increase in movement, blood flow and cardiovascular strength are improved.

#### One Scuba Warrior stated:

Janice: Back in August or September, I was able to take part in the Scuba Warriors Program. I wanted to thank you earlier but I deployed quickly after and I just got busy with other things and unfortunately put it off. I hope you know the program is awesome and I very much appreciated it and all the work you put into it. Not only is it a cool thing to do, but it was a great way for people to meet friends and do something that can relieve them from other stressors. Getting to scuba dive in the sound was an amazing experience and I look forward to continuing it. Please let me know if there is any way I can help in the future with the program. Thank you again and take care.

While diving, the pressure has a positive effect on the oxygen and nitrogen levels on the brain. There is empirical evidence that these changes in levels can help heal damaged tissue and neurons in the brain. The nitrogen levels experienced with diving can also help with migraine headache pain, a disability so many of the warriors face.

At this time, Heartbeat works with a private dive shop, Underwater Sports. The lead instructor, Chris, who manages the course, utilizes warriors that have completed advanced courses through Heartbeat to help with both the pool and open water experience. For several years, Scuba Warriors was offered over 2 weeks, during the week. Unfortunately, in 2018, many of the warriors were unable to complete the course due to doctor appointments that were scheduled at the same time. After several discussions with our Board of Directors, Underwater Sports and the volunteer warriors, the decision was made to offer the course on the weekends.

We also had to locate a new pool facility in 2020. We have finally achieved that and the new pool works out perfectly for the class. The course is scheduled over two weekends. The first weekend is class time and then pool time and the second weekend is for the open water certification. This change has been very successful and since then Heartbeat has been offering the course at least every other month.

For Scuba Warriors the goals are twofold:

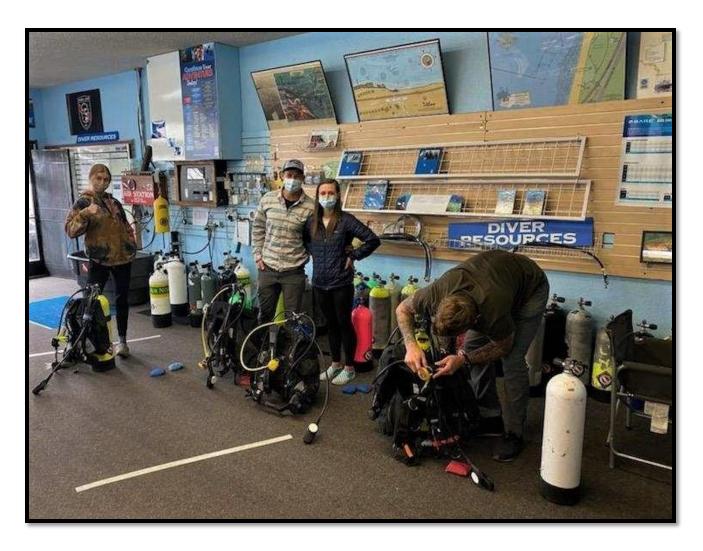
- 1. Obtain the Scuba Diving Certification by acquiring the physical skills and knowledge that result in being able to dive successfully and safely.
- 2. The physical and psychological healing of the individual warrior that can have major ramifications on the warrior's family and community. The warrior is physically strengthened from the diving exercise, and becomes part of a team once again, which improves his psychological well-being. The confidence gained by learning a new skill and the ability to move underwater without pain are also benefits as well as the peace experienced underwater.

The cost for each warrior to participate in the two weekend course is over \$600. Fortunately the pool costs are donated. Heartbeat will also frequently pay for the warriors who have completed the basic open water course to participate in additional diving experiences which are much more expensive. One such class was offered to one of our warriors at the cost of almost \$800.00. In addition, lunches are provided to the warriors during the class time.



Everyone gets hands on experience with all of the scuba equipment.

Later in the day they will get to practice with it in the pool.



Pictured here is the April 2021 class learning the equipment. Since 2013, spouses have been able to participate in the Scuba Warrior Program. Because the family unit is one of the first casualties of war, being together diving can help with the healing process. Also, working as a team in scuba and learning new skills together helps strengthen the relationship between husband and wife.



A Scuba Warrior during pool practice.

The warriors are still able to have fun while learning a new sport. These lighthearted moments help the warriors relax.



Scuba Warriors practice breathing techniques in the pool. It is important for the warrior to perfect all of these new skills in the pool under close supervision in preparation for the open water dive. Another skill that is practiced and that most new divers find difficult is the mask skill. This skill is learned to make sure a warrior can comfortably flood a mask or replace it underwater. With this skill, they can calmly recover the mask, if it is accidentally knocked off, and clear out the water safely. They must be able to get passed the urge to inhale through the nose immediately upon taking off a mask which just leads to a nose full of water.



New skills are being learned here: first is the ability to remove gear while underwater. Since the pool just resurfaced the bottom, the warriors were asked to use the platforms to set their gear on so as not to damage the new surface. The second skill is for the warriors to gain familiarity with buoyancy by performing a fin pivot. For this maneuver, the warrior puts air in the BCD little by little as he takes deep breaths. This makes the upper body float up gently as the fin stays put. BCD is a buoyancy control device. It is a piece of diving equipment with an inflatable bladder worn by the diver to establish neutral buoyancy underwater and positive buoyancy at the surface, when needed. This equipment and the skill to use it is a very important part in learning to scuba dive.



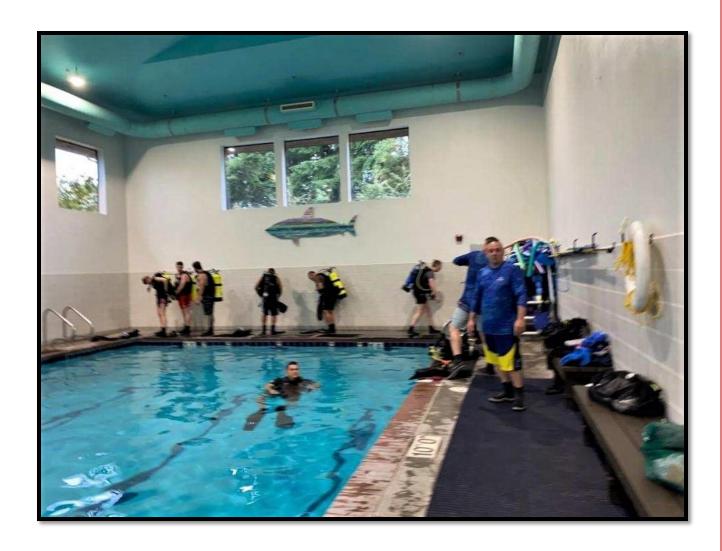
"This is so AWESOME Janice!! I can't thank you and Heartbeat enough!"

Scuba Warrior at pool practice for August 2020 class.

This warrior loved scuba diving so much that he enrolled in our advanced Dive Master Class and then continued to attend all of the Scuba Warriors Classes to help as a volunteer.



The warriors practice hand signals which help with communication under water. Practices are always about working as a team, just like when the warriors were overseas. Communication is key underwater just like it is downrange.

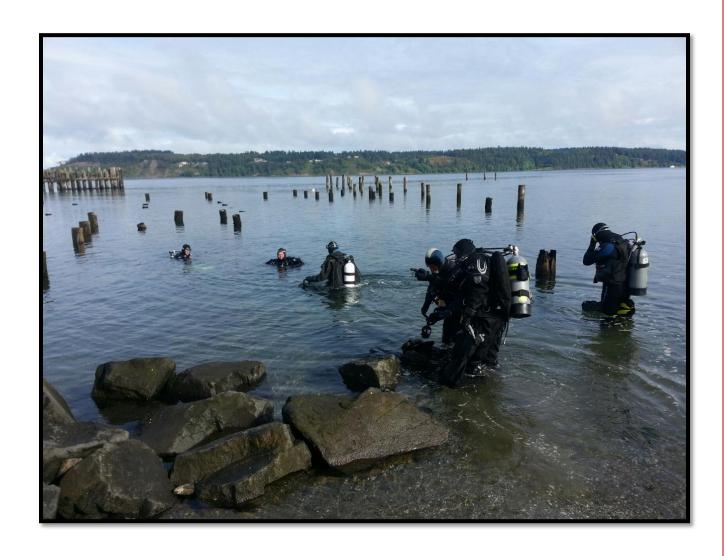


Scuba Warriors get ready to start the pool practice part of the course. One story Chris, the lead dive instructor related was about a retired marine who had experienced multiple deployments and many personal struggles:

"At the end of the first day in the pool, I noticed he was hanging back as the rest got out of the pool. He seemed focused on the corner of the pool, just floating there, looking at the wall. I swam over to him and asked if there were more skills he wanted to work on. He looked over his shoulder at me, eyes red. He shakenly whispered, 'No, it's just the first time in years that all the other noises I hear were quiet. I could just sit on the bottom and hear my bubbles and nothing else, no voices, no noise, no bangs. Nothing.' He went on to pass the class and moved from the area, but was diving heavily the last I heard."



Scuba Warriors pair up to check equipment during the open water practice. These skills were practiced during class time as well as in the pool. Always the warriors work as a team. They talk to their dive buddy about the site, currents, tides, what's out there to see, what to do if they are separated. They are also taught to stay off the bottom so as not to "silt out visibility" for their buddy and the other divers.



Scuba Warriors get ready to practice in the open waters of the Puget Sound.

The first weekend of the course is spent in class and the pool. The second weekend of the course is open water testing for certification.



This is the equipment bag that each Scuba Warrior receives at the beginning of the course. This equipment enables the warrior to continue their scuba diving after the course while decreasing the equipment rental expenses.



#### LETTER FROM A GRATEFUL SPOUSE

A Special Forces family enrolled in our Scuba Warrior Course as a family. The entire family received their diving certificate and has been able to continue diving as a family. Heartbeat paid for several extra dives once the certification had been obtained. The rehabilitation of the diving and the comradery of the other warriors and spouses have been extremely healing for this family. Because this meant so much to her, she wrote a letter to Heartbeat expressing her feelings about Scuba Warriors:

## Hi Janice,

I wanted to thank you for the fabulous lunch. What a great day for lunch outside on that deck. My family is enjoying Scuba so much more than I could ever imagine. It has been rough for us since Chris's injury. He has a lot of memory loss in addition to some physical issues. There has been a big disconnect between Chris and our son Camden. Chris has had to re-learn a lot of things he used to know and he gets frustrated. So learning Scuba together and then working as a team is incredible. It also gives them something to talk about. The added plus is how proud Chris is of Camden doing so well so far.

Of course I love it as well. I love the water, and I didn't realize how good it would make me feel. We also look forward to being with everyone. For quite some time we have really been alone. You have most likely heard it before, but families have a hard time understanding injuries. Mike, another Wounded Warrior in Scuba Warriors, shared with Chris about his own parents and it helped a lot.

I just wanted to thank you and let you know we will all be diving next week Tuesday and Wednesday to finish. You expressed that you didn't have a lot of time to travel. I would love to volunteer and help out however I can. Just let me know if I can help out.

Thank you so much for the Scuba experience!!! Best gift of the year!

Karin.



#### K9 HEALING WARRIORS

"Maybe, just maybe, the best medicine is not a pill, but four paws and a canine heart"

## Mary Cortani

K9 Healing Warriors was established in October 2016 after a successful experimental pilot in April 2015. This pilot study involved one female Wounded Warrior and her canine companion. It was very successful. Since 2016, Heartbeat continues to enroll warriors and their canine partners in our program. It is a very big commitment, requiring the pair to attend service dog training classes twice a week for at least nine months. Our trainer is Sharon Majewski who owns Cascade Service Dogs.

K9 Healing Warriors' primary purpose is to help warriors navigate through their injuries, physical and psychological, to help them reintegrate into the community and their families. Isolation is the byproduct of their disabilities. The service dog gives the warrior the confidence to go out into the community. He has his own buddy, who has his back.

Service dogs are specifically trained to one warrior and to the specific needs of that warrior. Some of these specific needs may be: turning off and on lights, waking warriors from nightmares, accompanying the warrior in public places, assisting with balance, assisting with prosthetic devices and performing calming behaviors to facilitate reorientation. In short, service dogs can transform lives by building bridges to independence. With the increasing numbers of warriors returning with PTSD, TBI and physical disabilities, service dogs are a unique way to help.

Dogs are able to help even the most isolated warrior. Offering praise to the animal and teaching service commands helps the warrior overcome his emotional numbness and increases his ability to communicate. The hypervigilance that most wounded warriors feel is reduced with the service dog. And since the service dog is now standing watch, restorative sleep is finally attained

To enroll in the program the warrior must also be signed off by his doctor, a psychiatrist or psychologist that states that a service dog program would be beneficial. After this step, Sharon meets with both the warrior and his dog. She evaluates the dog for the program. The dog must be physically fit but also attentive to the warrior, confident and not easily distracted by unusual sounds.

The goals, which are different for each warrior, are established in the beginning and reevaluated each month. Reports are sent to Heartbeat as to what has been accomplished and

what still needs to be done. Ultimately, there needs to be a difference seen in the warrior's life.

Costs for the program are approximately \$3,000 per warrior, per year. During the evaluation process, the warrior must prove their ability to care, feed and cover routine veterinary bills. If a major veterinary intervention is needed for the life of the service dog, Heartbeat will cover these costs. Heartbeat has also in the past purchased a service dog for the warrior. To date, Heartbeat has purchased four dogs for warriors in the program. The preference is for the warrior to have a dog of their own as it is important for the relationship between the warrior and canine to be close. On completion of the program the warrior/dog team must also pass the Service Dog Test.

When a member of an individual family is sick, debilitated or psychologically injured, the entire family is affected. The same applies for a family in the community. The K9 Healing Warriors therapy that Heartbeat offers is life changing to both the Wounded Warrior and to the entire family. If this affected family is then able to recover and become a giving member to the community, everyone wins.



Recently one of our female Wounded Warriors with her German Shepard service dog passed the Service Dog Certification Test with flying colors. She has owned the dog since he was a puppy and at the beginning of the course she needed to spend a couple of months just working on "puppy training" with him. Once that was completed, they moved quickly into the service dog training aspect.

This Wounded Warrior has been through unspeakable trauma and her K9 companion, according to her, has saved her life.

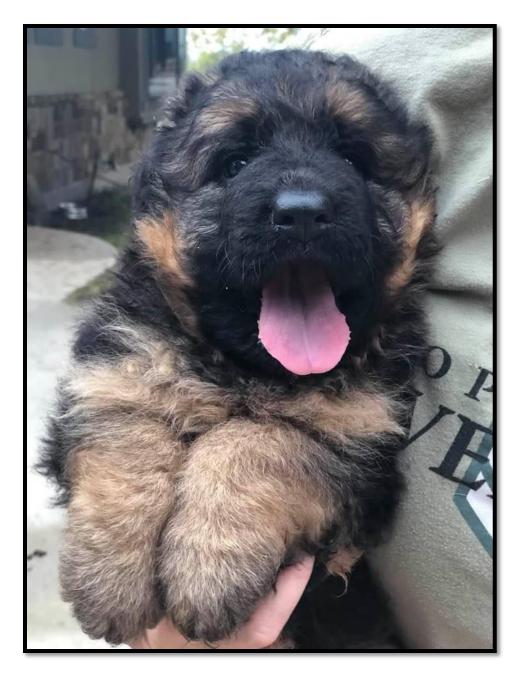
The evaluator for the Service Dog Test stated that this was the best team she has ever evaluated. The Warrior Transition Battalion hosted a congratulatory party for both of them because they have seen such an amazing difference in her due to the program. Heartbeat could not be happier.



Luis and Tina practice at the grocery store. Each training is different depending on the warrior's needs. Many have difficulty going into public places and their K9 partner can help with this and alleviate the anxiety that the warrior feels. Luis still keeps in touch with our service dog trainer. Tina is semi-retired as Luis has progressed so much from his original state that he can be in public areas by himself. He also utilizes art to help with his continued healing. He is just another success story for Heartbeat.



Zack is comforted by Kal, his service dog. These dogs are trained to anticipate the anxious states of their owners. They are also able to wake the warrior just prior to a nightmare. This enables the warrior to obtain the restful sleep he so desperately needs. These are only a few of the duties the service dog performs.



Freyja as a two month old puppy. She will have to wait until she is three months old before she can enter the program with her partner. At that time she will begin general puppy training which will include obedience, confidence building and socialization. Once some of these parameters are met by the puppy, service dog training gets incorporated into the continued puppy training.





Katie and her service dog candidate Freyja are perfecting loose leash walking in new places with distractions. Walking on different surfaces like the sewer grate is a skill to build confidence for working in different locations.

Freyja is about six months old here. She appears very confident and is extremely attentive to Katie.



Katie and Freyja demonstrating the "lap" command used to help ease the warrior's anxiety. Even though Freyja is still just a puppy, our trainer believes she is more advanced in her training that others in the class.





Jasmine and her service dog Ace. In the picture on the right, Jasmine and Ace are practicing the "Lap" command while training at Percival Landing in Olympia. Warriors use the "Lap" command to help them when anxiety and panic attacks occur, by redirecting the warrior's attention to themselves. This enables the warrior to relax enough to calmly leave the area. The canine may at first just lean against the warrior. If the anxiety persists, the canine will then try to move into the lap position while leaning his head against the chest of his warrior partner. These animals are so sensitive they can pick up on scent changes, body position and breathing changes in the warrior. They are amazing animals. They are frequently used to remind the warrior to take their medications at specific times. The trainer uses special treats to reinforce the timing of the medication. Some canines are so driven that they are able to recognize when the warrior's medication box is empty and needs refilling.





# A heartfelt letter from a Wounded Warrior Spouse regarding Heartbeat Serving Wounded Warriors K9 Healing Warriors Program

### Dear Heartbeat Serving Wounded Warriors

I am a spouse of a wounded warrior. I just wanted to reach out and explain how much this program has changed not only my husband's life but mine as well. When I first met my husband he was a high functioning person and now he's the complete opposite. While my husband was serving in the military he did acquire many different disabilities. My Husband shouldn't be left alone. He is a danger to himself and others. He's not mentally all their anymore.

He has no short term memory, no sense of day or time. He can't make rash decisions. All of those things on top of his mental disabilities make it impossible for him to work. He tries really hard to work but he keeps getting fired due to his inability to perform.

We lost everything when he got out of the military. Heartbeat took us from being homeless living out of the car, to living in an apartment. Life isn't easy being the sole provider. On top of working 2 jobs i have to take care of my husband and make sure he doesn't do anything crazy. I love my husband so much, but it's not easy. Some days we can't even get to the front door without him freaking out. He can't go anywhere or do anything unless I am with him. HBSWW recommended that we have our puppy become a service dog through K9 Healing Warriors. My husband thought that was a great idea but wasn't sure about it. He went and decided yes he could handle doing this training.

Here we are 3-4 months later and my husband can go places by himself. He is able to be more independent with his service dog. His service dog calms him down before he can start to have a freak out. The dog reminds him to take his medicine. When he is having a freak out the dog is trained to attack him with kisses and hugs... yes hugs! When going out in public his service dog is trained to block people from getting to close to my husband and to monitor him and ensure that he is safe and secure. He is so well trained in fact that he is able to sense when my husband is about to start having issues and can remove him from those situations and breaks his attention. The dog is literally trained to find the door in a store and take my husband through it to get him away from whatever it is that is triggering him.

Life is hard but Heartbeat has made life a little less stressful. I have never been so thankful. I can't explain how much this program has helped us. Thank you so much for everything.

Sincerely,

A grateful spouse

Heartbeat Serving Wounded Warriors would like to thank all of our donors for making these therapies possible. Each therapy is different and making amazing improvements in the lives of the warriors and their entire family. We are so grateful for your support. Your donations help pay for the places where the therapy takes place, the equipment needed and the therapists themselves.



## www.heartbeatforwarriors.org

Contact: Janice@heartbeatforwarriors.org

(425) 931-1047

For donations please go to our website and click on the donate button or send a check to Heartbeat at P.O. Box 610, Onalaska, Washington, 98570

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