The AR SAVES team has been busy getting Year 4 started! We look forward to welcoming Dallas County Medical Center in Fordyce in the month of September.

In August, we had a total of 47 consults and tPA was administered 12 times for a 25% rate.

In the September All-Sites call, the 2012 3rd Annual AR SAVES Telestroke conference dates were announced. This year, it will be held May 15-16 at the Statehouse Convention Center in Little Rock. Please start planning to attend now; we look forward to seeing you there.

Due to a contact renewal with APEX Innovations, there is now a new key code for those with administrative seats. The new key is: SS88BK5Y. Those who are given administrative seats are Nurse Facilitators and their back up facilitator. Staff members who are registering for the NIHSS portion only, should continue to use the key: JG6KGR5U. Please contact your Outreach Nurse for any questions regarding how to use this program. Please remember this is a mandatory annual competency.

Dr. Harik is ready to teach! He is ready, willing, and able to visit your facility and train physicians and nurses on the NIHSS. If you are interested in learning from one of the SAVES vascular neurologists, let a member of the SAVES team know and we will schedule a visit with Dr. Harik.

Please remember that all deficiencies must be up to date by October 1, 2011 or payment will be halted until compliance is reached. This effects mocks, invoices and any other program information or duties. If you have a question on your standing, please refer to your Quarterly Report or speak to a member of the SAVES team.
Since this was a women’s education lunch, the education and statistics were geared towards women. For example, more women than men will die from a stroke and nearly 20% of women report that they don’t know any risk factors of stroke, such as high blood pressure, smoking, high cholesterol, diabetes, atrial fibrillation, obesity and family history. And for the most startling reported statistic, for every hip fracture that was prevented with hormone therapy, there were 8 more strokes and 8 more invasive breast cancers. I do believe that every person’s jaw in the room dropped!!!

Each person was given a stroke risk assessment score card and they were encouraged them to fill it out and discuss this with their primary care physician. Every person in attendance stated that they learned something new about strokes that they did not know before.
The patient with a history of taking oral anticoagulation always raises concerns regarding hemorrhagic risk of tPA administration.

In the National Institute of Neurological Disorders and Stroke, patients with Coumadin treatment were excluded from tPA administration if their INR was elevated (INR > 1.3 in 1995, or INR > 1.7 in 2005). Current guidelines of American Heart Association and the American Stroke Association do not exclude patients with INR below 1.7 from tPA administration within a 3 hour window. AR SAVES uses an INR of less than 1.5 for the 3 hour window. All patients receiving oral anticoagulation are excluded from tPA administration regardless of INR level if they are within the 3 to 4.5 hour window from symptom onset. However, patients taking oral anticoagulants may have been under represented or excluded in the original studies on which current guidelines are based. The risk of hemorrhagic complications in such patients was not scientifically established.

In May 2010 issue of Archives of Neurology, the results of a small retrospective study showed that warfarin treated patients had the rate of symptomatic intracerebral hemorrhage of 30.8% despite INR 1.11-1.47, compared with those not taking warfarin (3.2%). This data prompted another publication about safety of tPA administration in patients on warfarin therapy with INR < 1.7. This small retrospective study showed no statistically significant difference in the rate symptomatic intracranial hemorrhage between patients receiving and not receiving warfarin.

The jury is still out. The final answer will not come from small retrospective studies. The analysis of a large, detailed database such as the Get With The Guidelines stroke registry may provide a final answer. Until then, we will continue following current guidelines in context of comprehensive patient evaluation.

The guidelines cannot keep up with the progress of medicine in a timely fashion. Anticoagulation with lovenox is widely used, especially in an in-patient setting for DVT prevention. Current guidelines do not give recommendations in this situation. Probably, normal PTT levels may help in decision-making.

The development of oral direct thrombin inhibitor adds another layer of complexity in the evaluation of stroke patients for tPA. Growing numbers of patients with atrial fibrillation started using Pradaxa (dabigatran) instead of warfarin. No guidelines currently specify how the use of this drug may affect the decision to administer tPA. There is no reliable test to evaluate the degree of anticoagulation with this drug, but the half life of 12-17 hours suggests that the patient should be excluded from tPA ministration if they have received Pradaxa during the preceding 48 hours. Normal PTT and Thrombin Time (TT) suggest that little anticoagulant activity of Pradaxa is present. The utility of these tests is primarily for negative predictive value. But even a slight elevation of PTT or TT does not reflect level of anticoagulation from Pradaxa. There is currently no reversal agent or antidote for Pradaxa.

**Careful history taking is a key of the patient evaluation for tPA administration.** The question “Do you take any blood thinners?” will help to determine whether the patient takes other anticoagulant different from warfarin.

---

**Side rails up when you step away**

Do not ambulate the patient

NPO until evaluated by MD

Two RN’s verify tPA dosage

Ensure informed consent
In our community outreach travels, we have had the opportunity to watch a lot of amazing professionals around the state in action. Making presentations to public groups is one very successful method of educating about stroke symptoms. Ironically, though, the fear of speaking in public is a very real fear. Dr. Paul Witt, PhD is an assistant professor of communications at Texas Christian University, and he says that, “It is even scarier than rattlesnakes. The idea of making a presentation in public is the number 1 fear reported by people in the U.S.”

To help those people who present to their community about strokes, we would like to share 10 tips from Toastmasters International.

1. **Know your material.** Know more about it than you include in your speech. Use humor, personal stories and conversational language – that way you won’t easily forget what to say.

2. **Practice. Practice. Practice!** Rehearse with all equipment you plan on using. Revise as necessary. Work to control filler words; Practice, pause and breathe. Practice with a timer and allow time for the unexpected.

3. **Know the audience.** Greet some of the audience members as they arrive. It’s easier to speak to a group of friends than to strangers.

4. **Know the room.** Arrive early, walk around the speaking area and practice using the microphone, visual aids, and remote control clicker.

5. **Relax.** Begin by addressing the audience. It buys you time and calms your nerves. Pause, smile and count to three before saying anything. (“One one-thousand, two one-thousand, three one-thousand. Pause. Begin.) Transform nervous energy into enthusiasm.

6. **Visualize yourself giving your speech.** Imagine yourself speaking, your voice loud, clear and confident. Visualize the audience clapping – it will boost your confidence.

7. **Realize that people want you to succeed.** Audiences want you to be interesting, stimulating, informative and entertaining. They’re rooting for you.

8. **Don’t apologize** for any nervousness or problem – the audience probably never noticed it.

9. **Concentrate on the message – not the medium.** Focus your attention away from your own anxieties and concentrate on your message and your audience.

10. **Gain experience.** Mainly, your speech should represent you — as an authority and as a person. Experience builds confidence, which is the key to effective speaking.
In September, we are highlighting Delbert McCutchen, Outreach Nurse for AR SAVES. Delbert has been married to his wife, Vivian, for 22 years and they have one son, Kyle. He enjoys spending time with his family, attending church, outdoor photography, playing on his iPad, and trying to fly RC helicopters. Delbert is also an avid Razorback football fan and St Louis Cardinal baseball fan. Delbert has been out of work only 3 days since he was 18 years old. After graduating from Flippin High School, he went to work at a shirt factory and then to at Micro Plastics for 11 yrs. While he worked at Micro, he also worked at Wal-Mart for 2 years. Delbert attended Harding University and received his AAS in Nursing from North Arkansas College. He started his career in nursing at Baxter Regional Medical Center, which lasted for 11 years until his move to UAMS in January. In addition to being a nurse, Delbert became a first responder in 1992, an EMT in 1995, and has been a Fire Fighter for 15 years. Some of Delbert’s favorite things are:

- Color: Red
- Food: Ham & Beans
- Book: The Bible
- TV show: M*A*S*H
- Band: Eagles
- Vacay spot: Pigeon Forge
- Movie: Willy Wonka and the Chocolate Factory (the original version) and A Christmas Story

EMS AND THEIR ROLE IN STROKE

So there you are, going into the next house, business, or whatever unknown scene you may get called to. Many things that flood the mind of an EMS provider: is the scene safe, how many patients, will we get stuck, is the house really down this road, how sick is the patient, is this another taxi ride? What about the patient whose symptoms just aren’t clear cut? I am weak, I can’t move my arm or leg, my speech sounds funny, my family member doesn’t seem to know me. Do you think this might be a stroke?

You arrive on scene and find these vague possible stroke-like symptoms. What next? EMS is trained in quick response, quick actions, and taking care of the patient with limited resources and assistance, but did you stop and think about the last known well time? This question is something that EMS providers often do not include in their line of questions. This simple question can affect the remainder of the patients care and outcome.

The next steps for this patient should include.......

- ABC’s
- Brief Neuro exam (FAST, Cincinnati, LAPSS, or MEND)
- Blood glucose
- IV access with blood draw
- SAMPLE History (with medications & Last Known Well Time)
- Keep patient NPO

Transport rapidly and provide prenotification to receiving facility. Also bring with you a family member or witness who provide last known well time.

Often EMS is the only contact with the witnesses to the incident and the key to determining when symptoms started. Transporting family/witness may help with determining appropriate medical treatments for the Acute Ischemic Stroke patients. This information, along with information collected during the assessment will help to determine the destination and type of treatment for these patients. Knowing the local telemedicine sites for AR SAVES as well as the state’s stroke centers is vital in caring for these patients in a timely manner.

Please refer to the AHA Guidelines for EMS for further recommendations

Part 11: Adult Stroke

2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care