MINUTES

EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM

STROKE SYSTEM EXECUTIVE COMMITTEE

September 2, 2009 – 10:00 A.M.

MEMBERS PRESENT

David Slattery, MD, Chairman
Christopher Roller, American Heart Assoc.
Scott Selco, MD, Sunrise Hospital
Chad Henry, EMT-P, AMR
Amelia Hoban, Sunrise Hospital (Alt.)
Allen Marino, MD, MAB Chairman
Derek Cox, EMT-P, LVF&R
Anna Smith, RN, Valley Hospital
Bobbette Bond, Health Services Coalition

MEMBERS ABSENT

William Wagnon, Mountain View Hospital

SNHD STAFF PRESENT

Joseph J. Heck, DO, Operational Medical Director
Mary Ellen Britt, Regional Trauma Coordinator
Judy Tabat, Recording Secretary
Rory Chetelat, EMSTS Manager
John Hammond, EMSTS Field Rep
Lan Lam, Administrative Assistant

PUBLIC ATTENDANCE

Jackie Levy, University Medical Center
Chief Scott Vivier, HFD
Carol McLeod, Spring Valley Hospital
John McNeil, American Heart Assoc.
Troy Tuke, EMT-P, CCFD
Brian Rogers, EMT-P, HFD
Sam Kaufman, Desert Springs Hospital
Susie Cram, Desert Canyon
Chief Bruce Evans, NLVFD
Ourida Diktakis, RN, St. Rose Siena
Eric Dievendorf, EMT-P, AMR
Jen Renner, HCA
Lyndee Leifeste, The Valley Health System
Lori Wright, American Heart Assoc.
Jo Ellen Hannom, RN, CCFD
Carol Butler, Centennial Hills Hosp.
Greg Boyer, Valley Hospital
Susie Kochevar, RN, NLVFD
Mary Ann Dube, RN, St. Rose Siena

I. CONSENT AGENDA

The Stroke System Executive Committee convened in the Clemens Room of the Ravenholt Public Health Center on Wednesday, September 2, 2009. Chairman Slattery called the meeting to order at 10:01 a.m. and the Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law. Dr. Slattery noted that a quorum was present.

Minutes Stroke System Executive Committee Meeting: 6/3/2009.

Dr. Slattery asked that this item on the consent agenda, Minutes Stroke System Executive Committee Meeting: 6/3/2009, be moved from Consent Agenda to Report/Discussion/Possible Action.

II. REPORT/DISCUSSION/POSSIBLE ACTION

A. Minutes Stroke System Executive Committee Meeting: 6/3/2009.

Dr. Selco questioned the motion made by Mr. Wagnon to approve the criteria in Objective 3C with the change of the word "should" to "shall." He felt that it was confusing and asked if it was accurate.

Dr. Slattery stated that from a Health District standpoint "shall" is more enforceable and easier to regulate. Dr. Heck agreed and stated it leaves no room to maneuver.

Dr. Slattery asked for a motion to approve the minutes of the June 3, 2009 Stroke System Executive Committee meeting. A motion to accept the minutes was made, seconded and passed unanimously.

B. Final Report from Stroke System EMS Protocol and Education Development Taskforce – Derek Cox

Mr. Cox started off the discussion by thanking the following people for volunteering their time and their dedication to this project:

Ian Smith, North Las Vegas Fire Department
Scott Vivier, Henderson Fire Department
Brian Rogers, Henderson Fire Department
Dr. Eric Anderson, Fremont Emergency Services
Dr. Scott Selco, Sunrise Hospital
Troy Tuke, Clark County Fire Department
Brent Hall, Clark County Fire Department
Amy Hoban, Sunrise Hospital
Anna Smith, Valley Hospital
Tami Vogel, Spring Valley Hospital
John Higley, Mesquite Fire & Rescue
Lisa Ponce, Bob Byrd, American Medical Response
Nicole Brown, MedicWest Ambulance
Mary Levy, UMC Paramedic Program
Steve Herrin, Fire Alarm Office
Jason Meilleur, MedicWest Dispatch
Monica Manning, Mary Champlion, Henderson Fire Department Dispatch

Mr. Cox reviewed his final recommendations:

Objective 1A: Assess current dispatch center(s) management of stroke

a. *Current Protocol* – The recommendation is to remove alpha responses from card 28.
b. *Educational Deficiencies* – The recommendation is to mandate (2) two hours of stroke education to be included in the emergency medical dispatcher continuing medical education required for recertification.
c. *Pre-arrival instructions* – No recommendations
d. *Outcome measurement* - The recommendation is to review 20 calls annually where card 28 was activated at the Emergency Medical Dispatch (EMD) QA/QI meetings. Findings should be reported to QA/QI Committee for review.

Mr. Chetelat questioned whether reviewing twenty calls annually is too high a volume for the EMD QA Committee to review. Dr. Heck suggested reviewing one call per meeting since they meet approximately eight times a year. Mr. Cox agreed to one call per meeting as long as you can reliably look for trends. Dr. Slattery felt that without representation from dispatch at this meeting he would not want to impose anything without talking with them. He agreed to leave it at one call per meeting and address it at a later date.

Dr. Heck questioned the removal of 28 Alpha's and asked if this workgroup talked about the increased risk verses the benefit by running those calls hot. Mr. Cox stated that they did discuss that but the number of alpha calls was very low and felt it wasn't a risk.

Dr. Marino questioned whether the two hours of stroke education will be included in their current canned EMD education or if it is an additional two hours. Dr. Heck stated that either through regulation or procedure the Health District will mandate two hours of stroke based education in addition to the canned EMD recertification requirement. Dr. Marino stated that since it is a canned product stroke should already be discussed and it would be nice to know how much time or redundancy there will be. Dr. Heck stated that the EMSTS Office will come up with the regulation or procedure change and meet with Steve Herrin to go over what is in the current requirement and adjust accordingly. Mr. Cox explained that Steve Herrin (FAO) and Monica Manning (HFD dispatch) attended these meetings and they stated the canned recertification education is just a general medical education with no specific categories.

A motion was made to approve Objective 1A with the recommended change as discussed. The motion was seconded and passed unanimously.

Objective 1B: Develop recommendations for improving the management of potential stroke victims during the time period from 911 call to EMS arrival.

Mr. Cox stated that after careful review no recommendations will be made.

Objective 1C: Determine educational needs of EMS providers in Southern Nevada in terms of:

a. Identification of acute stroke
b. Performance of appropriate history, exam, diagnostic tests and documentation as it is related to prehospital stroke care.

The recommendation from the task force is to assign the Education Committee to produce a stroke video that can be distributed throughout the county. Topics must include pathophysiology of stroke, signs and symptoms, key stroke mimics, assessment using the Cincinnati Prehospital Stroke Scale, notification requirements (telemetry's) and destination guidelines, documentation requirements, the QA/CQI process, hospital treatment options, a case study, and a test. As with similar in-services a 90% compliance with the education must be obtained before a go live date.

Dr. Marino questioned whether the stroke protocol will be put on hold until the video is done. Mr. Cox stated that it would be more beneficial to do a stroke inservice with 90% compliance rate before a go live date.

Mr. Chetelat stated that production of the video will take time and money which isn't ideal at this time and agreed to push forward education with 90% compliance rate. Dr. Heck suggested a canned scripted PowerPoint in order to roll it out quickly and be more cost effective.

Mr. Cox suggested striking "produce a video" and replace it with "produce a stroke educational program" with the intent of that being a scripted PowerPoint presentation.

Ms. Bond questioned if the 90% compliance rate is determined by facility or by EMT. Mr. Chetelat stated that each agency submits their training report rosters to us to show they've completed the education on 90% of their people. Ms. Bond then asked what happens to the remaining 10% and whether there is some expectation that there is going to be 100% completion rate at some point. Dr. Heck responded that the expectation is that everybody is trained but the 90% compliance rate is just for the purpose of allowing a protocol to be launched.

Dr. Marino asked if the PowerPoint presentation could go out with the new protocol rollout in October so when the stroke protocol gets approved in November the agencies will be ahead of the game. Dr. Heck stated that because the protocols are set to be issued October 1st with a go live date of January 1st and no MAB in October, he doesn't know how the Education Committee is going to meet to come up with the education product before November unless you want the Health District to put together the product without the input of the Education Committee. Dr. Slattery suggested scheduling an Education Committee for November with the idea of working on it ahead of time. Dr. Heck questioned if the Heart Association had a canned stroke presentation. Chris Roller with the American Heart Association answered in the affirmative.

Dr. Slattery made a motion to approve Objective 1B and 1C with the recommended changes as discussed. The motion was seconded and passed unanimously.

Objective 1D: Determine which stroke scale will be used by all EMS providers in Southern Nevada

Mr. Cox stated that the recommendation from the task force was to use the Cincinnati Stroke Scale.
Dr. Slattery stated that this as already been approved by a previous motion but to keep everything clean he will call for another one.

Dr. Slattery made a motion for EMS Providers to use the Cincinnati Stroke Scale . The motion was seconded and passed unanimously.

Objective 1E: Draft prehospital stroke care management protocol (to exclude destination criteria)

Mr. Cox presented his draft Acute Cerebral Vascular Accident protocol. He stated this protocol meets the minimum requirements for stroke treatment but added that Combitube/Combitube SA will need to be removed and replaced with Supraglottic Airway Device.

Dr. Selco expressed the fact that he would like to see onset of symptoms and any scene phone numbers of anybody that can assist in clinical decision making once the patient arrives in the Emergency Room. This would be extremely useful for triaging and treating. He also suggested reinforcing scene time to be less than 10 minutes in the educational program.

Dr. Slattery asked Mr. Cox if he would be opposed to adding an alert box to the protocol if it is that important. Mr. Cox stated it definitely will need to be addressed in the educational component and a ten minute on scene time should be a bench mark for acute strokes. Dr. Heck stated that he will put both those issues in an alert box and reformat it in the current rollout.

Dr. Marino questioned whether a tool will be released for the Cincinnati Stroke Scale. Dr. Heck advised the Committee that they will put the stroke scale as another appendix in the protocol manual and reference the appendix in the protocol.

Dr. Selco asked if it was reasonable to put a Cincinnati Stroke Scale card in each rig. Mr. Roller asked how many would be needed if those cards were available. Mr. Chetelat stated that there are about 400 to 450 units so a minimum of 500 would work.

A motion was made to approve the Acute Cerebral Vascular Accident protocol with the recommended changes as discussed. The motion was seconded and passed unanimously.

C. Final Report from EMS Quality Assurance/Performance Taskforce – Chad Henry/Anna Smith

Objective 2A: Determine the quality measures and measurement tool that will be used for assessing initial and continuous EMS receiving hospital designation.

Anna Smith reported that the primary criteria would be certification as a Primary Stroke Center by the Joint Commission (JC). The measurement tool used will be the measures outlined by JC. Reporting would take place quarterly at the already established SNHD QA meetings. She added that Objective 2A is unchanged and these recommendations have already been approved at a previous meeting.

Objective 2B: Determine performance and quality measures and measurement tool that will be used to assess prehospital stroke care, decision-making, and protocol compliance.

Anna stated she made the following recommendations very specific based off the guidelines put out by the American Heart & Stroke Association.

Recommendations: Follow the treatment protocol "Acute Cerebral Vascular Accident" (STROKE). The established standards in prehospital stroke care are as follows; maintain airway, breathing and circulation; identification of stroke signs and symptoms (Cincinnati stroke scale); rapid initiation of transport (10 minute scene time); establishment of last known well time; supplemental oxygen for patients with hypoxemia; checking blood glucose level; avoidance of administration of glucose containing fluids (unless patient is hypoglycemic); and delivery of patients to receiving centers capable of

rapidly caring for acute stroke. These quality measures will be reported quarterly at the SNHD QA meeting.

Dr. Slattery stated that these are the data points that we as a system will be looking at. When the education program is rolled out it is important for the paramedics and EMS providers to know what the benchmarks are and how they are going to be measured.

Ms. Bond questioned whether the data points tracked for quality assurance will be contributing to a database for stroke transports that can be reviewed in the QA quarterly meetings. She added that it would be a great tool for tracking compliance rates over time and determining outcome measures for the stroke system.

Ms. Smith stated that has been discussed and part of the education will be making sure the run sheets are complete to extrapolate that data.

Dr. Slattery added that the vision is perhaps the protocol violations both good and bad will be reported in a global sense at a closed QA meeting which is protected by the Health District and then and the need presents itself we will work with the Health District in terms of a special QA committee just for stroke.

A motion was made to approve the recommendations made for Objective 2B. The motion was seconded and passed unanimously.

Objective 2C: Determine triggers and process for performing peer review for EMS providers.

Recommendations: Important Data Collection Points - EMS

1. Was the Cincinnati stroke scale completed? (Preferably within first five minutes on scene)
2. Were mimics identified? (Hypoglycemia, post-ictal, bell's etc...)
3. Was a time identified when stroke symptoms started?
4. Was contact information obtained (family member)?
5. Was hospital notified of incoming stroke?
6. Were arrival, scene, departure and hospital times documented? Target 10 minute scene time.
7. Were protocol variations documented?
8. Patient taken to appropriate facility?

Objective 2D: Determine process and triggers for performing peer review for stroke receiving hospitals.

Recommendations: Important Data Collection Points – Hospital

1. Percentage of patients that arrive by EMS.
2. Percentage of patients with prior notification of arrival.
3. Percent of patients arriving after 3 hours but before 6 hours.
4. Code 100 activation percentage vs. EMS perceived Code 100.
5. Number/percentage of patients receiving t-PA.
6. Accuracy in identification of stroke (review of D/C ICD-9 code compared with initial EMS interpretation).
7. Symptomatic ICB from AIS receiving t-PA/ discharge percentages.

Ms. Smith stated that the biggest change here was #3 which is a good group of patients to identify so we know where to make improvements with primary prevention education or with diverting those patients to comprehensive centers at some time in the distant future when that center is decided upon. The other change was #7 where instead of mortality we decided symptomatic intracranial bleed from t-PA administration would be a good indication of protocol deviation and protocol compliance.

Dr. Selco expressed concern that symptomatic ICB was not defined and asked how they envisioned determining that there was a symptomatic ICB. Ms. Smith stated that a great question and asked if he could offer any assistance in deciding that.

Dr. Selco stated that there are two ways to define this. There is a real conservative way and then there is the way it was done for purposes of a clinical trial which used the NHA stroke scale to see if there was a

four point worsening in concert with hemorrhage. He felt that it wasn't reasonable to expect every stroke center to do the NHA stroke scale score on every patient. A more conservative definition of a symptomatic bleed would be any worsening from the patient's best neurologic exam after treatment in concert with hemorrhage on CT or MRI.

A motion was made to approve the recommendations made for Objective 2C and 2D including the definition for Symptomatic ICB. The motion was seconded and passed unanimously.

Objective 2E: Working with the SNHD Office of EMS & Trauma System to provide a proposed budget to the Executive Committee for stroke system data collection, clerical and statistical support, and quality assurance and oversight activities.

The Stroke QA/QI Committee Budget Proposal for last quarter 2009 and 2010 was handed out for review. Chad Henry recommended that once the protocol is rolled out the QA/QI Committee should meet monthly and then based on the outcome of those meetings move to a quarterly format thereafter. Dr. Slattery stated that action on the budget does not have to take place at this meeting but the vision was to set up a mirrored program with Trauma. Mr. Chetelat stated this would lead us to eventually seeking fees from hospitals to participate in the stroke system either annually or when they renew their Joint Commission accreditation.

D. Final Report from Stroke System Hospital Taskforce – Will Wagnon

Amelia Hoban reported that their recommendations have already been approved at a previous meeting and there was nothing to add.

E. Discussion on final Recommendations to the Medical Advisory Board – Dr. Slattery

Dr. Slattery stated that these recommendations will be taken to the November Medical Advisory Board for a formal vote.

Mr. Chetelat advised the committee that rolling out the protocol along with the education product in October with the assumption that it will be approved in November will be a risk to the agencies training on something that may not be approved.

Dr. Heck stated that the issue is not so much the educational product because that is going to be the same regardless. The question is the actual rollout of the stroke protocol since the MAB will not be able to officially vote on this protocol until November. He suggested to put this stroke protocol in the new protocol manual now along with the educational supplement that is going out on October 1, 2009, have the agencies start training on it and hope that the MAB is going to approve it as written. He added that if you look at the protocol most of it is covered in General Patient Care. The only additional item is adding the Cincinnati Stroke Scale and he didn't see the MAB saying no to that since it was this Committee's recommendation.

Mr. Chetelat stated that he would like a recommendation from this committee to go ahead and add the stroke protocol to the protocol manual that will be rolled out on October 1st and start the education product.

A motion was made to include the stroke protocol in the protocol manual and include the stroke educational program in the educational supplement that will be rolled out on October 1, 2009. The motion was seconded and passed unanimously.

Dr. Slattery thanked the committee chairs and all the individuals in the community that came together on this very important project for over a year's worth of work and congratulated them on a job well done.

III. INFORMATIONAL ITEMS/ DISCUSSION ONLY

None

IV. PUBLIC COMMENT

None

V. ADJOURNMENT

As there was no further business, Dr. Slattery called for a motion to adjourn. The motion was seconded and passed unanimously to adjourn at 10:57 a.m.