CLARK COUNTY HEALTH DISTRICT

MINUTES
EMERGENCY MEDICAL SERVICES
MEDICAL ADVISORY BOARD MEETING
SEPTEMBER 1, 2004 – 3:30P.M.

MEMBERS PRESENT

Jeff Davidson, M.D., Chairman, Valley Hospital
Chief Steve Hanson, Clark County Fire Department
E. P. Homansky, M.D., ED Physician at Large
William Elsaesser, M.D., Lake Mead Hospital
David Daitch, D.O., Boulder City Hospital
William Z. Harrington, M.D., UMC
Donald Reisch, M.D., Desert Springs Hospital
Michael Zbiegien, M.D., Pediatric Representative
Donald Kwalick, M.D., Chief Health Officer, CCHD
David L. Watson, M.D., Sunrise Hospital
Pete Carlo, EMT-P, Southwest Ambulance
Virginia DeLeon, R.N., Nurse Manager
Allen Marino, M.D., St. Rose Dominican/Siena
Philis Beilfuss, R.N., North Las Vegas Fire Department
Chief Randy Howell, Henderson Fire Department
Chief Mike Myers, Las Vegas Fire & Rescue
Kurt Williams, American Medical Response
Wade Sears, M.D., Southern Hills Hospital
Malinda Whipple, EMT-P, Mesquite Fire & Rescue
Darrin Houston, D.O., Mesa View Regional Hospital
Richard Henderson, M.D., St. Rose Dominican/Rose de Lima
Jon Kingma, EMT-P, Boulder City Fire Department

MEMBERS ABSENT

John J. Fildes, M.D., University Medical Center
Sam Kaufman, FAB Representative
David Rosin, M.D., Mental Health Representative
Kevin Slaughter, D.O., Spring Valley Hospital
Frank Pape, D.O., Summerlin Hospital

CCHD STAFF PRESENT

Rory Chetelat, EMS Manager
Trish Beckwith, Field Representative
Eddie Tajima, Administrative Asst.
Jane Shunney, Asst. to Chief Health Officer
Mary Ellen Britt, R.N., Quality Improvement Coordinator
Moana Hanawahine-Yamamoto, Recording Sec.
Joseph J. Heck, D.O., Operational Medical Director

PUBLIC ATTENDANCE

Brian Rogers, EMT-P, Southwest Ambulance
Gerry Hart, American Medical Response
Scott Vivier, EMT-P, Henderson Fire Department
Russ Cameron, EMT-P, Clark County Fire Department
Jo Ellen Hannom, R.N., Clark County Fire Department
Jay Craddock, EMT-P, North Las Vegas Fire Department
Natalie Seaber, R.N., MountainView Hospital
Kathy Kopka, R.N., Sunrise Hospital
Sue Hoppler, R.N., Desert Springs Hospital
Brent Hall, EMT-P, Clark County Fire Department
Aaron Harvey, EMT-P, Henderson Fire Department
Trent Jenkins, EMT-P, Clark County Fire Department
Sydney Selitzky, EMT-P, Henderson Fire Department
Tom Geraci, D.O., Mesquite Fire & Rescue
David Peterson, EMT-B, Mesquite Fire & Rescue
Pam Turner, R.N., Valley Hospital
J.L. Netski, R.N., American Medical Response
John Henner, D.O., MountainView Hospital

CALL TO ORDER - NOTICE OF POSTING OF AGENDA

The Medical Advisory Board convened in the Clemens Room at the Ravenholt Public Health Center at 3:31 p.m. on Wednesday, September 1, 2004. The meeting was called to order by Chairman Jeff Davidson, M.D. He stated that the Affidavit of Posting, Mailing of Agenda, and Public Notice of the Meeting Agenda were executed in accordance with the Nevada Open Meeting Law. Chairman Davidson noted that a quorum was present.

I. CONSENT AGENDA

Dr. Davidson stated the Consent Agenda consisted of matters to be considered by the Medical Advisory Board that can be enacted by one motion. Any item may be discussed separately per Board member request. Any exceptions to the Consent Agenda must be stated prior to approval. A motion for Board approval of the following item on the Consent Agenda was made, seconded, and carried unanimously.

Minutes Medical Advisory Board Meeting August 4, 2004

II. REPORT/DISCUSSION/POSSIBLE ACTION

A. Report from Focus Group on Critical Care Transport Curriculum

Dr. Joseph Heck advised that the Education committee approved the District Procedure for EMS-RN Training. The goal was to standardize the EMS-RN training program so that every EMS-RN operating in Clark County would have the same baseline education. Dr. Davidson, Dr. Marino, Dr. Heck and the lead nurses from each of the agencies were involved in putting this procedure together.

Dr. Davidson stated a motion to adopt the District Procedure for EMS-RN Training. The motion was seconded and passed unanimously by the Board.

B. Report from Focus Group on Pediatric Destination Protocol

Dr. David Watson explained that there have been multiple meetings and revisions forming this pediatric destination protocol. Dr. William Harrington from the University Medical Center (UMC) mentioned that the previous version included UMC and Sunrise Hospital and Medical Center as destinations for pediatric sexual assault patients. Dr. Michael Zbiegien from Sunrise clarified that sexual assault patients are examined at UMC by sexual assault nurse examiners (SANE) and that the Nevada Nurse Practice Act maintains that SANE are only allowed to examine patients that are fourteen years of age and older. This draft of the pediatric patient destination protocol defines the pediatric patient as less than twelve years of age. This age criteria eliminates UMC as a possible destination for pediatric sexual assault patients. Sunrise on the other hand has the capability of examining pediatric sexual assault patients up until the age of eighteen.

Dr. Joseph Heck from the Health District advised that the EMS office contacted the Nevada Board of Nursing and were advised that SANE are able to examine children less than thirteen years of age. The Nevada Board of Nursing defines pediatric sexual assault patients as less than thirteen years of age and require that all examinations with abnormal genital finding be referred to a recognized child abuse expert, physician, or APN and collection of evidential material on a pediatric victim should only be performed by a SANE with ongoing documented competency. The Nevada Board of Nursing will follow the training guidelines of the International Association of Forensic Nurses (IAFN); however, these guidelines will not be completed until Spring of 2006. Dr. Zbiegien added that a SANE may only do an external examination on patients that are less than fourteen years of age but is unable to collect internal evidence.

Dr. Richard Henderson recommended the definition of a pediatric patient be changed to less than eighteen years of age. Rory Chetelat stated that the definition of less than twelve years of age was set to keep it simple because the current EMS protocols define pediatric patients as less than twelve years of age. Philis Beilfuss from North Las Vegas Fire Department added that EMS providers should not have a problem with differentiating between a transport age and a treatment age. Virginia DeLeon, R.N., from St. Rose Dominican Hospital stated that changing the age to less than eighteen would help reduce the necessity of additional transports. Dr. Zbiegien also stated that leaving the age as less than twelve years of age would cause children

who are not seriously ill that are twelve and older to have extensive wait times in busy adult emergency departments.

Dr. Davidson initially suggested to table #4 which relates to the sexual assault patient on the pediatric patient destination protocol; however, Sydney Selitzky from Henderson Fire Department asked that this issue be addressed because there are no current guidelines in place at this time. Dr. Reisch commented that until UMC can handle doing examinations on victims of suspected sexual assaults of all ages then #4 should remain unchanged. Dr. Harrington's concern was that the change of the definition of a pediatric patient to less than eighteen years of age would stop UMC from performing examinations on children from twelve to eighteen. UMC hasn't been doing examinations on children twelve and under but feel that they do have the capability and will clarify the interpretation of the law before pursuing this matter further.

Dr. Davidson confirmed the consensus to amend the definition of the age of a pediatric patient from less than twelve years of age to less than eighteen years of age for transport destination purposes. He also brought up the fact that changing the age would mean all psychiatric patients less than eighteen years of age would only be transported to the four designated facilities.

Dr. Davidson stated the motion to approve the Pediatric Patient Destination Protocol with the amendment to change the definition of a pediatric patient to less than eighteen years of age. The motion was seconded and passed unanimously.

The Pediatric Patient Destination Protocol will be effective Friday, September 3, 2004 at 0700.

Randy Howell from Henderson Fire Department requested that the Board create a destination protocol for adult patients that are victims of suspected sexual assault. Mr. Chetelat volunteered to research this issue further.

C. Discussion of the Policy to Eliminate E.D. Closure

Mr. Chetelat explained that the elimination of E.D. closure has had a positive impact on the EMS community. Dr. Reisch stated there was a lack of utilization of the EMSystem by the EMS providers. He recommended that the entire EMSystem as an advisory be eliminated. Dr. Harrington stated that the EMSystem has provided relief for UMC at times and to eliminate this system would put UMC in a disaster mode. Chief Myers explained how the new computer system, FirstWatch, will help to enhance the current system. The ambulance crew will push the CAD button either en route or upon arrival at a facility. As additional ambulances are added to that same facility, the number will increase and the formula may include a color change to emphasize the seriousness of the wait time. Then, as the ambulances become available, the CAD button would then be pushed again and the number of ambulances holding will decrease. Mr. Chetelat asked the members to give the system time to mature. As the other technology comes on-line, utilization will improve and the system will develop.

Dr. Davidson stated the motion to eliminate E.D. closure. The motion was seconded and passed unanimously.

Mr. Chetelat formed a task force to make system-wide decisions and discuss methods of improving communication between prehospital and hospital. The task force divided up into subgroups to work on specific issues. The system would be similar to the way the mental health disaster was handled. When the system becomes impaired, a call to the Health District would be initiated. A page would then go out to the Administrators On-call (AOC), nurse managers, fire and ambulances services. Everyone would then connect into a conference call and the situation would be handled collectively.

III. INFORMATIONAL ITEMS/DISCUSSION ONLY

A. Henderson Fire Department Airway Data Collection Presentation

Aaron Harvey and Scott Vivier, Henderson Fire Department, presented the preliminary results of their Airway Management study. The study was initiated, in part, from an RSI study in San Diego which demonstrated the incidence of transient hypoxia and heart reactivity during intubation. Henderson Fire Department implemented a form which was used to track when advanced airway management was performed in the field. Looking at five months of data, they identified 46 cases of facilitated intubation. The indications for

intubation were: 44%-ventilatory compromise; 29%-apnea or agonal respirations; 22%-airway reflex compromise; 16%-potential for airway compromise. The overall success rate was 91%. By attempt, they were only about 53% successful. The reasons for failed attempts were as follows: 11%, inadequate relaxation; 27%, inability to expose cords; 27%, difficult anatomy; 15%, blood/vomit. 55% of the time, they found a grade 3 or 4 view. The flex-guide was used in 40% of all attempts and on 45% of first attempts. Therefore, it was recommended that they have the Flex-Guide out and ready to go along with the first choice tube. Critical complications included: 9%-failed intubation; 5%-airway trauma; 1%-adverse event from medication; 3%-tube dislodgement during transport and of special interest was 21% oxygen desaturation (defined as less than 90%) with 9% of those cases showing heart rate reactivity. The Henderson Fire Department used Code-Stat, which is software that the Lifepak 12 downloads into to document SpO_2, heart rate and $EtCO_2$. When looking at the Code-Stat information, it's apparent when intubation occurs due to the increase in $EtCO_2$ and respiratory rate. With Code-Stat, you can compare the data from a particular time and space and the EKG. Mr. Harvey reported a trend of the patient becoming bradycardic and then the heart rate increasing again right around the time the intubation was successful.

Following review of the data, the consensus was that the skill level of the paramedics was not in question, but probably that the procedure was flawed. Mr. Vivier explained that in the 1970's, the airline industry suffered a high incidence of crashes despite having the best equipment and the best-skilled pilots. The results of a combined investigation by NASA, the FAA and the NTSB found that 80% of the crashes occurred due to human error. The errors did not occur as a result of incompetently skilled crews but because of a flawed procedure. The airline's model of crew resource management, which dictates that there be a written, well-defined set of guidelines and procedures, was adopted. Recognizing the value of this approach, Henderson Fire Department received permission to use an advanced airway algorithm, developed by Dr. Davis of the San Diego study on RSI and adjusted it to meet their needs. The first change implemented was that intubation became a team effort. Predicated on this team-based approach, there should be a minimum of two people, preferably three, during intubation: the intubator who performs the task; the monitor person who watches the monitor for desaturation, hyperventilation and heart rate; and ideally, an equipment person who assembles and prepares the equipment. Crew resource management focuses on the importance of good communication between the team members. Dr. Homansky expressed the point that one really needs to think before taking someone's airway away from them. Mr. Vivier agreed. The goal is to ventilate the patient.

B. Facilities Advisory Board Report

No Report.

C. E.D. Nurse Managers Report

Virginia DeLeon, R.N., did voice her concern that the EMSystem is not being utilized properly especially in the case of offload status and psych volumes. She also addressed the fact that the new FirstWatch system will note the number of ambulances en route or arriving at a hospital but this number is really not an accurate indication of how saturated a hospital may be.

Due to the ongoing problems with mental health holds in the emergency departments, Dr. Davidson requested that a task force on mental health be formed.

D. QI Committee Report

No Report.

E. Update on Community Triage Center

No Report.

F. Update on Mesquite Fire & Rescue IV Maintenance Procedure

Mr. Chetelat explained that Mesquite Fire & Rescue was allowed to monitor certain IV drips out of the old MMA clinic through a pilot program. The pilot program was approved by the Health District and adopted as a Mesquite Fire & Rescue internal policy. Dr. Geraci and Chief Petersen requested that the language be amended to remove the MMA clinic so that they have the ability to originate from any medical facility. Since

the amendment is to an internal policy, the language regarding specific locations will be removed and it will be maintained as an additional training skill that Mesquite Fire & Rescue has the ability to perform.

IV. PUBLIC APPEARANCE/CITIZEN PARTICIPATION

None.

V. ADJOURNMENT

As there was no further business, Chairman Davidson called for a motion to adjourn. The motion was seconded and passed unanimously to adjourn at 4:48 p.m.