MINUTES
EMERGENCY MEDICAL SERVICES
DRUG & DEVICE COMMITTEE MEETING
APRIL 7, 2004 – 2:30P.M.

MEMBERS PRESENT

Allen Marino, M.D., Southwest Ambulance
David Watson, M.D., Sunrise Hospital

ALTERNATES

Sandy Young, R.N., Las Vegas Fire & Rescue
Susie Kochevar, R.N., Southwest Ambulance
Philis Beilfuss, R.N., North Las Vegas Fire Department

MEMBERS ABSENT

Deputy Chief Steve Hanson, Clark County Fire Dept.
Rick Resnick, EMT-P, Mesquite Fire & Rescue
Richard Henderson, M.D., St. Rose Dominican Hospital
Tom Higgins, M.D., University Medical Center
Aaron Harvey, EMT-P, Henderson Fire Dept.
Pete Carlo, EMT-P, Southwest Ambulance
Bryan Lungo, M.D., University Medical Center

CCHD STAFF PRESENT

Rory Chetelat, EMS Manager
Joseph Heck, D.O., EMS Operational Medical Director
Rae Pettie, Program/Project Coordinator
Moana Hanawahine-Yamamoto, Recording Secretary
Mary Ellen Britt, R.N., Quality Improvement Coordinator
Trish Beckwith, Field Representative
Eddie Tajima, Administrative Assistant
James Osti, Grant Writer

CALL TO ORDER - NOTICE OF POSTING OF AGENDA

The Drug & Device Committee convened in the Clemens Room of the Ravenholt Public Health Center on Wednesday, April 7, 2004. Acting Chairman Jeff Davidson, M.D., called the meeting to order at 2:40 p.m. and the Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law. Chairman Davidson noted that a quorum was present.

I. CONSENT AGENDA:

Minutes Drug & Device Committee Meeting January 7, 2004

Chairman Davidson asked for a motion to approve the Consent Agenda Items. A motion was made, seconded and passed unanimously.

II. REPORT/DISCUSSION/POSSIBLE ACTION:

A. Discussion of Addition of In-Line Albuterol and Pediatric Needle Cricothyrotomy Equipment to the Official Air Ambulance, Ground Ambulance & Firefighting Agency Inventory

Mary Ellen Britt noted that a change in the protocols, allowing paramedics to perform needle cricothyrotomy on children, necessitated the need to add equipment to the inventory. The pediatric-sized transtracheal catheter kit retails for approximately $50. When it was added to the inventory, Mary Ellen was approached by Philis Beilfus due to concerns with the initial/replacement costs. After reviewing the PALS manual, it was discovered that the equipment described was already being carried by the units. Mary Ellen suggested that the agencies be given the option to purchase the $50 kit or to assemble their own. She noted that Philis thoroughly

outlined the procedure to create the kits. Dr. Marino related that the same equipment is being used in his emergency room.

Philis Beilfus made a motion for the addition of a pediatric transtracheal kit to the Official Air Ambulance, Ground Ambulance and Firefighting Agency Inventory for patients that require needle cricothyrotomy. The motion was seconded and passed unanimously by the Committee. It was agreed the provider agencies will be given the option to purchase a commercial pediatric transtracheal catheter kit, or assemble a Health District approved kit which includes a 14 gauge IV catheter, a 3ml syringe, and a 3.0 endotracheal tube 3mm adapter.

B. Discussion of AutoPulse Device Pilot Study Results

Sandy Young reported the results of the AutoPulse Device pilot study which was conducted between September and November of 2003.

Patient Information Overview

Average Age:	59 years		
Witnessed Arrest:	72% yes	28% no	
Bystander CPR:	28% yes	72% no	
Manual CPR prior to use:	85% yes	15% no	
Estimated downtime average:	9 minutes		
Presenting rhythm:	57% asystole	43% V-Fib	
Defibrillation delivered average:	2 shocks per patient		

Assessment Parameters During Use

Palpate pulses:	72% felt pulses	28% no documentation	
Easier achieved vascular access:	33% yes	77% did not try	
Patient pinked up:	71%	29% no	
Demonstrated respiratory effort:	86% no	14% yes	
Converted to a shockable rhythm:	57% yes	43% no	
ROSC noted:	57% yes	43% no	
Transported to ED:	100%		
Destination Hospital:	42% UMC	42% Sunrise	16% Valley

Device Performance

Time required for deployment:	1.7 minutes average
Time device utilized:	25 minutes average
Battery life remaining at end:	75% - 2 bars

Impression Relative to Manual CPR

Utilization of resources (personnel and equipment):	strongly improved: 43%	improved: 57%	
Improved access to patient for assessment & transfer:	strongly improved: 29%	improved: 43%	same: 28%
Performance as superior to manual compressions:	strongly agree: 43%	agree: 57%	
Future Use:	strongly agree: 57%	agree: 42%	

The positive comments from the crews included: consistent application of CPR during transit through stairs, elevators and various obstacles; personnel able to remain seat-belted while CPR was administered; no adverse patient outcome. The crews recommended a full backboard rather than a half backboard, with disposable straps. The only adverse determinant given was the cost.

Dr. Watson expressed concern with the device due to an incident that occurred while he was on duty in the emergency room. The device would compress once and then stop. After attempts to repair it,

the device would compress once or twice and stop again. Dr. Watson stated that manual CPR was much more effective because of the ability to stop CPR, feel for a pulse and start again. He noted that it was a great device for the paramedics, especially in the summer heat, but felt the money used for the device could be used elsewhere. Sandy agreed that the equipment was expensive; however, the issue was employee safety. She related that a Las Vegas Fire & Rescue employee not wearing a seat belt, while administering CPR, was left a quadriplegic as a result of an accident.

Dr. Marino inquired if any data had been received from the hospitals regarding patients having broken ribs or adverse trauma. Sandy replied that there has been no feedback from the hospitals but it needed to be addressed. Las Vegas Fire & Rescue, after much discussion, decided to focus the study on crew safety rather than patient outcome.

Brian Moore, a representative of the device-maker Revivant Company, added that no human outcome studies were currently available. However, extensive studies involving 2,500 patients at six sites in the U.S. and Canada are continuing over the next four years at a cost of $45 million. He noted a study from Stanford University that was released to the National Association of EMS Physicians and the American Heart Association Scientific Advisory Board that was significant. In an independent study, 32 animals had been put into cardiac arrest for 8 minutes. All 10 animals resuscitated with basic CPR died. 88% of the animals placed on the device survived; 73% neurologically intact. Only 2 suffered mild neurological deficits. Brian indicated that over the next 6 to 8 months, a snowball of more and more evidence would be presented.

Sandy Young made a motion to add the AutoPulse Device to the Official Air Ambulance, Ground Ambulance and Firefighting Agency Inventory as an optional piece of equipment. The motion was seconded by Philis Beilfus and passed unanimously by the Committee.

III. INFORMATIONAL ITEMS/DISCUSSION ONLY

None

IV. PUBLIC APPEARANCE/CITIZEN PARTICIPATION

No response.

V. ADJOURNMENT

There being no further business, Dr. Davidson adjourned the meeting at 3:04 p.m.