EMSA Board of Trustees Meeting – March 28, 2012
Medical Director's Report

I am filing this report from Plano, Texas on March 28, 2012 while preparing to attend an unexpected funeral later today for a close friend and EMS colleague, Plano Fire Department EMS Captain (Ret.) Kenneth Klein. As many Trustees know, prior to joining our EMS system, I had the great privilege of serving as the Medical Director for the Plano Fire Department from 1999-2007. Captain Klein and I worked closely on a daily basis throughout those years in advancing that EMS system's clinical standards of care and supporting the EMTs and Paramedics in their clinical abilities through continuous quality improvement and continuing education development. A number of the medical oversight-related advances achieved in our EMS system within the last three years can be traced to work I initiated first with Captain Klein. I apologize for my absence at today's Board of Trustees meeting, but I trust you will understand my need to pay proper respects to this fine man and his surviving family.

Since the February Board of Trustees meeting, many exciting clinically-related events have occurred. Last month, I briefed you on the upcoming EMS State of the Science XIV – A Gathering of Eagles meeting in Dallas. The conference, as anticipated, saw record attendance and my presentations on behalf of our EMS system received significant interest, with EMS World (an industry journal) asking for a follow-up article on EMT-Basic utilization of 12-lead ECGs and Journal of Emergency Medical Services (JEMS) asking for a follow-up article on our comprehensive redesign in cardiac arrest resuscitation, with emphasis on our team dynamics approach.

Office of the Medical Director Directors TJ Reginald, David Howerton, and Jim Winham also attended the conference and, as usual, networked with many of my physician medical oversight colleagues and numerous administrative and clinical leaders in EMS systems across the country. These relationships are particularly important as we continually seek best practices in EMS clinical standards and in the administrative and educational support of those standards. As I indicated in last month's report, costs of my attendance at this conference were partially paid by The University of Texas Southwestern Medical Center at Dallas (related to my faculty status at the conference) and from my personal finances. No financing of my expenses came from the Office of the Medical Director/Medical Control Board (OMD/MCB) budget. The OMD staff expenses were previously budgeted in the OMD/MCB 2011-12 fiscal year and were limited to conference registration, conference-negotiated lodging rates, government per diems, and limited mileage reimbursements where applicable. We continue to maximize educational consumption and outreach while minimizing fiscal impact.

The MCB met on March 7th, with review and action on more protocols than at any other time in anyone's memory. Over 20 protocols were updated, many to reflect the needs required by current pharmaceutical shortages affecting the spectrum of medicine, and certainly the practice of EMS medicine.

One particular protocol approved introduces a new ventilation device, as I discussed briefly in last month's report, that will allow EMTs and Paramedics to deliver full mechanical ventilation, Continuous Positive Airway Pressure (CPAP) and Bi-Level Positive Airway Pressure (BiPAP), and all from one unit. The unit is ruggedized for field use and comes with substantial affirmation of its durability from military use in Afghanistan. This unit will be carried on all EMSA ambulances. Training has been scheduled in late May and the units will be first available for clinical use June 1st. Our current mechanical ventilators are at, or frankly beyond, their clinical use lifespan, as are the majority of our CPAP regulators. I am excited at the potential this new ventilation device gives our EMS system as we continue to see EMSA

"Respiratory Distress" as one of our most common reasons for EMS system activation and a growing population with congestive heart failure (CHF) and particularly, chronic obstructive pulmonary disease (COPD).

The MCB additionally approved utilization of a topical hemostatic agent, QuikClot®Combat Guaze™. This dressing has been repeatedly shown superior to other hemostatic dressings in multiple military medicine peer-reviewed published trials. A limited number will be carried on all EMS-related apparatus in our EMS system, effective June 1st.

Etomidate was approved by the MCB for medication-assisted intubation. This pharmaceutical agent will assist paramedics in difficult airway placement situations. While available for use per protocol June 1st, we may see later initiation dates due solely to pharmaceutical shortages nationwide.

Finally, our Ventricular Assist Device (VAD) management protocol was updated, with 90% of the credit going to TJ Reginald, the OMD Director for Clinical Standards Development and Research and 10% going to our colleagues at Integris Baptist Medical Center in Oklahoma City for confirming the accuracy of his work. This particular protocol was so highly praised by the MCB physicians that many of them are posting a copy of it in their Emergency Department to assist their nurses and physicians with VAD management. VADs are definitely in the news over the past few days as former Vice President Dick Cheney traded his out for a transplanted heart.

I continue to review all hospital emergency department-initiated diversion reports and monthly CQI reports filed by the multitude of agencies comprising our EMS system in metropolitan Oklahoma City and Tulsa. Diversions may not be a significant problem in our EMS system, but growing "bed wait" times upon arrival at emergency departments are definitely catching my attention and the MCB directed EMSA to construct and maintain a database for all bed waits in excess of 15 minutes over the past 3 months for its review and the next MCB meeting in May.

The most recent CQI findings indicate continued high quality patient care. You'll find the most recent reports for diversions and the EMSA CQI summary page under the Medical Director Report tabs today.

Our January 2012 cardiac arrest outcomes are also attached for your review. Of note, you'll find an outstanding 83% (5/6 patients) return of spontaneous circulation achieved for those victims of cardiac arrest of cardiac etiology (as opposed to trauma, toxicology, etc) that were witnessed to collapse, had some form of bystander CPR prior to EMS system arrival and were found in shockable cardiac rhythm. I am particularly excited by this analysis (which follows the international Utstein consensus for such analysis) as our team dynamics approach to cardiac arrest was being taught over this timeframe, but not fully implemented until February 1st. Preliminary analysis for February indicates we may realize continued success at this level.

Significant educational activities are on the horizon and a Continuing Education Summit has been scheduled by OMD for April 23rd with invites to all organizations that receive their medical oversight from the OMD/MCB. My stated goal is to achieve, for the first time in our EMS system, a truly coordinated program for EMS continuing education that will allow all credentialed EMS professionals to receive the same continuing education system-wide. There is growing interest and enthusiasm for this

objective among the myriad of EMS educators in our system and I believe marshalling the collective wisdom and efforts of these educators will pay direct dividends in clinical care achievements. I'll be briefing the Board of Trustees on the ongoing work in this regard in the months to come.

As always, I thank you for your continued interest and support of our EMS system and my daily medical oversight of it. It is a great honor and privilege to be of service to you, our EMS colleagues, and the citizens and visitors that depend upon our collective dedication and effort. I will prioritize at nearly any time possible any discussions a Trustee wishes to have with me in regards to our EMS system's medical oversight and welcome your inquiries.

Respectfully submitted

Dr. G