

Conference Proceedings



**Rural & Frontier EMS and
Trauma**

*"Summit
at the
Summit"*

August 16-18, 2006



Conference Proceedings

December 31, 2006

Purpose of report

The Rural and Frontier Emergency Medical Services (EMS) and Trauma Summit at the Summit (Rural EMS Summit) marked the first time that leaders from the intelligent transportation and emergency health care community had come together to focus on issues that impact the very survival of many rural residents – namely a timely, efficient and effective response to cries for help emanating from a motor vehicle crash or other trauma producing events. The caliber of the speakers that included representatives of federal and state agencies, prominent researchers, representatives of cutting edge technology companies, and leaders in the emergency health care industry, coupled with a dynamic audience mix helped make this inaugural Rural EMS Summit a landmark event.

The purpose of this synopsis is to capture the important findings and recommendations that emerged from two days of focused discussion. It is also designed to emphasize the ongoing spirit of collaboration that has evolved between the Critical Illness and Trauma Foundation (CIT) and the Western Transportation Institute (WTI) as the collectively search for technological applications to help overcome challenges to rural

EMS and trauma care.



“It is time to engage the rural committees of EMS and trauma professional organizations with NRHA, NOSORH, ORHP and others to ensure that we don’t get left behind on the platform when the train leaves the station ... the IOM report can help us achieve what we have been trying to accomplish in Rural America for a long, long time.”

*Nels Sanddal
CIT Foundation*



Introduction

The inaugural Rural EMS Summit marked a historic event in the evolution of EMS and trauma care in rural areas of the country. Challenges to the delivery of timely and effective emergency care in rural America have been noted for decades. However, this was the first nationwide effort to specifically address those challenges.

There were many factors that influenced the decision to hold the Rural EMS Summit at this particular point in time. The Institute of Medicine (IOM) had published a report titled *The Future of Rural Health: Quality Through Collaboration* in 2005 that identified the importance of emergency medical services (EMS) in health care delivery in rural America. In 2006, the IOM had also produced a long-awaited three part series of reports titled *The Future of Emergency Care Within the U.S. Health System*. These IOM reports serve as visionary documents that will guide EMS and trauma care in rural America for many decades. These exceptional reports were further bolstered with the publication of the *Rural and Frontier EMS Agenda for the Future* by the Rural Health Association in 2004. The Rural EMS Summit provided the first opportunity to discuss the contextual relationship between these documents among participants with wide-ranging viewpoints.

Additionally, 2006 marked the 20th anniversary of the Critical Illness and Trauma Foundation (CIT) which had spent the past two decades fostering the development and improvement of EMS and trauma care in rural areas of America and around the world. The board of directors of CIT felt that it was important to “give something back” to the community that it had served and to publicly celebrate its birthday. The timing and location of the Rural Summit was also influenced by the fact that the National Rural ITS Conference 2006 was being held in Montana with WTI playing a key leadership role in that event. The planners of both events felt that it made a great deal of sense to “piggy-back” the two events to meet the overlapping interests of both audiences.



Planning Committee

The level of planning committee representation documents the anticipated importance of the event, even before it took place. In addition to the key sponsors of CIT and WTI, the agencies and organizations that contributed to the planning and sponsorship of the event included:

- American College of Surgeons – Rural Committee
- Centers for Disease Control and Prevention – Division of Injury Response
- U.S. Department of Transportation – EMS Office
- Federal Highways – Intelligent Transportation Systems
- Health Resource and Services Administration—Rural EMS and Trauma Technical Assistance Center
- MSU – Extended University
- National Association of EMS Physicians – Rural Committee
- National Association of State EMS Officials – Rural Committee
- National Organization of State Offices of Rural Health – EMS Committee
- National Rural Health Association – EMS Issues Group

In addition to the planning support provided by these groups, additional financial support was provided by the CIT, WTI, Med-Media, Trauma and Emergency Response Infrastructure, American College of Surgeons – Trauma System Planning and Evaluation Committee, and the National Center for Frontier Communities.

A special acknowledgement is also extended to Amy Mellinger and Heather Soucy of CIT's staff for their stellar support during the planning and conduct of the Rural EMS Summit.



The Agenda – Day One

The Rural EMS Summit was held on August 16-18, 2006 at Big Sky, Montana. The first day overlapped with the National Rural Intelligent Transportation Systems Conference 2006 and focused specifically on the use of technology in the prevention of, or response to, motor vehicle crashes. Drew E. Dawson, provided a historical overview of the impact of technology in primary, secondary and tertiary prevention of motor vehicle crashes. This was followed by a captivating research presentation on the role of “black box” technology in reducing ambulance crashes provided by Jon Swanson.

Bob Heath, assisted by Don Kuntz, provided a real-time demonstration of the data collection, retrieval and reporting capacity of an electronic patient care record used by Rural EMS agencies in Nevada. An additional demonstration of remote patient monitoring capabilities was provided by Paul (Doc) Tillotson. The link between rural EMS, trauma response and care, and intelligent transportation system technology was provided by Linda Dodge and Steve Albert.



“Currently about 90% of all rural EMS agencies in Nevada are uploading electronic data on a real time basis...there is not one of them that would be willing to give up what they have and go back to written records.”

*Bob Heath, Nevada
State Health Division*





It becomes really important in looking at how all the different agencies work together and how we share information whether we are in emergency medicine or traffic transportation, by sharing information we can all do our jobs better.

*Steve Albert
Western Transportation Institute*

The transition between the specific intelligent transportation/technology focus of day one and the emergency health care challenges of rural America was described in a dynamic and captivating presentation by Dr. Michael Rotondo. In that discussion Dr. Rotondo noted that trauma is the leading cause of death for persons between the age of 1 and 44 in rural America and that the rate of death from injury is inversely proportional to the population density of the country with individuals in rural America dying at alarming rates. He also provided compelling data suggesting that the regionalization of trauma care can reduce trauma mortality and morbidity.



The Advanced ACN...holds a lot of promise in terms of getting the right EMS resources to the patient and perhaps expediting the delivery of care to the patient..

Drew Dawson, NHTSA



“Nearly 60% of all trauma death occur in rural areas despite the fact that only 20% of the population lives in these areas.... with the Institute of Medicine’s reports...we may have an opportunity to have an impact on rural trauma care.”

*Mike Rotondo, MD
Brody School of
Medicine at East
Carolina University*



The Agenda – Day Two

Whereas the first day of the conference had been a blend of challenges and solutions offered by technological applications, the second day of the Rural EMS Summit zeroed in on the issues and challenges that persist in the delivery of emergency health care in rural America. The format began



“The vision for the future is a coordinated, regionalized and accountable emergency care system”

*Robert Giffin
Institute of Medicine*

with very broad perspectives and became more topically focused as the day progressed.

Robert Giffin who had been lead staff person for the IOM during the development of the Future of Emergency Care series began with an overview of the process, findings and recommendations. Nels Sanddal, who had served on the IOM’s committee for these reports, identified and discussed the “rural” implications of the findings and recommendations. These discussions set the stage for Keith Mueller who had worked with the IOM’s committee that produced the Future of Rural Health to discuss how the findings of the two separate IOM works meshed together to provide a strong base of support

for change. Chris Tilden took the discussion one step further by adding the unique perspectives contained in the Rural and Frontier EMS Agenda for the Future.



*Kirby Peden, MD,
Pioneer Medical Center*



Jennifer Riggle, ORHP and Rick Hunt, CDC



The audience was then provided with a federal policy overview of rural EMS and trauma care by Drew Dawson, Richard Hunt, Jenifer Riggle and Jane Ball. The depth and breadth that the policy makers, from both the private and public sector brought to the discussion, was thought provoking and informative. The audience challenged the Federal panelists to assist the participants in helping to develop a message that would resonate within their agencies and on Capitol Hill.

During the afternoon, the sessions began with an overview of the rural emergency health care literature, or lack thereof, presented by Daniel Patterson and N. Clay Mann. Tami Lichtenberg discussed, from a global perspective, the role of the Critical Access Hospitals (CAH) in rural emergency care and Kirby Peden brought the discussion home by illustrating his experiences in treating trauma patients as a physician in a CAH in rural Montana. Issues associated with recruitment and retention of volunteers in the EMS workforce were discussed by Joseph Hansen and the Commonwealth of



*Gamunu Wijetunge,
National Highway Traffic
Safety Administration*

Virginia's approach to these challenges was presented by Scott Winston and Sara Gaba. Broader workforce issues were discussed further by Gamunu Wijetunge and Davis Patterson.



*Tami Lichtenberg,
Rural Health Resource Center*



*“Rural health offices
will only learn about
EMS if they have folks
like you who are
willing to share your
knowledge.”*

*Chris Tilden, PhD
Kansas Department of
Health &
Environment*



The Agenda – Day Three

The final day of the conference began with a discussion led by Dianne Atkins about how to formally identify “best practices” in rural emergency care where the frequency of events makes systems and outcome research challenging, at best. Financial challenges associated with rural emergency care including the high “cost of readiness” and the potential impact of “pay for performance” measures were eloquently presented by Gary Wingrove. Teri Sanddal and Jon Krohmer added a perspective on both the positive and negative aspects associated with rural emergency preparedness since 9/11.

The final series of sessions helped identify important future steps and actions necessary to increase the viability of the emergency health care system. Dia Gainor spoke of the need to establish a voice for rural EMS and trauma by strengthening the resolve of the various professional organizations and associations involved in the Rural EMS Summit. Mike Rotondo and Tom Esposito, helped translate the presentations and dialogue from the preceding two days into actionable items. Joseph Hansen and Nels Sanddal fielded final comments from the audience and presenters and made a commitment on behalf of CIT and WTI to ensure that the presentations, recommendations and findings of the Rural EMS Summit are widely available.

“Recruitment and retention of personnel has risen to the top of everyone’s list in terms of challenges facing Rural and frontier EMS agencies.”

*Joe Hansen
CIT Foundation*



Quotes from Presenters

"...I think if I didn't have EMS in the ED I couldn't take care of trauma patients because there is no one else in the ED who has more experience in managing the airway and protecting the C-spine."

Kirby Peden, Big Timber Hospital



"If you do something well on a daily basis you will rise to the occasion when multiple causality events occur."

*Tom Esposito, MD
Loyola University Burn & Shock Trauma Institute*

"We need a course to train local EMS providers how to effectively advocate on their collective behalf."

Dia Gainor, Idaho EMS Bureau



"I see EMS service bringing in patients with flu like symptoms without N95 masks on ... routinely using equipment on a daily basis would better prepare us to respond to large scale events such as the Avian flu."

*Doug Kupas, MD
Geisinger Medical Center*

"We want to provide good science on workforce issues to our policy makers, the national EMS community....use that good policy to guide programs....so that we can see what works." Gamunu Wijetunge, NHTSA

"We at the Division of Injury Response consider response as a continuum that starts at the point of injury, discovery, 911, EMS, emergency hospital care, and trauma surgery."

Rick Hunt, CDC



"When we went to a fee schedule with CMS through the Balanced Budget Act we went into it trying to spread a 55% funded program across 100% of the services, which didn't work.."

*Gary Wingrove
Mayo Medical Transport*



"One of the things that happens in consensus conference is that the viewpoint of the person who is the most persuasive and the loudest often becomes the consensus."

*Dianne Atkins
Division of Pediatric Cardiology
University of Iowa*



"We have strong positive evidence for the importance of having access to trauma centers." N. Clay Mann, IICRC

"EMS is defined as a core health service in the IOM's Quality Through Collaboration: The Future of Rural Health.."

Jennifer Riggle, ORHP

General Findings

Based on the presentations and in-depth discussion that occurred an informal group consensus was reached on the following issues.

- Trauma is a major epidemic in rural America that requires the establishment and continuous improvement of inclusive trauma care systems.
- EMS and trauma care systems are an essential component of health care in rural America.
- Technology-based solutions are one answer to decreasing risks and improving responses to injury producing events and to acute illness episodes.
- Agreement with IOM findings concerning the fragile nature of emergency care in general that is amplified several fold in many rural communities.
- Current social, political and economic attributes apparent in rural America create additional stressors on the rural EMS and trauma care system, such as aging demographics and declining volunteer pools.
- The lack of attention to trauma and EMS at the federal level, e.g. the failure to fund the trauma and EMS program, Rural EMS Equipment Program, the Rural EMS and Trauma Technical Assistance Center and other programs, interrupts program momentum and continuity and further exacerbates existing challenges.
- The recent publication of policy documents including the IOM's Emergency Care in the U.S. Health Care System, and the NRHA's Rural and Frontier EMS Agenda for the Future create opportunities to focus the attention of legislators and policy makers on issues of rural EMS and trauma care.
- Individual professional organizations and associations should re-double the commitment of their "rural EMS and trauma care committees".



*Doug Kupas, MD, Geisinger Medical Center
Teri Sanddal, CIT Foundation*

"The results showed that 70% of the respondents said that 2-5 patients could overwhelm the EMS system"

Teri Sanddal, CIT Foundation

Recommendations

- A coalescence of organizations interested in rural EMS and trauma care should occur and that the NRHA's EMS Issues Group is the logical focal point for such a convergence of support.
- The Critical Illness and Trauma Foundation and the Western Transportation Institute should reconvene the Rural EMS Summit on a regularly scheduled basis to maintain the focus and momentum gained at this inaugural event.



Drew Dawson, NHTSA and Nels Sanddal, CIT Foundation

Next Steps

The 2nd Rural and Frontier EMS and Trauma Summit will be held at Coeur d'Alene, Idaho from May 20 to 24, 2008. Information regarding the Summit at the Lake will be available in early-2007 on the CIT website at <http://www.citmt.org>.



Quotes from Participants

"This has been a great program. To focus on rural issues and solutions is a great need nationally. I have appreciated the opportunity to attend," Participant.

"This has been one of the finest, most informative gatherings I have ever participated in. It needs to continue!!! Funding must be secured to have this as an annual event," Participant.

All slide series presentations for the Rural EMS Summit are available on CIT's website at: <http://www.citmt.org/summit2006.htm> and also as an addendum to these conference proceedings.

Print copies are also available at CIT, you may email your request to info@citmt.org or by mail at:

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Featured Presenters

Steve Albert, M.A.
Director
Western Transportation Institute

Dianne L. Atkins, M.D.
Professor of Pediatrics
Division of Pediatric Cardiology
University of Iowa Hospitals and Clinics

Jane W. Ball, RN, Ph.D.
Executive Director
EMSC National Resources Center

Drew E. Dawson, B.S.
Director of the Office of EMS
National Highway Traffic Safety Administration
U.S. Department of Transportation

Linda Dodge, B.A.
ITS Public Safety Program Coordinator
National Highway Traffic Safety
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Thomas J. Esposito, M.D., MPH
Professor and Chief of Surgery
Loyola University Medical Center
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