NRITS 2006

The Future of EMS/ITS Communications

ITS America PSAG
Medical Subcommittee

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National Association of State EMS Officials
World Changes
Which hospital?

Fastest route to hospital?

Quarantine?

How many operating rooms?

Condition?

How many victims?

Medical history?

Call in specialists?

Special equipment needed?

Transport

En route
RECOMMENDATIONS
FOR ITS TECHNOLOGY
In Emergency Medical Services

BY THE
MEDICAL
SUBCOMMITTEE
OF THE
ITS AMERICA
PUBLIC SAFETY
ADVISORY GROUP
Sponsored by the ITS America Public Safety Advisory Group

Let's Connect the Links in the Chain of Survival

An invitation to participate in
The National Task Force for Advanced Emergency Information Exchange Networks
EMS Communications – the Future

- Network of Networks
  - Voice, Data, Video
- Description of Requirements
- Suggested Development/Advocacy Methods
ITS TECHNOLOGY            EMS

“Push-me-pull-you”
EMS Resource and Event Monitoring System (EMSREMS) “Polling Device”
STATE POLICE – B BARRACKS
LIFE FLIGHT
CITY JAIL
MVC
CITY P.D.
STATE POLICE – B BARRACKS
RIDGWAY P.D.
SMITH CO. S.O.
VERNON PD
NEW SHARON PD
RIDGWAY TOW
JUDGES/COURTS/WARRANTS
DOMESTIC ASSAULT
KRISPY KREME DONUTS – They’re Hot!
VERNON PD
SMITH CO. JAIL
RIDGWAY P.D.
SMITH CO. S.O.
EMSREMS
FREMS
DOTREMS
Fire Danger Level 3

SMOKE INVEST.

CITY FD STATION 2

UNITED AMBULANCE

CITY FD STATION 1

HYDRANT STATUS

CITY FD

FIRE/RESCUE/HAZ MAT

MVC

CITY FD

LADDER

VERNON FD

NEW SHARON FD

RIDGWAY FD

EXTRICATION/HAZ MAT

POND/HYDRANT STATUS

STRUCTURE FIRE

RIDGWAY EMS

Burning Permit

LEREMS

EMSREMS
Weather Alert:
Snow 4 – 6”
Database

“Network of Networks”
EMS Communications: Current and Future

“I wonder…” vs. “I know…”

- System Status Pre-Dispatch
- Event
- Dispatch
- To Scene
- At Scene
- To Hospital
- Emergency Department/Specialty Unit
- Transfer To Specialty Center
Event: “I have no clue…”
2 Patients/45MPH Car/Object/Head On

Ames St. to Clark St. to Old Highway (E); 15.2 Mi.s; #3945 Old Highway

ETA: 10 Min’s.

NEW SHARON FD 1st RESPONDERS

RIDGECITY FD EXTRICATION/HAZ MAT

ED On Alert for Pt: +

TEAM On Alert for Pt:+

RIDGEWAY EMS

MVC

RIDGEWAY EMS 1

ETA: 12 Min’s.

CITY TRAUMA CTR.

MVC

CITY FIRE/RESCUE

LIFE FLIGHT

DIABETIC

CITY TRAUMA CTR.

JONES MEM. HOSP. (DIVERT)

MERCY HOSP.

UNITED AMB.

VERNON FD VOLUNTEER AMBULANCE

1ST RESPONDERS

ST RESPONDERS

RIDGEWAY HOSP.

ED On Alert for Pt: +

2 Patients/45MPH Car/Object/Head On

+ + Severity
At Scene: “I wonder…”
Wireless Patient Monitoring

Electronic Health Record

Portable PSCD Type Platform

Speech Recognition
Input

Diagram content courtesy of the Department of Defense, Telemedicine & Advanced Technology Research Center
Needs Summary

- Polling Devices (No → BMIS-T)
- Accessible Databases
- Database Interfaces (USDHS: CAP, DE, NIEM)
- Interoperable Voice/Data Communications (USDHS: NIEM, SafeCom/DM)
- Wall-to-Wall Connectivity/Accessibility (Rural Areas)
- Further Technology Development
  - Radio Frequency ID Applications
  - Advanced Automatic Collision Notification (AACN)
  - Software Defined Radio
  - Alerting (Vehicle and System)
  - Speech Recognition (No → DOD/TATRC)
  - Video/Medical Device Output (Beginning)