



2010 Priority Dispatch Improvements
September 3, 2010

Priority Dispatch Introduction

Full Implementation of a Medical Priority Dispatch System provides a number of benefits:

- Effective resource utilization and proper level of service by call type.
- Eliminates over response which can be perceived as waste by the public.
- Reduces dispatch and response risks by adopting a national standard
- Provides immediate medical instruction to 911 caller
- Preserves availability of resources to improve response times to life threatening emergencies
- Allows advanced management techniques through quality assurance and improvement programs.

Priority Dispatch - Background (1 of 4)

- **“EMD” means “The National Academy of Emergency Dispatch” (NAED) Software Based Protocols for Emergency Medical Dispatch” which are compliant with Federal ASTM Standards.**
- **“EMD” means a 911 Emergency Medical Dispatcher that has received 24 hours of specialized training in addition to Emergency Tele-communicator training and in house training.**
- **“EMD” also means the structured Caller Interrogation, Prioritization of the call and Pre-Arrival Instructions.**
- **Since it is software driven (Pro-QA), it is highly detailed. There are 33 Problem/Symptom Categories and 258 individual “Response Determinants” contained within those Categories.**
- **“Emergency” means lights and sirens. “Non-Emergency” or “Downgraded” means no lights or sirens. “Upgrade” means to ask for additional resources or for a unit to respond emergency.**

Priority Dispatch - Background (2 of 4)

1990 – Sunstar Paramedics began using the National Academy of Emergency Medical Dispatch (EMD) Protocols including pre-arrival instructions.

1996 – Established Medical Operations Manual Protocol 3.1. Implemented and enforced “downgrading” ALS First Responder Units and Ambulances to “Alpha” level responses. Eliminated Ambulance responses on children locked in cars, sting ray injuries, and public assist calls.

1996 – Established Medical Operations Manual Protocol 3.2. Affirmed the practice of Ambulance only responses for 7-Digit Non-Emergency calls (non-911). This included “Alpha” level responses to Nursing Homes and Law Enforcement requests for “Ambulance Only.”

1999 – Accredited Center of Excellence attained.

Priority Dispatch - Background (3 of 4)

2008 – Established the 1-SN Protocol (Skilled Nursing Facility).

- 911 calls at Nursing Homes are shipped to Sunstar for EMD.**
- If the call is “Alpha” level, it remains as an “Ambulance Only”**
- If there are priority symptoms (Bravo, Charlie or Delta) an ALS First Responder is dispatched by 911 Center.**
- This protocol applies to 88 Skilled Nursing Facilities and has eliminated 800-900 ALS First Responder responses annually.**

March 2009 – EMD function was moved to the 911 Center. All 911 call takers are EMD trained; a comprehensive EMD-QA program is in place. High compliance to protocol has been attained.

June 2010 – Implemented EMD Codes on Radio, Mobile Data Terminals to streamline and integrate EMD from Call Taking to Field Units.

Priority Dispatch - Background (4 of 4)

- **Change Management – Medical Dispatch Review Committee**
- **Long standing committee – 911 Center, Sunstar Comm Ctr, Medical Director, Fire Chief and EMS Administration**
- **Monitors implementation and compliance to all EMD and EMS Dispatch related changes, coordination between the Centers.**
- **Implementation dates are always flexible to ensure high quality and solid processes are in place at each step.**

Priority Dispatch Process

9-1-1/EMS Call Received

Location verified (Cell and Landline)

Chief Complaint and Key Questions

Determinant – Level of Response*

Fire/EMS Units are Dispatched

Pre-Arrival Instructions



* As soon as a location is verified and call is “life threatening” units are dispatched.

See Figure 1 in Field Responder Guide.

“When in doubt, send them out!”

Fire/EMS System Goals

ALS First Responder

Preserve availability for Life Threatening Emergencies

Preserve availability for Fire Protection

Contain Growth and Manage Resources

Ambulance

Preserve availability of Ambulances for Transport Mission

Contain Cost and Manage Resources

“Send the right resource, the right way, in the right time”

Response Criteria

ALS First Responder

Is Paramedic needed to quickly treat a Priority Symptom?

Is there a need for more than 2 personnel to accomplish the necessary tasks on scene in a reasonable amount of time?

Ambulance

Does the patient need transport?

Echo Response



Life Threatening Emergency

Patient **Not Breathing** or Ineffective Breathing (**Choking, Hanging, Drowning**)

ALS First Responder

EMERGENCY

BLS First Responder

EMERGENCY (If Closest Unit)

ALS Ambulance

EMERGENCY

2010 Estimated EMS Incidents: 1% or 1,426

No Change Proposed

Delta Response



Life Threatening Emergency

Chest Pain, Severe Difficulty Breathing, Unconscious, Seizures, Dangerous Bleeding

ALS First Responder

EMERGENCY

BLS First Responder

EMERGENCY (If Closest Unit)

ALS Ambulance

EMERGENCY

2010 Estimated EMS Incidents: 27% or 38,302

No Change Proposed

Charlie Response



Potentially Life Threatening Emergency

Difficulty Breathing, Not Alert, Diabetic Problems, Stroke, Overdose, Serious Injury

ALS First Responder

EMERGENCY

BLS First Responder

EMERGENCY (If Closest Unit)

ALS Ambulance

EMERGENCY

2010 Estimated EMS Incidents: 18% or 25,488

No Change Proposed

Bravo Response



Potentially Life Threatening Emergency

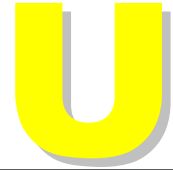
Unknown Situations, Serious Bleeding/Injury, Pregnancy, Psychiatric Problems

ALS First Responder	EMERGENCY
BLS First Responder	NONE
ALS Ambulance	EMERGENCY

2010 Estimated EMS Incidents: 17% or 19,236

Next Step – Continue to work with Fire Departments to Update Runcards (based upon Determinant) to limit BLS First Response where practical. Limited improvement potential. Historically, about 6% or 8,500 have BLS First Response for all Determinants. **Staff level work.**

No Determinant



Unknown Situations – Transfer to Law Enforcement – **Assaults, Traffic Incidents**

ALS First Responder	EMERGENCY	(Expect less responses or more
BLS First Responder	NONE	downgraded responses)
ALS Ambulance	EMERGENCY	(Expect less responses)

2010 Estimated EMS Incidents: 23% or 32,926

Next Steps – Work with Police Chiefs and Fire Chiefs to allow **EMD Prior to Transfer** unless “crime in progress.” **Collect the data and analyze possible improvements.** From limited data analysis, there is a high non-transport percentage and anticipated low severity calls (i.e. simple assaults, unknown injury traffic incidents, etc.) For example, calls noted as “Possible Staging Situation” have a 90% No Transport rate.

Need upper leadership support.

Alpha Response – Fire Rescue



**Non-Life Threatening Situation
High Potential for Non-Transport (>50%) – Minor Traffic Incident**

ALS First Responder	NON-EMERGENCY
BLS First Responder	NONE
ALS Ambulance	NONE (Dispatched if Requested by FD On Scene)

2010 Estimated EMS Incidents: 17% or 23,558

Next Step - Eliminate Ambulance Response for <50% Transport Rate. Also would be used on some Bravo responses. Effort would decrease Ambulance Responses by approximately **6,700 (28% decrease in Alpha tier). Refer to Handout and Field Guide.**

EMS Management Committee agreed; MCB Approved. Ready for implementation through CME and MDRC. This is a conservative approach and additional calls can be eliminated through repeated process improvement cycles. **Staff level implementation.**

Alpha Response – Ambulance



**Non-Life Threatening Situation
High Potential for Transport (>50%) – Sick Person**

ALS First Responder	NONE
BLS First Responder	NONE
ALS Ambulance	NON-EMERGENCY

2010 Estimated EMS Incidents: 17% or 23,558

Why we are here!

Proposed Improvements

1 - No ALS First Responder to Alpha Calls where Medical staff is with the patient.

2 - Fully implement Priority Dispatch. No ALS First Responder to Alpha Calls where they are not needed.

Proposed Improvement – 1

- EMS Management Committee discussed and agreed with the following:
- Dispatch Ambulance only on Alpha level responses where there is a medical professional on scene (i.e. Nursing Homes, Adult Living Facilities, Doctor's Offices, Home Care or Hospice with patient).
- The majority of these have already been accomplished with the 1SN Protocol.
- This effort could further reduce ALS First Responder responses by approximately **2,200 calls per year (9% decrease in the Alpha tier)**.
- **Staff level implementation if selected.**

Proposed Improvement – 2

- In the Alpha tier there are no Priority or Life Threatening Symptoms.
- Unknown Situations are in the Bravo tier.
- There is no NEED for a rapid Paramedic assessment or treatment
- There is no NEED for enough hands to accomplish tasks.
- Many communities dispatch BLS Ambulance only.
- **See “Relationship of Main Code Levels” in First Responder Guide**
- Average Response Time for Downgraded ALS Ambulance = 10:30
- ALS-FR could be dispatched if the call is in holding or long response time is expected as determined by Protocol.

Proposed Improvement – 2

- **Concerns raised:**
 - **Large enough issue to be handled by Upper Leadership**
 - **Policy level issue**
 - **Cities and Fire Districts want to respond and serve their citizens**
 - **Impact on currently funded ALS First Responder Units (i.e. EMS Allowable Cost Standards)**
 - **Tying up Fire Rescue Units without necessity and having them unavailable for the True Emergencies**
 - **Public perception of over Response or inefficiency.**

Proposed Improvement – 2

- Applying this methodology, Ambulance only responses could be sent on the following:

- Abdominal Pain
- Back Pain
- Falls (Ground Level – Not Dangerous Body Area)
- Headache
- Poisoning/Ingestion (Poison Control)
- Sick Person (Chronic Medical Problems)

- **ALS First Responder responses could be reduced by 18,200 calls per year (76% reduction in Alpha tier).**

- Refer to Handout and Field Guide.

Priority Dispatch Closing

Full Implementation of Priority Dispatch for the ALS First Responder Program is an important step to maximize:

- **the efficient use of our human and material resources**
- **provide high-quality, safe, economical and effective patient care.**

Next Steps

Discussion by the group followed by direction and timeline for Next Steps:

- 1- Adjusting Runcards on Bravo Responses to Reduce BLS First Responses**
- 2- Attaining EMD Determinants on calls with “No Determinant”**
- 3- Implementation of Ambulance Reductions in Alpha tier**
- 4- Implementation of ALS First Responder Reductions in Alpha tier**
- 5- Other short or long term goals?**

