The Maximal Response Disease

by Jeff J. Clawson, MD

"Red Lights and Siren" Syndrome in Priority Dispatching

Editor's note: *This is the fourth of four articles on medical dispatching. Each article will be accompanied by two Utah Treatment Sequence Cards in cutout form.*

The following treatment sequence cards are currently approved by the state of Utah for use by certified EMDs. Any use of these cards outside Utah should be carefully reviewed and approved by local medical control, and the dispatchers using them trained in CPR and the Heimlich Maneuver.

In the beginning the world was without light – not to mention lights-and-sirens. From the EMS standpoint, such a time seems hard to imagine because today it couldn't be less true. Literally millions of "emergency" responses occur every year in this country alone. Almost every one of them, in the years B.C. (before call-screening), were run red-lights-and-siren – not only to the scene but often to the hospital. Ninety percent of the time, however, there is no medical justification for this practice.

Closer examination of this philosophy suggests a Mt. Everest syndrome logic: "Why do we always use them? Because they're there!" From a medical standpoint, we could consider this aberrant thinking process the "Maximal Response Disease." It's a combination of always responding red-lights-and-siren and/or always sending multiple vehicles. And short of the common cold, it infects more EMS response system people everywhere than any other malady.

Dispatch Misconceptions

The "disease" takes root from three traditional notions. First, it's an emergency, we've got to hurry! Years ago when hurrying was maybe all that was done for the victim, from beginning of call to end, the "hurrying" had some value – it got the victim *to the treatment*. Second, many systems have coupled EMS response logic to that of fire response. Unfortunately it is an apple/orange-type comparison. A fire gets worse by seconds and minutes, therefore, why not a prehospital medical problem? But a single cardiac arrest in a football stadium does not spread in the manner of a fire so that after a minute there are two arrests, then four, eight, 16, until, shortly, the entire stadium is in cardiac arrest. Medical problems do change, but the vast majority involve a single patient in less than a life-threatening crisis.

Then last and unfortunately least palatable of all – running red-lights-and-siren in and of itself is fun and seems important – at least to some people, including a once 22-year-old EMT who will remain nameless. After the fire department in Salt Lake City first discussed the idea of sending first response EMT/engines *non*-red-lights-and-siren, a paramedic captain remarked, "What are you guys going to do, take away the last thing on this job that's fun?"

Fortunately the maximal response disease is the dinosaur of today's progressive EMS systems. And medical priority dispatching is the method of its extinction.

The "Marine Corps" response has been touted as the method of ensuring that those in dire straits get all the help they need – and fast. But without medically appropriate guidelines for the dispatcher to follow, so will everyone else. In the past, EMS leaders pointed out that, in order to avoid any errors in judgment, the maximum response was always sent. However, today with significantly greater numbers of EMS-knowledgeable lawyers as the loyal opposition, we may be unable to defend against the myriads of *potential* cases resulting from significant delays in arriving at a critical emergency because an ALS team was tied up responding on a fractured extremity or a similar BLS call. Systems with the capability of tiered or layered response that don't use their first-response personnel or their BLS ambulance crews (often private) and still send a "one-of-each" response, are not functioning at today's required level of medical responsibility.

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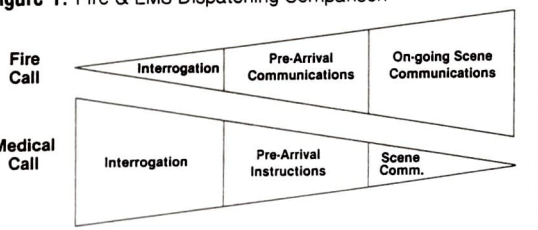
Most telecommunications people will readily agree that of the three areas of public safety dispatching (police, fire, and EMS), fire and EMS are more alike than either is to the police version. Their reasoning correctly includes the fact that the majority of fire and medical calls are considered "escalating" emergencies. However, this is only true for less than 10 percent of police requests. But there remains a basic, even less understood difference between the fire and EMS dispatching process that contributes to maximum response thinking.

Figure 1: Fire & EMS Dispatching Comparison



Changing Dispatch Role

Since the combination of fire and medical dispatching is very common, a clear understanding of this difference is essential knowledge to students of dispatching in general. The changing dispatch role during the unfolding of an incident can be thought of graphically as the variable width of a wedge (see Figure 1). A report of fire begins at the point of the wedge. That is to say, the initial role of the dispatcher is simple and straightforward – get the location and what is burning, then send the right assignment based on these two factors. Varied interrogation sequences are not necessary. However, once the first arriving unit visualizes an active scene, the process often escalates – the wedge expands as scene command relays specifics of the fire (exact location and its extent) and makes requests for additional responses or "alarms." The dispatcher gets busier with information relay as multiple command sectors are established and additional units stage. Moveups and mutual aid are often necessary and other agencies such as police and EMS are notified as needed.

The small point at the beginning of the fire dispatch wedge is based on the absolute necessity to get suppression units on the road quickly. A fire is assumed to be spreading. The extent of it can rarely be seen initially. It gets worse each second. Seconds *do* count here. But this set of facts for fires cannot be simply extrapolated to medical dispatching.

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Caller Interrogation

By far the greatest responsibility of the EMD is up front, at the *beginning* of each call. The wedge is therefore *reversed* in EMS calls. Like the fire dispatcher, the EMD initially starts at the same place in the interrogation process. The location and callback number is, of course, identically essential. At this point the medical equivalent to the "What is burning?" question is asked – "What is the problem?" This query should elicit a chief complaint if one is not readily apparent at the moment the phone is answered.

The EMD must understand an important point here. At times the caller will offer the EMD information such as "He's dying!" or "Send the paramedics quick!" While these are complaints, they aren't *chief* complaints containing categorizable medical information such as signs, symptoms, or incident types. As you can see, "He's dying!" doesn't help you select a dispatch priority card. But then by asking "Why do you think he's dying?" you may elicit a response of "Because he's got a really bad pain in his chest and he's just pouring sweat." Age (approximate if not exact) is also determined, as well as the two most important medical questions we ask: Is he *conscious*? Is he *breathing*? You are looking for only yes or no answers at this point. Of course the answer may also be "I don't know" or "I'm not sure."

Herein lies one of the most significant concepts to understand about priority dispatching. In situations where, through this initial brief generic questions sequence, the victim is determined to be not breathing, or is unconscious but breathing cannot be verified, cardiac arrest is assumed and a maximum response is sent immediately *before ever reaching a dispatch priority card!* The priority dispatch concept does *not* waste valuable time asking more specific questions *prior* to response when the answers to these two important "Four Commandment" questions suggest an ultimate time/life threat from the start.

This set of generic questions (location, callback number, and the Four Commandments) constitute what we refer to as the "Invisible Card" (see Figure 2). Obtaining this entry material is an absolute baseline requirement in initiating any medical call for help.

Dispatch Protocol

Much has been said over the years about who is *in charge*. It ranges from who controls response through who controls the scene to who controls the patient. We know now that this role changes as we obtain more precise information from in-

Figure 2: Medical Dispatch Case Entry Protocol.

LOCATION: _____

CALL BACK #: _____

CHIEF COMPLAINT (What's the problem?): _____

AGE: _____

SEX: ☐ M ☐ F

CONSCIOUS: ☐ Yes ☐ No ☐ Unknown

BREATHING: ☐ Yes ☐ No ☐ Unknown

NOTE: If victim is **NOT** breathing, a **maximum** response is sent immediately. If victim is **UNCONSCIOUS** and breathing **cannot** be verified by second party caller, a **maximum** response is sent immediately. The specific priority card suggested by the above information is then referred to for response information and double-check purposes.

person visual assessment of the situation. However, from the time the call is received to vicinity arrival, the dispatcher "calls the shots." No, the EMD does not outrank the battalion chief or a seasoned paramedic. Hardly (check his salary). The dispatcher is only doing what *we* (medical control or fire/EMS administration) have determined *prior to the incident* to be the correct level of response for any particular type of emergency. The dispatcher is only carrying out that protocol. But until someone arrives at the scene, no one can know more about the nature of that incident than the dispatcher.

Analogously, response selection could be compared to golf. The dispatcher selects the club and the responder then drives, putts, or chips to get to the green. A maximal "Marine Corps" response to every emergency is the equivalent of driving a #2 wood to the hole from 20 yards out. It's just not appropriate for that situation. In the hospital, this would be the equivalent of the emergency doctor dropping everything she's doing and sprinting to the front desk to check the next patient just because she can't trust the triage nurse – also hardly appropriate. Medical priority dispatching has proved to be an effective, safe way to determine the nature of the emergency at the time the call is received, thus eliminating the need for maximal responding in many cases.

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As you may better understand now, this outdated maximal response philosophy did not eliminate dispatch errors. It just made the *real* errors less apparent (ALS units tied up on BLS calls, first response where not needed, and emergency vehicle accidents). To you as a trained professional, this wasteful and even dangerous practice of maximal response should be reserved for the highest level of actual or potential crisis. Often, with sending the "Marine Corps" as a knee-jerk reaction, the only crisis present was the one we created. □