

Without Minutes To Spare. Call processing time should reflect nature of the crisis

By Greg Scott

Not too long ago we received a letter from a MPDS* user who was asking about national standards for total dispatch transaction time (i.e., from receipt/pick-up of initial 9-1-1 call, caller interrogation, determinant prioritization/selection and tone out of resources); and for a position from the perspective of the National Academies of Emergency Dispatch* (NAED*). This was not an unusual request. People frequently ask us about adequate time frames and/or standards to fully assess and select the final determinant for ensuring proper response. Some centers have adopted the National Fire Protection Association's (NFPA) standard, which requires emergency calls to be dispatched in 60 seconds, 95 percent of the time. The reality is that there is no validated research to support a 60 second dispatch standard, particularly one that requires 95 percent compliance to all calls, regardless of their nature. Is it really reasonable to expect the dispatch time standard on a sprained ankle be the same as for a sudden arrest?

The NAED does not endorse a single, one-size-fits-all national standard for call processing times. Why? For one thing, existing computer-aided dispatch (CAD) technology is not standardized enough across emergency call center boundaries to accurately compare times from agency to agency. Beyond that, there may be design and control weaknesses that significantly affect conclusions based on the data. Until we reach a consensus, the following information may be helpful in setting your standards locally.

We know that address verification time—the first stage of call processing—is lengthening on average because of the widespread use of wireless technology and the greater proportion of 9-1-1 calls originating from a wireless phone. Also, we know that when using our EMD program properly, the highest priority calls are coded faster than the intermediate and lower priority cases. Generally, ECHOs take about 35 to 45 seconds to code AFTER address verifi-

cation has been completed and DELTAs take, on average, about 50 to 55 seconds.

I recommend that your call processing standard reflect the nature of the call. That is, DELTAs and ECHOs could have one target time window, while the remainder could have another longer time window. In general, a 90 (to 100)-second time frame is a reasonable target for completing DELTA and ECHO cases, although 90 or 95 percent fractal compliance to such a target is difficult to meet given the issues with address verification from wireless phones.

There are other questions you might address, also, before setting your standards.

Priority Level	Time to Final Coding	# Cases	%
ECHO	:38	433	0.3%
DELTA	:49	42,753	29.3%
CHARLIE	:58	30,356	20.8%
BRAVO	:47	50,328	34.5%
ALPHA	:66	20,832	14.3%
OMEGA	:59	1154	0.8%
ALL	:52.9	145,866	100%

Note: "Time to Final Coding" starts at the completion of address and phone number verification, and ends when final coding is sent to CAD for dispatch. Average Time on Case Entry = :24.4, Average Time on Key Questions = :27.7, Agency: Emergency Medical Services Authority, Tulsa/Oklahoma City, U.S.A., Case Date Range: 4/1/2002 to 6/22/2004

These include:

- Do you know the percentage of 9-1-1 calls come from wireless sources in your region? According to the Federal Communications Commission (FCC), the number of 9-1-1 calls placed by people using wireless phones has more than doubled since 1995, to over 50 million a year. While the location of the cell tower used to carry a 9-1-1 call may provide a very general indication of the location of the caller, that information is not usually specific enough for rescue personnel to deliver assistance to the caller quickly.
- Are dispatchers following their call-taking protocol? Calltakers who follow a protocol consistently can gather more information in the same time frame or faster than those who try to make up questions and instructions on the fly.
- Is the center using the ProQA* EMD

software? The software assists dispatchers in quickly determining the appropriate response determinant code for each case and then guides dispatchers in providing all relevant Post-Dispatch and Pre-Arrival Instructions, as well as important case completion information.

- Are dispatchers being given enough time to complete their calltaking protocol so as to be accurate and safe in their information gathering? Or are they being pressured to meet a time standard simply to make the stats look good to outside observers?

We know that errors increase rapidly the less time is allowed a person performing multiple complex tasks in a compressed-time environment. Couple that with the mission-critical nature of the information gathered by the emergency calltaker, and a 60 second time standard can be a recipe for disaster. It is more important to do it right the first time than do it a few seconds faster and get it wrong (or incomplete).

- Are there too many distractions in the center to allow for timely and accurate call processing? Distractions are a big cause of error, and emergency call centers are generally full of distracting sounds, visual clutter, and dispatch activity. While distractions in the dispatch environment cannot be eliminated, they can be mitigated with good center design, regulated work flows, and proper staffing. ■