

Criteria Based Dispatch in Anchorage

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Imagine you work as a Telecommunicator (aka Dispatcher) at your local public safety access point (PSAP) taking calls for the fire-based EMS system. It is a pretty busy place that processes 80,000 calls for service in a year that may include EMS, Fire and requests from other agencies for help. The callers could be reporting the smell of smoke in a structure, a psychological emergency, a gunshot wound, a heart attack...the potential is almost endless. As an added twist, the callers will cover an immense gamut of communication skills and primary languages. Anchorage, Alaska is by some accounts the most diverse city in the US¹. The local school district reports that there are 99 languages besides English spoken by its student body. Those who call may, of course, be very emotional in response to the incident. How do emergency telecommunicators rapidly process calls to identify a life-threatening emergency?

Anchorage Fire Department uses a system called Criteria Based Dispatch (CBD) which was developed at King County EMS. Once basic location information is obtained, the dispatchers ask two key questions on all calls:

- 1) "Is the person awake and alert?"
- 2) "Is (s)he breathing normally?"

If the answer to those questions is "no" then the dispatcher tells them to start CPR and gives instructions. This is the so-called "No-No-Go" method that was pioneered in Seattle/King County. This method is likely the fastest means of initiating CPR with lay rescuers and has resulted in significant improvement in the time to first CPR as well as the number of times that CPR is performed in the Anchorage system. Using the CARES Dispatcher Assisted CPR module, Anchorage FD was able to track numerous time intervals as well as monitor barriers encountered by the dispatcher. After implementing CBD in the spring of 2014 (and using the CARES Dispatcher Module when it became available in late 2015), the table below shows how Anchorage FD has been able to far exceed the national standards in Telephone CPR².

	Call receipt to CPR recognition	Call receipt to first compression
National Standard: High Performance	60 seconds	120 seconds
National Standard: Minimum	120 seconds	180 seconds
Anchorage FD 2016	44 seconds	100 seconds
Anchorage FD 2017	52 seconds	111 seconds

CBD is unique in that the dispatchers are encouraged to use their verbal and experiential dispatch skills to quickly get to the right answer. For example, if the caller is unable to determine if the person is breathing normally, this system encourages the dispatcher to have the caller move the phone to the patient. Many times, this allows the dispatcher to identify the ineffective breathing pattern of cardiac arrest known as agonal respirations and with that information they immediately have the caller start CPR. This is only effective in dispatch centers that have been trained and in which the dispatchers are given the latitude to draw these conclusions. In other words, some systems are very rigid and do not allow any variations from a set algorithm.

With the CARES Dispatcher Assisted CPR Module, the Anchorage Fire Department has found that when the telecommunicators/dispatchers are trained in CBD AND enabled to add flexibility to the call taking AND rewarded with feedback on the cardiac arrest "saves", we saw significant improvements in our time to first compressions and frequency of CPR being performed prior to EMS arrival. This process is "easy but not simple" as it often requires confronting an established dispatch culture but it has paid immense dividends for Anchorage FD and the community it serves.

¹ <https://www.cnn.com/2015/06/12/us/most-diverse-place-in-america/index.html>.

² http://cpr.heart.org/idc/groups/heart-public/@wcm/@ecc/documents/downloadable/ucm_493303.pdf