

Dispatcher-Assisted CPR Module Data Dictionary

Cardiac Arrest Registry to Enhance Survival (CARES)

OVERVIEW

Roughly 240,000 EMS-treated out-of-hospital cardiac arrests (OHCA) occur every year in the United States. These result in death in all but 10% of cases nationally, but an 8-fold regional variation in survival suggests that system factors have a profound impact on outcomes.

The likelihood an OHCA victim survives falls by 7% to 10% per minute, and emergency responders can take 10 to 15 minutes to reach and assess a patient. Bystander CPR can bridge this period and yield a two to three-fold increase in survival. However, only about 40% of OHCA victims receive Bystander CPR nationally.

Emergency medical dispatchers can help elevate rates of Bystander CPR and thus survival by providing ‘just-in-time’ CPR instructions to 9-1-1 callers. 9-1-1 managers, however, must measure performance and provide for continuing education to maximize staff proficiency in handling suspected OHCA calls. This requires that 9-1-1 centers continually evaluate a fraction of the cardiac arrest calls they handle. The workflow in this process is as follows:

1. Define the number of calls your center will evaluate each period (e.g., each month or quarter).
2. For each period, obtain records of all cardiac arrests confirmed by the EMS systems your center dispatches for.
3. Find the calls that match these records in your archive.
4. Evaluate the calls using the Telephone CPR Data Module, a tool geared to collect data essential for improving the provision of 9-1-1 pre-arrival CPR instructions.

Apple QuickTime is the preferred software for evaluating calls. This software brings up a window with a dial that tracks time as the recording plays. The recording can be stopped at any given moment, and the dial will indicate the time elapsed from the start of the call in minutes and seconds. This allows the listener to define key moments in the call-handling process, such as when a dispatcher or call-taker starts CPR instructions or a bystander performs the first dispatch-directed compression.

The following Data Dictionary defines the terms used in the Telephone CPR Data Module. Please review it carefully and refer to it as needed – it is essential to have a clear understanding of the elements the module aims to collect. Coding these elements requires attention to detail and, in some cases, careful judgment, so evaluators should code a few sample cases before providing data to CARES. In calls where CPR is determined to be in progress, there is no need to continue evaluating the call or filling out the form (see “CPR already in progress,” page 6.)

D1. DISPATCH AGENCY

Definition/Description:

- The Dispatch Agency is the agency that dispatched the 911 call. The dispatch call can be received directly or from a transfer agency. The Dispatch Agency provides pre-arrival instructions and sends medical units to the location of the arrest.

Instructions for Coding:

- Select the Dispatch Agency from the pull-down menu. Additional Dispatch Agencies may be added to the pull-down menu, if needed.

Dispatch Agency	Dispatch Agency's Standard Abbreviation
MESA REGIONAL DISPATCH CENTER	MRDC
PHOENIX REGIONAL DISPATCH CENTER	PRDC

D2. DATE AND TIME OF CALL

Definition/Description:

- This is the date and time the call was received at the Dispatch Agency. If no date and time are given by time stamp, they can be retrieved from the agency's Computer Aided Dispatch (CAD) or alternate record keeping system.
- The date of the call is essential for a continuous quality improvement program that aims to track changes in process data through time. Combined with the time the call was received, it also helps link dispatch and pre-hospital records in cases where incident numbers between such records do not match.

Instructions for Coding:

- This field will be auto-populated with the date of arrest provided by the EMS Agency.

Date or Time	CARES Coding
July 23, 2013	07/23/2013
8:15 pm	20:15:00

D3. INCIDENT NUMBER

Definition/Description:

- The unique number automatically assigned by the EMS Agency for each Patient Care Report (PCR).
- This number will be used to identify each unique record within the CARES database after patient name and DOB are removed.
- Where applicable, this value can be used to link dispatch information (CAD data) for EMS and First Responders.

Instructions for Coding:

- This field will be auto-populated with the Incident # provided by the EMS Agency.

D4. WAS THIS A CARDIAC ARREST BEFORE ARRIVAL OF EMS?

Definition/Description:

- Indicates whether the patient arrested before or after the arrival of a 911 Responder.
- Patients who experience a cardiac arrest after the arrival of a 911 Responder (First Responder or EMS) are likely to receive immediate resuscitative efforts by trained personnel, to include CPR and/or defibrillation, with minimal opportunity or need for dispatch instructions.

Instructions for Coding:

- Information for coding this entry is derived from EMS run sheets that match the call Incident Number or, barring an Incident Number match, share a date and time and/or address suggesting a probable match.
- If the cardiac arrest occurred **before** the arrival of a 911 Responder, select “Yes.”
- If the cardiac arrest occurred **after** the arrival of a 911 Responder, select “No.”
- If the arrest witness status is not known, select “Unknown.”

Example	CARES Coding
The patient was found on the floor of the kitchen by her husband. He did not see or hear her fall but immediately called 911.	Yes
EMS was called to the home of the patient, who complained of shortness of breath. The patient was awake and alert when EMS arrived and the first monitored cardiac rhythm was sinus tachycardia of 150 bpm. After 2 minutes of monitored sinus tachycardia, the patient went into ventricular fibrillation. Resuscitative efforts were initiated.	No

D5. CPR ALREADY IN PROGRESS?

Definition/Description:

- CPR is “already in progress” when callers indicate that they or other lay or trained rescuers on scene have started CPR before the dispatcher starts instructions for CPR.
- Calls where CPR is already in progress should be **excluded** when calculating the proportion of cases where dispatchers recognize the need for CPR, start CPR instructions, and achieve the first bystander compression. They should also be excluded when calculating the median or average time to these events from the start of the call.

Instructions for Coding:

- If CPR is known to start before a call-taker or dispatcher start instructions for CPR, select “Yes.”
- If CPR does not start before a call-taker or dispatcher starts instructions for CPR, select “No.”
- If it is not known whether CPR started before a call-taker or dispatcher started instructions for CPR, select “Unknown.”
- If “No” or “Unknown” is selected, continue evaluating the call and completing the form. If “Yes” is selected, there is no need to continue evaluating the call or completing the form.

Example	CARES Coding
After attending the symphony, a couple saw a woman suddenly collapse on the sidewalk. Since there was no pulse, the man began chest compressions. Shortly thereafter, the woman called 911.	Yes
The patient’s wife heard a loud ‘thud’ in the next room. She immediately walked into the room to find the patient on the floor unconscious/unresponsive and called 911 without initiating CPR.	No

D6. DID DISPATCH RECOGNIZE NEED FOR CPR?

Definition/Description:

- A dispatcher or call-taker recognizes the need for CPR when he or she indicates that CPR should be performed during the course of the call.
- The dispatcher recognizes the need for CPR when he or she says any of the following in connection with a response to the victim's condition: "CPR," "chest compressions," "compressions," "continuous chest compressions," "CCR," "rescue breaths," "rescue breathing," "ventilations," or "rescue ventilations." In some cases, the dispatcher might not say any of these but indicates recognition by starting CPR instructions. In such cases, the time to dispatch recognition of the need for CPR and the time to start of CPR instructions are the same.

Instructions for Coding:

- If the dispatcher indicates that he or she recognizes the need for CPR, select "Yes."
- If the dispatcher does not indicate that he or she recognizes the need for CPR, select "No."
- If it is not known whether the dispatcher indicated recognition of the need for CPR, select "Unknown."

Example	CARES Coding
Dispatcher receives a call from a woman that says her husband is "passed out and not responding." Dispatch tells the caller that she must initiate CPR and he will coach her through the process.	Yes

D7. CPR INSTRUCTIONS STARTED?

Definition/Description:

- CPR instructions are directions dispatchers and call-takers provide to guide callers through the process of performing CPR, whether compression-only or conventional CPR (CPR with rescue breathing). Instructions are considered “started” if they are simply started, even if they are not finished and/or followed.
- Instructions to get a patient to a hard, flat surface should not be considered the start of CPR instructions. In many protocols, instructions start when a call-taker or dispatcher tells the rescuer to “kneel by the patient’s side”. The moment when CPR instructions are considered started, however, may vary from one dispatch center to another according to language used in local protocols.

Instructions for Coding:

- If CPR instructions are started, select “Yes.”
- If CPR instructions are not started, select “No.”
- If it is not known whether CPR instructions were started, select “Unknown.”

Example	CARES Coding
A caller is ready to start CPR. The dispatcher begins instructions, saying, “Kneel by the patient’s side,” but the caller stops him abruptly, saying the patient is “waking up and is conscious now.” The dispatcher does not continue the CPR instructions he started.	Code as “Yes.” Although CPR instructions were stopped just after they were started in this example, they were still started.

D8. CHEST COMPRESSIONS STARTED?

Definition/Description:

- Chest compressions are considered “started” if a rescuer does *any* chest compressions, even if the rescuer stops just after starting.
- Determining whether chest compressions are started can be difficult in a minority of cases. Rescuers don’t always count out their compressions, and sometimes their voices or the compressions themselves are inaudible.

Instructions for Coding:

- If chest compressions were started, select “Yes.”
- If chest compressions were not started, select “No.”
- If it is not known whether chest compressions were started, select “Unknown.”

Example	CARES Coding
Dispatcher gives instructions to a caller to begin CPR. Caller starts chest compressions as EMS arrives.	Yes
Dispatcher gives instructions to a caller to begin CPR. Caller states that they are afraid of hurting the patient, and want to wait until EMS arrives.	No

D9. BARRIERS TO CPR?

Definitions/Description:

- Barriers to CPR are defined as obstacles that prevent the start of dispatch-directed, bystander chest compressions.
- Barriers to CPR are important to track because the recurrence of given barriers can point the way to protocol changes addressing high-frequency obstacles. For example, a common barrier is that rescuers can't move a patient from a bed to a suitable location where compressions could be effective. Knowing this, managers and medical directors can experiment with protocol language and procedures to help rescuers solve this problem.

Barrier	Definition
Hang up phone	This is when the caller disconnects from the dispatcher or call-taker processing the call.
Language barrier	This is when the caller and dispatcher do not speak the same language and therefore cannot communicate effectively.
Caller left phone	This is when the caller leaves the phone for purposes other than rendering aid to the patient after speaking with the dispatcher or call-taker.
Caller not with patient	This is when the caller is speaking from a location that prohibits the caller's physical assessment of patient.
Overly distraught	This is when a caller's highly-distressed emotional state delays or prevents him or her from taking CPR instructions and/or performing CPR.
Caller refused	This is when a dispatcher or call-taker suggests or instructs CPR and a caller refuses for reasons other than a physical inability to perform CPR.
Couldn't move patient	This is when a caller reports his or her inability to move the patient from an unsuitable location for CPR (e.g., toilet or bed).
Patient status change	This is when a patient initially thought to be in cardiac arrest presents indication that he or she is not in cardiac arrest.
Obviously dead	Caller conveys that patient is deceased. In this case, the caller provides sufficient evidence to the dispatcher in support of that conclusion (e.g. rigor mortis, mottled skin, decomposition, foul odor).
Other	Any barrier apart from those defined above that prevents the start of CPR instructions and/or bystander chest compressions.

Instructions for Coding:

- Select the box(es) next to the appropriate barrier(s) according to the definitions above. Multiple barriers can delay or prevent the start of CPR in any one call.

Example	CARES Coding
The caller, a native Spanish speaker, speaks and understands English poorly. The dispatcher knows little Spanish, but is able to get the caller to do CPR after several minutes of trying to clarify his instructions.	Language barrier
The dispatcher tries to calm a hysterical caller, but the caller screams and then leaves the phone. The caller is heard screaming in the background until EMTs arrive.	Overly distraught & Caller left phone
A dispatcher tells the caller that she needs to start CPR and that he will help her. The caller refuses, saying she has hurt her back and that there is no way she can get the patient from the bed to the floor.	Other: physical inability (in free text field) & Couldn't move patient
The patient appears to be unconscious in the back yard, but the caller is on a landline phone on the second floor of the house. The caller is thus not able to physically assess the patient's status.	Caller not with patient
The caller reports that the patient is not conscious and not breathing normally. The dispatcher starts instructions for CPR, but the patient opens his eyes and begins to mumble and deliberately starts rubbing his head. The dispatcher recognizes the patient is conscious and discontinues CPR instructions.	Patient status change
The caller indicates that the patient is not conscious and not breathing normally. The dispatcher starts instructions for CPR, but the caller subsequently says the patient is "blue, cold and stiff as a board." The dispatcher discontinues CPR instructions.	Obviously dead

D10. PATIENT IS ADULT, CHILD, OR INFANT?

Definitions/Description:

- A patient is defined as an Adult if he or she is nine years old or older.
- A patient is defined as a Child if he or she is between one and eight years old.
- A patient is defined as an Infant if he or she is less than one year old.
- Patient age is important because it structures the kind of CPR dispatchers and call-takers should prescribe. While CPR on an infant and CPR on a child both involve chest compressions and rescue breaths, CPR on an Infant and CPR on a Child are distinct and different treatments. In the large majority of cases, dispatchers and call-takers should provide instructions for compression-only CPR for adults suspected to be in cardiac arrest.

Instructions for Coding:

- Select the appropriate age category based on patient age, in years.

Example	CARES Coding
The caller says her husband is “passed out, snoring and unresponsive.”	Code patient age as “Adult,” as indicated by the fact that the patient is the caller’s “husband.”
A pre-school teacher calls in reference to an unresponsive student on the playground.	Code patient age as “Child”
A teacher from an elementary school calls in reference to an unresponsive student on the playground. No other information about the student’s age is provided.	Code as “Unknown.” The patient may be either a child or an adult. Alternatively, check patient age in the Demographic Information section of the CARES form.

D11. PATIENT IS CONSCIOUS?

Definition/Description:

- A patient is considered conscious if the caller reports the patient is conscious and/or responsive. A patient is considered not conscious if the caller reports the patient is not conscious and/or is not responsive.
- A patient's level of consciousness is a key indicator of whether he or she is in cardiac arrest. It can be difficult to get a clear answer on whether the patient is conscious. Callers often give contrary answers to this question at different times in the call. Type-appropriate CPR instructions should be given when a patient is deemed not conscious and not breathing normally.

Instructions for Coding:

- Select the response that is most appropriate based on the definition above.

Example	CARES Coding
The caller says her husband is “passed out and not responding.”	No
The caller does not commit in answering whether the patient is conscious, saying “yes” at one point, “no” at another and “I can’t tell” at another. The dispatcher asks if she can speak with the patient. The caller says, “No, there’s no way he can talk to you.”	No If the caller reports that the patient can’t speak, it indicates the patient is most likely not conscious.
A caller says the patient is in a seizure. The seizure then stops, and the caller reports that the patient “is snoring like he’s in a deep sleep and he won’t wake up.”	No A patient who “won’t wake up” should be classified as not conscious.
The caller reports the patient wouldn’t wake up a minute ago, but now appears to be “getting better.” The dispatcher tells the caller to shake the patient’s shoulders to see if the patient responds. The caller says he moaned and pushed her arms away.	Yes A patient who makes purposeful movement (pushing the caller’s arms away) is demonstrating conscious intent and should be coded as conscious.

D12. PATIENT IS BREATHING NORMALLY?

Definition/Description:

- A patient is considered to be breathing normally if the caller reports the patient is breathing normally. A patient is considered to be breathing not normally if the caller reports the patient is:
 - a) not breathing or,
 - b) the caller reports abnormal breathing and/or,
 - c) the Quality Assurance (QA) rater hears abnormal breathing and/or identifies it through the caller's description of the patient's breathing. Abnormal breathing is defined as breathing with a rate and/or character different from the victim's normal breathing at rest.
- A patient's breathing status is a key indicator of whether he or she is in cardiac arrest. It can be difficult to get a clear answer on whether the patient is breathing normally. Callers often give contrary answers to this question at different times in the call. Agonal breathing is very common in cardiac arrest. Callers often use specific words or phrases to describe this kind of breathing. These descriptions include, but are not limited to, "gasping," "gasping for air," "gurgling," "gargling," "snoring," "snorting," "humming," "moaning," "groaning," "breathing every once in a while" and "shallow breathing." Type-appropriate CPR instructions should be given when a patient is deemed not breathing normally and not conscious.

Instructions for Coding:

- Select the response that is most appropriate based on the definition above. In cases where callers describe agonal breathing or where the quality assurance rater hears agonal breathing, patients should be coded as not breathing normally.

Example	CARES Coding
The caller says her husband is drunk and that he keeps "gurgling and gasping for air."	No
The caller says his wife "seems to be breathing okay," but the quality assurance rater hears a soft snoring sound in the background. The dispatcher does not hear it or hears it but does not identify it as abnormal breathing.	No

D13. TRANSFER CALL

Definition/Description:

- A call is coded as a Transfer Call when the recording includes audio from an agency that first receives and then relays the call to the Dispatch Agency for processing.
- Many recordings include audio from Primary Safety Answering Points (PSAPs), agencies that initially receive and then transfer calls to a Dispatch Agency. These PSAPs are usually law-enforcement agencies transferring calls to “Secondary PSAPs,” or fire/medical dispatching agencies.

Instructions for Coding:

- If a recording includes audio from a PSAP, select “Yes.”
- If a recording does not include audio from a PSAP, select “No.”
- If it is not clear whether the recording includes audio from a PSAP, select “Unknown.”
- If the call is coded as a Transfer Call, note in minutes and seconds the time elapsed from the start of the recording (time 0:00 in Apple QuickTime window) to the moment when a dispatcher at the Dispatch Agency first addresses the caller.

Example	CARES Coding
PSAP receives call about a cardiac arrest and transfers call to dispatch agency. Dispatch agency first addresses caller at 0:17 of the call.	Yes Time Elapsed Before Dispatcher First Addressed Caller: 0:17

D14. DISPATCH RECOGNIZES NEED FOR CPR

Definition/Description:

- The time dispatch recognizes the need for CPR is the time elapsed from the start of the call (or in the case of a Transfer Call, the time elapsed from the moment the dispatcher or call-taker first addresses the caller) to the moment when the dispatcher or call-taker indicates that he or she realizes CPR should be performed.
- Dispatcher or call-taker recognition of the need for CPR is the first of three key time intervals in the provision of pre-arrival CPR instructions.
- Dispatchers and call-takers indicate their recognition when they say any of the following in connection with a response to the patient's condition: "Cardiopulmonary Resuscitation," "CPR," "chest compressions," "compressions," "continuous chest compressions," "Hands-Only CPR," "CCR," "rescue breaths," "rescue breathing," "ventilations," or "rescue ventilations." In some cases, the dispatcher might not say any of these but indicates recognition by starting CPR instructions. In such cases, the time to dispatch recognition of the need for CPR and the time to start of CPR instructions are the same.
- If the dispatcher or call-taker indicates his or her recognition, but subsequently instructs the caller or rescuer either to "lift the patient's chin and tilt his or her head back" and/or "to look, listen and feel for breathing," the time to dispatch recognition of the need for CPR should be defined as the moment the dispatcher or call-taker indicates his or her recognition AFTER instructing the caller or rescuer to perform this formal breathing assessment.

Instructions for Coding:

- Enter the elapsed time from the start of the call (or in the case of a Transfer Call, the time elapsed from the moment the dispatcher or call-taker first addresses the caller) to the moment of dispatch recognition of the need for CPR, in minutes and seconds.

Example	CARES Coding
The dispatcher says, "We need to start CPR right away," 32 seconds into the call.	Minutes: 0 Seconds: 32
The dispatcher says, "We need to start CPR" at 1 minute and 27 seconds into the call. She then instructs the caller to lift the patient's chin, tilt his head back and to look, listen and feel for breathing. The caller performs this procedure. It takes 25 seconds, and at 1:52 the dispatcher says, "OK, let's start compressions."	Minutes: 1 Seconds: 52
The patient is on the floor and the caller describes him as "not conscious" and "not breathing normally." A second later, at 55 seconds, the dispatcher then says, "kneel by his side and put the palm of one hand in the center of his chest. Put your other hand on top of that hand."	Minutes: 0 Seconds: 55

D15. DISPATCHER BEGAN INSTRUCTIONS

Definition/Description:

- This is the time elapsed from the start of the call (or in the case of a Transfer Call, the time elapsed from the moment the dispatcher or call-taker first addresses the caller) to the moment when the dispatcher or call-taker starts CPR instructions.
- Dispatcher or call-taker initiation of CPR instructions is the second of three key time interval in the provision of pre-arrival instructions.
- This method for assigning this time will vary from dispatch center to dispatch center, depending on the wording of protocols. Instructions to get a patient to a hard, flat surface should not be considered the start of CPR instructions. In many protocols, instructions begin when a call-taker or dispatcher tells the rescuer to “kneel by the patient’s side.”

Instructions for Coding:

- Enter the elapsed time from the start of the call (or, in the case of a Transfer Call, the time elapsed from the moment the dispatcher or call-taker first addresses the caller) to the moment the dispatcher or call-taker starts CPR instructions, in minutes and seconds.

Example	CARES Coding
The caller reports that she is ready to start CPR. The dispatcher says, “kneel by his side and put the palm of one hand in the center of his chest,” 2 minutes and 12 seconds after the start of the call.	Minutes: 2 Seconds: 12

D16. TIME TO FIRST COMPRESSION

Definition/Description:

- This is the time elapsed from the start of the call (or in the case of a Transfer Call, the time elapsed from the moment the dispatcher or call-taker first addresses the caller) to the moment when the caller or rescuer delivers the first chest compression.
- The time to first compression is the third of three key time intervals in the provision of pre-arrival CPR instructions.
- The time is noted when the first compression is audible or the caller/rescuer indicates he or she has started compressions (i.e. by counting with dispatcher).

Instructions for Coding:

- Enter the elapsed time from the start of the call (or, in the case of a Transfer Call, the time elapsed from the moment the dispatcher or call-taker first addresses the caller) to the moment the caller or rescuer delivers the first chest compression, in minutes and seconds. There are often calls in which the time to first compression must be carefully inferred or entered as "Unknown."

Example	CARES Coding
The dispatcher finishes instructions for starting compressions, and the caller clearly counts out the first compression 3 minutes and 23 seconds into the call.	Minutes: 3 Seconds: 23
The dispatcher finishes instructions for CPR at 2 minutes and 50 seconds into the call and tells the caller to count the compressions out loud. The caller doesn't count, however, and, eight seconds later, at 2:58, the dispatcher asks, "Are you doing the compressions?" The caller says, "Yes." The dispatcher then reminds the caller to count out loud, and the caller begins: "1, 2, 3 ..."	In this scenario, it becomes clear that the caller is doing CPR at 2:58 seconds (the caller says, "Yes" when asked if he's doing compressions.) The dispatcher told him to count out loud at 2:50. Since 8 seconds later the caller said he had been doing compressions, it can be reasonably inferred that the first compression occurred somewhere between 2:51 and 2:55. In the absence of more perfect information, enter the elapsed time as 2:53, the midpoint between 2:51 and 2:55.
The dispatcher finishes instructions for CPR and tells the caller to count out loud at 1:46. The caller doesn't count, but the first of a string of audible compressions occurs at 1:49.	Minutes: 1 Seconds: 49

D17. COACHING OR COMPLIMENTS FOR DISPATCHER

Definition/Description:

- Coaching refers to any advice or feedback a manager or colleague could give the dispatcher or call-taker based on his or her performance in a given audio recording.
- Compliments refer to any positive comments a manager or colleague could give the dispatcher or call-taker based on his or her performance.
- Coaching dispatchers and call-takers on select audio recordings is essential for improving their performance on suspected cardiac arrest calls. Call evaluators should listen for any clues to recognition of cardiac arrest a dispatcher or call-taker may have missed (e.g., agonal breathing or descriptions of agonal breathing). They should also evaluate how assertive the dispatcher or call-taker was in getting instructions started once he or she identified the need for CPR. It is equally important to point out those things a dispatcher or call-taker does well when handling a suspected cardiac arrest call.

Instructions for Coding:

- Indicate in the text box whether the dispatcher was “Assertive” or “Passive” in his/her effort to give CPR instructions. Dispatchers who *ask* callers “Are you willing to do CPR?” or “Do you want to try CPR?”, for example, are Passive. Dispatchers who *tell* callers, “We need to start CPR” or “I need you to start CPR” are Active. Additional performance comments may be added (e.g., comments regarding missed agonal breathing) as needed.

Examples
The dispatcher was Passive. He asked if the caller wanted to do CPR instead of telling him, “We need to start CPR.”
The dispatcher was Assertive. He told the caller “We need to start CPR.”
The dispatcher missed an audible agonal breath 54 seconds into the call. Identifying it could have accelerated the time to recognition of the need for CPR.
The dispatcher missed descriptions of agonal breathing. The caller said the patient was “gasping” at 1 minute and was “breathing really hard” at 1:15.
The dispatcher calmed and reassured a highly-distressed caller and got him to perform CPR until EMTs arrived.

D18. OTHER COMMENTS?

Definition/Description:

- Other Comments refer to any thoughts the QA evaluator may have with respect to research and process improvement ideas.
- Patterns that emerge when evaluating audio recordings can lead to research and process improvement ideas.

Instructions for Coding:

- Enter free text comments.

Examples

Dispatchers tend not to listen as closely as possible to callers' descriptions of patients when first receiving calls. Callers often indicate that the patient is an adult and is not conscious in the first few seconds of a call (e.g., "My husband is passed-out on the floor"), but dispatchers often miss these indications. Several seconds later they ask the patient's age and whether he or she is conscious. The time to recognition of the need for CPR could be considerably reduced if dispatchers caught this kind of information when callers first provide it.

It would be interesting to know if the time to dispatch recognition of the need for CPR varied according to whether dispatchers ask if the patient is "conscious" instead of "responsive," and vice-versa.