



EMS Best Practices



When Things Don't Go According to Plan

Joe Barger MD, EMS Medical Director
Pat Frost RN, MS, APRN, EMS QI Coordinator

As a Prehospital provider you work in a world of high risk, high expectations and with health care challenges and constraints that are not always in your control. At times those issues present difficulties in the field that can impact patient care. Although there are tremendous resources put into training, treatment guideline development, provider and patient safety the potential is always there for things not to go according to plan.

The unexpected can and does happen. How often this happens is unclear. The literature on error or unusual occurrence reporting consistently demonstrates that no health provider whether they are an MD, RN, Paramedic or EMT routinely reports all the issues they could. Under-reporting is due to numerous factors including providers failure to recognize an event, fear of disciplinary action or embarrassment. But what we do know is that valuable information can be learned from these events that can improve treatment guidelines, training and performance.

Currently we are reviewing our unusual event occurrence program to explore ways to encourage reporting. We will be working with each of our agencies to put a program in place that addresses more than "errors in the field". The focus will be collecting data to look at overall EMS system performance issues. This will include the opportunity for providers, patients and hospitals to participate in alerting us to some of the challenges we face in this county. This information will then be used to re-evaluate our current programs, processes, treatment guidelines and policies allowing us to improve our overall EMS system.

Bottom line...unusual occurrence reporting is more than just error reporting. It can also serve as an "early alert system" that helps us identify system wide problems and high risk issues that need attention. As we make changes to our current program we want to know your ideas. Send your comments to EMS QI Coordinator @ pfrost@hsd.cccounty.us

Professional Documentation is

- Complete
- Accurate
- Timely
- Legible
- Unaltered
- Free of jargon, bias, slang, irrelevant opinion
- All of above

WHAT YOU DON'T MEASURE YOU CAN'T MANAGE

Without appropriate use of systems like unusual occurrence reporting we may be missing opportunities to improve county EMS services. Your report could result in an important change in the way we deliver care.

Professional Documentation: The Narrative

The PCR is a legal patient care focused document
Complete, accurate and timely documentation is a professional responsibility. Narrative data is a vital part of documentation. Professional narratives are objective focusing on patient assessment, treatment, intervention and patient response. The narrative serves to "paint the picture" of patient care delivered that cannot be captured in the data fields of the electronic PCR (ePCR).

When issues arise during a call that create frustration or other difficulties you may be tempted to describe these in the narrative record. Personal opinions about a frequent flyer, uncooperative patient or family, disagreements with triage decisions or transfer of care problems at the receiving facility do not belong in the patient narrative.

Your concerns of legitimate issues should be reported to your supervisor and an unusual event form completed. How can you improve your documentation? Assume responsibility for self-assessment of all documentation. Appreciate the importance of good documentation among peers. Strive to set a good example and respect the confidential nature of the ePCR. If you need help improving your documentation see your clinical educator.

Contra Costa County Health Services www.cchealth.org
Emergency Medical Services Agency
1340 Arnold Drive, Suite 126, Martinez CA 94553
Phone: (925) 646-4690 Fax: (925) 646-4379
www.cccems.org

From the Field:

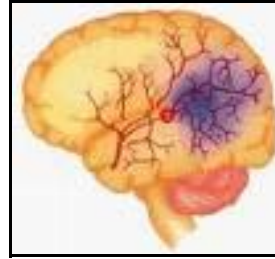
Joe Barger MD EMS Medical Director



Double Trouble: Nitro in Chest Pain & CHF

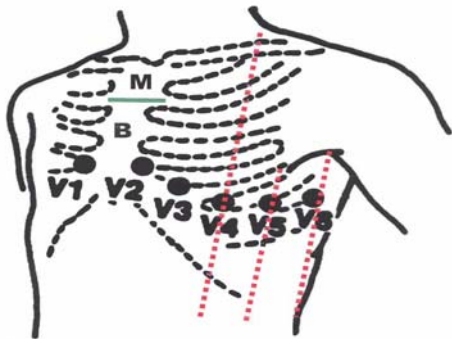
Since inception of double-dose (0.8 mg) nitroglycerin for patients with pulmonary edema and blood pressures above 150 systolic, there have been a number of cases noted in which double-dose NTG was given for chest pain. As a reminder, this double-dose regimen is **only** applicable in patients with pulmonary edema and elevated

systolic pressures and should not be used in the patient with chest pain but no evidence of CHF.

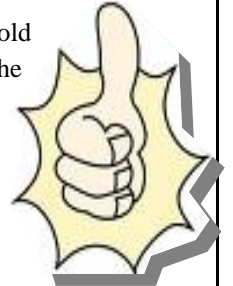


Stroke History Critical !

For hospitals to consider rapid intervention in stroke patients, the specific time of stroke symptom onset is critical to establish, communicate, and document. This is the most important piece of history you can gather from the patient or family, and needs to be relayed to the hospital in the radio report to help them prepare for care of the patient. Document the time of onset on your PCR as well – either in the narrative or as part of the chief complaint. For patients who awaken with symptoms, the time they last were noted to be normal or without the new symptoms is the key time.



Artifact update! We are seeing a five fold improvement in our ECG's from all departments over the last 2 months. A recent survey showed only around 4% had significant artifact. Occasionally we see that one of the chest leads is not well displayed, which probably means that there was less-than-ideal skin contact. Skin prep is important. All-in-all, the quality has improved markedly in a very short time!



Remember that if you see significant artifact, wandering baseline, or a computerized reading that says that the ECG can't be interpreted, check the leads and repeat the ECG.

At Your Request: 12-Lead Placement Review

We have had several requests to review 12 Lead Placement so here it is: Proper placement of chest leads is a critical step in obtaining a high-quality ECG. Key surface anatomy landmarks guide placement. No diagram can demonstrate this well, but once learned, the landmarks will show you the way and it will become easy to do. This is truly a "hands-on" skill.

Step 1: Locate the **sternal angle**. It is a ridge between the 2 parts of the sternum. Our figure shows a green line at the angle, with the manubrium (M) of the sternum above and body (B) of the sternum below. The 2nd ribs are attached to the sternum at the level of the angle. If you start at the **sternal notch**, which is the soft area just above the sternum in the midline, you should be able to feel the angle as you run your fingers downward on the sternum, then move outward to feel the ribs.

Step 2: Now that you know where the 2nd ribs are, you can find the 2nd interspaces below them. Find the 3rd, then the 4th ribs, and finally the 4th interspaces below. Place **V1** in the 4th interspace just to the right of the body of the sternum, and **V2**, just to the left.

Step 3: The **midclavicular line** is an imaginary vertical line that runs from the midpoint of the clavicle downward. **V4** is the next lead placed, and it is placed along that line in the 5th interspace. **V3** is then simply placed halfway between V2 and V4.

Step 4: The **anterior axillary line** is an imaginary line that runs vertically from the skin fold at the front of the axilla (armpit). **V5** is placed along that line, at the same *horizontal* level as V4.

Step 5: The **mid-axillary line** is a line that runs vertically from the middle of the axilla on the lateral side of the chest. **V6** is placed along that line, again at the same horizontal position as V4 and V5.

Please contact us with your comments or concerns. Visit our website @ www.cccems.org