A two-year-old child arrived in the Emergency Department crying, wheezing out loud and rubbing her puffy eyes. Her face was red and hot, and her eyes were nearly swollen shut. She had been dining out with her mother and somehow had an exposure to food containing peanuts, and this little girl, like so many others of her generation, was allergic.

“Give that kid a milligram of Epi,” the Emergency Department Physician shouted. He was standing in the doorway of another patient’s room, two doors down. Karen, the RN assigned to that section of the ED, was just walking into the toddler’s room.

“You mean 0.1 mg, right?” Karen clarified as she walked by the busy MD.

“Yes, a milligram, you know what I mean, Karen,” he repeated back.

“You mean 0.1 mg, of 1:1000 Epinephrine, SC...right Bob?” Karen answered back again while drawing up the medication in the room, as time was of the essence. This child was in full-blown anaphylaxis and needed treatment immediately to prevent a code.

There are certain aspects of resuscitation and emergency response that, after many years of practice, become routine for providers. Add to that the comfort of working with familiar staff,
and, at times, clinical response feels automatic. But, consider the scenario described above that may have been different with an inexperienced RN, unfamiliar staff, or even just tired staff. Imagine a new graduate taking this verbal order and not questioning it because it was an emergency. The child could have ended up receiving a ten-fold overdose with potentially lethal consequences. In these circumstances, effective communication is critical. In this article, we will review the importance of respect, clear communication, and simple techniques to avoid errors during emergency and resuscitation situations.

**Complex Environment + High-Risk Situation**

= *Recipe for Communication Breakdown*
Communication Breakdown is Common

We all know that effective communication is critical in high-risk environments such as healthcare. Effective teamwork depends on all team members communicating and avoiding complacency. “Retrospective analyses of incident and adverse event reports found communication and teamwork issues to be among the most frequent contributory factors (i.e. in 22-32% of reports)” (Manser, 2009) 9. In order to avoid errors and increase patient safety, we must focus on open and frequent communication during resuscitation.

RESPECT

“R-E-S-P-E-C-T, find out what it means to me, R-E-S-P-E-C-T!” 1 belts out Aretha Franklin in her iconic empowering tune. But what does this mean in the healthcare setting? It is all about being professional and having respect for each other. No one is perfect, and in the IOM report, “To Err is Human,” 2 the authors point out that it is in our nature to be imperfect. In healthcare
settings, we should set up systems and implement practices that anticipate and minimize errors. Communication errors are very common, and Croteau (2004) argues that,

“If there were one aspect of health care delivery an organization could work on that would have the greatest impact on patient safety, it would be improving the effectiveness of communication on all levels—written, oral, electronic.”

One way to decrease errors is through open communication where both parties can be expected to receive and give respect, even when they are wrong. What would have happened if either party in the opening story did not have respect for the other? Can you imagine if the physician had yelled at the nurse? What if the nurse had been too intimidated to clarify what the physician meant? What if the nurse had scorned the MD for his mistake? None of this would have been productive or helpful to the patient. Having confidence that you will be treated with respect in your workplace is the first step to building a culture of safety.

Constructive Intervention

Since 2005, Advanced Cardiac Life Support (ACLS) classes have incorporated a new communication technique called “Constructive Intervention.” This concept is based on respect, but it takes it one step further. It asks all participants of ALCS to intervene or take action when they know something during a code is not right. ACLS participants are asked to intervene for the patient’s safety. It does not matter what role they play in the code, they must
intervene if they know a mistake is being made. ACLS elaborates that, “during a resuscitation attempt, the team leader or team member may need to intervene if an action that is about to occur may be inappropriate at the time. Constructive intervention is necessary but should be done tactfully” (ACLS, 2006). As an ACLS instructor, I notice many class participants have difficulty understanding or even agreeing with this concept. Some staff may not feel confident in correcting or questioning a coworker with more training and education, but they should. Students often think that the emphasis of constructive intervention is great in the classroom, but say it does not translate to the “real world” of clinical practice. This is an unfortunate perspective, as it is just as important to offer constructive intervention as it is to know the correct dose of drugs by heart, perhaps even more so. If one forgets the drug dose, it can be looked up quickly or confirmed by a peer. But having the courage and confidence to step up and offer intervention when it is critical is not something you can pull from a text. It is a cultural attitude in healthcare that we should all support and encourage.

Closed-Loop Communication

We all know by now to read back telephone orders in order to confirm what the prescriber said. Not only is this a good practice, but it is a longstanding Joint Commission goal. This is done to ensure what was heard was correct. Verbal orders in the hospital setting are reserved for true emergencies, such as a code. By repeating back verbal orders during a code, we are closing the
loop with the person conveying the message. Closing the loop allows the senders of the
message to hear what they said reflected back to them, and to confirm that their message was
received correctly. This is critical because in times of stress, we may not say exactly what we
are thinking or mean to say. By repeating it back, we can be sure the message sent was indeed
the intended one. Repeating back orders verbally forces us to confirm what was heard and
makes everyone in the room aware of what is being done next. By repeating the order back
verbally, any errors made by the practitioner sending or receiving the message have an
increased likelihood of being caught and corrected. Very few mistakes are caused by one factor
alone, but are often a result of multiple failures within the healthcare system. Closing the loop
and repeating the order back gives the sender an opportunity to fix a mistake. It also gives
everyone listening a chance to correct the error too. Staff may feel that this is unnecessary and

“Q: In an emergency situation such as a
code in the ER, if the physician calls out the
medication order and the RN repeats it back
before administering the drug, and the code
recorder is documenting the name of the
drug, dose, time, route, and rate, is this
acceptable?

“A: Yes. In certain situations such as a code
or in the OR, it may not be feasible to do a
formal "read-back." In such cases, "repeat-
back" is acceptable”.

(2008) Joint Commission Website 6
is a waste of time in an emergency but, in reality, it only takes about 5 seconds to repeat an order. It can be done simultaneously as one is opening packaging on medication or charging a defibrillator.

**Preconceived Notions**

A resuscitation team consists of members with varying backgrounds, educational levels, and experiences all coming together very quickly. The team members may not even have met each other before the code. We each bring with us our own perspective, communication style, and cultural identity. One way we can improve communication between individuals is to use common language and active listening. Our common language is based on ACLS, and all providers should remain current in their certification. Active listening includes processing all the signals that are sent, including body language. “Human beings tend to process what they hear over three times faster than the average rate of speech. The active listener uses this opportunity to organize the information received into key points rather than becoming distracted while the sender completes the transition.” Active listeners also clarify anything that is not understood. I have witnessed a code where the doctor ordered an Amiodarone infusion for the patient. He said, “Hang the drip.” The nurse who had just walked in the room saw the patient in V-Tach. She then asked the documenting staff nurse if the patient had already had Amiodarone. The documenting nurse said, “Yes, he has had 300 mg IV already.” The nurse assumed since the patient now had a pulse, that the doctor wanted the maintenance dose, so she mixed it and hung it a few minutes later. Upon starting the infusion, the patient lost his pulse and remained in V-Tach. The doctor asked, “Why are you hanging that big bag, I
wanted the 150 mg second dose?” This mistake could have been avoided if the doctor had given clear orders, if the nurse had repeated them back, or if the nurse had stopped to clarify the dose and rate of the infusion. If the nurse had been comfortable addressing the physician in this manner, she would not have needed to ask the documenting nurse for clarification. By taking a standardized communication approach during resuscitation, the emphasis is on the process, not the person carrying it out.

**Algorithms to the Rescue**

Everyone who is an ACLS provider should learn the algorithms for ALCS and understand the sequence. Frequent reviews are often needed to keep these fresh in your mind. Being familiar with the drugs, doses, and indications for use is imperative. Knowing what you are doing will give you the confidence to stop, question, and intervene when another provider commits an error. But relying on memory alone can set you up for failure, as we are all human. Having copies of the algorithm in your pocket or posted in code rooms or medication cabinets acts as a very valuable resource. It can be referenced quickly and also shown to the other practitioner when there is a question. Holding out the algorithm card and saying, “Did you want 3 mg of Atropine? The algorithm calls for 0.5 mg of Atropine,” is a very concrete, non-judgmental way to communicate to the other person a possible error. Making suggestions of other treatment alternatives is also another way to respectfully let the other person know that you think he or she may be taking the wrong action. It also takes the emphasis out of who is right or wrong, as the focus is now on the algorithm.

**Talk to your Recorder**
Documentation is critical written communication during a code. This piece of communication should be in a structured format that is easy to follow. Regardless of the format, paper or electronic, the person documenting should be familiar with the process. For this reason, an experienced staff member is a good choice for the role. The person documenting has a crucial role in communicating and summarizing what has been done for the rest of the team. The Recorder will frequently be asked how long since the last dose of a drug, how long the code has been going on, and if the 2 minute cycle of CPR has occurred. Therefore, when a drug or treatment is administered, it should be clearly communicated to the staff member documenting. A simple statement such as, “Epinephrine 1 milligram administered,” after the drug is given will let the staff member documenting know what time the drug was actually given. Make eye contact with the Recorder while saying this so he or she can acknowledge what was said either verbally or non-verbally, such as with a nod of the head.

One at a Time Please!

Okay, so you don’t have to raise your hands in a code, but everyone cannot speak at once. If you have ever been to a code where many people are present and everyone is talking, it gets very noisy and confusing. Eliminate this by not talking unless it is absolutely necessary to treat the patient or for safety of the staff.
This is not the time for conjecture about facts unrelated to the code or for chatter. If there are too many people in the room without clear roles, ask them to leave in order to better care for the patient. Speak in a calm but assertive manner; this is no time to be shy. Conversely, shouting does not help and often gets other code team members upset or anxious. Codes are stressful enough! Having a calm but assertive demeanor will help communicate the emergency at hand. Team members should not be insulted by commands and autocratic leadership style during a code. This is a necessary leadership dynamic during life-and-death situations, and the intent is to communicate effectively. Clearly identifying team roles will help everyone understand who the team leader is, and the leader should be doing most of the talking. These behaviors do not come naturally to most of us but must be learned over time. Training through frequent mock codes or simulation is a way to model these behaviors for staff. Specific behaviors that measure teamwork competency include, “shared mental model, mental rehearsal, situational awareness, cross-monitoring, closed-loop communication, open communication, flattened hierarchy, role clarity, and anticipatory response.”

In summary, effective communication in emergency situations can be achieved through active listening, closed-loop communication, critical interventions, and respect. This simple act of mutual respect may seem the most obvious of all basic practices, but it is critical and often not done. If the MD in the opening scenario had not listened to Karen the RN, the ending may have not been the same.

“You mean 0.1 mg, of 1:1000 Epinephrine, SC...right Bob?” Karen answered back again while drawing up the medication in the room, as time was of the essence.
Bob followed Karen into the room and put the order sheet down on the medication counter.

“Yes, I’ll write it down correctly, too” Bob said as he scribbled out his order he had just written hastily on the order sheet. Karen knew exactly what he meant, as she had worked with Bob for years now and could almost anticipate what he was going to say or order most of the time. She was very glad she clarified what he said as it was critical to her small patient.

“You’re just bound and determined not to let me overdose that kid, aren’t you?” Bob, said quietly as Karen drew up the med. “Thank you.”

For more reading on team communication and patient safety, refer to the following references.


6. Joint Commission (2008) website NPSG 02.01.01 retrieved March 2, 2010 from: [http://www.jointcommission.org/AccreditationPrograms/LongTermCare/Standards/09_FAQs/NPSG/Communication/NPSG.02.01.01/Read+Back+Orders.htm](http://www.jointcommission.org/AccreditationPrograms/LongTermCare/Standards/09_FAQs/NPSG/Communication/NPSG.02.01.01/Read+Back+Orders.htm).


