

# Emergency Department Communications

November, 2010

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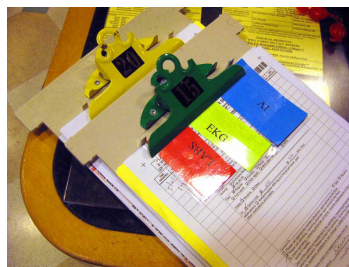
## “The source of the disaster was poor communication”

When we think of “Emergency Department Communications” we tend to think of signout - shift change with ED nurses signing out to other ED nurses and ED doctors signing out to ED doctors, and docs and nurses signing out admitted patients to those taking care of them on the floor. We think of the famous “SBAR” signout (Situation, Background, Assessment, Recommendations) that is in common use for signout on hospital floors, and even mandated by the British National Health Service.

But ED communications encompass much more than this. Yes, there is more communication going on at shift change - that’s why it’s noisier then - but much of an ED nurse, doctor, secretary or tech’s time is taken up with communication. Can Mr. X go to MRI nonmonitored? Can Mrs. Y have some more Diluadid? Is that CT with or without contrast? Who do you need to attend to first, and how do you find out?

And the real question to be raised, and in part answered, is how larger and busier EDs and new technology affect our communications for good or ill.

This single page is just an introduction, a teaser if you will, for the content to be presented at the Emergency Department Informatics Symposium. If you miss the session, you can browse <http://www.ed-informatics.org> and get much the same education.



communications have suffered. Things get missed. **Patients** get missed!

When an ED is small, everyone can hear and see what everyone else is doing. (More or less. Go along for the sake of the argument, OK?)

As an ED gets bigger, we lose this *situational awareness* that is so often cited as critical for the safety of airline cockpits or nuclear power control stations. We try, with variable success, to compensate with communications technology.

### Signout

Let us return for a minute to the archetypal medical communication, signout. Can technology help? Yes, there are many hospitals that now use VoiceCare or similar voicemail solutions to allow nurses to record their signout. There are also various text-based signout tools, often created by residents, that have had less penetration than voice recording.

### Intra-ED Communications

The elephant in the room, however, is communications within the ED. When our EDs have expanded to two, three, five or more “modules” or “pods,” when building codes require rooms to be twice the size of rooms in older EDs, and when even our expanded EDs are filled to far more than their design capacity - in the words of Yeats,

*Things fall apart; the centre cannot hold;  
 Mere anarchy is loosed upon the world.*

To try to restore order, there are multiple technologies that we can employ.

The simplest is to use colored objects. We can place paper charts on clipboards colored in a scheme that matches the Emergency Severity Index triage category. We can put little colored laminated cards on charts that indicate things like “EKG needed” “IV start and labs needed” or “needs X-ray.”

Or, we can use pagers, “picklephones” (basically a hospital-limited cellphone network), cellphones, Vocera speech-recognition cellphoneish badges (if you search and find a video of an attempt to use this in the ED you will be amused), Blackberries which

Slightly more complicated is to use a white greaseboard, and to write notes on it for others coming by to see. There is even one ED that, when forced to expand, simply pointed a video

camera at the main whiteboard so it could be seen on TV. A step up is a tracking board - at the cost of being harder and slower to write on than a greaseboard, it is seen everywhere in the ED, and can do more.

More at EDIS or online.

### Objectives

1. Describe the differences in effective verbal, written, and electronic communication technologies.
2. Understand the pros and cons of patient care using technologies vs. other methods of communication.
3. Explain the meaning of context aware communication.
4. Evaluate new communication technologies available in the healthcare market today.
5. Describe how data mining is part of communication in the ED.

### EDs are not Scalable

Have any of you experienced an ED expansion? Or an ED that has gotten much busier? In both cases, it’s likely your

ESI Level	Color	Example
1	Red	cardiac arrest, CPR in progress; respiratory arrest
2	Orange	chest pain in a 65 year old man; severe shortness of breath
3	Yellow	abdominal pain and fever
4	Green	twisted ankle and can't walk; well-appearing, cough and fever
5	Blue	stubbed toe; viral URI

Bed	Age	Name	Iso	Chief Complaint	Attending	Phy Ext	LOS	R.N.	Patient Care	Lab	Rad	Bed
1	20y	Cathy Palm	M	SOB/CP	KC		0.12	Linda	♥	7/2	2/1	
2	24y	Renée Colic		L flank pain	MNT	JW	0.55	Linda	♣	!	1/0	
3	55y	Bill Smoker		chest heaviness	KC		2.21	Linda	★	7/2	!	
4	1y	Carla Infanta		fever and cough	KC		0.44	Linda	♣		!	
5	22y	Harry Batt	V	RLQ pain	MNT	JW	0.22	Linda	♣	!	1/0	
6	33y	Grena Criddle		vaginal DC	MNT		1.15	Ben	♣			
7	78y	Vera Olds		weak and dizzy	KC		0.18	Ben	♣			
8	18y	Ima Klutzer		hand lac	MNT	JW	1.10	Ben	♣	9/1	3/0	
9	28y	Charles Como		heroin/decr LOC	KC	JW	1.44	Ben	♣			