Emergency
Excellence

EmEx-Compare Report for

Community Suburban Hospital

1/1/2009

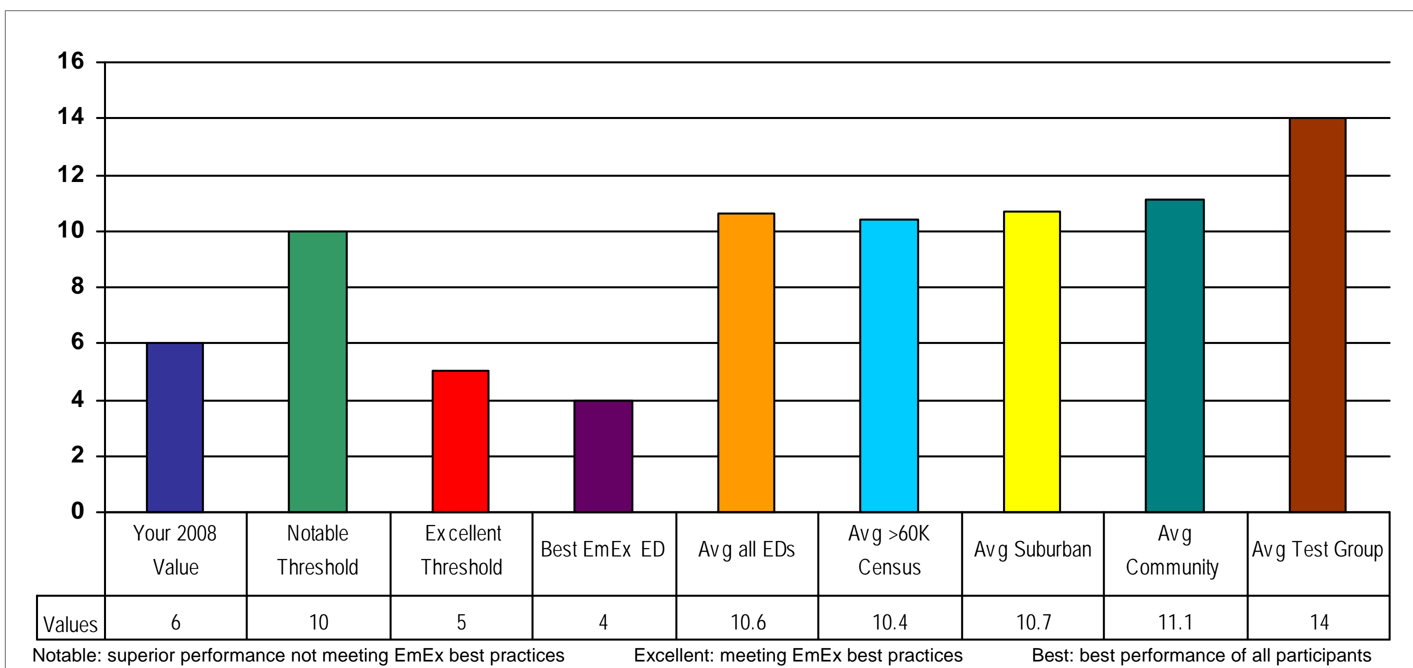
SAMPLE PAGES for DEMONSTRATION

Door-to-Triage Time

How many minutes from patient arrival until triage (ESI or other measure) is assigned?

Your Value: 6 **Pillar:** Systems and Safety

Percentile Ranking (EmEx EDs):		Test Group EDs	100%
All EDs	88%	Suburban EDs	83%
>60K Census EDs	83%	Community EDs	83%



Discussion:

The door-to-triage time is defined as the time period (in minutes) from a patient's emergency department arrival until the triage score is assigned. Rapidly and accurately categorizing patients into severity groups, particularly during busy periods, prevents "sick" patients from being neglected while awaiting physician assessment. This is a critical benchmark since patients with time-sensitive conditions are at risk until assessed. In addition, delays in triage score assignment are indicative of flawed processes, insufficient front-end staffing, or both.

Three-level systems were quite common until the advent of more precise, 5-level systems. The 3-level systems divide patients into the groups "emergent" (cannot safely wait until a space in the clinical area becomes available), "urgent" (can safely wait a short amount of time until a space in the clinical area becomes available), and "non-urgent" (can safely wait a long time until a space in the clinical area becomes available).

Currently, over half of US emergency departments use a 5-level system (i.e., ESI, CTAS/Canadian, Australian or modified versions). The Emergency Severity Index (ESI), the most prevalent 5-level system used in the US, is a 5-level triage rule that categorizes patients into five groups as follows:

•ESI 1 - Severely unstable, must be seen immediately by a physician, often require an intervention (i.e.

intubation) to be stabilized. ESI 1 cases represent 2% of all patients and 73% of ESI 1 cases are admitted.

•ESI 2 - Potentially unstable, must be seen promptly by a physician (within 10 minutes), often require laboratory and radiology testing, medication, and (often) admission. ESI 2 cases represent 22% of all patients and 54% of ESI 2 cases are admitted.

•ESI 3 - Stable and should be seen urgently by a physician (within 30 minutes), often require laboratory and radiology testing, medication, and are most often are discharged. ESI 3 cases represent 39% of all patients and 24% of ESI 3 cases are admitted.

•ESI 4 - Stable, may be seen non-urgently by a physician (or MLP), require minimal testing or a procedure, and are expected to be discharged. ESI 4 cases represent 27% of all patients and 2% of ESI 4 cases are admitted.

•ESI 5 - Stable, may be seen non-urgently by a physician (or MLP), require no testing or a procedure, and are expected to be discharged. ESI 5 cases represent 10% of all patients and 0% of ESI 5 cases are admitted.

(Note that use of the word 'stable' above is from the perspective of whether patient likely to deteriorate while awaiting the physician assessment and is not equivalent to the EMTALA definition.)

In correlating ESI to a 3-level system, ESI 1 and 2 are considered "emergent," ESI 3 is considered "urgent," and ESI 4 and 5 are considered "non-urgent." Since ESI is standardized and tested, its use allows emergency departments to be compared by acuity and inpatient bed utilization. Additionally, it is possible to look at a group of ESI-assigned patients to predict the number of inpatient beds needed before they are requested.

In a study of 32,000 patients triaged in Europe (using the Canadian Emergency Department Triage and Acuity Scale, CTAS), 85% were completed within 10 minutes of arrival. In 98%, the duration of the triage process was under 5 minutes. And, VHA, a healthcare cooperative, demonstrated an average arrive-to-triage time of 5 minutes, with the best performer reaching 1 minute. Furthermore, the time needed to perform triage was an average of 4 minutes, with the best performer reaching 2 minutes.

Appropriate front-end staffing is needed to minimize door-to-triage times. Triage staffing needs should be adjusted to correspond with increased demand during day and time periods with a higher number of patient arrivals. Often this can be accurately predicted by looking at previous trends. Protocols should be in place for adding additional triage personnel temporarily as demand scales up, rather than after a large backlog has already occurred. Ancillary personnel should assist triage nurses in performing tasks that do not require a trained triage nurse, such as identifying open beds, preparing empty stretchers, or taking vital signs, allowing each triage nurse to become significantly more productive.

Inefficient processes can lead to significant door-to-triage delays. When patients encounter multiple staff (i.e. greeter, security guard, registration) before the triage nurse, there will be unnecessary delays in door-to-triage time. Non-patient care processes should be done in parallel to patient care processes whenever possible, so as not to cause delays in patient assessment and treatment. Many emergency departments have been successful with bedside registration using mobile workstations to shorten door to ESI times.

Appropriate education and mentoring can help nurses inexperienced with triage quickly become top performers. Triage systems such as ESI can be learned easily and effectively, especially using widely available printed materials as a guide.

Whenever possible, patients should be brought back to the treatment area immediately (bypassing a triage area) when there are adequate open beds available. If all ED nurses have been educated on performing triage, triage can be completed in individual treatment rooms, shortening door-to-triage times, as well as

door-to-doctor times. Triage performed in individual rooms significantly expands the number of effective " triage nurses," eliminating the bottleneck at the front. For very low acuity cases (i.e., suture removal, minor abrasion), the in-treatment room triage process can be abbreviated or even eliminated (saving nursing resources), as certain cases can be quickly evaluated and discharged by a physician or midlevel provider without any nursing assessment or intervention needed.

The door-to-triage time is a key indicator of a basic yet vital emergency department process and should be regularly tracked. The goal for every comprehensive emergency department should be to assign a triage score that accurately identifies emergent and urgent cases in less than 5 minutes.

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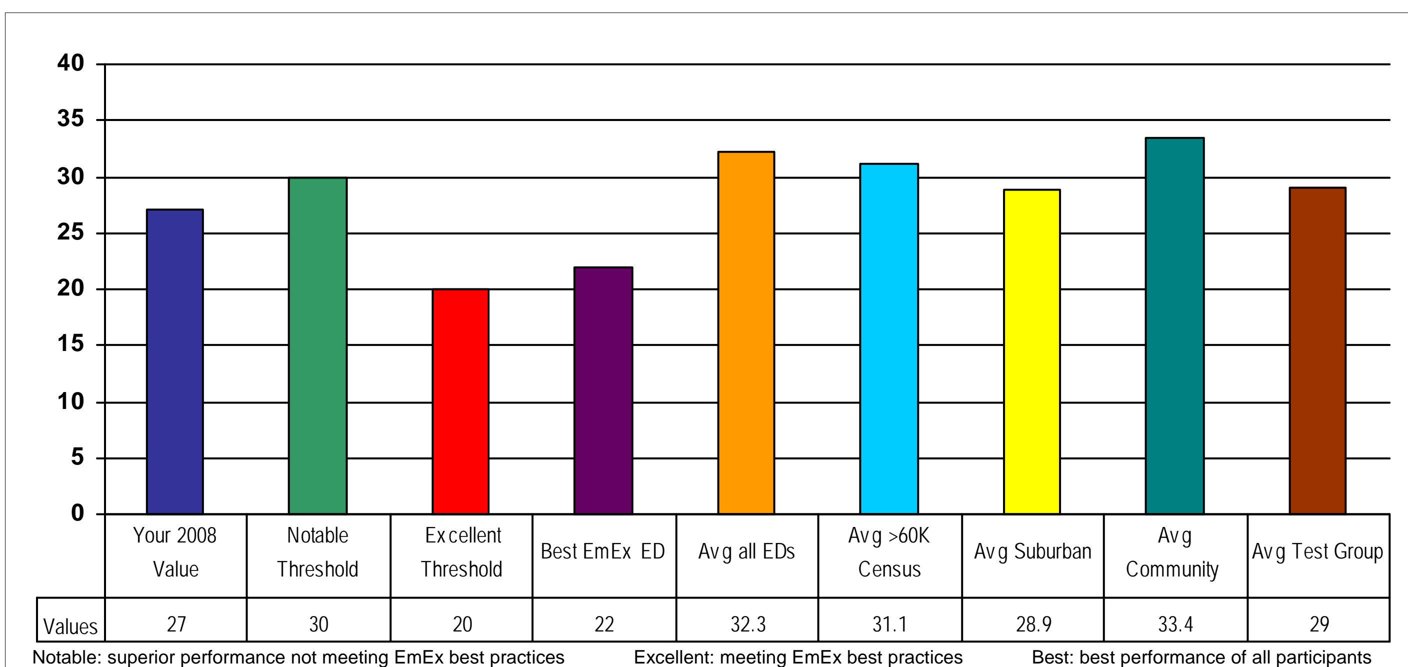
Order-to-CBC Time

How many minutes from order placed/blood collected until CBC resulted?

Your Value: 27 **Pillar:** Systems and Safety

Percentile Ranking (EmEx EDs):		Test Group EDs	100%
All EDs	63%	Suburban EDs	50%
>60K Census EDs	50%	Community EDs	50%



	Your 2008 Value	Notable Threshold	Excellent Threshold	Best EmEx ED	Avg all EDs	Avg >60K Census	Avg Suburban	Avg Community	Avg Test Group
Values	27	30	20	22	32.3	31.1	28.9	33.4	29

Notable: superior performance not meeting EmEx best practices Excellent: meeting EmEx best practices Best: best performance of all participants

Discussion:

Lab turnaround time has a large impact on overall emergency department turnaround times. Emergency department and hospital leadership should regularly track laboratory performance, and the laboratory leadership should be accountable for their performance. Many emergency departments have had dramatic improvements in lab turnaround times using point-of-care testing in the emergency department. Some larger emergency departments have been successful in implementing ED-based, satellite laboratories.

VHA demonstrated that from order to CBC result was 28 minutes in the best performer and 50 minutes on average. About one-third of the time required was spent from order to-collection and two-thirds from collection-to-result. CBC testing is typically faster than chemistry testing since the specimen is not spun down and the machines often result faster. The College of American Pathologists (CAP) Q-Probes Study identified TAT from phlebotomy to reporting of results as the most important performance measure for the laboratory. A median TAT for hemoglobin was 25 minutes.

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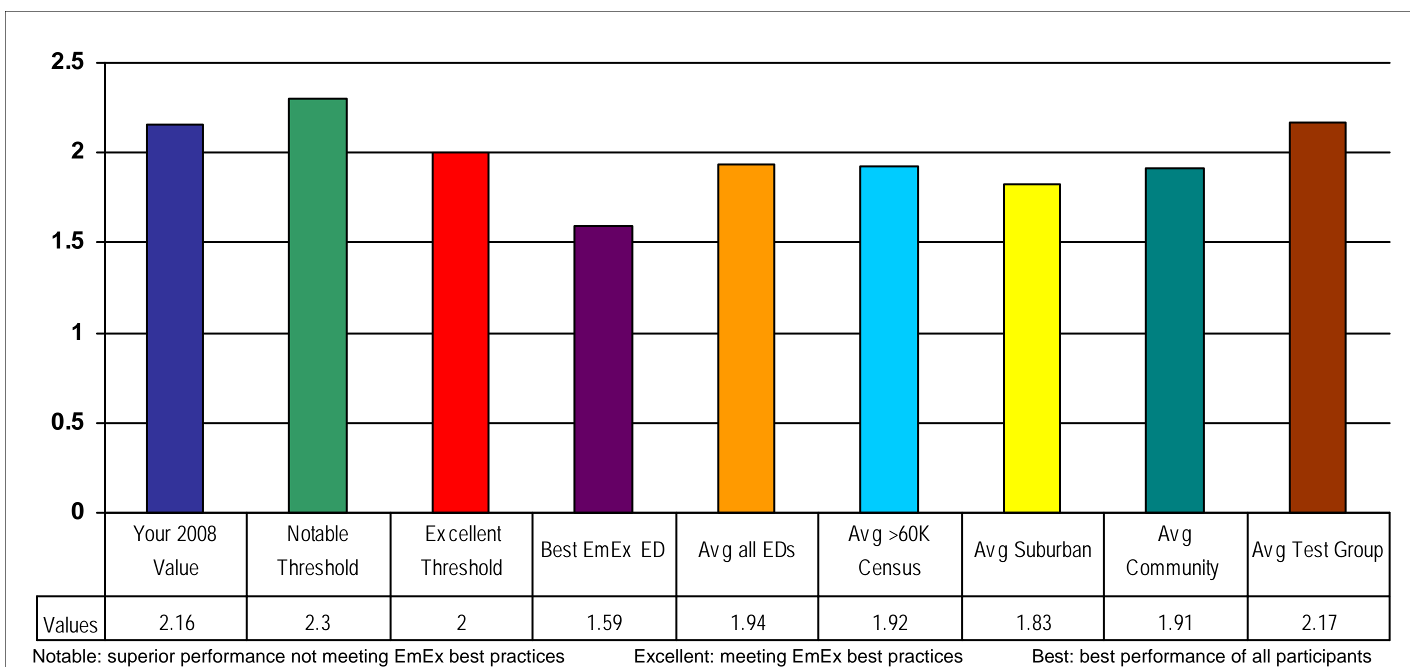
Patients per Emergency Physician per Hour

We calculate adjusted patients per physician per hour (PPH) by comparing ED census and ED physician hours and adjusting for any resident or midlevel hours.

Your Value:	**70,980 Census / (32,850 Attending Hours + (0 Midlevel Hours + 0 Resident Hours) / 2) = 2.16**	**Pillar:**	**Staff and Safety**

Percentile Ranking (EmEx EDs):		**Test Group EDs**	**50%**
All EDs	**25%**	**Suburban EDs**	**0%**
>60K Census EDs	**17%**	**Community EDs**	**17%**



Discussion:

We calculate adjusted patients per physician per hour (PPH) by looking at emergency department census and emergency department physician hours, adjusting for resident and midlevel hours.

We recommend staffing such that PPH is no greater than 2.3 in emergency departments with typical acuity and optimal nurse/ancillary staffing. In general, a midlevel provider or emergency medicine resident physician can help extend an emergency attending by an additional 50%, so an attending-MLP or attending-resident team can has an equivalent PPH of 3.5.

In recent years, the complexity of emergency medicine has increased with more acute patients, more diagnostic testing expected, and more intense documentation and regulatory burdens. Physicians cannot safely see the same patient load as a decade ago. EmEx highly discourages understaffing (excessive patients per hour per physician) in an attempt to maximize profit per physician. Understaffing leads to treatment delays, medical errors and poor patient outcomes, poor patient satisfaction, poor staff satisfaction, and poor retention of physicians.

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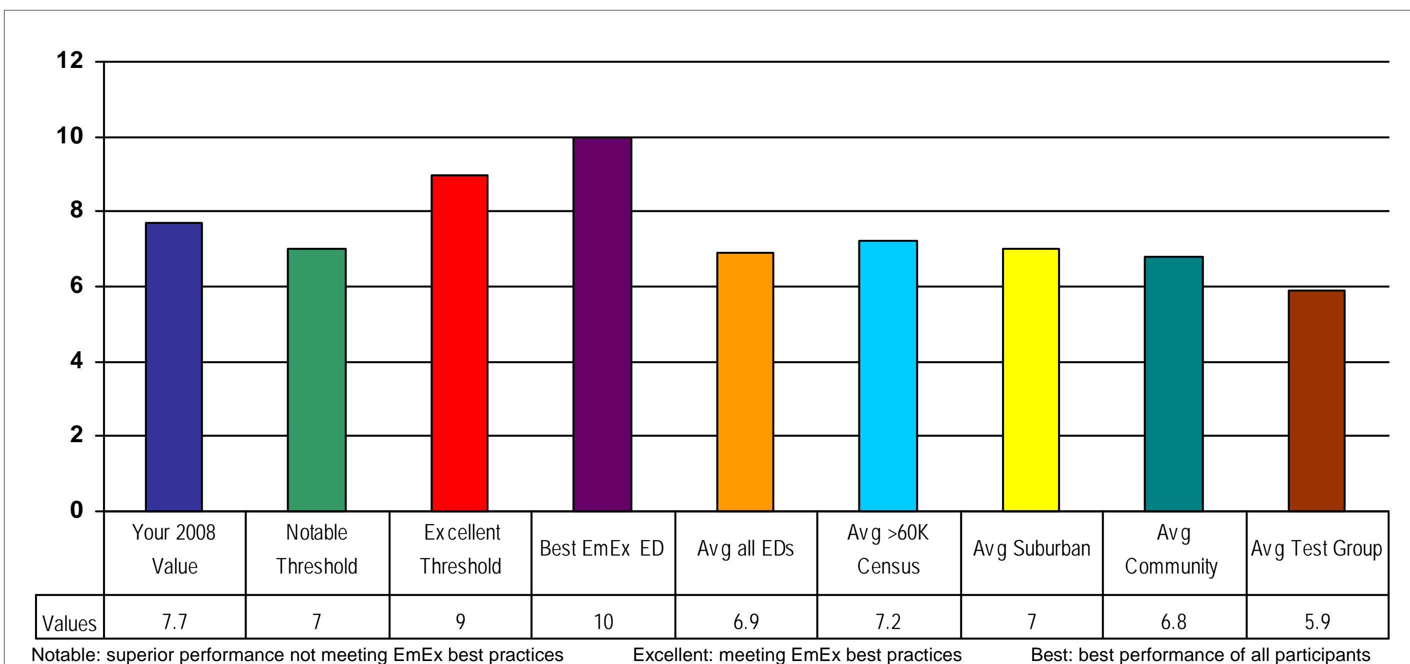
Emergency Nurse Perspective of Job Satisfaction

Emergency Nurse Survey: How professionally satisfied are you when working in the ED? (1=very dissatisfied 4=dissatisfied 7=satisfied 10=very satisfied)

Your Value: 7.7 **Pillar:** Staff and Satisfaction

Percentile Ranking (EmEx EDs):		Test Group EDs	100%
All EDs	63%	Suburban EDs	50%
>60K Census EDs	50%	Community EDs	50%



	Your 2008 Value	Notable Threshold	Excellent Threshold	Best EmEx ED	Avg all EDs	Avg >60K Census	Avg Suburban	Avg Community	Avg Test Group
Values	7.7	7	9	10	6.9	7.2	7	6.8	5.9

Notable: superior performance not meeting EmEx best practices Excellent: meeting EmEx best practices Best: best performance of all participants

Discussion:

To successfully recruit and retain physicians and nurses, hospital leaders should pay particular attention to the anonymous, self-reported nurse satisfaction data and to the staff comments at the end of the report. Is your emergency department a difficult place to work? How are relationships with other emergency department staff, the medical staff, and the administration? Are your physicians and nurses overworked? Do your physician and nurses earn fair compensation? Is your organization committed to workplace fairness? What have you done to improve morale in your emergency department? Leaders can deepen staff loyalty and appreciation by addressing these concerns in an effective and non-threatening manner.

Recommended Changes, Emergency Nurse Opinion

Emergency Nurse Survey: What changes would you recommend to improve the performance of the ED?

66 Unique Comments:

- More doctors
- Scrap our computer vendor
- The utilization of the team leaders on each pod to facilitate the flow of the emergency room better.
- More PCTs. I REALLY think this "30-minute average until you see a doctor" advertising plan is ill-conceived and puts alot of pressure on both the RN and MD staff. Although the pts rarely take out their anger @ the MDs. They just yell at the RNs, who then have to do damage control.
- I wish I had some good ideas but I don't. I think that we should let go the nurses who are not productive. I wish the doctors would spend more time doing the work on the pod they are on and quit looking at the computer to see what other doctors are doing. I wish the doctors were more aggressive at talking with one another to make a plan when the ed is busy instead and blaming each other. There is very little comunication between the doctors and nurse's.....wants,needs,expectations,concerns etc.
- fast track
- Have meetings with our doctors,nurses and techs every quarter. Address concerns together as a team. Bring up physicians' concerns, techs' concerns and nurses' concerns. Give feedback on past quarter and any changes anticipated regarding administration.
- I'm not sure what we could do, a budget is a budget. We caould make PCT's on call, that's where we lack staff. We/re often short nurses on nights as well because of the budget.
- triage and flow to peds er of adult pt's is still confusing under 20 before pod b opens and then after that the charge nurse and md decide but only if ....it is confusing. you ask 3 people and you get 3 different answers to that and whether or not to send peds pt's to registration or back to the room or triageing kids without vitals but marking them on the board as assessed and putting them into the rooms which has proper equiptment to do vitals but not doing them.
- Music - even overhead elevator music!
- Pay more, less call requirements. Pull the on call doc in more on days when the waiting room is a zoo and move the patients. Facilitate the admission process a little more so that patients get up to their rooms in a more timely manner.
- STREAMLINE THE CHARTING. THERE IS PAPER AND COMPUTER CHARTING AND MUCH OF OUR DOCUMANTATION IS REQUIRED IN BOTH PLACES. TOO MANY STEPS AND TOO MUCH REPETITION. IMPROVE THE TECHNICAL SKILLS OF THE WEAKER NURSES OR REPLACE THEM. FIND TECHS THAT ARE INTERESTED IN INVESTING TIME AND ENERGY INTO THE JOB AND TAKE THEIR RESPONSIBILIIES SERIOUSLY.
- Improve flow of patients to the hopsital once decision has been made to admit. This would help in flow of patients through the ED and reduce time to see MD
- Ideally, having an area that we could open any day at any time and staff with a physician and nurses would be great. In the ED you never know what is going to happen as far as acuity or number of patients. This way instead of bursting at the seams, we would have a way to expand when needed. This would be beneficial to the patients and also very much to the staff. I don't know where that area would be neccessarily.
- Handle concerns with individual staff members better.
- Better communication amongst all staff.
- As our ED grows in volume we may want to consider a "fast track" area for minor complaints such as sprains and strains, minor suturing.

- better staffing to see patients more quickly- especially since the acuity of the patients has be high
- have supplies that we need. Examples the correct slings and left wrist splints. We are ALWAYS running out of supplies that we need to do our job.
- have pediatric rns triage/assess pediatric patients
- The techs need to be treated better. They are all mostly in school and they have a hard time scheduling their job around their classes. It seems like we have a revolving door of techs. I also would like to be informed of patient results that I am usually unable to access. This would mean the doctor would have to communicate this with us. They could write it down on the the chart in a special spot.
- use nurse practitioners
- none
- Recent staffing cutbacks make it difficult to achieve the high standard of care staff set for themselves. It seems as if there is always a shortage of staff available to transfer patients to tests. I would recommend an additional rapid response tech be available during peak hours.
- Team work between the main ED & pediatric ED.
- Improve electronic documentation system.
- A management staff that understands what is means to 'work the floor' everyday. Our management staff spends so much time in their offices that they are never seen by the staff. This allows feelings along the lines of abandonment to fester. The staff doesn't see them taking patients, doesn't see them lending a hand when staffing is short, doesn't visually see them at all. They seem more like 'Big Brother' rather than a supportive management team.
- There are just so many things that are time killers but that can't be changed due to JCHO safety policies. I just wish we would stop trying to make our ED a drive thru so we can see more patients with less staff
- None
- We need supplies not to run out.
- Add high quality PCTs
- doing fine
- Increase RN pay. Increase number of nurses on teams- mgmt telling us we are working below the RN-pt ratio of other hospitals in the nation does not take into account the level of care expected (and delivered) to the high maintenance population we serve. Stop giving lip service about how everything is being done to retain nurses, when in actuality, none of us can think of one thing (that isn't also being offered by surrounding hospitals).
- Begin to understand that no one has all the answers- allow for non life threatening errors and give the support needed to correct these errors with constructive support. This leads to job satisfaction and confidence. Encouragement is sadly needed not condemnation . Treating professional as professionals and patients as people who are hurting and need of help and professionism.
- I would recommend allowing for more staff during peak hours. Also, do not keep staff waiting for so long for new positions (different shifts, FT/PT, etc). You are likely to lose staff if we don't feel support or needed.
- Not putting so many patients in the hallway just to provide care to a non emergent patient.
- Fast Track Expedite Admissions
- not so sure that the new 30 min rule will work well, some of the staff will not be able to get to the pt in a timely manner
- staff ore pcts. often when a pct calls in the pod is left with only a unit clerk call on call staff in sooner rather then later when everyone including pts and there family has had enough work with psych to increase the turn over on total er time and time it takes to see a psych professional
- Putting 4 nurses back on each Pod. Management needs to recognize the staff for their accomplishments and make them feel more appreciated. Our raises are terrible and our pay is the lowest in the area for nurses and techs. Most hospitals are getting an 8% raise and we're getting 2% if we score perfect 3's across the board. That doesn't really help with the increase in cost of living.