

EMERGENCY DEPARTMENT AT CAPACITY – A PRACTICAL APPROACH TO RESOLVING A CRISIS

John M. (Jay) Shiver, MHA, FAAMA, CHE
Managing Associate
McManis-Monsalve Associates, Inc.
Manassas, VA

Philip Nathanson
Principal
McManis-Monsalve Associates, Inc.
Manassas, VA

INTRODUCTION

The 1990's were a period of significant change in the healthcare industry as hospitals merged, closed and reduced capacity. Often overlooked during the change was the impact of these changes on Emergency Departments. According to the National Center for Health Statistics of the Centers for Disease Control:

- o In the past decade the country lost 15% of its Emergency Departments due to closures.
- o In the same period, the use rate (visits per 1000 population) for Emergency Departments increased by 7%, and total visits increased by 20%.
- o The combined effect of closures and increased visits has been a rise in average visits per Emergency Department of 33% in only one decade.

Hospitals across the country are reporting that Emergency Departments are overloaded and stressed beyond capability. Average time to treatment, a key driver of patient satisfaction, has risen by 32% to 67.7 minutes over the past five years. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has acknowledged the gravity of the situation and is in the process of issuing new standards that require hospitals to have in place systems to address the quality and services provided by their Emergency Departments. These changes are occurring within the context of national crisis in reimbursement, rising health insurance costs, workforce shortages and a medical malpractice liability problem.

Emergency Department (ED) performance is too important to the community, and to the hospital, to be ignored. People depend upon the Emergency Department when they are most vulnerable, and their experiences in the ED are a crucial factor in determining patient and community satisfaction with the hospital and in shaping its reputation. Employees do not want to work in an environment of unhappy clients. Poor performance adversely impacts staff morale. A poor reputation and bad morale make it harder to recruit staff in an already difficult market.

The ED is the proverbial "third rail" of hospital management. Virtually every component of the hospital has a stake in the performance of the Emergency Department. For private physicians, it is a place to send patients during off hours and a source of new patients. For hospital-based physicians, it is an important customer. For inpatient services, it often the most important source of new workload. And for the uninsured, it is a major access point for healthcare services. Any unilateral management attempts to change how the ED operates can be expected to incur the wrath of one or more of these stakeholder groups.

Under the scenario presented, changes are necessary in the ED.

This article suggests both an overall approach and a number of specific initiatives that can dramatically improve emergency department performance – and can do so with the support and participation of the traditional opponents of ED change.

BEGIN WITH THE VISION

“Improvement” can be described as progress toward a desired state. Emergency Department improvement must be built on an explicit description of that desired state – a vision of the future. Some questions the vision should answer might be:

- ❖ How important is the Emergency Department to the hospital and community?
- ❖ How does it want to be perceived by the public?
- ❖ How will it serve the emergency medical needs of the community?
- ❖ Is this to be a place of comfort for those needing medical care?
- ❖ How will the ED work with the medical staff?
- ❖ How will the ED provide care in a timely manner with consideration for the anxiety of the patients and families?

For example:

“As an integral part of the largest medical center in Prince Charles County, the Memorial Hospital Emergency Department will be the county’s most trusted provider of emergency care. We will be known as the place where expert, caring staff meet the needs of all patients and their families promptly, compassionately, and in a technologically advanced, safe, and comforting environment.”

ENGAGE THE STAKEHOLDERS

The key to successful ED improvement is to ensure that improvement efforts are based on the participation of everyone with a stake in the vision. The first step: create a cross-disciplinary Improvement Team made up of representatives of:

- ❖ Emergency Department nurses
- ❖ Emergency Department physicians
- ❖ Finance
- ❖ Laboratory
- ❖ Radiology
- ❖ Respiratory/Pulmonary

It is more important that the participants be the best individuals available rather than the official leaders. Assign people who can work as team members, envision a larger vision and select individuals who will influence implementation and can communicate well in a team setting. Appoint a strong, decisive and innovative leader, and give the team the authority and resources it needs to succeed.

Because a number of complex “ownership” issues arise during a transition phase, such as this, it is often advisable to utilize a professional to facilitate the ED team. Professionals have the

facilitation expertise, a wealth of “lessons learned,” and are better able than an insider to focus the team and maintain direction.

CREATE THE CHARTER

The ED team must be given a specific charter. This charter should be shared throughout the organization so that everyone has a clear idea of what the ED team is doing, and why. The team should prepare a schedule of meetings, assign a recorder and if necessary, assign research projects.

For example:

The Memorial Hospital Emergency Department Improvement Team is chartered to create an Emergency Department that can attain the Vision established. The Team has the full support and authority of Administration. The Team is tasked to develop recommendations and an implementation plan within the next ninety days. The Team can rely upon the support of the entire organization in carrying out this important endeavor.

BASELINE CURRENT PERFORMANCE

It is impossible to measure progress toward the vision without first knowing current performance against key parameters.

A number of standard metrics are crucial in gauging the effectiveness of process improvement efforts. These include:

Patient volumes by:

- Diagnosis – CPT and urgency classification (trauma, emergency, urgent, non-urgent)
- Payer mix
- Age
- Those who left without treatment

Time of Day Benchmarks:

- Arrival
- Registration
- Time to first clinical interaction
- Time to treatment
- Turnaround times (lab, x-ray, respiratory) including order time, order transmission time, draw time, time results reported
- Time seen by ED physician
- Time private attending notified/time arrived

Staffing by:

- Time of day
- Job classification

In addition to the standard metrics, the ED team should develop measures tailored to the specifics of the vision. For example, in addition to prompt treatment, the sample vision statement above commits the ED to high levels of public trust, clinical expertise, caring and compassionate staff, technologically advanced care, and patient safety. Progress toward every one of these objectives can and should be measured by clinical outcomes, benchmarking, customer surveys, etc.

PROCESS OF CARE IS THE FOCUS

Perhaps the biggest pitfall in all quality improvement is to jump quickly to a solution that team members “know” is the problem. When an improvement team is chartered because the Emergency Department is struggling many team members will “know” that what is needed is new equipment, more space, and/or additional staff. However, simply throwing resources at the ED rarely improves performance. The ED is an extremely complex operation whose activities are dependent upon and intertwined with each other and with those of the rest of the institution. Unless the institution thoroughly understands and improves the process of care, the new equipment is likely to sit idle for a good deal of the time, the expanded staff will be as overworked and stressed as ever, and the additional space will simply provide more room for patients to wait for care.

One technique that is often helpful is to begin the CQI process with a discussion of the current process, as the team understands it to be, and flow chart this process. This quickly leads to “eureka moments” where participants see unnecessary, duplicative and inefficient steps in the current processes, recognize the need to start at the beginning and chart a new process. One way to organize the improvement effort is to concentrate on finding ways to move patients through the ED more quickly: **to increase the velocity of patient care**. Generally, the faster patients move through the ED, the more satisfied they are, the more cost-effective their care, the better their clinical outcomes, and the more patients the ED can accommodate. Documentation and data is needed to measure change efforts. For example:

- o **Patient satisfaction** correlates directly with time-to-be-seen, and strongly with total processing time through the ED
- o **Costs** per patient are significantly lowered for each minute that can be shaved off the total “length of stay” in the ED.
- o **Clinical outcomes** are significantly better for patients requiring admission who move quickly into inpatient beds.
- o As a way of **increasing capacity**, improving patient throughput is easier, quicker, and almost always less expensive than adding ED space.

Emergency Department Process Improvement Teams can generally accomplish the majority of improvement in four to five meetings of three hours for each meeting. It is a classic example of “20% of the effort making 80% of the improvement.” When the team realizes it has developed significant improvement it may be a good time to start testing the ideas and implementing them. This does a couple of things. It demonstrates to the rest of the organization that progress is being made and allows the team to see the value of their hard efforts.

Prior to implementation, the new processes need to be tested. Each new step should be evaluated and tested in the actual work setting and those directly impacted should be invited to comment. This step will also serve as the first step in educating the staff about the new processes.

PROCESS CHANGES THAT IMPROVE THE VELOCITY OF CARE

Over the years a number of new techniques have been implemented in hospital Emergency Departments. All of the techniques help patients move through the ED faster, and all contribute in one way or another to happier patients, better clinical outcomes, and lower costs. Each

technique has worked consistently over time, but is not necessarily appropriate for every ED situation. Every team will come up with its own ideas in the CQI process.

Triage, just triage

In some Emergency Departments the triage function has become a lengthy process of checking vital signs, documenting complaints and counseling. The result is a duplication of effort and time spent in non-value added processes. An experienced nurse can often simply look at a patient, learn the chief complaint, make a determination of the level of acuity, and assign the patient accordingly. The vital signs can then be taken at the bedside.

Bedside registration

Other than to allow the patient to be assigned an identity number for tracking in the computer system and for billing purposes is there any reason for gathering patient information prior to taking the patient to a treatment area? With current technology it is possible for the registration process to be done at bedside. This not only speeds up the treatment process but also allows for clinical personnel to begin evaluating the patient. The patient is taken directly to the clinical area, where a nurse examines the patient and at the same time begins to complete the medical record at the bedside. The remaining patient information is gathered by the clerical staff at the bedside.

Preemptive diagnostic order guidelines

Why wait for the physician to see the patient to order diagnostic studies? Well educated and trained nurses, using approved guidelines, can safely order studies. Often these tests, in concert with the nursing exam, will be all that is needed for the physician to arrive at a diagnosis and prescribe treatment.

True stat testing

Tests may be ordered “stat” but the processing is often on cruise control. For example, when blood work is ordered a phlebotomist may have to come from elsewhere in the building, draw blood, and then walk to the lab. Why not train the ED staff to draw the blood and install a relatively inexpensive pneumatic tube system to move the sample quickly to the lab? The conflicting incentives of inpatient and ambulatory care may also play out in this scenario. Many instruments used by the laboratory are designed to do batch testing because it is less expensive. This does not delay inpatient care when one considers that most laboratory tests for inpatients are done on a cyclical schedule. However, for the Emergency Department this is not a viable solution. It is worth exploring the financial and time advantages of acquiring equipment that better meets the needs of the Emergency Department.

Cross training staff

Do all breathing treatments in your hospital have to be administered by a Pulmonary Technician? Think about how much time could be saved if the Emergency Department staff were trained to administer the more basic therapies. This would also reduce the non-productive time spent by Pulmonary Techs traveling to and from the Emergency Department. It is also an opportunity to upgrade the skills of medical assistants and provide them with greater career growth.

Dedicated table top lab and dedicated x-ray

Many physicians will acknowledge that the majority of lab tests they need to make a diagnosis could be accommodated with a small tabletop laboratory and most x-rays could be done with simple x-ray equipment. Not every diagnostic work up could be accommodated, but for those that can, this option will eliminate considerable processing and travel time.

Diagnostic waiting area

Most patients already recognize that much of a visit is spent waiting for diagnostic results. If the majority of patients are non-urgent, why leave them lying on a gurney tying up a treatment bay? Set up a comfortable lounge where they can relax. When the results are returned take them to a common private area for counseling and discharge. If necessary, the patient can be taken to a cubicle. Meanwhile, the treatment bay has been freed up to accommodate other patients.

Fast track

One way to address a large volume of non-urgent patients is to create a low intensity process and dedicated space for them. The “fast track” area might be adjacent to the Emergency Department. It could consist of primary care examination and treatment space, without expensive high-tech ED equipment. It might be staffed by clinicians who prefer working with less acutely ill patients such as nurse practitioners.

Control the admission process

How much time do patients wait in the ED for inpatient beds to be available? How much of that time could be saved if bed utilization were truly optimized? When management cedes control of inpatient beds, it is ceding control of the core business of the hospital. And if bed control is given to those who provide the direct patient care, less than full bed utilization is almost inevitable; too many incentives invite the blocking of beds. In addition to contributing to delays in getting patients into beds, control of bed utilization by care providers is not fair to the staff, because workload may not be evenly and equitably distributed. Management must manage the utilization of this essential asset.

Get control of the ED revenue cycle

Hospitals are expert at inpatient acute care and billing and collections. However, many financial officers will admit that under pressure to generate cash flow, they focus on the inpatient revenue cycle at the expense of the outpatient revenue cycle. This is one of the reasons for the perception that outpatient services, especially the Emergency Department's, are financial losers. Outsourcing the outpatient billing, after thorough proof-of-concept testing, works in some EDs. This may be particularly appropriate where physicians are employees of the hospital. Another revenue enhancer is to follow up with all uninsured patients to see if they are eligible for any kind of public insurance such as Medicaid and help them enroll.

IS THE EFFORT WORTH IT?

Consider the following “best of breed” performance outcomes:

- Emergency Department turnaround of 75 minutes average. In other words, this ED requires only 8 minutes more to process the average patient than the time it takes the average Emergency Department even to see a patient.
- Non-emergent “fast track” average visit times of 45 minutes
- Patient satisfaction improvement of over 30%
- Employee satisfaction improvement of over 20%
- Patient volume increases of over 35% with minimal overall expense increase (internal staff transfers)

SUMMARY

It has been said that: “Within the human race, only the baby with a wet diaper truly embraces change.” The Emergency Department represents an opportunity to make changes for truly positive purposes. Successful improvement initiatives begin with a vision of better performance, involve all key stakeholders, and focus on changes to the process that will increase the velocity of care. Every day, improvement in ED performance is translating directly into lower costs, more revenue, improved community and physician relations, and better care outcomes. And in the end, aren't those the goals of every Emergency Department?

BIBLIOGRAPHY

Rockett et. al. "Assessing substance abuse treatment need: A statewide hospital emergency department study" Annals of Emergency Medicine, June 2003, Volume 41, No 6.

"Emergency Department Overcrowding Standards Rational, and Elements of Performance", Joint Commission on Accreditation of Healthcare Organizations Hospital Accreditation Manual, 2004.

3.

"Emergency Department Visit Data, 2000", Centers for Disease Control, National Center for Health Statistics, Ambulatory Health Care Data.

"Under Stress: Inside the Emergency Department", HealthLeaders Magazine, March 2003.

Ginger Ferguson, RN, MN, CNAA, CHE, "Re-design of a Traditional One-Track Model Emergency Department to a Patient Focused Model", ACHE, Fellow Project, August 2000.

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