RUHS Emergency Department Care Transformed: Nursing & Physician Leadership/Teamwork Revolution the Patient Experience

Michael Mesisca, D.O., M.S., Medical Director, Department of Emergency Medicine
Gillian Dargan RN MSN- Vituity Operations Consultant, Interim ED Nursing Director
Leah Patterson, R.N.- Assistant Clinical Nursing Officer, Riverside University Health System (RUHS)

ABSTRACT

To improve patient care, save lives, enhance patient satisfaction and experience, a collaborative effort has been made in the Emergency Department at Riverside University Health System to rapidly change operations. The challenges were significant and multifactorial. The solutions have proven to, in a 12-month period, create exceptional performance improvement in all aspect of patient care. The change, driven by the nursing and physician team under new leadership including new hospital administrators, new nursing and physician leaders, and new operational committees and teams, have brought astounding results. The average patient time waiting to be seen by a physician or physician assistant (Time to Provider) dropped by over an hour to 17 minutes. The percentage of patients leaving without being seen (LWBS) by a physician dropped by 9.1 percent (more than 20 patients a day). The average length of stay for patients being sent home from the E.D., turn-around time to discharge (TTT-D), decreased to 184 minutes, an average reduction of over an hour. Patients presenting to the E.D. at Riverside University are receiving national leading care in timeliness and quality. This has improved patient, nursing, and physician satisfaction, drastically enhanced quality of care, reduced medical-legal risk from overcrowding, and is saving money by reducing the average length of stay (LOS) for every patient in the E.D.

CHALLENGE & SOLUTION 1:

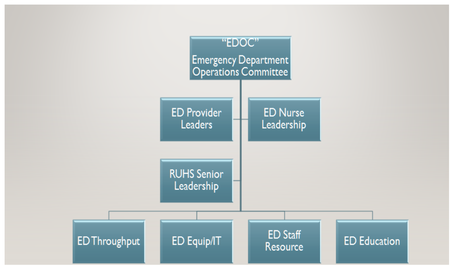
A New Culture: A Vision to Treat Everyone Like Family

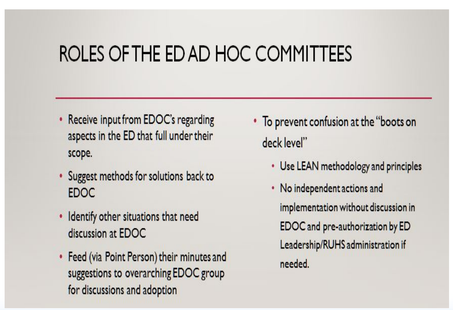
CHALLENGE:

Re-defining a culture of a "County Facility". Prolonged & major change requires leaders and teamwork.

SOLUTIONS:

Current RUHS Administration recruited new E.D. leadership. A unique solution was to contract an Interim Nursing Director from CEP America (dbaVituity™) and pair with a new physician medical director with track records in operational excellence and team building. Change was driven systematically from the ground up through an Emergency Department Operations Committee (E.D.O.C.), where 25+ members consisting of nurses, physicians, P.A.s, E.D. techs, lab, registration, & radiology team members meet regularly to collaborate on operational challenges & create changes. The EDOC comprehensive team members are the champions who help lead and implement the changes.





CHALLENGE & SOLUTION 2:

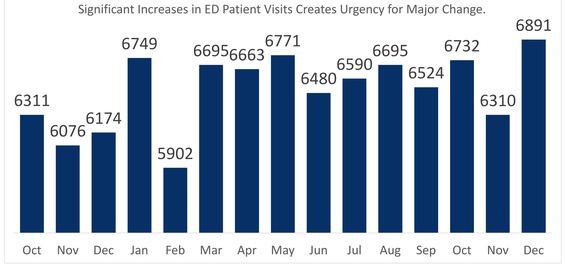
CHALLENGE:

Long Emergency Department wait times are dangerous. Patients that wait in the E.D. to be seen for hours or that leave the E.D. due to long wait times, before being seen by a physician (Left Without Being Seen, LWBS) & never receive care can experience permanent injury or even death.

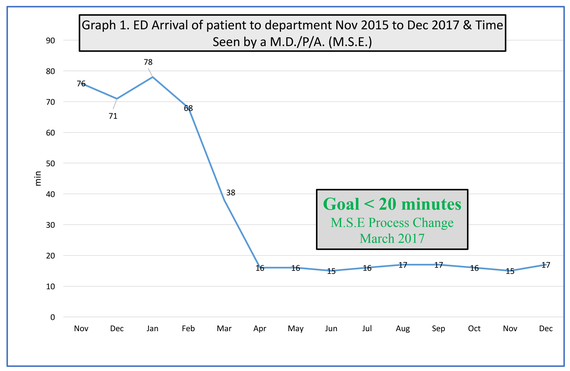
SOLUTIONS:

April 2017, R.U.H.S. instituted a new nursing triage process and Medical Screening Examination (M.S.E.) process where M.D./P.A.s see patients on arrival. The average time was reduced from 78 minutes to 15-17 minutes even with rising patient volumes. Left Without Being Seen (L.W.B.S.) rate dropped from 9 percent to almost 0. In the past, 20 patients a day left without being seen, presently fewer than 20 a month LWBS.

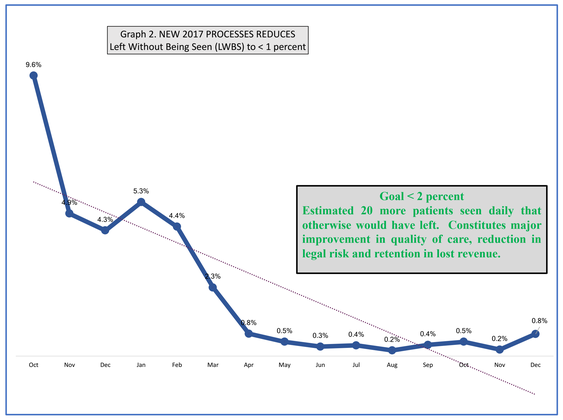
Table 1. RUHS Monthly Volume Oct 2016 to Dec 2017
Significant Increases in ED Patient Visits Creates Urgency for Major Change.



Graph 1. ED Arrival of patient to department Nov 2015 to Dec 2017 & Time Seen by a M.D./P/A. (M.S.E.)



Graph 2. NEW 2017 PROCESSES REDUCES Left Without Being Seen (LWBS) to < 1 percent



CHALLENGE & SOLUTION 3:

CHALLENGE:

ED Construction of Front End Mar 2017 – Aug 2018. Although changes were needed, ongoing construction presents a complex and challenging environment for patient care; decisions were made to implement the ED flow changes to support our patients needs, even while under construction restraints.

SOLUTION:

Designing processes that can be mobilized throughout the construction process and work in any setting with a product that was useable in the final stage of transition so that rework was minimized in each phase.

CHALLENGE & SOLUTION 4:

CHALLENGE:

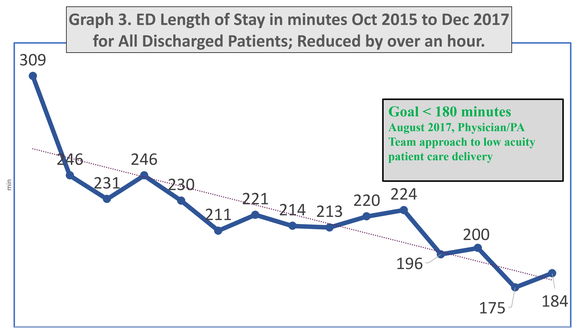
Prolonged length of stay in E.D. for patients awaiting care and tests, termed turnaround time to discharge (TAT-D), creates exponential delays in care, decreased quality and patient satisfaction, and dangerous working environment.

SOLUTION:

E.D.O.C's creation and implementation of a streamlined process of care delivery method that includes an internal waiting room and the following new best practices:

- *Patients rarely return to ED lobby after M.S.E.),*
- *Expedited lab results (labs drawn by phlebotomy/RN immediately post-MSE).*
- *Radiology/lab collaboratives that reduced turnaround times.*
- *Physician and PA Team Approach to care delivery. Acuity and patient location no longer determined patient assignments. Next available provider sees the patient regardless of complaint or patient location.*

Graph 3. ED Length of Stay in minutes Oct 2015 to Dec 2017 for All Discharged Patients; Reduced by over an hour.



TURN AROUND TIME TO DISCHARGE REDUCTIONS:

Changes in physician/P.A. (provider) team approach to care and flow, reduced TAT-D by significantly improving patient throughput. By reducing the average amount of time every spent in the department, the total number of patients in the ED at any given time was reduced improving nursing and provider efficiency and reducing overcrowding.

Historically, ED providers separated care based on patient location (Rapid Treatment Area vs. Main ED); the provider team now mobilized to deliver care to sickest patient or patient waiting longest regardless of their location in the ED. Transitions of care between providers was also reduced by having the MSE provider remain assigned to lower acuity patients.

PAs & Residents received formal operations education emphasizing operational goals and that metrics are a reflection of patient safety and quality (not arbitrary goals). Mentoring each fulltime PA with individual metrics and follow-up also produced a 20 percent increase in PA productivity.

PROFOUND ADDITIONAL RESULTS

REDUCED TAT-A:

Emergency Medicine (EM) physician & Nurse leaders conducted collaborative operational events with physician admitting teams leading to a >60% reduction in Turn Around Time to Admission (TAT-A) with ongoing collaborative performance improvement projects underway.

IMPROVED RADIOLOGY TAT:

An EM-Radiology Collaborative was initiated and goals were set for turn around times (TAT) for X-ray, CT and Ultrasound, resulting in a 10 percent or more reduction in all modalities, in spite of increased volumes with winter surge.

MDR ROUNDS:

Daly E.D. multi-disciplinary rounds (MDR) with ED nursing leaders, ED physicians and residents, Social workers and case managers have been started each morning in the ED to facilitate better care of patients with challenging dispositions & improve the Turn Around Time to Admission (TAT-A).

REVENUE PRODUCTION:

RN leadership, training and hiring has led to significant reduction of RN traveler workforce in the E.D. Further, the previously high number of patients presenting and leaving the E.D. without being seen was costing the county millions in lost revenue that is now captured.

CONCLUSIONS

In the Emergency room, time matters. Quality patient care is being able to deliver our patients the same care we would want for a member of our own family.

In the course of a year, the administration and EM team at RUHS have revolutionized the patient experience in their E.D.

Through support from every member of the ED team, EDOCs, data driven goals & mentoring feedback, specific operational changes (MSE, internal waiting room, reduced transitions of care), the quality and timeliness of care in the ED is now exceptional.

The average patient is seen in 15-17 minutes or less, the average length of stay for discharged patients is near 3 hours, & the number of patients left without being seen by a medical provider is almost zero.

This was accomplished through strong leadership, a new hospital administration taking a novel approach of contracting an outside, highly experienced nursing director who partnered with a new physician medical director and invested hospital leadership. An engaged team at all departmental levels working together with operational vision, data, clear set goals & accountability can rapidly change culture and drive performance excellence. Patient outcomes and quality care is the goal; metrics the support; patient feedback and outcomes the reward!

★★★★★ 12/1/2017
I couldn't be more thankful..Today I went into the ER almost immediately was greeted and helped by the nurse who checked me in and took my vitals in what..5min?
I only waited a few more minutes and another emt was already putting an iv in my arm.
I didn't look so well and they took very great care for me. All of the nurses and PA, thank you. I felt a bond with all of them, so kind and good at what they do.

THE REWARD:

A very positive change in patient experience in both the government HCAPHS and within the social media of YELP (2stars to 4/5 stars) and RUHS Website!

Gillian Dargan RN MSN – g.dargan@ruhealth.org
Mike Mesisca, D.O. – m.mesisca@ruhealth.org