

Jacqui Lawrence RN, Audrey Gochenour RN, Karen Lyons RN, Beth Bates RN, Wendi Hulett RN

LEADERSHIP/PLANNING

The Emergency Department Nursing Manager from Lincoln County Medical Center (LCMC) noted a decline in timely admission of ED patients to the inpatient units in early 2019.

The planning team included the Emergency Department Manager, MedSurg Department Manager, ICU Department Manager, Quality Manager and Chief Nurse Executive.

Leadership recognized the alignment with our strategic plan and determined that this was a priority for our facility. They designated use of resources such as manpower to implement the plan. Leadership, including the CNE, attended the Throughput Committee meetings and provided guidance and assistance.

PROCESS OF IDENTIFYING NEED

We identified a need to improve throughput times through initiation of a warm handoff toolkit provided by Presbyterian and a review of research done by the National Center for Biotechnology Information (NCBI) that reported a connection between long wait times from emergency to inpatient admission and Length of Stay (LOS). We recognized that reducing wait times in the Emergency Department (ED) meets the Institute for Healthcare Improvement's (IHI) measures for improving flow and patient experience. This further aligns with The Centers for Medicare and Medicaid Services' (CMS) measure to track Median Admit Decision Time to ED Departure Time for Admitted Patients. ED to inpatient wait times are considered a measure of the quality of care received.

We reviewed the Presbyterian Healthcare Services' purpose of improving the health of patients, members and communities that we serve and the expectation to deliver on this through the Presbyterian Promise, which is a component of our Strategy to ensure our patients have an exceptional experience. Our Throughput rate was 29% for the 2nd quarter of 2019 and did not meet our goal of 60% of patients being admitted within 30 minutes of bed assignment, even though the IHI's goal is to admit within an hour, and we believed we had opportunity to improve our throughput which in turn would reduce our LOS. The LCMC Executive Quality Committee and Patient Satisfaction Committee addressed the need to improve this measure of quality based on this information. We designated an improvement in throughput as a quality improvement project for the ED in Q3 of 2019.

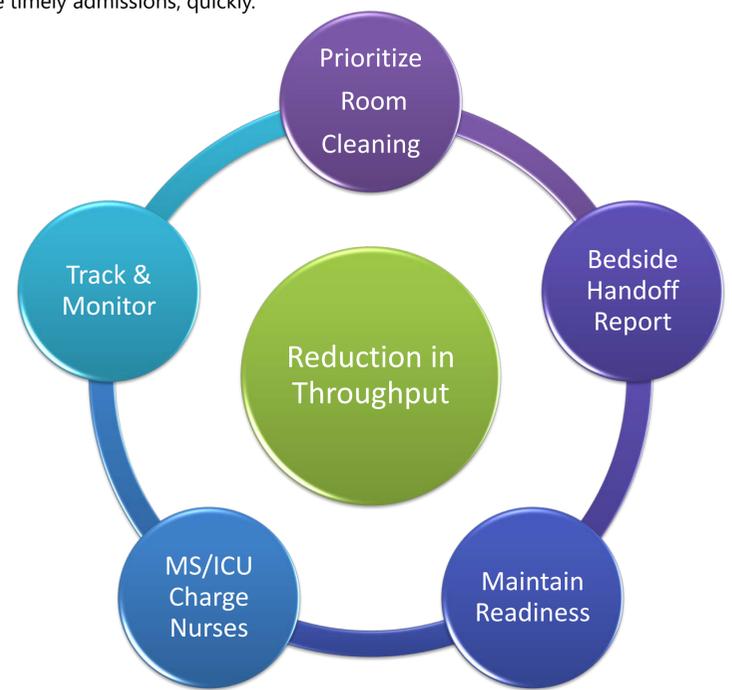
• National Center for Biotechnology Information (NCBI). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2912828/>

** Centers for Medicare and Medicaid Services (CMS). <https://ecqi.healthit.gov/ecqm/eh/2019/cms111v7>

*** Institute for Healthcare Improvement (IHI). <http://www.ihl.org/resources/Pages/Measures/TimefromEDtoInpatientBedmedian.aspx>

PROCESS IMPROVEMENT METHODS

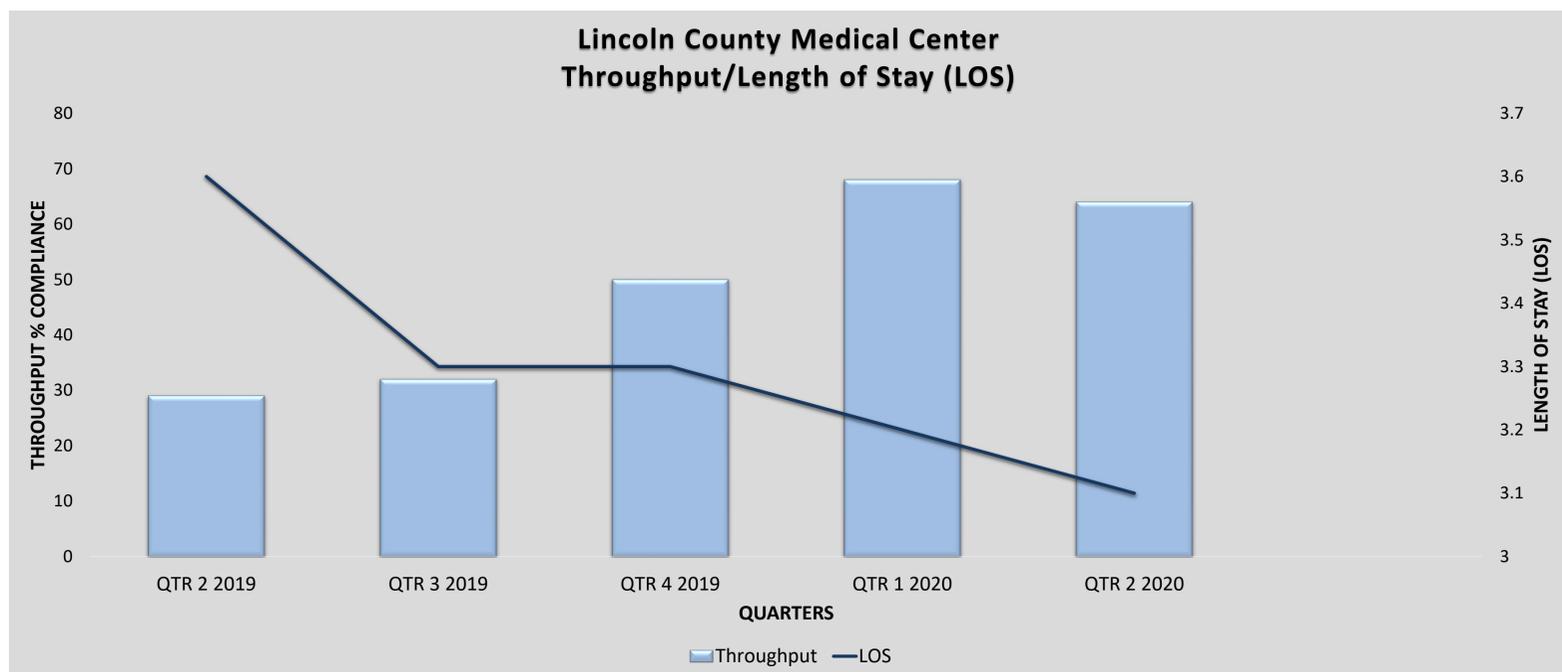
LCMC used the Plan-Do-Study-Act cycle methodology to guide process improvement. Through multiple meetings, we planned what we would change in our processes. Some components of the improvement process included implementation of a Throughput Committee that met monthly and data collection to determine the reasons for a low throughput rate. The team then reviewed the data at the throughput committee meeting and utilized newly combined MS/ICU charge nurses to improve communication, flow, room readiness, prioritization and including the entire care team in being a part of the admission process. ER nurses began providing bedside reporting to the inpatient nurse upon admission, the charge nurse determined ahead of time which RN would receive the next admission and carried the house supervisor phone for improved communication, unit secretaries ensured timely disposition of newly admitted patients, EVS staff prioritized room cleaning based on volumes. The team continues to track and trend the data and provide feedback to nursing staff regarding challenges, this helps the team to be able to address challenges and barriers to ensure timely admissions, quickly.



RESULTS

The results of the interventions implemented lead to an increase in throughput time compliance and a reduction in inpatient Length of Stay (LOS). In second quarter of 2019 only 26% of LCMC's patients were being admitted to an inpatient unit within 30 minutes of bed assignment, with a throughput goal of 60%. At that same time the average inpatient Length of Stay (LOS) was at its highest of 3.6.

Results: Throughput for 2020 shows that LCMC admits an average of 66% of patients within 30 minutes of bed assignment, which is improved from an average of 37% in 2019. It is also noted that LOS decreased from a high of 3.6 in 2019 to 3.1 in 2020 when our admission wait times improved.



LESSONS LEARNED/SUSTAINABILITY

One of the lessons learned is that by working as a multidisciplinary team we could better determine the most beneficial plans for ensuring timely throughput and in turn reducing LOS. We continue to hold our Throughput Committee meeting monthly where cases are discussed and analyzed and also barriers to timeliness are addressed, this also keeps the lines of communication open between staff and leadership to discuss possible new best practice.

The sustainability plan includes discussion of throughput times at daily staff huddles and monthly and quarterly meetings to stay on top of barriers to providing timely admission.