No vacancy. This became an all too familiar term at Atrium-Cleveland in 2017. “What is the bed status?” quickly became the question of the day, every day. Lack of available beds at our hospital led to an increased number of transfers to other facilities. Transfer to other facilities led to hardships for not only our system, but for the patients and families affected as well. In 2017, 1,450 patients were transferred to other facilities from Atrium Health-Cleveland. Of those patients, 32% (463) were due to no bed availability.

Focus groups were formed to address this problem. It was noted that if we could decrease length of stay, specifically for observation patients, we could then free up needed beds for the inpatient population. Hospital administration’s solution was to create a type-I observation unit.

Type-I observation units, which are closed units with a dedicated team of practitioners, have been deemed best practice and the preferred type of observation unit. Patients in Clinical Decision Units (CDU) are carefully selected with specific diagnoses and management plans following a protocol driven design. There should be specific inclusion and exclusion criteria for each diagnosis. Patients follow either a diagnostic pathway (chest pain rule out, TIA, syncope) or a therapeutic pathway (COPD, asthma, dehydration, cellulitis). One main objective of the CDU is to determine if patients require admission to the hospital or are appropriate for discharge home. Much in the same way ICU is dedicated to managing the critically ill, the CDU specializes in managing the opposite end of the spectrum. When done correctly, this allows for these patients to receive a more efficient and effective care delivery plan.

We partnered with Carolina CDU Specialists to begin the work of opening the new unit in December 2017. We were able to expedite its opening by placing the unit within our existing footprint and repurposing underutilized equipment and space. This allowed us to open the unit in only 4 months, on April 9, 2018. Throughout the project, we maintained strict cost control with a total cost of less than $150,000.

We developed strategic partnerships with other departments and ancillary staff to discuss the mission and goals of CDU, the vision of strategic partnerships, and built a team with key-players to buy-in to ensure our success. The cardiology and radiology department prioritized CDU patients’ studies and consults, with the exception of the ED and ICU. We held several meetings with the hospitalist group to establish a working relationship and establish a process when transfer to their service may be indicated. Ensuring that our own staff remain cognizant of our goals contributed to our success.

We have continued to emphasize a continuous treatment mindset, moving away from a more “traditional” inpatient schedule to instill a workflow that emphasizes continuous treatment plans to decrease LOS, improve efficiency, and expedite patient care delivery.

Our facility does not perform stress testing on weekends. Prior to CDU opening, patients were staying all weekend waiting for stress tests on Monday. Once patients are safe for discharge home, we developed a process for scheduling outpatient stress testing in a timely fashion and following up directly with patients about their results. Once patients are safe for discharge home.

Our CDU design currently utilizes 10 beds, all with remote monitoring capabilities. The CDU specializes in managing the critically ill, the CDU sees patients from 26 hours in 2017 to 14 hours and 41 minutes in 2018, meeting the stretch goal for a 40% improvement.

CDU to achieve Tier One status with the 2018 Teammate Engagement Survey, which was met.

Dr. Victor Zuniga, Medical Director, Clinical Decision Unit
Eddie Nichols, Project Manager, Atrium Health Cleveland

**Introduction**

We have been able or are appropriate for discharge April 9 outpatient stress testing in a timely manner. Lack of available beds at our hospital led to an increased number of transfers to other facilities. Transfer to other facilities led to hardships for not only our system, but for the patients and families affected as well. In 2017, 1,450 patients were transferred to other facilities from Atrium Health-Cleveland. Of those patients, 32% (463) were due to no bed availability.

**Improvement Process**

Outcome Metric (See Graph 1)
Reduction of transfers out of facility due to bed capacity from 463 in 2017 to 180 in 2018 with similar patient volumes in both years. The CDU accomplished the 60% reduction, exceeding the goal while being operational for 9 out of 12 months.

Process Metrics (See Graph 2)
Reduction in length of stay for all Atrium Health Cleveland observation patients from 26 hours (2017 baseline) to 21 hours and 21 minutes, exceeding the target goal for an 18% improvement.

Reduction in length of stay for the Clinical Decision Unit observation patients from 26 hours in 2017 to 15 hours and 41 minutes in 2018, meeting the stretch goal for a 40% improvement.

Balancing Metric
CDU to achieve Tier One status with the 2018 Teammate Engagement Survey, which was met.

**Goals**

Outcome Metric (See Graph 1)
Reduction of transfers out of facility due to bed capacity from 463 in 2017 to 180 in 2018 with similar patient volumes in both years. The CDU accomplished the 60% reduction, exceeding the goal while being operational for 9 out of 12 months.

Process Metrics (See Graph 2)
Reduction in length of stay for all Atrium Health Cleveland observation patients from 26 hours (2017 baseline) to 21 hours and 21 minutes, exceeding the target goal for an 18% improvement.

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Balancing Metric
CDU to achieve Tier One status with the 2018 Teammate Engagement Survey, which was met.

**Discussion**

The addition of a CDU at our facility has significantly decreased length of stay, had a direct impact to decrease our facility transfer rates, and allowed us to keep Cleveland County patients in their local hospital where they feel comfortable and where their family can be with them. We have been able to bring some of that back to our patient community by retooling inefficiencies while providing high quality, evidenced-based care. It is our hope to continue fine tuning our processes, expanding our protocol catalog, and building relationships. By sharing information and ideas with our colleagues, our patients can receive the care they deserve.

**Resources**


**Contact Info**

Karen Hardin, MSN, RN: Nurse Manager
Karen.Hardin@atriumhealth.org

Victor Zuniga, MD: Medical Director
Victor.Zuniga@atriumhealth.org

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Atrium Health Cleveland Administration
Eddie Nichols: Project Manager