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Abstract

The national epidemic of boarding hours in the emergency departments prompted the implementation of a discharge bundle in an acute care hospital. This bundle included an ADT nurse, discharge orders written prior to 11AM, and EVS shifting employee hours. Initial findings indicated a reduction in boarding time by 126 minutes.

Keywords: boarding time, early discharges, Admission/Discharge nurse, throughput, acute care patients, emergency department, and patient flow.

Impact of a Discharge Bundle on Boarding Hours in Acute Care Hospitals

Emergency departments (ED) were experiencing higher boarding hours due to overcrowding. Boarding hours were defined by the time the patient waits in the ED on an admission decision until they depart from the ED to an in-patient bed (Alsabri et al., 2022). Bouda Abdulai et al. (2021) found that the National Academy of Medicine classified the increase in boarding hours as a national epidemic. The Joint Commission established the Leadership Standard LD.04.03.11, known as the patient throughput standard (The Joint Commission, 2012). This standard holds organizations accountable for boarding time. The Joint Commission established a boarding time no longer than 240 minutes (four hours) for patient safety and quality care (Janke et al., 2022). By increasing the readiness of general medical-surgical beds earlier in the day, the following gains in operational effectiveness were possible: (a) improved patient admitting (boarding hours) and discharge times, (b) improved quality of care from being admitted to the most appropriate unit for care, as well as (c) decreased costs of care related to more efficient turnover of the room for the next patient (Jones et al., 2022).

Gap

A hospital in South Texas had increased boarding hours in the ED. This hospital's ED held over fifty patients daily waiting for a medical-surgical bed. The average length of stay (LOS) was increasing due to patients being sicker and their comorbidities, leading to longer boarding times. The local data illustrated patients were waiting more than 1200 minutes, six times more than what is considered safe for a medical-surgical bed. The ED boarding times at the South Texas hospital went from 1132 minutes in June 2022 to 1602 minutes in March 2023 (Administrative Director of Clinical Operations, personal communication, May 8, 2023).

National Data

Kobayashi et al. (2020) found that ED boarding was more severe in hospitals that function at a high in-patient occupancy rate (>85%) and at large urban institutions. The Centers for Disease Control and Prevention (CDC) (2022) collected national data in 2018. They found that 8.4% of the population had to wait more than 360 minutes, and 1.8% had a more significant wait time of more than 600 minutes to be bedded from the ED (CDC, 2022). Kelen et al. (2021) stated that The Association of Academic Chairs of Emergency Medicine hospitals made known that the proportion of ED patient boarding greater than 480 minutes increased by 130% (from 7.0% to 16.0%) from the academic year 2012 to 2019. Alsabri et al. (2022) studied adverse events and the correlation of boarding time in the ED. The study found 139 adverse events reported with a boarding time mean of 287 minutes.

State Data

After COVID-19, Davis (2021) found that in Texas, the average wait time for patients in the ED had increased as high as 1440 minutes in some locations. Texas Health (2019) identified high-volume hospitals around Arlington, Dallas, Fort Worth, and Plano, where patients were expected to wait 298 minutes before being admitted into a unit. Smaller hospitals around the Dallas-Fort Worth Metroplex experienced shorter wait times of 233 minutes (Texas Health, 2019).

Literature Review

The databases for this review contained CINAHL, PubMed, MEDLINE, and ProQuest. The disciplines used were comprised of nursing, medicine, and facilities management. This search yielded over fifty articles. Twelve articles were reviewed; three were systematic reviews, three were case studies, two were randomized control trials, and four were literature reviews as

noted in the evidence table (see Appendix A). One of the literature reviews was a cross-sectional

study that increased health information technology use and productivity and decreased boarding

hours. Establishing an admission/discharge/transfer (ADT) nurse resulted in earlier discharges

and decreased LOS, which helped with the workload of other RNs. An ADT nurse increased

nurse satisfaction and patient satisfaction. The literature illustrated that an environmental

services (EVS) discharge team decreased room turnaround to under fifty minutes and averaged a

response time of twelve minutes (Burmahl, 2019). The literature stated, physicians who placed

discharge orders earlier in the day increased the capacity of hospital beds. Some articles in the

literature review were outside the five-year relevancy period but were appropriate and significant

for the literature review. According to Walker (2016), the use of a systematic review on

improving throughput using Lean Six Sigma and process mapping showed a decrease in

boarding hours. Spiva and Johnson (2012) stated when using an ADT nurse, it helped by

increasing nurse documentation, Shepherd et al., (2016), showed a decrease in LOS, and

Giangiulio et al., (2008), reported the ADT nurse decreased the workload of the nurses.

The literature review identified several evidence-based practices: establishing an ADT

nurse, placing discharge orders earlier in the day, and having EVS assigned to specific units in

the medical-surgical area decreased boarding hours. According to The Joint Commission (2012),

there was an adjustment to Leadership Standard LD.04.03.11, known as the patient throughput

standard. This standard holds organizations accountable for boarding time not to exceed 240

minutes, patient safety and quality care. This standard went into effect on January 1, 2014.

Admission and Discharge Nurse

Perry (2017) found that organizations implementing an ADT nurse could assist with

discharges and decrease the patient's LOS. Having an ADT nurse increased patient satisfaction

with the discharge process because the ADT nurse was not rushed when explaining instructions to patients, and the patients felt comfortable asking questions (Lane et al., 2009). According to Spiva and Johnson (2012), establishing an ADT nurse increased nurse satisfaction because it decreased the workload of a staff nurse by 72 minutes, and nurses could focus on ED admissions. Giangiulio et al., (2008) stated that implementing the ADT nurse improved patient throughput and patient, family, and nursing staff satisfaction. When using an ADT nurse, the proficiency of the discharge process improved as the ADT nurse refined their assessment skills and dedicated, uninterrupted time to complete each patient discharge. Mao et al., (2022), mentioned that an ADT nurse increased the mobility of surgical patients, decreased readmissions, and had a positive effect compared to the control group.

Early Discharge Orders

Cyrus et al. (2022) found that earlier discharge times freed up hospital beds for new admissions and transfers from the ED, clinics, and other hospitals post-intervention areas. When discharge orders were placed earlier in the day, and the nurses executed the discharges promptly, this increased throughput from the ED by transferring patients to the medical-surgical units. Discharges were challenging when a floor nurse cared for five patients and had a discharge to complete during the medication administration. Salehi et al. (2018) found that bed boarding was unequally distributed and over capacity. In the medicine service area, patients with multiple comorbidities resulted in an increase in boarding times. This was the reason for asking physicians to place discharge orders earlier in the day. Bouda Abdulai et al. (2021) stated discharges took longer for sicker patients. Walker (2016) found that by implementing a Lean Six Sigma and completing a mapping process with physicians, per Hospital Consumer Assessment of Healthcare Providers and System (HCAHPS), patient satisfaction scores increased because of

the decreased boarding time, 41-minute reduction in ED LOS per patient, and a six-year retrospective study showing hospitalists had lowered their LOS by 8.3%. Shepherd et al. (2016) concluded that educating physicians on the importance of discharges and passing that education to the patients when it came time for discharging showed a decrease of five minutes per patient.

Room Readiness

According to Burmahl (2019), EVS leaders created a new role called the Environmental Services Flex Discharge Team. Data trends on discharge times and days were evaluated, and EVS worker schedules were adjusted to meet the discharge time needs. As a result, the team cut turnaround times to under 50 minutes and averaged a response time of twelve minutes (Burmahl, 2019).

Project Question

In three medical surgical in-patient units, does implementing a discharge bundle to include an ADT nurse, physicians writing discharge orders by 11 AM, and shifting hours for EVS staff to meet the high-volume demand of discharges, compared to the current practice of the primary nurse completing the discharge process and the current practice of physicians and the environmental service team decrease boarding hours in the emergency department and increase throughput over eight weeks in an acute care hospital, located in South Texas?

Objectives

1. Decrease the number of boarding hours in the ED

2. Increase throughput within the medical-surgical services (increase the number of discharge orders before 11 AM)

3. Discharge patients earlier by using an admission and discharge nurse (decrease turn-around-time for EVS room readiness)

Framework

The framework used for the quality improvement project was the Plan-Do-Study-Act

(PDSA). The Agency for Healthcare Research and Quality (2020) stated that the PDSA quality

improvement framework is commonly used in healthcare. The four steps to the PDSA

framework were Plan, Do, Study, and Act (see Appendix B). The PDSA framework worked best

with this project as it allowed the project lead to analyze the data and ensure the discharge

bundle worked precisely. When the PDSA framework was used, the project lead made changes

and re-evaluated the aspects from the discharge bundle that were not meeting the desired

outcomes.

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Methods

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The project being conducted was a quality improvement project. The project lead

conducted an organizational change readiness assessment (see Appendix C). The results were

promising, indicating that the organization was fully prepared and eager to enhance boarding

hours in the ED, as evidenced by a score of 74. Through effective interprofessional

collaboration, the organization had successfully fostered a culture that prioritized continuous

improvement and readily embraced change, setting the stage for a positive transformation.

The SWOT analysis revealed crucial weaknesses that required immediate attention for

the project's success (see Appendix D). The strength of the project benefitted not only the

patients but also the medial-surgical nursing team and the ED nursing team. Following the

SWOT analysis, the project lead, in close collaboration with the nurse managers, meticulously

evaluated the risks and weaknesses and their potential impact (see Appendix E). The project lead

and the nurse managers made daily rounds on the units, actively addressing any concerns of the

staff. When staff members could not attend the staff meetings, the project lead took the initiative to review the process with the employees, ensuring that everyone was on the same page.

Population

The population of interest included three medical-surgical units that provided care to adults (eighteen years of age and older), an orthopedic unit, a general surgical unit, and a general medical unit. The orthopedic unit was a 19-bed unit that cared for patients with bone fractures due to motor vehicle accidents, trauma, or significant falls. The medical unit was a 20-bed unit that cared for patients diagnosed with congestive heart failure, atrial fibrillation, and acute and chronic renal disease. The surgical unit was a 19-bed unit that cared for patients recovering from various surgeries. The three units combined averaged 288-295 discharges monthly (P. Saldana, personal communication, June 8, 2023). The eligibility criteria for inclusion for the in-patients were any adult with admit orders from the ED to any of the three medical-surgical units and with a discharge order from the three medical-surgical units. The exclusion criteria included discharges from intermediate or intensive care units, patients not admitted directly to the three units and downgraded, or patients admitted from a post-anesthesia care unit.

Setting

The project site, located in South Texas, was an academic institution with 500 beds. The medical-surgical bed capacity within the three units was 58. The project site was also a part of many clinical services that include cancer care, cardiology, community medicine, geriatric medicine, human immunodeficiency virus infection and acquired immune deficiency syndrome care, physical medicine and rehabilitation, stroke care, trauma care, and women and infants' services. The percentage of the indigent population admitted to the project site was 51.2% in 2021 (M. Fanning, personal communication, June 22, 2023). The percentage of patients with

Medicare and Medicaid admitted to the project site was 34.2% (M. Fanning, personal communication, June 22, 2023). The indigent population discharges can be complex due to the need for more resources. The complex discharges could have contributed to the gap at the project site because it is a public health system that serves the underserved and indigent population.

Measurement and Analysis

The statistical tool used for the project was the independent t-test, which analyzed the data in the dashboard created by the project lead. The t-test compared the regular discharges to those that used a discharge bundle. The reliability tool that was used was the Cronbach's alpha. There are different reports about the acceptable Cronbach's alpha values, ranging from 0.70 to 0.95 (Tavakol & Dennick, 2011). The project lead used a Cronbach's alpha of 0.95.

The sample size (pre and post) was 190 discharges for the three units. Each discharge was allocated an identification code. The identification code was assigned using the current year followed by numerical order of the number of discharges (2023-1, 2023-2, etc.) (see Appendix F). The project lead also retrieved data from the previous month, including boarding hours and discharge times. The project lead was the only one to access the master list, which was saved in an Excel spreadsheet on a password-secured computer in a locked room in the project lead's office. To retrieve the discharge information, the project lead had to have login access to the electronic health record system, EPIC. The project lead retrieved the discharges daily from EPIC and transferred the needed data to the Excel spreadsheet. The project lead did not print out any discharge information or have any paper copies of patient information. The discharge information was only available when the project lead signed in to EPIC. The data allowed the project lead, to analyze the boarding time in the ED before the intervention and when the intervention was in place.

Procedure (Process)

During the pre-implementation phase, the project lead obtained approval from the Administrative Director of Nursing and the Financial Officer for the three medical-surgical units to obtain a discharge nurse, (see Appendix G). Within the organization, an ADT nurse was known as a discharge nurse. The project lead created a GANTT chart with phases that included step-by-step instructions on how each phase was implemented, (see Appendix H). The project lead set up a meeting with the throughput committee, which comprised of physicians, nurses, environmental services, transport, and the Director of Throughput.

Role of Team

The project leader led the other team members, who volunteered their time for the quality improvement project. The volunteers' responsibilities were standard to their job description and were listed as discharge nurses, charge nurses, nurse managers, patient care assistants, healthcare unit coordinators, throughput director, and transport/EVS/concierge services. The details of each team member's responsibility were outlined and presented with the team members (see Appendix I).

Intervention

The project lead met with the physicians and presented the times the discharge orders were placed by physicians (see Appendix J). Some orders were placed starting at 6 AM due to the orthopedic surgeons going into the operating room. The medicine and hospitalist physicians rounded on the critical patients first, and by the time they rounded on the medical-surgical units, it was later in the morning. The data presented, indicated if discharge orders were placed before 11AM, it would increase the number of discharges by at least 15% and help decrease boarding hours by increasing patient throughput.

After meeting with the physicians, the project lead met with the Director of EVS and Transport. Data on the number of discharges that occurred during each hour of the day was presented (see Appendix K). The data illustrated the highest number of discharges occurred from 9 AM to 4 PM. The project lead worked with EVS to evaluate the data and have EVS personnel dedicated to discharges on the specific three units only during the high peak times. A dedicated team of EVS personnel would allow the medical-surgical beds to be turned around faster and allowed boarded patients to get a bed in the medical-surgical rooms sooner. The EVS Director agreed and dedicated three EVS workers to shift their schedule and work on each floor where the units were located. The Director of EVS evaluated if there were enough full-time employees to continue with a designated EVS employee for the high peak time of discharges to continue this process.

The next phase the project lead completed was the discharge nurse roles and responsibilities (see Appendix L). The project lead worked with the Director of Throughput to develop the role and responsibilities. Once the role and responsibilities were completed, the Director of Throughput educated and trained the discharge nurses on the expectations of the position. The nurses were educated, and the Director of Throughput completed two shadow shifts with the discharge nurse to validate that the work was completed correctly. The shadow shifts also helped with real-time coaching when questions were asked. During the education period of the discharge nurse, the physicians received information about writing discharge orders earlier. The goal given to the physicians was to increase the number of discharge orders placed before 11 AM.

Education of Team

The project lead educated the staff members from the orthopedic, general surgical, and general medical units on the importance of reducing boarding hours in the ED. Staff meetings were offered to educate the staff on the importance of decreasing boarding hours and the importance of the discharge nurse. The meeting showed data onboarding hours and the implementation process for the new discharge nurse. The staff meetings were held for one week, September 9th through the 11th. The hours were 0730 and 1230 in the computer conference room. Information was presented via a projector, and a handout was given to each staff member on the project. The process of what each team member needed to do when a discharge order was placed was explained (see Appendix M). It was vital for the medical-surgical staff to understand the status of boarded patients and the consequences that could occur when patients were in the ED holding area.

One point emphasized when educating the staff, was that the longer patients waited in the ED, the longer their care and interventions got delayed. This meant in-patient orders were not carried out for patients in the ED holding area. Another point that was emphasized was the nurse-to-patient ratio. The ratio stays consistent, 1:5, within the medical-surgical units. In the ED, the ratios fluctuated tremendously because the ED could not stop accepting patients. There were some days when the ratios in the ED were 1:12. Once the medical-surgical staff understood the safety concerns with the ED boarding hours, the introduction of the discharge nurse was presented. The project lead explained why a discharge nurse would benefit both the medical-surgical and ED units. After the staff meetings, the project lead met with the EVS Director, the physician from the throughput committee, and concierge/transport services. Each discipline received education on decreasing boarding hours (see Appendix N, Appendix O, Appendix P).

Once all the education was disseminated to all the team members and they understood their roles, the project began. The project lasted for 30 days. The discharge nurse worked Monday thru Friday, 9 AM to 5 PM. The discharge nurse was responsible for completing the discharges in the three medical-surgical units. Once the discharge paperwork was given and explained to the patient, the discharge nurse called for transportation. Once transportation was on the way to pick up the patient, transportation notified EVS that the room would be empty and ready to be cleaned.

After the 30-day completion of the project, the project lead collected the data on boarding hours, discharge orders placed by 11AM, turnaround time for EVS, and when patients were discharged from the electronic health record system, EPIC. This collaborative approach was crucial in analyzing the final results of all three parts of the discharge bundle, emphasizing the importance of their roles in the project's success.

Statistical Analysis

The Statistical Software Package for the Social Sciences (SPSS) version 29 was used to analyze and calculate the discharge data. The pre- and post-discharge bundle intervention data were compared. For the statistical analysis, the statistician recommended using the independent *t*-test to compare the past discharge data to the discharge data that used the discharge bundle. The boarding time was analyzed using the independent *t*-test to see if there was a decrease in boarding hours by implementing a discharge bundle.

Ethical Considerations

The project lead received human rights training in preparation of protecting patient rights and information during the project (see Appendix Q). The training was imperative for protecting the rights of the patients. The project proposal was submitted to the University of Texas at

Arlington Graduate Nursing Review Committee for review and approval. The GNRC committee reviewed the project, and it was approved by the committee, allowing the project lead to start the project.

Results

Project Outcomes

The results of the quality improvement project yielded two significant t-values: discharge order time and EVS turnaround time. It also yielded one t-value that was not significant, and it was boarding hours. When the independent t-test was used for the statistical analysis it also ran the p-value. The p-value for discharge time and EVS turnaround time was <0.001, which signified both were statistically significant (see Table 1). The boarding time had a p-value of 0.235.

Discussion

After implementing the discharge bundle, the t-value was insignificant in boarding hours. However, when the average boarding hours were calculated for previous data and data using the discharge bundle, it did illustrate a decrease of 64 minutes. When the discharge nurse was implemented, discharge nurses identified by numbers, 1, 3, 4, 5, and 6 could discharge the patients with early discharge times, as seen in Figure 1. The data also showed that the physicians were not writing discharge orders before the project before 11 AM. During the project, physicians identified by numbers, 1, 2, 4, 5, 7, and 8 could write orders before 11 AM to help expedite discharges and throughput, as seen in Figure 2. When the data was analyzed, the EVS turnaround time decreased when EVS adjusted employee shift times, as seen in Figure 3.

EVS employees shifted their hours and worked during high peak times, which showed efficiency for the EVS team and they did not use an extra full-time equivalent (FTE) position.

The leaders only shifted their schedule. Instead of 6 AM-2 PM, EVS started at 10 AM-6 PM. For throughput, it benefited the boarded patients because the physicians were discharging one to two patients before 11 AM, which assisted in decompressing the ED.

The data was presented to the administrative director of nursing for the medical-surgical services. During the presentation, the project lead presented the data results with an overall average as well as which objectives were significant and which ones were not. The project lead also presented the cost of the discharge nurse. Once the cost was analyzed and compared to the change it made with patient throughput, the project lead asked if it could be a request for the next fiscal year's budget. The data was considered a positive outcome overall for the organization. The administrative director implemented the discharge nurse and allocated a 0.5 FTE for each nursing director to have their discharge nurse.

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Summary

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Key Findings

One of the strengths that the project yielded was the EVS turnaround time. It went from an average of 50 minutes to 45 minutes. The Director of EVS adopted this process change and had other FTEs shift their hours, to continue to decrease turnaround time. The discharge nurses were able to get the patients discharged promptly, creating an open bed for another ED-boarded patient. For the bundle to continue to have excellent outcomes, the project site would have to get an agreement from all physicians to continue to write discharge orders before 11 AM.

Limitations

One limitation to implementing the project is the agreement from each physician to commit to at least one to two discharges before 11 AM daily. Understandably, a physician might not have a patient to discharge. Another limitation was the time frame for the project. It was

limited to 30 days of data collection. It would have been better to have 90 days of data to have a better mean for boarding hours. The last limitation was that the discharge nurse was only implemented Monday through Friday and not on the weekends.

Some variables that affected the boarding hours were patient's social determinants of health, patients who transferred to different levels of care, and patients who transferred to outside facilities. For the project to be sustainable and have continued excellent outcomes, new employees will need to receive training and orientation on the discharge process.

Conclusion

The implementation of a discharge bundle was a success for the hospital. Positive influences were noted in patient care, nurse satisfaction, and patient satisfaction. The changes to the throughput process by nursing, physicians, and EVS reduced the turn-around time for room readiness and reduced the boarding time of patients in the ED. As a result of the success of the project, the organization determined the best approach was to provide discharge nurses on a permanent basis, maintain the EVS staff working staggered shifts during high-peak times, and continue to work with physicians to increase the number of discharge orders earlier in the morning.

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Table 1

Independent Samples
***t*-Test**

		df	Significance	
			One-Sided p	**Two-Sided p**
Boarding Time	**Equal variances assumed**	**188**	**0.231**	**0.462**
	Equal variances not assumed	**155.981**	**0.235**	**0.47**
Discharge Time	**Equal variances assumed**	**188**	**<.001**	**<.001**
	Equal variances not assumed	**104.995**	**<.001**	**<.001**
EVS Turnaround Time	**Equal variances assumed**	**188**	**<.001**	**<.001**
	Equal variances not assumed	**185.96**	**<.001**	**<.001**

Figure 1

Figure 2

Discharges by Physician

Figure 3

Clustered Bar Mean of EVS Turnaround Time by Discharge Physician by Pre1_Post2
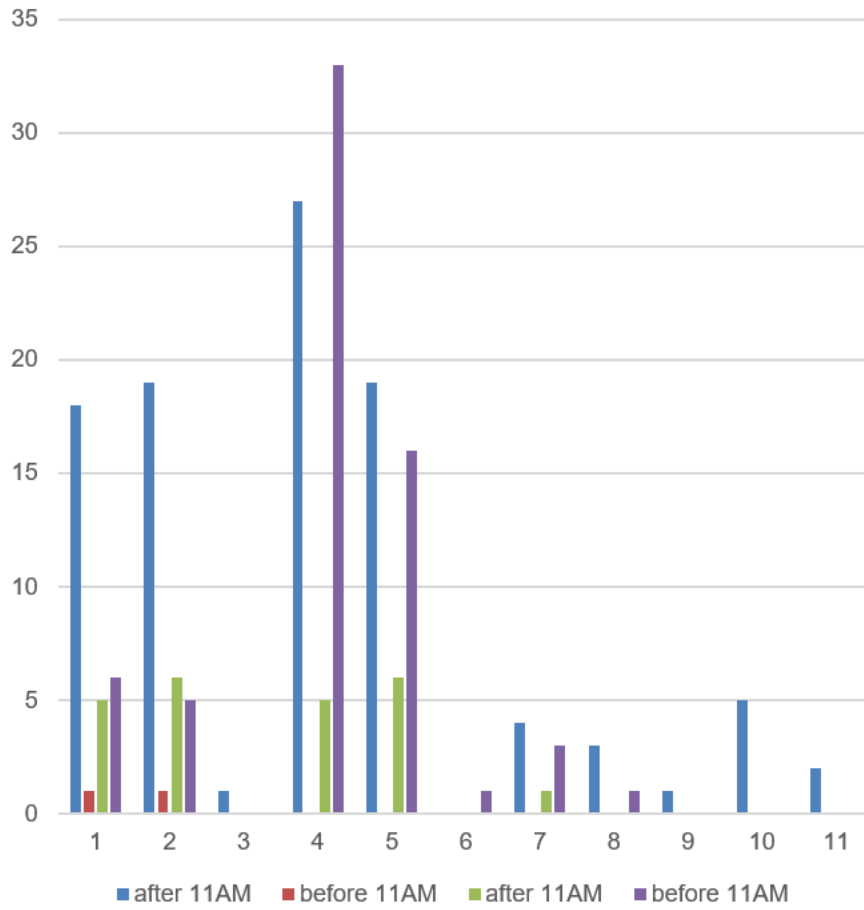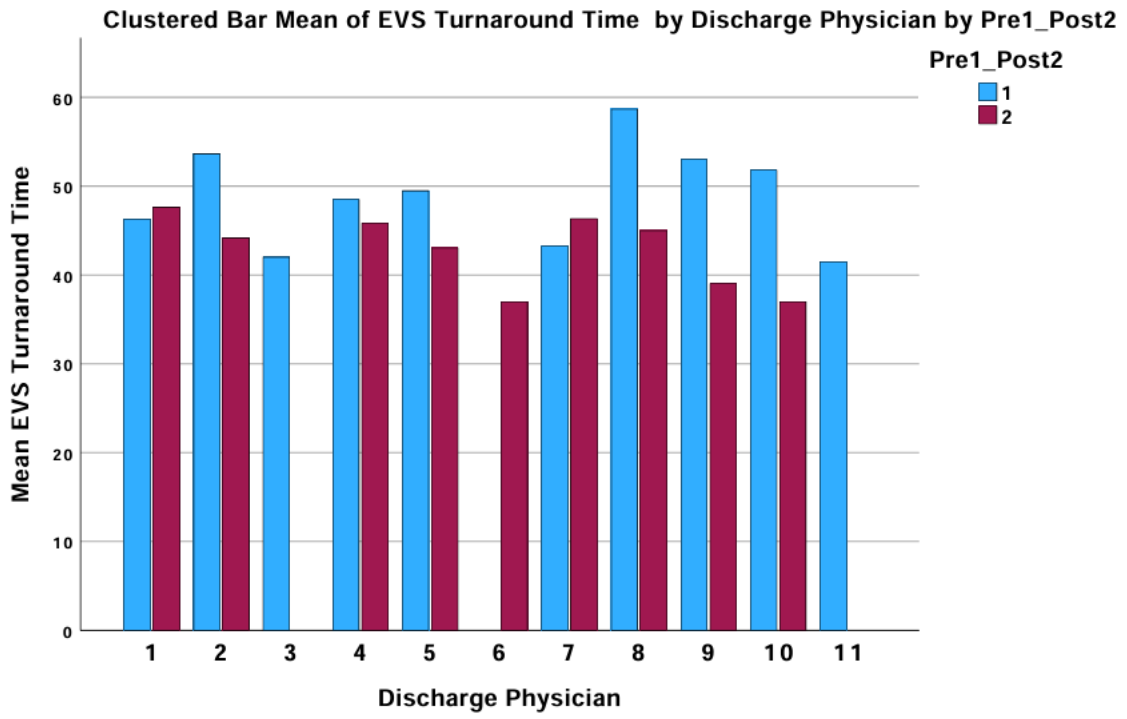
Appendix A

Evidence Table

#	Author Citation	Design & aim or hypothesis & Major Variables	Population & Setting & Sample Size	Intervention	Measurements (e.g. tool to assess outcome)	Results &/OR Recommendations	Strengths & Limitations	Evidence Level & Quality Rating
1	Bouda Abdulai, A. S., Mukhtar, F., & Ehrlich, M. (2021). United States' performance on emergency department throughput, 2006 to 2016. *Annals of Emergency Medicine*, *78*(1), 174–190. https://doi.org/10.1016/j.annemergmed.2021.01.009	**Design:** cross-sectional study; **Major Variables**: wait time, length of visit, boarding time, the proportion of patients leaving without being seen, median time from arrival to departure for ED visits, and	**Population**: Patient encounters at hospital-based EDs in the United States from 2006-2016 **Sample Size:** 325,037	From 2006 to 2016 the revolution of health information technology has increased productivity and facilitate management and coordination. Other interventions used were bedside registration, self-check-in kiosks and the use of a physician in triage.	**Measurement tools:** survey-weighted generalized linear models to assess changes over time also conservative box-and-whisker plot was used to plot data points for any data that was out of range	Results: National Hospital Ambulatory Medical Care Survey (NHAMCS) showed an improvement in ED throughput, decreases in patient wait time, patients leaving without meeting the ED physician and boarding time compared to the previous decade. The time to discharge increased for the sickest patients	One strength this study had was in 2005 quality checks were performed on 10% on the full sample to ensure reliability. Some limitations were relying on the accuracy of NHAMCS, time measures since those are extracted from clinical records,	**Evidence level and quality rating is:** IIA

						and the rate of missingness of the boarding time measure	
2	Burmahl, B. (2019). 2019 Environmental Services Departments of the Year. *Health Facilities Management, 32*, 19-24,26-29. https://www.proquest.com/magazines/2019-environmental-services-departments-year/docview/2569697518/se-2	**Design:** **Aim:** The aim of the study was to see if having EVS employee on standby during the high peak hours of patients being discharged from the hospital**&** **Major Variables:** Being able to have the staff to make these accommodations	**Population:** discharged patients **Setting:** Northside Hospital **Sample Size:** 450,000 square feet 126-plus beds	**Intervention:** The intervention was to have a designated EVS personnel during high peak times of discharge to be able to turn over the room	**Measurements (e.g. tool to assess outcome):** monthly data trends on turn over room time	**Results:** By implementing a designated EVS personnel they were able to decrease the turnaround time for patient rooms.	**Strength:** patient flow committee conducted a multidisciplinary analysis of the bed demand curve and was able to further optimize patient flow efficiency and turnaround times also reduce the productivity loss during shift changes. **& Limitations:** there was not a standardizes pre and post data collection so data may look good but it was not tested correctly.	**Evidence Level & Quality Rating: IV**

| 3 | Cyrus, R. M., Kulkarni, N., Astik, G., Weaver, C., Hanrahan, K., Malladi, M., O'Sullivan, P., Yeh, C., Lee, J., & O'Leary, K. J. (2022). Effect of an attending nurse on timeliness of discharge, patient satisfaction, and readmission. *Journal of nursing management*, Advance online publication. https://doi.org/10.1111/jonm.13643 | **Design:** Retrospective study **Aim:** To improve the timeliness and quality of discharge for patients by creating the role of the attending nurse. **or hypothesis & Major Variables** | **Population**: 894 bed urban academic hospital in Chicago, IL, on a non-teaching hospital medicine service. **Setting:** One unit in the hospital, with an internal medicine physician who would oversee 14 patients at a time. **Sample Size:** A total of 8239 patient discharges | **Intervention:** An attending nurse paired with a hospital medicine physician on discharge time and quality. | **Measurements (e.g. tool to assess outcome):** Pre and Post satisfaction scores, t-test, chi-squared test | **Results:** Establishing the role of the AN at the institution resulted in an increase of earlier discharges. Length of stay remained the same. The 30-day readmission increased. | **Strengths:** Some strengths are; this positively affected hospitalist morale, ability of the ANs to serve as a source of continuity for patients when hospitalists and nurses rotated, and because the AN had experience the training was only one month, which allowed for a quick transition to be operational. **& Limitations:** First, setting was a non-teaching hospitalist service at a single site at a large urban academic | **Evidence Level & Quality Rating:** IVA |

							medical center. Second, despite the use of propensity score matching, our two comparison groups had differing acuities. Third, study may not have accounted for all potential confounders. Lastly, other interventions may have impacted the outcomes	
4	Giangiulio, M., Aurilio, L., Baker, P., Brienza, B., Moss, E., & Twinem, N. (2008). Initiation and evaluation of an Admission, Discharge, Transfer (ADT) Nursing Program in a pediatric setting. *Issues in comprehensive pediatric nursing*, *31*(2), 61–70. https://doi.org/10.1080/01460860802023117	**Design:** Quality Improvement project **Aim:** If an ADT nurse is in place, it will facilitate effective and efficient care during admission and	**Population**: 253-bed, free-standing pediatric hospital located in Northeastern Ohio. **Setting:** general medical-surgical pediatric units	**Intervention:** The ADT nurse's role is to initiate and perform the admission, transfer, and discharge of patients, which often are time consuming with activities that are disruptive to the continuity of care that nursing provides.	**Measurements (e.g. tool to assess outcome) Survey**	**Results:** reported that the ADT program made a worthwhile contribution to the workload of the nurses on the unit or ED (93%); that there is effective communicati	**Strengths:** nurses reported the ADT nurses' role in the facilitation of admissions from ED and PACU had increased the satisfaction	**Evidence Level & Quality Rating:** VB

	discharge peaks for the bedside nurse.	**Sample Size:** 183 RNs				on between the ADT nurses and the unit/ED nurses (90%); that the ADT program assisted them in making good use of their skill and abilities (95%); that the work of the ADT nurses was complete and accurate (95%); and that the ADT program provides high quality care and services (100%)	of the general care floor nurses as well as the patients and families in these units, who used to feel "unattended to." Also, the floor nurses didn't feel that the care they provided to the other patients was interrupted. **Limitations:** The ADT nurses need to improve the discharge process	
5	Lane, B. S., Jackson, J., Odom, S. E., Cannella, K. A. S., & Hinshaw, L. (2009). Nurse satisfaction and creation of an admission, discharge, and teaching nurse position. *Journal of Nursing Care Quality*, *24*(2), 148–152. https://doi.org/10.1097/01.NCQ.0000347452.36418.78	**Design:** Quality Improvement **Aim**: to see if by using an Admission, discharge, and transfer nurse will increase nurse	**Population**: patients in an acute care hospital in south east Unites States **Setting:** a bone, joint, and neuro unit. **Sample**	**Intervention:** Create an ADT nurse position to evaluate nurse satisfaction, workload, and the quality of admission and discharge process.	**Measurements (e.g. tool to assess outcome)** -NDNQI RN Survey -ADT Process Survey	**Results:** NDNQI survey indicated a 25% increase in job enjoyment, under the question; having enough time with patients increased by	**Strengths:** when having an ADT RN, you can retain older nurses within the work force. **& Limitations:** additional	**Evidence Level & Quality Rating is:** VC

	satisfaction, workload, and the quality of the admission and discharge process.	**Size**: three months of work logs were obtained to evaluate all admissions and discharges (297 admissions and 119 discharges)			38%, as well as the number of RNs who stated inadequate staffing did not affect unit admissions increase by 100%	studies are needed verify the impact of the ADT nurse, as well as completing a study with a larger nursing group	
6	Mao, H., Xie, Y., Shen, Y., Wang, M., & Luo, Y. (2022). Effectiveness of nurse-led discharge service on adult surgical inpatients: A meta-analysis of randomized controlled trials. *Nursing Open*, *9*(5), 2250–2262. https://doi.org/10.1002/nop2.1268	**Design:** Systematic Review and meta-analysis **Aim:** To determine the effectiveness of nurse-led discharge service for adult surgical inpatients	**Population**: adult surgical patients **Setting:** medical-surgical units **Sample: Size:** 1,649 participants	**Intervention:** By using a nurse led discharge service to evaluate the effectiveness of the discharge service in the surgical patients, analyzing if these interventions imply a result in a reduction of length of hospital stay, increase satisfaction, and readmission emergency visit	**Measurements (e.g. tool to assess outcome)** Meta-analysis for readmission, meta-analysis for length of stay, meta-analysis for ADL, meta-analysis for emergency visit	**Results:** Had lower readmission rates, higher activity of daily living, but no difference in LOS &/OR Recommendations	**Strengths:** to ensure reliability subgroup analyses were conducted and sensitivity analyses were performed. **Limitations:** only focused on surgical patients and not complex medical patients also literature search may have missed eligible studies	**Evidence Level & Quality Rating:** IIB

| 7 | Perry, D. (2017). ADT nurses can help ease bed constraints, patient volumes. (2017). *Case Management Advisor*, *28*(7), 80–82. https://web-s-ebscohost-com.ezproxy.uta.edu/ehost/pdfviewer/pdfviewer?vid=6&sid=fa74924d-4323-4fde-b743-6a24a61f03b7%40redis | **Design:** Literature Review **Aim**: to show the effectiveness of an ADT nurse and decreasing LOS | **Population** is ED patients; **Setting** is in-patient units with high turnover rate **Sample size-** example was a 40-bed unit | Getting an FTE for an Admission/Discharge /Transfer nurse to help with admissions and discharges | Measured by hospital LOS and ED boarding times | Results of the consultant were adapting an ADT nurse in a unit that admits and discharges about 20 patients per day would benefit from this intervention. | **Strength** was shown by having an ADT nurse they are able to assist with discharges and decrease LOS. A **limitation** was no research evidence to prove the results of an ADT nurse. | Evide nce level and quality rating is a VB |
| 8 | Salehi, L., Phalpher, P., Valani, R., Meaney, C., Amin, Q., Ferrari, K., & Mercuri, M. (2018). Emergency department boarding: A descriptive analysis and measurement of impact on outcomes. *CJEM*, *20*(6), 929–937. https://doi.org/10.1017/cem.2018.18 | **Design:** retrospectiv e single centre observation al study. **Variables** patient demographi cs, clinical characterist ics (telemetry requiremen ts isolation status, comorbidit y levels), ED wait times, inpatient length of stay, and | The study **population** included all patients admitted to the following admitting services: medicine, surgery, pediatrics, and critical care. The population included 13,872 inpatient admissions from the ED | An intervention used was looking at all medicine patients being admitted and their co-morbidities. | The one-way ANOVA test was used to show the difference between group means of LOS. | Results: patients who were admitted to a medicine team had prolonged ED LOS as well as prolonged boarding times. | First limitation is, it's a single-site study at a center with high patient volume and consequent ED wait times. Second, limitation had to deal with coding and measureme nt errors. Third limitation had to deal with clinically | Evide nce level and quality rating is an IIIA |

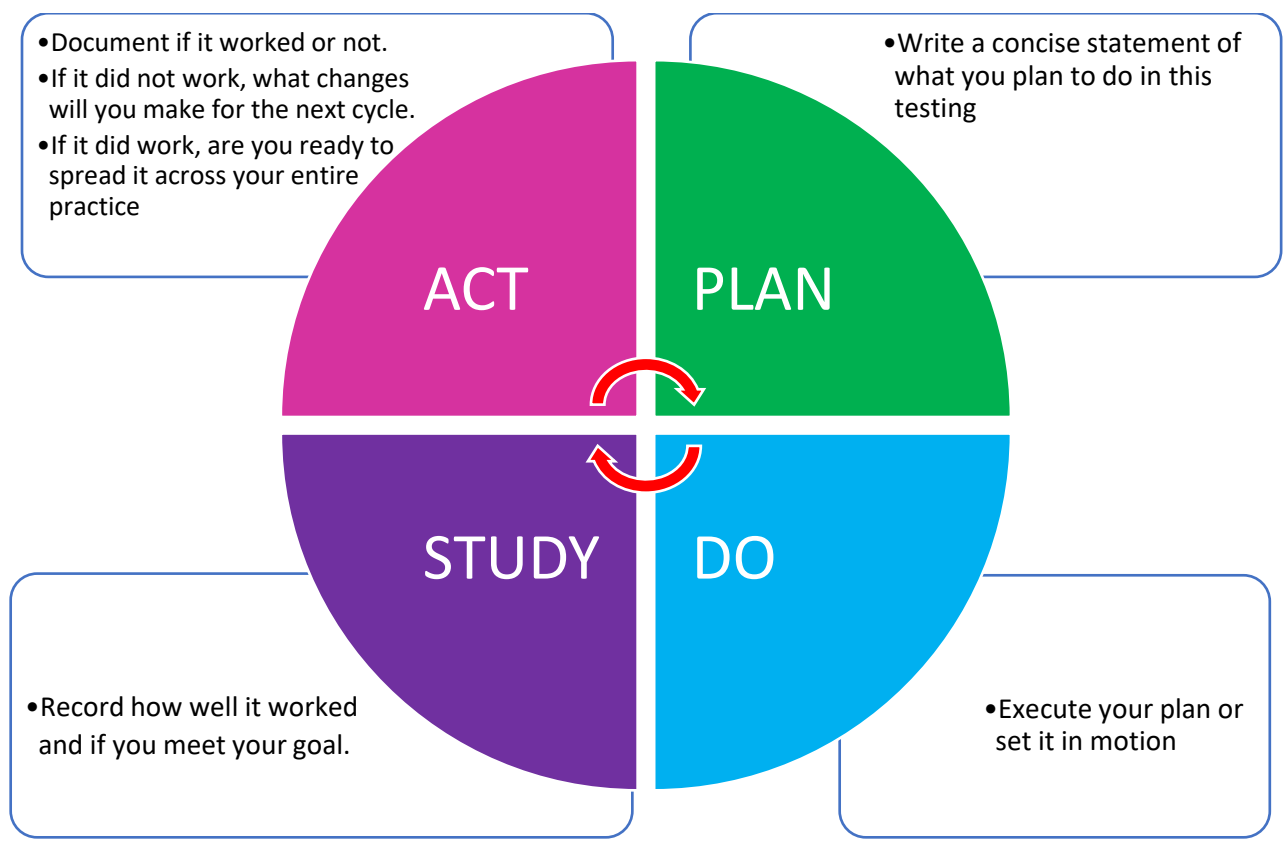|								
		inpatient mortality.					insignifican t effects of a large sample size.	
9	Shepherd, L., Chahine, S., Klingel, M., Zibrowski, E., Meiwald, A., & Lingard, L. (2016). Reducing length of stay and satisfying learner needs. *Perspectives on Medical Education, 5*(3), 170-178. https://doi.org/10.1007/s40037-016-0276-2	This is a cohort study The aim of the study is to observe how one educational interventio n, ED teaching shifts, relates to LOS.	Population is ED patient visits. Setting is two academic health centre sites in London and Ontario Canada**.** The sample size was based on 114,000 patient visits	The intervention is having clinical clerks help with history and physical as well as imaging.	Measurem ent tool use was the Bonett-Price method.	The result of using clinical clerks was the average of 5 minutes less for every patient being seen in the ED. This translates to 140 hours less per month.	One strength was examining the same medical students for a time frame on the same day every week, which the study was able to control many variables. Some limitations of this study were; it was a single centre study where medical students spend only two weeks during their rotation, very difficult to control all variables that effect	Evide nce level and quality rating is IVB

						LOS, and the exploration of knowledge application was a proof-of-concept which requires validation for future use.	
1 0	Spiva, L. & Johnson, D. (2012). Improving Nursing Satisfaction and Quality Through the Creation of Admission and Discharge Nurse Team. *Journal of Nursing Care Quality, 27* (1), 89-93. https://doi.org/10.1097/NCQ.0b013e318227d 645	**Design:** Pre and Post-test **& aim or hypothesis & Major Variables**	**Population**: 633-bed community acute care hospital located in the southeastern United States **& Setting:** patients admitted to the 37-bed medical/surgical unit. **& Sample Size:** 136 RNs	**Intervention:** To establish the use of an AD nurse to help the aging nurse workforce have more time with their patients.	**Measurements (e.g. tool to assess outcome)** ADT process survey, Press Ganey Survey, NDNQI RN Survey, productive logs, retrospective nursing documentation	**Results:** After implementation of the AD RN, Rn satisfaction improved, patient satisfaction increased, and nursing documentation improved.	**Strengths:** The AD RNs was able to help out in emergency situations with patient interventions and transferring to the ICU **& Limitations:** The AD RNs found they did not have specific places to document and needed computers to efficiently do their job.	**Evidence Level & Quality Rating:** VB

1 1	The Joint Commission. (2012, December 19). *Patient flow through the emergency department.* https://www.jointcommission.org/standards/r3-report/r3-report-issue-4-patient-flow-through-the-emergency-department/	**Aim:** To evaluate current boarding conditions in the ED and update standards	**Population**: All boarded patients **Setting:** emergency Department t	**Intervention:** Joint Commission researched what could be the possibilities of extensive boarding and modified the report to state the recommendations for boarding time should not exceed four hours	**Measure ments (e.g. tool to assess outcome):** The Joint Commissi on established requireme nts	**Results:** EDs standards are for patients not to board more than 4 hours	**Strengths & Weaknesse s: N/A** None for this article	**Evide nce Level: V**
1 2	Walker, C. (2016). Strategies for improving patient throughput in an acute care setting resulting in improved outcomes: A systematic review. *Nursing Economic$*, *34*(6), 277–288.	Design: Systematic Review (SR) Aim: To identify and synthesize the literature regarding patient throughput and strategies to improve throughput in acute care settings	Population is based on the patients seen in the ED and waiting for an inpatient bed. The Sample Size of the SR was 14 articles dealing with throughput from the ED to an acute care setting The setting is in acute care areas.	Interventions: Using Six Sigma methodologies of mapping processes focused on frontline staff and physicians' engagement to change the culture, interventions included admitting physicians and triage physicians. Other interventions were a clinical decision unit in the ED. Interventions to help the admitting and discharge process in hospitals were reviewed as well.	Measurem ents – HCAHPS Patient satisfactio n scores increased due to decreased boarding time, 41-minute reduction in ED LOS per patient, and a 6-year retrospecti ve study showing hospitalist s had lowered their LOS by 8.3%	The SR was able to provide great evidence-based ideas to improve patient throughput. One review was able to provide throughput improvement by applying Lean Six Sigma methodologie s of mapping process that had to deal with physicians and frontline staff. Research showed improvement of LOS from 5.4 to 4.6 days,	Strengths-The 14 articles provided data to provide results needed. Limitations - did not have a high level of evidence articles. Due to the lower level of evidence found, it was difficult to generalize the findings.	Evide nce level and quality rating is IA

					reducing readmissions, and reducing preventable harm by 72%.		

Appendix B

PDSA Chart

•Document if it worked or not.
•If it did not work, what changes will you make for the next cycle.
•If it did work, are you ready to spread it across your entire practice

•Write a concise statement of what you plan to do in this testing

ACT

PLAN

STUDY

DO

•Record how well it worked and if you meet your goal.

•Execute your plan or set it in motion

Institute for Healthcare Improvement, 2023

Appendix C

Organizational Change Readiness Assessment

This assessment is designed to reveal your organization's ability to change when change is needed. Read the following questions and indicate your level of agreement with each statement using the following scale.

5   We are excellent at this. I am confident we would succeed.
4   We are good at this. I believe we can manage.
3   We are okay at this. I believe we could manage.
2   We need help with this. I don't think we would manage very well.
1   We have problems with this. I don't think we can do this.

Sponsorship regularly comes from a senior level such as the President.	5
Leadership is provided from the highest senior levels that have direct responsibility for change.	5
There is a strong sense of urgency for change from the senior staff.	4
The organization has a culture that emphasizes continues improvement.	5
Any planned change initiative has clear objectives that are consistently communicated.	4
Management strongly believe the future should look different from the past.	5
Management has a clear vision of the future and can mobilize the necessary resources.	4
The change effort connects to other major initiatives underway or being planned within the organization.	4
Management is willing to change critical business processes.	4
All employees are supported when taking risks, being innovative and looking for new solutions.	3
The organization has successfully implemented major changes in the past 12 months.	5
Employees enjoy working in the organization and the level of individual responsibility and team spirit is high.	5
The organization is always experimenting and new ideas are easily implemented.	5
Organizational decisions use a participatory process, are made quickly and it's clear when the decision is made.	4
Employees have been extensively cross trained and have a good understanding of each others role in the organization	4
Employees view change as an opportunity	4
Employees work across boundaries with little trouble	4
Total Points	74

Appendix D

Decreasing Boarding Hours SWOT Analysis Table

Strengths	Weaknesses
1. Improve patient safety outcomes 2. Improve staffing ratios 3. Employees will appreciate the administration addressing a critical concern. 4. Decrease in burnout 5. Improve employee attitude at work 6. Improve overall job satisfaction	1. Lack of knowledge of the medical surgical nurses on boarding hours 2. Lack of engagement from employees to participate since it is not a direct effect on the unit 3. Employee not fully engaged due to an employee going to the session during their 12-hour shift
Opportunities	Threats
1. Have the DNP project for 90 days to analyze a complete quarter of data 2. The physicians receive funds so employees can get food served while they receive the education.	1. Continuous turnover, which will take longer to complete staff education 2. Due to physicians not reporting to the organization; getting 100% participation to complete education will be difficult

Appendix E

Boarding Hours Risk Management Plan Table

Risk	Probability	Impact	Contingency Plan to Address Threat
Lack of knowledge of the medical surgical nurses' onboarding hours	Frequently	Significant	During the education, give actual examples of patients in the ED waiting room (critical beds and tele-beds) with a 10-15 patient ratio.
Lack of engagement from employees to participate since it is not a direct effect on the unit	Frequently	Significant	Education sessions will be mandatory. The sessions will be held in groups of five employees to ensure they fully understand the impact.
Employee not fully engaged due to an employee going to the session during their 12-hour shift	Likely	Significant	If employees attend during their shift, phones, and pagers will be asked to be turned off, and they will be asked for their buddy to watch over their patients. Employees who step out of the education session will be asked to redo it.
High turnover rate, which will take longer to complete 100% of staff education	Likely	Significant	Will have multiple sessions during the day and the night shift. Employees out on FMLA will have the opportunity to attend a make-up session. New employees will have 1:1 education.
Due to physicians not reporting to the organization; getting 100% participation to complete education will be difficult	Likely	Significant	We will have the organization provide lunch for all physicians who sign up for a session. We will have sessions from 11 AM-1 PM.

Appendix F

Dashboard for Data Entry

DNP Dashboard: Discharges Compared to Discharges with the use of a Discharge Bundle

Participant	Age	Gender	Living status	Boarding Time	Discharge Physician	Discharge Time	EVS Turnaround Time	Discharge Nurse
PRE-DATA PROJECT								
2023-01	3	1	1	58	2	1	43	
2023-02	2	1	1	91	2	1	65	
2023-03	1	0	1	158	8	1	65	
2023-04	1	1	0	170	1	1	46	
2023-05	0	1	1	172	1	1	46	
2023-06	1	0	1	188	2	1	64	
2023-07	4	1	1	201	10	1	64	
2023-08	1	1	1	250	5	1	46	
2023-09	0	1	1	256	1	1	46	
2023-10	3	0	1	285	2	1	63	
2023-100	4	0	1	4154	5	1	44	
2023-101	1	0	0	5998	4	1	48	
2023-11	0	1	1	331	1	1	46	
2023-12	2	0	1	355	1	1	42	
2023-13	1	1	1	392	5	1	62	
2023-14	2	1	1	433	2	1	62	
2023-15	1	0	1	475	2	1	62	
2023-16	2	0	1	785	2	1	62	
2023-17	1	0	0	504	5	1	42	
2023-18	1	1	0	554	11	1	42	
2023-19	1	1	0	612	5	1	61	
2023-20	3	0	1	618	7	1	45	
2023-21	4	0	1	634	2	1	60	

Legend for Dashboard

Variable Name	Variable Information
Participant	Individual Discharge patient ID number
Age	0=17-29, 1=30-45, 2=46-55, 3=56-65, 4=66 and >
Gender	0=Male and 1=Female
Living Status	0=Indigent, 1=lives at home
Boarding Time	How many minutes a patient is boarded in the ED
Discharge Physician	ACS = 1
	Orthopedics =2
	Neurosurgery =3
	Medicine =4
	Hospitalist =5
	Oral Surgery =6
	Urology = 7
	Plastics head and neck =8
	Neurology = 9
	Family Practice =10
	Gyn-Onc =11
Discharge Order Time	Before 11AM=0 After 11AM=1
EVS Turnaround Time	Time in minutes for a room to be ready to bed the next patient
Discharge Nurse	The discharge nurse who completed the discharge

Appendix G

June 22, 2023

To Whom It May Concern:

Monica L. Herrera has my full support in completing her DNP quality improvement project, which will

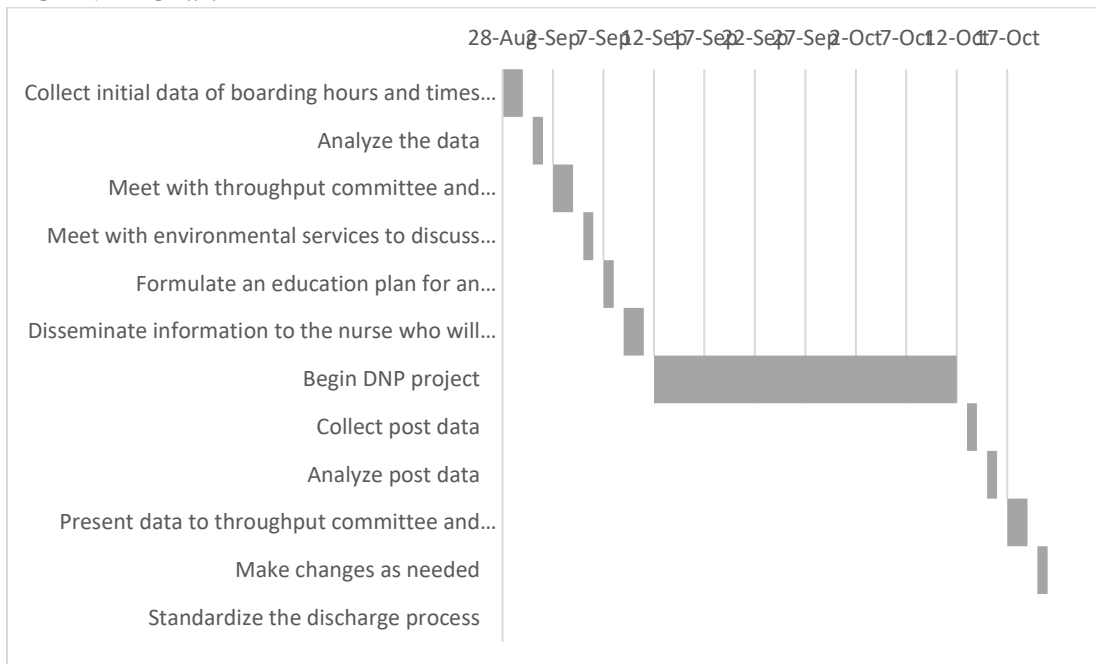be to evaluate the process of decreasing boarding hours by implementing a discharge nurse.

Sincerely,

Mark Fanning, MSN, BA, RN, NE-BC
Administrative Director of Nursing

Appendix H

GANTT Chart

Project Activity	Start	End	Responsible Person	Duration
Collect initial data on boarding hours and times of discharges	28-Aug	30-Aug	Project Lead	2
Analyze the data	31- Aug	1-Sep	Project Lead	1
Meet with the throughput committee and physicians to discuss data and the current process of discharges	2-Sep	4-Sep	Project Lead	2
Meet with environmental services to discuss high volumes of discharges and room turnaround time	5-Sep	6-Sep	Project Lead	1
Formulate an education plan for an admission/discharge nurse's roles and responsibilities	7-Sep	8-Sep	Project Lead	1

Disseminate information to the nurse who will be the admission and discharge, nursing staff, and the physicians who will start to discharge by 10 AM	9-Sep	11-Sep	Project Lead	2
Begin quality improvement project	12-Sep	12-Oct	Project Lead	30
Collect post data	13-Oct	14-Oct	Project Lead	1
Analyze post data	15-Oct	16-Oct	Project Lead	1
Present data to the throughput committee and physicians	17-Oct	19-Oct	Project Lead	2
Make changes as needed	20-Oct	21-Oct	Project Lead	1
Standardize the discharge process	22-Oct	25-Oct	Project Lead	3

Appendix I

Team Member Role   Define

| Team Member Role	Define
1. Administrator Director of Nursing	Approval of Quality Improvement Project
2. Chief Financial Officer	Approved for 1 FTE
3. Project Lead	Overseeing the implementation, data collection and dissemination of project results
4. Discharge Nurse	Will coordinate with the primary nurse and discharge any patient from the three units assigned
5. Nurse Managers	All three nurse managers will delineate the information about the discharge nurse to the charge nurses
6. Charge Nurses	Will attend staff meetings on the new process (acquiring a discharge nurse)
7. Patient Care Assistants/Health Unit Coordinators	Will call the discharge nurse once a discharge appears in the electronic medical record
8. Operations	Will purchase a Cisco phone for the discharge nurse
9. Throughput Director	Will run reports on the number of discharges being completed by the nurse as well as the amount of time each discharge is taking
10. EVS/Transport/ Concierge Staff	Will be notified once a discharge is complete so they will be able to pick up the patient

Appendix J

Inpatient Discharge Order Throughput
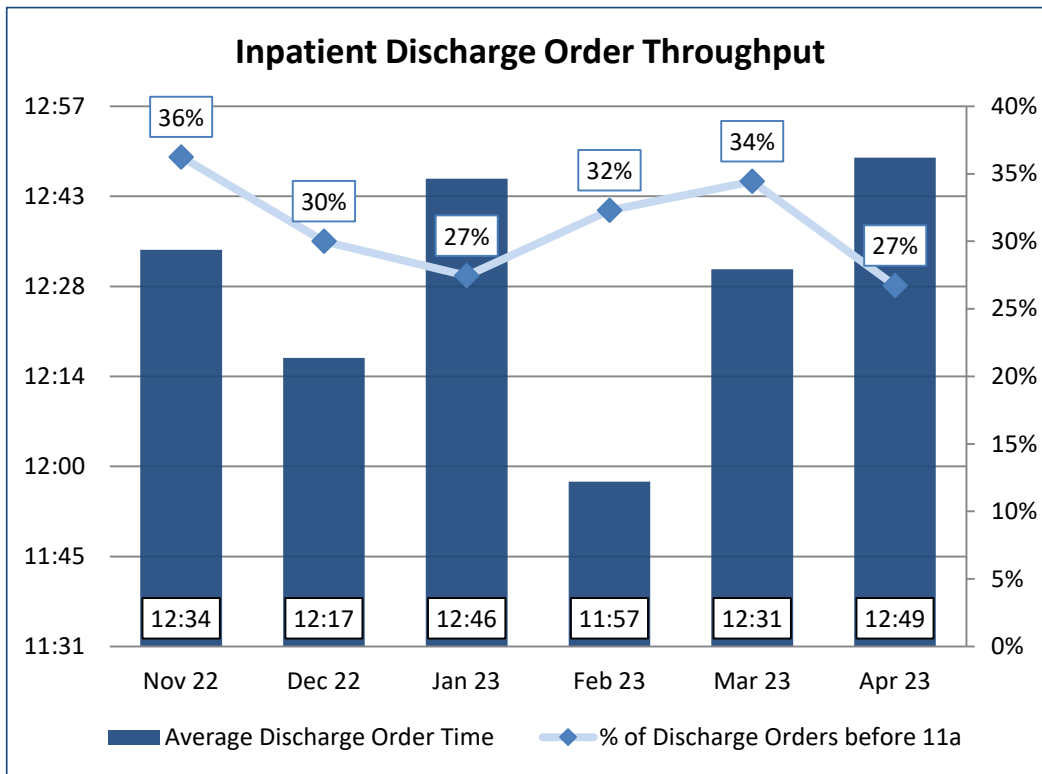
Note: Data results are from physicians average discharge order times and by month prior to implementation of project.

Appendix K

Discharge Order Time by Hour
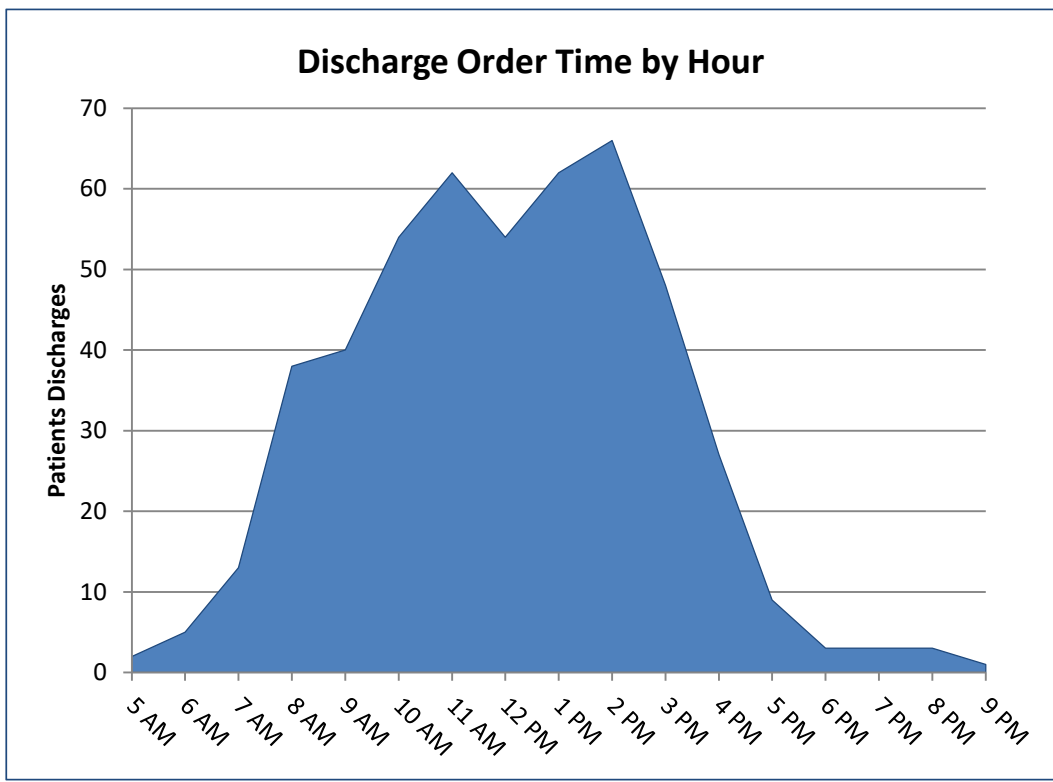
Note: Data results are from discharges by hour of the day and patient discharges prior to implementation of project.

Appendix L

Education for the Discharge Nurse Roles and Responsibilities

- Will be responsible for completing active discharges in three medical-surgical units
- Will work M-F 9-5
- At start of shift, nurse will look in EPIC and verify all active discharges.
- Will see which discharge was put in first and start with that discharge then continue with the next discharge that was placed.
- Once patient has been given all discharge paperwork and IV has been removed, the nurse will call for transport to pick the patient up and either take them to the hospital discharge lounge or to the patient's ride.
- Once transport has been called, transport will call EVS to clean the room
- If no active orders are in the queue, will work on ED admissions on the unit

Nurse Managers
- Will be educated on the new role of the admission and discharge nurse

Process for Improving Boarding Hours

Agenda Item	Topic Leader	Schedule	Time
I. **EC Updates** **Boarding Hours Data**	Project Lead	7:30 AM	10 minutes
II. **Examples of Risks**	Project Lead	7:40 AM	10 minutes
III. **Introduce** **Admission/Discharge** **Nurse**	Project Lead	7:50 AM	15 minutes
IV. **New Process for** **Discharges**	Project Lead	8:05 AM	15 minutes
V. **Quality Goal**	Project Lead	8:20 AM	5 minutes
VI. **Q & A**	Project Lead	8:25	5 minutes

❖ A discharge order is placed in EPIC

❖ HUC confirms the order in EPIC and with the primary nurse
❖ Once confirmed, HUC will call the discharge nurse on the Cisco phone
   o Will notify the discharge nurse which patient is being discharged
   o HUC will get a confirmation from the discharge nurse
   o HUC will notify the primary nurse that the discharge nurse has
   o been called
❖ The discharge Nurse will come to the unit and complete the discharge for the patient
   o Once the discharge is complete, will call the concierge to pick up the patient and send them to the discharge lounge
   o The discharge nurse will notify the primary nurse discharge is complete
   o The discharge nurse will notify HUC to discharge the patient out of the system once the concierge (transport) picks up the patient
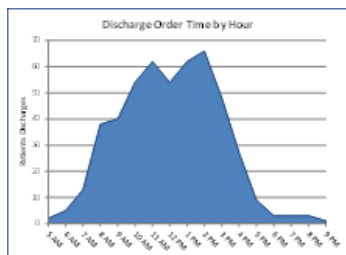   o Transport will notify EVS the room is empty and ready to clean

Appendix N

Decreasing Boarding Hours as a Team

Monica Herrera, DNP Student

Environmental Services (EVS) Team

❑ The importance of decreasing boarding hours in the ED
❑ How does EVS play a part in decreasing boarding hours
    ❑ The turn around time of a dirty bed
    ❑ The lag time from patient leaving room to when an EVS person can start the cleaning process
❑ How can EVS help patient throughput?
    ❑ Decreasing the lag time by getting notifications
    ❑ Having a designated person for three specific units
❑ Evaluate the data of the times when the hospital has the highest discharges
    ❑

EVS Project Process

- ❑ EVS Director will pick a designated EVS employee to complete discharges on the 3 designated units
- ❑ The EVS employee will only work on discharges during the hours of 8 AM to 3 PM
- ❑ Once a patient is picked up by transport
  - ❑ transport will let the HUC know the patient is leaving
  - ❑ transport will notify EVS the room is empty and ready to be cleaned
  - ❑ EVS will be on stand by and start the clean when patient has left
- ❑ This will happen for 30 days
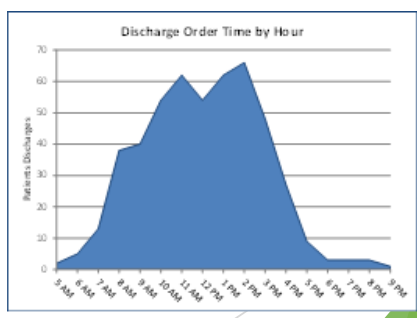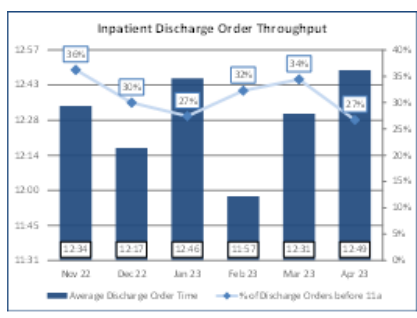- ❑ At the end of the project the data will be evaluated

Appendix O

Decreasing Boarding Hours as a Team

Monica Herrera, DNP Student

Physicians and Their Role in Decreasing Boarding Hours

- ❑ The importance of decreasing boarding hours in the ED
- ❑ Discuss current times of inpatient discharge orders
- ❑ How can physicians help patient throughput
- ❑ Talk about placing discharge orders an hour earlier than current practice
- ❑ If possible place discharge orders by 10 AM

Physicians Project Process

- ❑ Physician from the throughput committee will communicate the current data and the goal that will be placed for the physicians
- ❑ The goal of the physician is to place discharge orders at least one hour earlier than current practice
  - ❑ If possible will ask to have orders placed by 10 AM in patients that are located in the 3 units
    - ❑ 4A, 5A, 6B
- ❑ This will happen for 30 days
- ❑ At the end of the project the data will be evaluated

Appendix P

Decreasing Boarding Hours as a Team

Monica Herrera, DNP Student

Concierge/Transport Services Team

- ❑ The importance of decreasing boarding hours in the ED
- ❑ How does Concierge/Transport services play a part in decreasing boarding hours
  - ❑ Transportation order is placed in EMR
  - ❑ The length of time patient is waiting for transport
  - ❑ The lag time from patient leaving room to when the patient is taken out of the system
- ❑ How can Concierge/Transport help patient throughput?
  - ❑ Decreasing the wait time the patient has to wait for transport services
  - ❑ Having concierge/transport on standby for the three specific units
- ❑ Evaluate the data of the times when the hospital has the highest discharges
- ❑ Bring awareness to the Concierge/Transport team of the time of discharges and peak times
- ❑ Indicate the value and importance of the Concierge/Transport Services Team

Concierge/Transport Project Process

❑ Concierge/Transport services will receive a call from the discharge nurse to pick up patient and take them to the discharge lounge

❑ The Concierge/Transport department will expedite discharges from the 3 specific units during the hours of 11 AM to 6 PM

❑ Once a patient is picked up by transport

   ❑ transport will let the HUC know the patient is leaving

   ❑ transport will notify EVS the room is empty and ready to be cleaned

❑ This will happen for 30 days

❑ At the end of the project the data will be evaluated

Appendix Q

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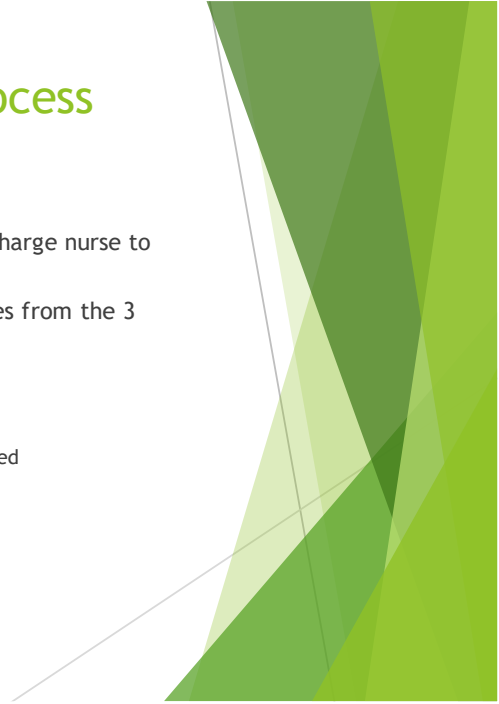
Human Subjects Protection Training (HSP): Training Completion Certificate

This document certifies that Monica Lourdes Herrera completed the training entitled "Human Subjects Protection Training (HSP)" on July 11th, 2023.

Training Start time: 07/11/2023 03:38 PM; Training End Time: 07/11/2023 07:49 PM

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