

Decreasing Psychiatric Admission Wait Time in the Emergency Department by Facilitating Psychiatric Discharges



ABSTRACT

Limited capacity in a psychiatric unit contributes to long emergency department (ED) admission wait times. Regulatory and accrediting agencies urge hospitals nationally to improve patient flow for better access to care for all types of patients. The purpose of the current study was to decrease psychiatric admission wait time from 10.5 to 8 hours and increase the proportion of patients discharged by 11 a.m. from 20% to 50%. The current study compared pre- and post-intervention data. Plan-Do-Study-Act cycles aimed to

improve discharge processes and timeliness through initiation of new practices. Admission wait time improved to an average of 5.1 hours ($t = 3.87, p = 0.006$). The proportion of discharges occurring by 11 a.m. increased to 46% (odds ratio = 3.42, $p < 0.0001$). Improving discharge planning processes and timeliness in a psychiatric unit significantly decreased admission wait time from the ED, improving access to psychiatric care. [*Journal of Psychosocial Nursing and Mental Health Services*, 53(12), 20-27.]



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In 2012, the Joint Commission issued a standard requiring hospital leaders to take responsibility for improving patient hospital experiences by addressing length of admission wait time in the emergency department (ED). They also recommended that hospitals develop specific goals to improve patient flow, suggesting a maximum of 4 hours of ED boarding time (Joint Commission, 2012). The problem of ED wait times was underscored by the Centers for Medicare and Medicaid Services (CMS); they also recognized the ED wait problem and planned to initiate a pay-for-reporting program in 2014 to incentivize hospitals to track admission wait time from the ED (Rabin et al., 2012). Others have noted that the problem of ED admission wait times is often associated with limited capacity on inpatient units; this is especially true for small psychiatric units (Alakeson, Pande, & Ludwig, 2010; Rabin et al., 2012). Discharge timing and planning strategies were identified as an efficient method of increasing capacity for new admissions to psychiatric units, thereby decreasing ED admission wait times (Alakeson et al., 2010). The current article describes a quality improvement initiative focused on discharge timing and planning strategies designed to address an ED wait problem for psychiatric admissions at PeaceHealth Southwest Washington (PHSW) Medical Center in Vancouver, Washington.

EVIDENCE

Evidence to support the current study was retrieved through a literature search for strategies related to timing and planning of psychiatric inpatient discharges to decrease wait time for psychiatric admission in the ED. Four databases and five websites related to health care and hospitals were thoroughly searched; current available evidence was limited and much of it was lower-level evidence, as defined by Melnyk and Fineout-Overholt (2011). Four articles represented the best available evidence from research; two sources presented psychiatric discharge guidelines (for discharge planning and timing) based on a literature review and quality improvement work.

Discharge Planning

Three sources supported the importance and process of discharge planning (Alghzawi, 2012; Institute for Healthcare Improvement [IHI], 2003; Shepperd et al., 2013) to reduce inpatient length of stay. The IHI (2003) outlined criteria to best facilitate timely discharges while contributing to overall hospital patient flow, including orchestrating the discharge and synchronization of other patient movement according to planned discharges. Shepperd et al. (2013) found evidence of randomized controlled trials to support the importance of discharge planning to decrease length of stay for most hospitalized patients. Alghzawi (2012) proposed evidence-based guidelines for

psychiatric patient discharge planning, describing general discharge principles and stages, and offering an example of an evidence-based discharge planning form. These sources support the importance of discharge planning and provide guidance for psychiatric discharge practices for the improvement of patient flow and a resulting decrease in wait time for admissions from EDs.

Discharge Timing

Three research studies suggested strategies that focus on the timing of discharges may facilitate capacity for admission of patients from the ED and thereby decrease ED wait time (Bastiampillai, Schrader, Dhillon, Strobel, & Bidargaddi, 2012; Khanna, Boyle, Good, & Lind, 2012; Powell et al., 2012). Bastiampillai et al. (2012) specifically addressed a psychiatric population, whereas the other two studies addressed a general population that included some psychiatric patients. Results of these three studies suggested that interventions aimed at earlier discharge times on day of discharge and increased numbers of weekend discharges, when appropriate, may facilitate decreased patient wait time in the ED for admissions. Although there may be some differences for discharges and admissions of psychiatric patients, this best-available evidence provided support for intervening in the timing of discharges from the psychiatric unit to decrease ED wait times for psychiatric admission.

LOCAL PROBLEM

PHSW experienced long ED wait times and disrupted patient flow from the ED to inpatient units and decided this problem would be amenable to change via quality improvement processes. PHSW recognized that ED waiting is not solely an ED concern and that issues outlined in prior research were relevant to its capacity and patient flow difficulties. Therefore, PHSW developed a quality improvement initiative to focus on timely discharges in the medical/surgical areas based on strategies used by others and recommendations by the Joint Commission to create capacity for admissions.

Wait time in the ED was also a concern for PHSW's inpatient psychiatric unit. The ED is the primary access

Wait time data were derived from a psychiatric unit log that tracked wait times for ED patients awaiting transfer to the psychiatric unit. A quality improvement team was developed to support the organization's initiative to improve patient flow from the ED to the psychiatric unit and reach for Joint Commission and CMS standards. The resulting quality improvement project was approved and supported by the Vice President of Patient Care Services, the Director of Quality and Safety, and the Director and Physician Director of Behavioral Health Services at PHSW. The team comprised interprofessional representatives of the psychiatric unit's staff (including nursing, psychiatry, and social work) plus the department director, clinical

STUDY QUESTION AND INTENDED IMPROVEMENT

The current quality improvement project was designed to improve the problem of delayed access to inpatient psychiatric care from the ED at PHSW. The quality improvement team examined whether improvements in discharge processes facilitate earlier discharges from the psychiatric unit and whether increasing capacity at the psychiatric unit facilitates decreased ED admission wait time. The primary aim of the current study was to decrease the average wait time in the ED from 10.5 to 8 hours for admission of adult psychiatric patients to PHSW's inpatient psychiatric unit by February 28, 2014. The supporting process measure was to increase the proportion of psychiatric patients discharged from the psychiatric unit by 11 a.m. from 20% to 50%. Process improvements were targeted to contribute to timely discharges and the creation of capacity at the psychiatric unit to decrease ED wait times.

The quality improvement team used a systems approach to guide process change in nursing and health care. The Baldrige Health Care Tool for Performance Excellence (National Institute of Standards and Technology, 2014) provided a method of systems self-assessment for understanding the priorities of organizations such as PHSW. Self-assessment promotes performance excellence by identifying the organizational profile, providing guidelines for excellent performance, identifying opportunities for improvement, and facilitating measurement of any improvement in this process. Results of the Baldrige Self-Assessment at PHSW, conducted in February 2013, revealed a strong organizational profile that was well-suited for making any needed changes. Although strengths were evident in every process category, the operations category presented an opportunity for improvement in patient flow from the ED to inpatient units, including the psychiatric unit.

Disrupted patient flow from the emergency department, with subsequent prolonged wait times, negatively impacted the quality of care for psychiatric patients awaiting admission.

point to inpatient psychiatric care. Disrupted patient flow from the ED, with subsequent prolonged wait times, negatively impacted the quality of care for psychiatric patients awaiting admission. Long wait times also resulted in blocked access to ED care by other patients (Huang, Thind, Dreyer, & Zaric, 2010). The 12-bed unit at the PHSW psychiatric unit received 53% of its admissions from the PHSW ED, according to the emergency psychiatry log tracking the disposition of all psychiatric patients seen in the ED. From September 2012 through February 2013, 123 patients were admitted to inpatient psychiatry from the ED. Average wait time was 10.5 hours, but some patients waited more than 1 day for admission, and one waited approximately 4 days.

manager, and a representative from the emergency psychiatric service in the ED.

A review of the admission process from the ED to the psychiatric unit by the quality improvement team revealed that capacity is a major factor contributing to admission delays. Root cause analysis of delays in admission to the psychiatric unit confirmed that inefficient or late discharges from the psychiatric unit reduced capacity for admissions. To meet its mission of healing and goals of compassionate, safe, quality care for all patients, and to meet accrediting and regulatory requirements, PHSW needed to address these issues and work to improve patient flow from the ED to the psychiatric unit, as well as the medical/surgical units.



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METHOD

The current quality improvement project was approved and monitored by the University of Colorado College of Nursing DNP Capstone Bridge Committee to ensure consistency with quality improvement principles and ethical practices. Risk to participants was minimal and no greater than that usually experienced while awaiting admission in the ED or planning discharge from the psychiatric unit. Data reported for Plan-Do-Study-Act (PDSA) cycles were de-identified and stored without any linkage to patient-specific information to preserve confidentiality. No contact with providers outside of PHSW was necessary except for that which would necessarily occur within the normal process of patient care. SQUIRE Guidelines (Ogrinc et al., 2008) were used throughout the current project to frame evaluation of the quality improvement processes.

Population and Setting

The patient population included adults 17 or older, waiting in PHSW's ED for admission to its inpatient psychiatric unit, and those hospitalized and ready for discharge from the same psychiatric unit during the time of the current project. The population waiting in the ED for admission was primarily White, with acute psychi-

atric conditions warranting inpatient psychiatric treatment and stabilization for return to community follow up. Approximately 10% of all psychiatric patients evaluated in the ED were admitted. Ninety-seven patients were admitted during the pre-intervention phase and 120 were admitted during the post-intervention phase. Over the life of the current project, 334 patients were admitted to the psychiatric unit from the ED. The population included voluntarily and involuntarily committed patients. Individuals ready for discharge from the same unit completed treatment and were deemed safe for outpatient care in the community. During the pre-intervention phase, 207 patients were discharged; 172 were discharged during the evaluation phase. Patients being transferred to other facilities were excluded from the current study.

PHSW is one of two medical centers located in Clark County, Washington and houses the only inpatient psychiatric unit in the county. PHSW's ED and most of the inpatient services are located on its main campus; however, the psychiatric unit is located at a campus 8 miles away. This campus houses only the psychiatric unit, an urgent care clinic, and two other outpatient programs. The psychiatric unit is small, with 14 beds, a capped census of 12, and variable patient room con-

figurations. Access to acute medical and ancillary services and personnel to assist emergencies is limited. Patient and staff safety concerns, as well as room arrangements and bed availability, influence capacity to admit.

From August 2013 through October 2013, the organization was required to make rapid changes to staffing and service delivery to alleviate budget shortfalls. The psychiatric unit experienced a reduction in force, resulting in a higher patient-to-nurse ratio, absence of unit secretaries, and destabilization of the unit's team. These changes exerted an influence on the willingness of the staff to accept admissions of certain acutely ill or potentially violent patients and impacted the decision making about admission timing. These rapid changes were incorporated in the context of the ongoing PDSA cycles.

Intervention

The literature review revealed that timely discharges facilitated capacity for additional admissions; therefore, the quality improvement team developed an intervention plan based on a root cause analysis of delays in discharges from the psychiatric unit and evidence-based practices for discharge. The psychiatric unit was already using many of the evidence-based discharge planning tactics recommended in the literature; those not already in use (i.e., discharge

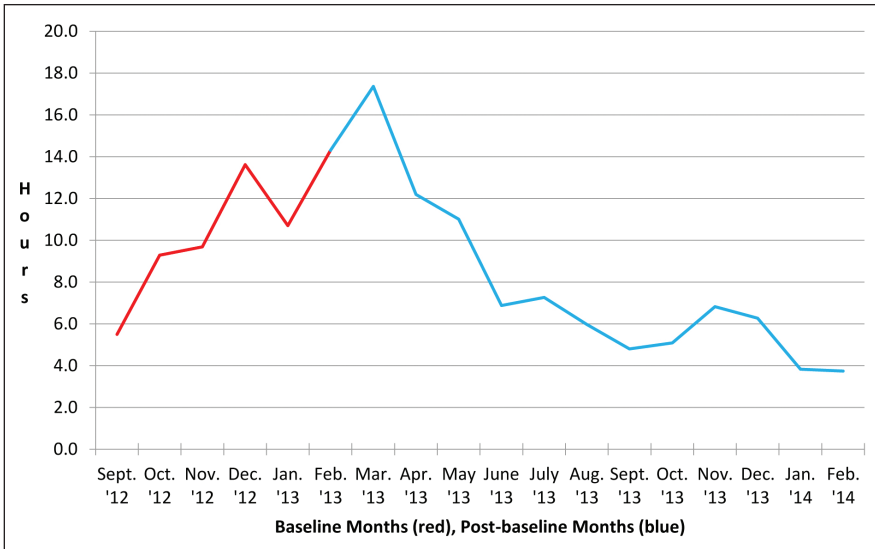


Figure 1. Average emergency department wait times by month (September 2012 to February 2014).

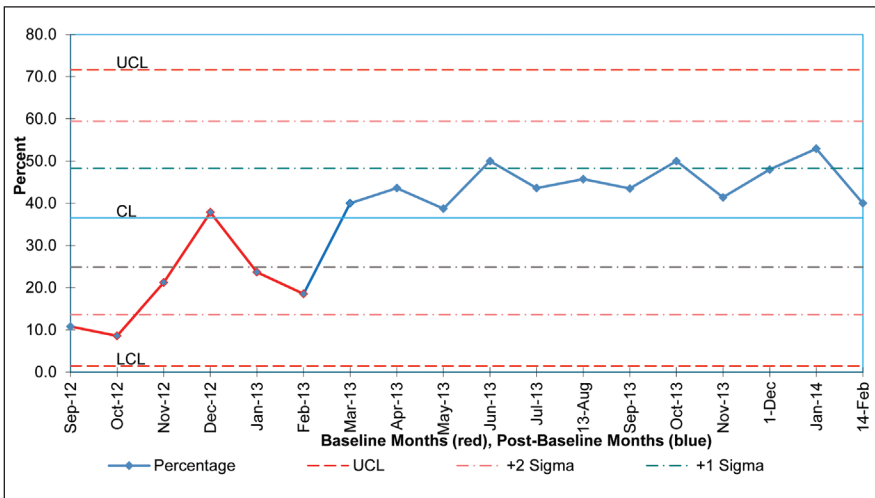


Figure 2. Psychiatric unit discharges by 11 a.m. by month (September 2012 to February 2014). Note. UCL = upper control limit; CL = control limit; LCL = lower control limit.

checklists and discharge appointments) were introduced.

The quality improvement model of rapid cycle improvements, guided by the PDSA process (Warren, 2011), provided the framework to introduce change processes identified by the root cause analysis and literature review. Interventions fell into categories of discharge timeliness and evidence-based discharge planning. Seven series of PDSA cycles were conducted to facilitate identified changes: (a) discharge transportation, (b) discharge orders, (c) discharge data entry, (d) length of stay, (e) patient involvement and ex-

pectations, (f) evidence-based discharge planning, and (g) staff attitude. **Table A** (available in the online version of this article) provides further detail about each PDSA cycle implemented.

Evaluation of PDSA Cycles

All PDSA cycles were evaluated on criteria specific to each and also on the basis of improvement in wait and discharge time through the duration of the project. Changes were made as a result of the analysis and successful interventions were continued. Minimal resources were required to implement these process improvements.

Data quality was controlled in two ways: (a) parameters for collection of data were specifically defined for the measurement of ED admission wait times and psychiatric unit discharge times; and (b) separate spreadsheets were provided for assigned staff to enter data needed for these measurements, which were then checked periodically by the lead investigator (P.R.S.) for completion and accuracy.

Analysis

The project design was a pre and post evaluation of the impact of the project interventions. Baseline data were gathered for 6 months before the start of interventions in March 2013. Data collection then continued over the course of the project through February 2014; the last 6 months' data were used for post-intervention comparison. Average ED wait time was analyzed pre and post intervention using an independent, two-sample *t* test for continuous data. Change in discharge timeliness from the psychiatric unit was analyzed pre and post intervention using chi-square with Yate's correction for continuity (Polit, 2010) between two distributions. In addition, a time-trend control chart for statistical process control was used to track variation and determine stability of discharge timing over the course of the project. All comparisons were powered at 80% for an effect size change of 0.78 (ED wait time) and 0.75 (discharge timing), and an alpha of $p < 0.05$. Based on power calculation, sample sizes of 54 and 14 were needed for the wait time and discharge timing measures, respectively, over the life of the project to test for significant change. The baseline sample of 207 combined with the intervention sample of 172 provided a total sample of 379.

RESULTS

Clinical Process Changes

Clinical process changes resulted in improved care for psychiatric patients. Process improvements were based on implementation of the interventions previously described to improve dis-

charge processes. **Table B** (available in the online version of this article) describes the project's specific interventions and their background and outcomes.

Outcome Measure

Average ED wait time for admission to the psychiatric unit (mean = 10.51 hours, $SD = 2.92$ hours) significantly decreased after quality improvement implementations (mean = 5.08 hours, $SD = 1.16$ hours; $t[6.54] = 3.87$, $p = 0.006$; 95% confidence interval [CI] = [2.11, 8.65]). **Figure 1** shows the changes over time.

Process Measure

Analysis of the discharge timing process measure revealed common variation amenable to changes for improvement (**Figure 2**) and statistical significance in the changes achieved post intervention. Average proportion of patients discharged from the psychiatric unit by 11 a.m. improved from 20.3% to 46.5% (chi-square (1, $N = 379$) = 28.4; $z = -5.44$; $p < 0.001$; odds ratio = 3.42; 95% CI = [2.37, 5.81]).

DISCUSSION

The current project decreased the average ED wait time for patients awaiting admission to the inpatient psychiatric unit, moved the wait time closer to the regulatory recommendation of ≤ 4 hours, and improved access to care for patients facing crises. Improved discharge processes resulted in earlier discharges and increased capacity at the psychiatric unit. All improvement processes resulted from evaluation of a root cause analysis of contributors to late discharges and the addition of missing evidence-based discharge processes (i.e., the discharge checklist and discharge appointment). Outcomes of the primary aim and process measure were clinically and statistically significant, and were consistent with the reviewed literature.

The improved ED wait time for admission to the inpatient psychiatric unit exceeded expectations. The long wait time for transfer to the psychiatric unit had frustrated patients, ED staff

KEYPOINTS

Stover, P.R., & Harpin, S. (2015). *Decreasing Psychiatric Admission Wait Time in the Emergency Department by Facilitating Psychiatric Discharges*. *Journal of Psychosocial Nursing and Mental Health Services*, 53(12), 20-27.

1. A quality improvement project was designed to improve emergency department (ED) wait time for psychiatric admission by increasing capacity for admissions.
2. Rapid change cycles using a Plan-Do-Study-Act (PDSA) process, supported by evidence-based practices and root cause analysis, provided the framework for a successful quality improvement project.
3. PDSA cycles and clinical change interventions, focused on improving discharge planning and timeliness at the psychiatric unit, resulted in a 50% decrease in average ED wait time for psychiatric admissions.

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and physicians, and psychiatric staff and physicians. Decreasing the average wait time from 10.5 to 5.1 hours was a significant improvement of more than 50% for acutely ill psychiatric patients awaiting access to inpatient psychiatric care. In addition, the statistically significant change in wait time was unexpected and demonstrates the low possibility that these changes occurred by chance. This significant change means that patients with suicidal ideation, acute psychosis, or other conditions requiring safe and specialized psychiatric care have access to this specialized care more quickly once the psychiatric unit has determined eligibility and capacity for admission. In addition to improved access to care, this improvement represents significant progress toward the ED wait time goal of ≤ 4 hours recommended by the Joint Commission and CMS. It is unclear whether this recommendation represents a reasonable expectation for PHSW's situation of the psychiatric unit not co-located with the ED. Nonetheless, PHSW came close to meeting the recommendation and may be able to fully meet it with additional process improvements.

The process measure outcome also exceeded expectations. By increasing the proportion of psychiatric inpatient discharges that occurred by 11 a.m., the quality improvement

project created an improved patient flow and greater capacity for timely admissions. Although the team did not reach the targeted average of 50% of discharges, the outcome was close at 46%. Statistical significance and effect size improved after process improvements: patients were 3.42 times more likely to be discharged by 11 a.m. than before the interventions. The nine process improvements in clinical care described earlier resulted in improved discharge planning and timeliness. These changes also increased involvement of patients and the treatment team in discharge planning. Involvement of patients and treatment staff as partners in care reflected the unit's model of care, the nationally supported recovery model (Substance Abuse and Mental Health Services Administration, n.d.) for the care of psychiatric patients. Some difficulty was encountered in the implementation of one of the process improvements, possibly indicating a conflict with the recommendations of the IHI (2003). Implementation of discharge appointments, recommended by the IHI, was difficult for this psychiatric unit. It is unclear whether this difficulty was related to the nature of psychiatric care in general or to the specific culture of this unit in which the desire for confidence in discharge readiness and safety before determining

discharge date is paramount. If either of these options is true, this experience may indicate discharge appointments are not viable for all psychiatric units. Difficulty may also have been related to the intermittent absence of physician members from the quality improvement team meetings, thus creating a gap in their input. Because patients found the departure appointment cards helpful in specifying their discharge appointment and process, and staff appreciated their underlying purpose, further PDSA cycles should be conducted for potential clarification and formalization of the procedure.

All other outcomes of the current project were consistent with the reviewed evidence describing strategies related to timing and planning of psychiatric inpatient discharges to decrease psychiatric admission wait time in the ED. Results were consistent with the studies demonstrating earlier discharges contributed to less ED wait time for admissions (Bastiampillai et al., 2012; Khanna et al., 2012; Powell et al., 2012) and the limited body of evidence that improving discharge processes increases capacity for admissions (Alghzawi, 2012; IHI, 2013; Shepperd et al., 2013). Results provided additional support to show this strategy's specific use in psychiatric units. Results support and contribute to the existing body of knowledge on this topic and represent the first known quality improvement project of this type conducted in a psychiatric unit.

LIMITATIONS

Certain limitations, risks, and difficulties were encountered during the current project, despite efforts to minimize them. Changes in unit staffing and department leadership and structure negatively impacted the focus on improvement processes. Another challenge was the risk of human error and inconsistencies in data entry; efforts by the quality improvement project leader (P.R.S.) to check data accuracy minimized the degree of risk. A Hawthorne effect could account for a portion of the quantitative outcomes achieved.

Still, quality improvement projects, by design, accept a variety of factors as contributing to the ultimate desired change, including the psychological impact of a new project.

Sustainability may be at risk because of recent hospital system changes. The department has undergone much change since January 2014, resulting in new leadership. At the time of this writing, clear plans were in place to continue collection of outcome and process measure data for purposes of monitoring. Other plans to sustain or

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continue the project remained uncertain. Without continued leadership for and focus on supporting processes, the results achieved over the past year may decline. This decline would be unfortunate, especially because additional gains could be made by continuing to work on other factors that impact the ED wait time for psychiatric admissions.

Generalizability is limited to the specific setting and circumstances peculiar to PHSW. Departmental and organizational culture and the psychiatric unit's remoteness from the ED limit its similarity to other organizations. In addition, numerous changes in leadership, staffing, and structure impacting the department during the project affected

its generalizability to other facilities. Despite these local circumstances and the potential limitations of the project, many of the changes made at PHSW's psychiatric unit can be adapted for use by other facilities.

STRENGTHS

The most important strengths of the current project were the improved timeliness of care for patients and the nursing team's anecdotal report of satisfaction with the changes made. These outcomes justified the 12-month journey of numerous PDSA cycles, meetings, and process changes, which were sustained despite numerous departmental and organizational stressors and changes. Satisfied nurses make better caregivers who are then more able to provide high-quality care, thus contributing to patients' recovery. The current project achieved the ultimate goal of any quality improvement project: better quality of health care for healing of patients. The current project resulted in better access to inpatient care and better discharge processes for psychiatric inpatients.

Additional strengths were noted. Changes in clinical processes were made without any significant additional cost to the department. In addition, there were no observed negative impacts to patients or staff, and the quality improvement team witnessed the effectiveness of PDSA cycles in making small but significant and clinically important changes.

CONCLUSION

The current quality improvement project has shown that improvements can be made in ED wait time for psychiatric patients when focused effort is made to improve discharge processes, thereby impacting inpatient psychiatric capacity for admissions. Implications of this observation are important; staff and physicians gain hope for better processes and care of their patients, and patients are provided better access to inpatient care. Patients awaiting inpatient psychiatric care in the ED are acutely mentally ill and at risk of harm

to self or others, and need the safety and specialized care of the psychiatric unit as soon as possible. Psychiatric patients at PHSW's ED access needed care in a much timelier manner as a result of the current project, initiated because of an improvement opportunity demonstrated in the Baldrige system analysis. Further system improvement and process changes could potentially decrease the wait time even more; this work could include improvements in transportation from the ED and the psychiatric unit's admission decision process. Such improvements could help drive the wait time closer to the recommended timeframe of ≤ 4 hours while providing even better care for patients and improving the satisfaction of patients, staff, and physicians.

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TABLE A. Summary of PDSA Series and Cycles

Series title/goal	Cycle ID	Cycles	Plan/Do	Study/Act
<p>Discharge Transportation.</p> <p><u>Goal:</u> to decrease the frequency of late discharges due to late transportation.</p>	A	<p>A.1: AM Community Meeting</p> <p>A.2: Individual Follow-up</p> <p>A.3: PM Community Meeting</p>	<p><u>Plan:</u> Developed changes to remind patients to arrange timely transportation for discharge, and to help patients as needed with transportation arrangements.</p> <p><u>Do:</u> Tested changes of reminding patients during AM & PM community meetings and providing staff assistance as needed, to promote timely discharge transportation.</p>	<p><u>Study:</u> Recognized need to address discharge transportation planning in both AM & PM community meetings; one patient situation demonstrated usefulness of individual staff assistance with problematic discharge transportation planning, resulting in cycle A.2; incidence of late discharges related to discharge transportation decreased.</p> <p><u>Act:</u> Cycle A.1 led to cycles A.2 and A.3.</p>
<p>Timeliness of discharge orders.</p> <p><u>Goal:</u> To decrease the frequency of late discharges due to late physician discharge orders.</p>	B	<p>B.1: MD education and cue for discharge order timing</p> <p>B.2: Revision/continuation of education</p>	<p><u>Plan:</u> Planned to change MD behavior through education and reminders.</p> <p><u>Do:</u> Implemented discussion of need and rationale for writing orders pre-discharge day or early on discharge day; posted visual reminder for MDs.</p>	<p><u>Study:</u> MDs & staff were found to be more aware of timing issues for discharge for short time period, but became desensitized to long-term importance; during each cycle there were no late discharges related to late orders.</p> <p><u>Act:</u> Cycle B.1 was revised with further discussion and new reminders, resulting in better long-term understanding; process of timely orders for pending discharges was hardwired.</p>
<p>Discharge data entry</p> <p><u>Goal:</u> to ensure complete data base for measurement of progress towards discharge timeliness</p>	C	<p>C.1: Data entry improvement</p> <p>C.2: Data entry improvement #2</p> <p>C.3: Data tool revision and follow-up</p>	<p><u>Plan:</u> Developed processes to improve data entry completeness for discharge monitoring</p> <p><u>Do:</u> Tested change by using drop-down menu in data collection tool and training staff; next cycle tested additional training and reminders: final</p>	<p><u>Study:</u> Plans and implementation produced verbalized understanding by staff but < 100% completeness through each cycle; performance improvement needed with assistance of unit manager.</p> <p><u>Act:</u> Staff recommendations were utilized after each cycle and new cycle implemented; referred</p>

goal.			cycle, tested revision to tool per staff recommendations.	performance issue to unit manager.
<p>Length of stay (LOS)</p> <p><u>Goal:</u> To increase awareness of and monitor LOS to facilitate discharge planning progress and timely discharges.</p>	D	<p>D.1 & D.2: LOS awareness by MDs</p> <p>D.3 & D.4: LOS awareness by nursing staff</p> <p>D.5: LOS awareness by treatment team</p> <p>D.6, D.7, & D.8: Monitor patient discharge planning progress and LOS</p>	<p><u>Plan:</u> Developed plans to improve LOS awareness by all MDs, RNs, and treatment team.</p> <p><u>Do:</u> Tested changes to daily worksheets that state each patient's LOS for MDs and RNs; to focus on LOS and discharge planning in team meetings; to increase frequency and modified format of team meetings. Implemented daily mini-team meetings for discharge planning, and initiated new form to document meetings and discharge planning.</p>	<p><u>Study:</u> In 2 cycles both MDs readily adapted to use of new worksheet, reported increased awareness of LOS. RN cycles in process. Treatment team required softer approach to constant reminders about discharge planning and LOS. Staff and MDs stated mini-team meetings were helpful; needed a method to consistently document.</p> <p><u>Act:</u> Implemented worksheet changes for MDs; treatment team reminders implemented. Implemented cycles D6 and D7 to evaluate mini-team meetings, and D8 to initiate and evaluate new documentation. New process fully hardwired.</p>
<p>Patient involvement & expectations</p> <p><u>Goal:</u> To improve patient expectations and increase participation in discharge planning.</p>	E	<p>E.1 & E.2 : Patient involvement in discharge planning</p> <p>E.3: ED setting expectations prior to admission</p>	<p><u>Plan:</u> Developed forms to engage patients in discharge planning, and process to set up patient expectations prior to admission.</p> <p><u>Do:</u> Tested use of "My Discharge Plan" document with patients and their response; tested use of pre-admission statement in ED.</p>	<p><u>Study:</u> First version of "My Discharge Plan" not helpful as predicted nor user friendly for patient; revisions needed; after revisions, found that the document was helpful only in certain situations, realized many patients were already engaged in planning. Pre-admission statement developed and cycle was successful.</p> <p><u>Act:</u> Implemented "My Discharge Plan" document on as needed basis per MSW. Pre-admission statement implemented for all admissions.</p>

<p>Evidence-based discharge tactics</p> <p><u>Goal:</u> To upgrade discharge processes by adding two evidence-based tactics of discharge appointment and discharge checklist.</p>	<p>F</p>	<p>F.1& F.2: Discharge appointment</p> <p>F.3, F.4, F.5, F.6: Discharge checklist</p>	<p><u>Plan:</u> Developed plan for providing a departure appointment card to facilitate patient readiness for discharge; developed plan for revitalizing an old and unused discharge checklist for staff use.</p> <p><u>Do:</u> Implemented departure appointment card, with process to be initiated by MD when discharge date determined; revised and implemented discharge checklist for staff use.</p>	<p><u>Study:</u> Needed 2 cycles to fully evaluate patient responses, MD adherence, and unit utility. Patients appreciated the form; MDs grew to understand the need and usefulness. Staff liked the checklist and requested some revisions and needed to adjust to 100% adherence to new process.</p> <p><u>Act:</u> Implemented departure appointment card. Fully implemented new discharge checklist after a few revisions and work on 100% compliance. New processes hardwired.</p>
<p>Staff attitude</p> <p><u>Goal:</u> To improve staff knowledge and understanding of patient flow and its impact on patient care and the psychiatric unit.</p>	<p>G</p>	<p>G.1 & G.2: Staff group education.</p>	<p><u>Plan:</u> Developed educational presentation for psychiatric unit staff</p> <p><u>Do:</u> Presented education in in-service setting to 12 staff.</p>	<p><u>Study:</u> A pre and post assessment showed that understanding improved as a result of the in-service presentation. Education provided by e-mail raised the department percent of participation to > 75%.</p> <p><u>Act:</u> Made the education available to staff who missed the in-service, via power point and evaluation form distributed by e-mail, for cycle G.2.</p>

TABLE B. Clinical Process Changes

Purpose	Interventions	Background	Outcomes
Patient expectations and involvement in discharge planning	<ol style="list-style-type: none"> 1. Communication twice daily in community meeting plus individual staff follow-up regarding timely discharge transportation 2. Pre-admission statement implemented in ED for all admissions; it contains information about early discharge planning expectations. 3. "My Discharge Plan" developed for social worker to use for engaging patients in discharge planning. 	<ol style="list-style-type: none"> 1. History of patients departing late in day due to late transportation. 2. History of patients needing to better understand expectations of LOS and discharge. 3. History of patients not engaging in discharge planning. 	<ol style="list-style-type: none"> 1. Patients are more aware of need to arrange transportation for morning; frequency of late transportation decreased but still contributes to late discharges; patients now engage with each other about discharge transportation planning. 2. Patients are better informed of unit expectations. 3. Original intent was to use form with all patients; some patients objected due to self-initiated involvement in discharge planning; form now used only prn by social worker for uninvolved patients requesting discharge.
Staff/Physician attention to patient length of stay (LOS) and discharge planning	<ol style="list-style-type: none"> 1. Daily worksheet used by staff & physicians changed to include every patient's LOS 2. Frequency of team meeting discussion about discharge planning increased via daily mini-team meetings interspersed between full team meetings. 3. New form implemented to document team meetings and discharge planning. 	<ol style="list-style-type: none"> 1. History of staff and physicians lacking awareness of patient LOS and discharge planning progress. 2. History of team meetings occurring only twice per week, delaying discharge planning. 3. Need for documentation of more frequent meetings and evidence of discharge planning discussions. 	<ol style="list-style-type: none"> 1. Fully implemented, after some initial resistance by staff during adaptation state; much greater awareness of LOS. 2. Implemented and successful; physicians, social worker, and care manager actively involved in mini-team meetings; discharge planning is more active. 3. Fully implemented without difficulty.
Timeliness of discharge orders	<ol style="list-style-type: none"> 1. Physicians write discharge orders as soon as possible, with focus on prior day or early morning on day of discharge. 	<ol style="list-style-type: none"> 1. History of discharge orders being written too late to facilitate pre-11 a.m. discharges. 	<ol style="list-style-type: none"> 1. Fully implemented by physicians except in situations of last minute decision.
Staff knowledge about patient flow impact	<ol style="list-style-type: none"> 1. Staff in-service and power point presentation developed to educate 	<ol style="list-style-type: none"> 1. Need for staff understanding of reasons for changes and effect on 	<ol style="list-style-type: none"> 1. Education was successful and can be repeated as needed.

	department staff	patients.	
Facilitation of departure process for discharge.	1. Discharge checklist implemented	1. Lack of discharge checklist; history of disorganized departure process; evidence-based practice includes discharge checklist.	1. Fully implemented, actively used and appreciated by staff.
Communication and planning for the discharge departure	1. Implemented departure appointment card, initiated by physician upon determination of discharge date, passed to RN who gives to patient.	1. History of inconsistent communication and planning for departure among staff and patients; evidence-based practice includes discharge appointment.	1. Fully initiated, staff and patients appreciate the card; inconsistent initiation by physicians.