Psychiatric Treatment Team: A Structured Approach

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Dedication and Acknowledgements

First and foremost, I would first like to thank my husband, Steven Strange, for always encouraging me to reach the highest of heights in my education and my career. This while being patient during the countless hours I was distracted by paper writing, researching, and just being in my head thinking about school and work assignments. Steven Strange, you are my superhero in so many ways.

For the support of my children, Savanna and Chelsea Strange, I could not be more grateful. I started my nursing education journey when they were small. Now they are all grown up as the pinnacle of my education, this project could not have been possible without their encouragement not to quit when they may have needed me most.

My leaders, Paula Bird and Loraine Frank-Lightfoot are both Doctors of Nursing practice (DNP) and mentors who recognize the benefits of nursing leaders having their DNP degrees. They have supported me and approved the time off I needed to pursue my DNP and work on this project. They continue to model behaviors that have encouraged me to be the best nurse leader I can be, equipped to lead future generations of nurses, multidisciplinary teams, develop and implement evidence-based processes, and have a seat at the administrative table to positively effect patient outcomes.

I would also like to thank my instructors and classmates. Dr. Kabbe has been an excellent support from the very beginning of this project and the person that would patiently discuss my wild ideas much longer than she had to. Tina Carr, Christa Cichowitz, and I, as the three amigos, made it through both the MSN and DNP programs together through illness, death of loved ones, work issues, and a full-on pandemic. Please take note that if Tina Carr ever says, “Let’s just continue on to get our DNPs together because if we don’t do it now, we never will” that she is
right. While this has been one of the most difficult endeavors of my life given the circumstances of the last two years, I do thank Tina and all the others mentioned here for that extra push and encouragement or I would never have the opportunity to experience what I will on May 5, 2022, as a DNP graduate who will be called Dr. Heather Strange.
Abstract

Psychiatric treatment team meetings are a required element of care on inpatient behavioral health units; however, they can be a disorganized waste of time and energy that creates frustration among team members. The purpose of this project was to improve the quality of the current psychiatric treatment team process on a 51-bed inpatient behavioral health unit by replacing it with one that is evidence-based, and patient centered. The main objective was to improve team member satisfaction by making it more efficient and effective for all involved. The intervention involved implementation of role-based templates and initiation of strong meeting facilitation. Pre- and post- intervention surveys were conducted among a sample of treatment team members who had experienced both old and new formats to determine team member satisfaction, perception of meeting efficiency, and helpfulness to patients. Additionally, observations were conducted to count delays and reports were analyzed to determine effects on patient length of stay and recidivism. There were statistically significant improvements in team member satisfaction and perceptions of efficiency. While there were also improvements in perceptions of helpfulness to patients, length of stay, and recidivism, they did not prove to be statistically significant. Treatment team members are more satisfied when meetings are efficient. Leadership involvement and meeting facilitation are important to ensure meeting efficiency. Patients may benefit when their care team is engaged in treatment planning. Using this evidence-based treatment team meeting format provided a method to improve the overall meeting experience while minimizing waste.

Keywords: treatment team meeting, psychiatric treatment planning
Psychiatric Treatment Team: A Structured Approach

Background and Significance

There is a long-standing tradition of psychiatric rounds on inpatient behavioral health (BH) units with variations of treatment team models, but few are evidence based (Fiddler et al., 2010). Historically, the medical establishment has approached patient care paternalistically, excluding patients and others on the care team from actively participating in care decisions (Genuis, 2021). There has been incremental movement away from this mindset in healthcare, as evidenced by widespread use of advanced care directives (both medical and mental health), interdisciplinary bedside rounds, bedside nursing handoffs that include patients, and most recently the immediate release of medical records to patients through the 21st Century Cures Act (U.S. Department of Health and Human Services [DHHS], 2020). However, in certain areas within healthcare, such as psychiatry, there is evidence that this attitude remains (Fischer & Neale, 2008; Mathisen et al., 2016).

The inpatient behavioral health treatment team process that is multidisciplinary and includes input from the patient is a standard of care required by healthcare oversight agencies and is a criterion for reimbursement of care (Centers for Medicare & Medicaid Services [CMS], 2020; The Joint Commission [TJC], 2020). These standards intend to ensure care that benefits patients and improve outcomes. When standards are not followed, benefit to the patient is reduced and organizations may face financial penalties and/or loss of revenue (CMS, 2020). Treatment team meetings that are evidenced based, patient centered, and efficiently run provide the opportunity to improve overall patient care, increase patient and team member satisfaction, and improve financial vitality (Mattinson & Cheeseman, 2018; Mercedes et al., 2016; Patel et al., 2019; Shetty et al., 2017; Walton et al., 2020).
The treatment team process on a 51-bed inpatient behavioral health unit at a large urban hospital with over 2,000 annual visits presented multiple opportunities to become more efficient and effective. They were conducted daily (lasting approximately two hours), required excessive human resources, and lacked patient centeredness. Participants who attended meetings in their entirety included a nurse manager, a therapy manager, a utilization review (UR) clinician, a discharge planner, and a recreation therapist. The physicians and advanced practice providers, collectively termed providers for this project, participated during a portion of each meeting to cover only their assigned patients. Delays occurred due to staggered provider arrival times, discussion of extraneous information, and disengaged team members which resulted in nonproductive meetings and frustrated team members. Non-provider team members (nurse manager, therapy manager, utilization review clinician, discharge planner, and recreation therapist) also reported perceptions that their input into treatment planning was undervalued as providers often disregarded their recommendations for care. This resulted in limited participation by non-provider treatment team members, even when present during meetings. The primary nurses and patients were not present which decreased vital communication, bedside nurse autonomy, and patient engagement.

**Purpose**

The purpose of this project was to improve the quality of the current psychiatric treatment team process on a 51-bed inpatient behavioral health unit by replacing it with one that was evidence-based and patient centered. The goals were improved patient outcomes and increased treatment team member satisfaction. The objectives required to reach the goals were to improve meeting efficiency and to increase perceived value of participation by all treatment team members.
**Review of Evidence**

The purpose of this literature review was to identify best practices and concepts that would lead to accomplishing the goals of this project. To find relevant articles, PubMed, Scopus, PsychINFO and CINAHL were searched using the following terms and phrases: “psychiatric rounds and treatment teams,” “behavioral health treatment plan template,” and “mental health treatment team.” The only exclusion term was “outpatient.” Articles that were written in a language other than English, were duplicative, or not peer reviewed were excluded. A gap in the number of articles specifically relating to treatment teams on behavioral health units was found. As a result, the search was broadened to include “rounding” and “interdisciplinary team meetings.” Additionally, relevant germinal articles were included. Twenty-one articles were identified and six were excluded for lack of relevance to this project. Themes identified include task structure and role clarity, team member responsibilities, team member satisfaction, and length of stay (LOS)/recidivism.

**Structure and Role Clarity**

Vinolur-Kaplan (1995) points out the importance of administrators setting the treatment team process up correctly from the start with a specific task structure and role clarity. Collins et al. (2014) warns that lack of meeting structure and facilitation leads to wasted resources as extraneous conversation occurs. To encourage structure and clarity and avoid waste, use of a tool, template, or checklist is highly recommended (Banfield et al., 2018; Collins et al., 2014; Gilliland et al., 2018; Krishnamohan et al., 2019; Mattinson & Cheeseman, 2018). Specifically for behavioral health units, the SCAMPER template aids in providing structure and clarity through specific scripting for each member of the team (Mattinson & Cheeseman, 2018). Focused observation of treatment team meetings is necessary to extrapolate the most meaningful
elements for their setting (Banfield et al., 2018; Collins et al., 2014; Gilliland et al., 2018).

Mattinson and Cheeseman (2018) studied this and developed the SCAMPER template to include seven key behavioral health domains: social needs, community mental health team liaison, assessments required, mental health act review, prescriptions (medication, electroconvulsive therapy (ECT), and consent to treatment forms), engagement with relatives, and risk assessment.

**Team Member Responsibilities**

Team members have a responsibility to conduct themselves professionally during treatment team meetings including coming prepared, acting civilly, and communicating clearly (Vietz et al., 2019; Vinokur-Kaplan, 1995; Walton et al., 2020; Yank et al., 1994). Vinokur-Kaplan (1995) reports that when members of a mental health treatment team act professionally and are made to feel equally valued, it positively influences team effectiveness. Vietz et al. (2019) suggest the following skills lead to successful treatment team meetings: collaborative clinical reasoning, organization, managing demanding situations and error management, self-control, and empathy. Walton et al. (2020) contributes by identifying a list of challenges that teams have faced when attempting interdisciplinary teamwork process improvement. These include ineffective communication, differences in personalities, role and responsibility confusion, lack of leadership, and poor time management (Walton et al., 2020). While healthcare providers are expected to have developed these skills to successfully navigate these pitfalls, it is not always the case. This suggests a responsibility of leadership to identify issues and provide direction or remediation when indicated (Yank et al., 1994).

**Team Member Satisfaction**

Banfield et al. (2018) reported that after implementation of a rounding tool, 80% of first year doctors who were surveyed reported having a better understanding of the treatment plan and
100% felt empowered to ask for clarifications from more senior doctors. Mercedes et al. (2016) conducted a systematic review that included eight studies for effectiveness of multidisciplinary rounds and reported statistically significant staff satisfaction improvement after the initiation of a standardized communication tool. Authors of five articles infer improved team member satisfaction based on the idea that improved communication among team members and a more efficient process inherently improves satisfaction (Gilliland et al., 2018; Krishnamohan et al., 2019; Mattinson & Cheeseman, 2018; Patel et al., 2019; Shetty et al., 2017).

**Patient Length of Stay (LOS) and Recidivism**

Patient LOS and recidivism were commonly analyzed post-intervention as measures of success, but studies showed mixed results (Banfield et al., 2018; Gilliland et al., 2018; Mattinson & Cheeseman, 2018; Mercedes et al., 2016; Patel et al., 2019). Banfield et al. (2018) and Gilliland et al. (2018) mention decreased LOS or recidivism anecdotally because of timely and safe discharges. Mercedes et al. (2016) reports that three studies in their systematic review demonstrated mixed results; one decreased LOS, one demonstrated no change in LOS, and one showed an increased LOS. Mattinson and Cheeseman (2018) indicated no significant reduction in LOS and explained that this may be caused by a lack of resources outside the acute care setting that inpatient processes would not be able to positively impact. Patel et al. (2019) reports that while there was no significant reduction in LOS, 30-day readmission rate was reduced (12.6% intervention group and 18.9% control group).

**Theoretical Framework**

Duffy (2018) developed the quality-caring model (QCM); a middle range theoretical framework focused on professional nurses as an integral part of multidisciplinary teams with caring relationships as the key driver for improved patient outcomes. The major components of
this framework include humans in relationship, relationship-centered professional encounters, relational capacity, feeling cared for, practice improvement, and self-advancing systems (Duffy, 2018). The framework is based on the core idea that relationship building in a manner that results in people feeling cared for will create more motivation by individuals to engage in health promoting activities (Baggett et al., 2016).

Non-provider team members (nurse manager, therapy manager, UR clinician, discharge planner, and recreation therapist) reported a lack of feeling cared for by others team members. They found treatment team meetings laborious, ineffective, and not beneficial to patients. Patients were not provided the opportunity to participate in the treatment team process which left them feeling their input into their own care was unimportant. Using the QCM framework to develop a treatment team meeting process that encourages relationship centered encounters with each other and with patients resulted in more engaged individuals, actively participating in treatment planning and follow through.

A major influence on the QCM is the Complex Systems Theory and Duffy (2018) proposes that “through continuous improvement processes, individual healthcare providers and systems address revising their practice using internal and external evidence as guides, generating practice changes that are ongoing and innovative, and allowing for natural self-advancement” (p. 42). This project’s purpose aligns with the QCM by having a vision to improve a process (interdisciplinary treatment team) using internal evidence (team member input and template) and external evidence (existing evidence from a thorough literature review) as guides to generate practice changes (collaborative approach to patient-centered care) allowing for natural self-advancement (increased team member autonomy and patient involvement) (Duffy, 2018).
Methods

This process improvement project was designed to create a treatment team format that would increase treatment team member satisfaction, improve efficiency, and increase helpfulness to patients.

Design

A quantitative, quasi-experimental design was used to investigate pre- and post-intervention treatment team members’ perceptions, treatment team meeting time/delays/interruptions, and LOS/recidivism rates. A purposive, convenience sample of behavioral health team members completed the survey to determine satisfaction and perceptions of efficiency and helpfulness to patients. Participants were recruited through verbal and electronic methods. Recruitment efforts occurred after the pre-intervention observation period to prevent potential changes in team member behavior resulting from project awareness. The project, including purpose, goals, and objectives, was introduced in staff meetings, the best practice committee meeting, and in treatment team meetings. Additionally, an email with project details and process improvement importance accompanied the survey request to participate. Completion of the survey functioned as consent to participate in the project.

Translational Framework

The Model for Improvement is a translational framework that consists of two parts: three fundamental questions and rapid testing cycles (Institute for Healthcare Improvement [IHI], n.d.). The model’s questions provided guidance for the implementation of this project: what is to be accomplished (set aims), how will the team know a change is an improvement (establish measures), and what change can be made that will result in an improvement (selecting changes) (IHI, n.d.). Plan-Do-Study-Act (PDSA) cycles were used to conduct rapid, small-scale testing of
the selected changes in a real work environment. By using this structured method, results and positive patient outcomes were realized sooner and resources, such as time and costs, saved. Additionally, failures were quickly recognized and revised as needed. This model provided an excellent framework for this project by providing the team with the focus and steps necessary to set a clear, time specific aim, establish measurable goals, select the most beneficial, evidence-based changes, and conduct enough rapid cycle tests to refine those changes until they resulted in sustained improvement.

**Setting**

This process improvement project took place within a large, tertiary acute care facility in an urban area in the southern US. At the time of this study, 51 licensed inpatient behavioral health beds were open and staffed for use. Twelve beds were designated specifically for geriatric patients, 12 for adult patients with intensive management needs, and 27 for adult patients with mental health and/or substance misuse treatment needs. Each treatment team meeting included a review of all patients admitted to the inpatient BH units. Each patient case was discussed on day one and day seven of their inpatient stay. Number of patients discussed each day was dependent upon census fluctuations. No adolescents or pediatric patients receive inpatient BH treatment within this facility. The average daily census for 2021 was approximately 40 with annual visits over 2000. Initially, the treatment team meeting setting was a large group room. Some team members attended in person and others attended virtually. During PDSA cycle one, the meetings were moved from in person to a virtual platform.

**Sample**

All team members within the BH unit who had attended or would potentially have attended treatment team meetings three months prior to the project were invited to participate in
a pre-intervention survey. Roles of participants included BH providers (physicians, physician assistants, nurse practitioners), nurses, therapists, discharge planners, and utilization review clinicians. The pre-intervention sample pool consisted of 28 team members with 18 completing surveys. Team members who attended a treatment team meeting after the intervention were invited to participate in a post-intervention survey. The post-intervention sample pool consisted of 27 team members with 17 completing surveys.

**Intervention**

Mattinson and Cheeseman (2018) reported at the time of their study, there were no evidence based best practices or standard of care for structured psychiatric treatment team meetings. This review of literature revealed a similar gap. Based on the review of current evidence, the intervention for this project included implementation of a standardized template and format, structured roles and responsibilities, and strong meeting facilitation. A template and format were created based on the SCAMPER (Social needs, Community Mental Health Team Liaison, Assessment requirements, Mental Health Act, Prescriptions, Engagement with relatives, and Risk assessments/pass plans) tool (Mattinson & Cheeseman, 2018). This tool was designed for use on a behavioral health unit but was created in Scotland therefore not all components were transferable to the project. Additionally, the components were not role specific. Structured review of patient templates created for this project are role specific and include relevant components, including input from the patient (Appendices A, B, C, D, and E). Removing role-based tasks from the meeting, required individual prep work but saved time for the group. For example, UR clinicians review and gather insurance and reimbursement related information to bring to the meeting rather than reviewing during meeting time. Primary nurses gather clinical information and speak with each patient prior to treatment team to bring in the voice of the
patient. Team members from each role have a responsibility to complete their template prior to the meeting and to further encourage input from all roles, a standard rounding order was developed as follows: UR clinician, therapist, nurse, provider, then discharge planner.

To further improve efficiency, daily discharge planning was removed from treatment team meetings and moved to one-to-one meetings between the discharge planners and the providers. In doing so, whole team meetings were reduced from seven days a week to three days a week to focus only on treatment planning. Meeting cadence took regulatory requirements into account since all patients must have a treatment team within 72 hours of arrival and every seven days thereafter (see Appendix F).

**Plan-Do-Study-Act (PDSA) Cycles**

Five PDSA cycles were completed, and modifications made based upon input from treatment team members, nurse manager, therapy manager, and medical director.

**PDSA One.** During cycle one, it was determined that in person meetings were not working well due to limited space and technology issues. It was a large group and while meeting in person was conducive to teamwork, the available space would not allow for social distancing as needed during the COVID-19 pandemic. Additionally, the UR role had been turned into a remote position and those team members were unable to hear the on-site team effectively. The meetings were moved to a virtual format. The providers did not have cameras, but they were purchased and installed during this cycle to encourage as much teamwork as possible while meeting virtually.

**PDSA Two.** Cycle two focused on re-evaluating the meeting structure after changing to a virtual format. Because there is a dedicated team on the 12 bed Geriatric unit, it prompted consideration of a separate treatment team meeting. The new team format included the provider,
therapist, discharge planner, and primary nurse attending. Added benefits to this format were an in-person meeting (better relationship building), the primary nurse attending rather than the nurse manager, and the meeting time was moved earlier in the day (facilitates earlier discharges and improves patient flow). An attempt was made to move the primary nurse into the treatment team meeting on the adult unit as well, however, due to the size of the unit (39 patients), it was not feasible to implement there. The barrier was coordination of five nurses joining at separate times without creating significant delays.

**PDSA Three.** A group facilitator was implemented during cycle three. The UR clinician became the facilitator of the meeting since they had the best overview of the planning process. Prior to the new format, team members tended to report out the same story just from a distinct perspective rather than moving through a patient’s treatment plan toward discharge. The UR clinicians were particularly good at redirecting the conversation back to planning rather than reporting out, so they were the best choice to become meeting facilitator. Additionally, during this cycle code status was added to the nursing template to ensure that this was addressed for each patient.

**PDSA Four.** The focus of cycle four was the patient order of the treatment team list. Initially, the treatment team list was set up to be in the order of patient rooms to make it easier for the team to follow. While this worked well for the team, multiple providers requested the order of the treatment team patients be batched together so they would not have to be present when patients assigned to other providers were being discussed. An additional request was made by one of the psychiatrists for each of the three to arrive to treatment team every 30 minutes. While the request to batch was granted, the request for 30-minute intervals was not as it would have required all other roles who participate in treatment team to be present for an hour and a
half, waiting between groups of patients, only for the convenience of psychiatrists. This request would have returned the process to pre-intervention flow and had potential to negatively affect the progress made in non-provider team member satisfaction (a change only for provider convenience at the expense of the rest of the team) and efficiency (all other team members waiting between groups of patients for the next provider to arrive).

**PDSA Five.** Cycle five continued to focus on the batching of patients for psychiatrist convenience while providing equity of time spent among them during treatment team. To reduce delays, all providers were required to be present at the beginning of each treatment team meeting and could leave the meeting after their batched group of patients was discussed. A concern was raised that if the same order were followed each treatment team meeting, the same psychiatrist would go last, thus spending unproductive time waiting. To ensure equity for each provider, the provider group to present first rotated each treatment team day. This afforded providers the ability to move on to other tasks of the day in an equitable manner.

**Data Collection**

**Procedure**

The project site research council and an external Institutional Review Board (IRB) determined that this process improvement project was not research and IRB approval was not required. Observations of treatment team meetings were conducted by the project lead over 14 consecutive days to collect data regarding delays and interruptions. After observations and pre-intervention surveys were completed, education of the treatment team template was provided using the 4P model (see Appendix G). The 4P (purpose, picture, plan, and part) model is the preferred method of providing education on new initiatives and practice changes at the project site, so team members were familiar with this format and thus more receptive to the education.
(Bridges, 2009). After one week of education, the treatment team process change was implemented. Reinforcement of the process was provided in real time during meetings as needed. LOS and recidivism data were after intervention implementation, observations were conducted for 14 consecutive days to collect data regarding delays and interruptions.

**Instruments**

**Survey.** No previously existing survey that met the needs of this project was identified. The survey used in the SCAMPER study was created specifically for BH inpatient facility but asked study participants to complete the survey on paper and did not ask the questions to address the goals of this process improvement project (Mattinson & Cheeseman, 2018). Therefore, survey questions were independently created and formatted electronically through Survey Monkey (surveymonkey.com) and distributed via email to potential participants. The first two survey items gathered demographic information: role and verification of participation in treatment team over the last three months. The next three items asked participants to score items using a Likert scale addressing satisfaction, efficiency, and helpfulness to patients (see Appendix H). The survey was sent electronically to all eligible team members pre- and post-intervention.

**Reports and Observations.** Helpfulness to patient was measured through analysis of LOS and recidivism rates. Aggregate LOS and recidivism data were obtained from monthly reports. No patient identifiers were recorded during data collection to ensure patient privacy. Post-intervention data (observations and survey) were collected one month post intervention start date to provide enough time for treatment team members to become familiar with the new process. Two months of post-intervention LOS and recidivism data were compared to two months of pre-intervention measurements. Post-intervention surveys were conducted after the third of five PDSA cycles. Efficiency data (meeting times and delays) were documented and
measured through observations 14 days before launching the new process and 14 days after implementation between PDSA cycles three and four. Observation data and survey data were primarily sourced.

**Data Analysis**

Metrics analyzed included team member satisfaction, efficiency, helpfulness to patients, LOS, recidivism, and meeting time/delays/distractions. The data analysis included descriptive and inferential statistics using Microsoft Excel Data Pak (descriptive) and IBM SPSS software (non-parametric) (International Business Machines [IBM], 2021; Microsoft 365, 2021). Descriptive statistics were collected to check normalcy assumptions and determine mean score were conducted to determine whether significant differences were observed for each measure, pre- and post- intervention.

**Results**

**Sample**

Treatment team members within all five team roles were invited to anonymously participate in pre- and post-intervention surveys. Survey participation by role is shown in Table 1. Twenty-two pre-intervention survey responses were received. Four respondents had not participated in a treatment team meeting during the previous three-month period and therefore excluded from data analysis. The remaining 18 pre-intervention survey responses were included. Twenty-three post-intervention survey responses were received. Six respondents had not participated in the new treatment team format and therefore excluded from data analysis. Seventeen post-intervention survey responses remained and were included. Pre- and post-intervention data were not paired because of staffing changes. There were 27 treatment team
members that met criteria to participate in the post-intervention survey broken down following roles: physician/APP (8), nurse (7), therapist (6), UR (3), and DP (3).

Table 1

Respondents by Role

<table>
<thead>
<tr>
<th>Role</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Physician/APP</td>
<td>1</td>
<td>5.56</td>
</tr>
<tr>
<td>Nurse</td>
<td>7</td>
<td>38.89</td>
</tr>
<tr>
<td>Therapist</td>
<td>6</td>
<td>33.33</td>
</tr>
<tr>
<td>Utilization Review (UR)</td>
<td>2</td>
<td>11.11</td>
</tr>
<tr>
<td>Discharge Planner (DP)</td>
<td>2</td>
<td>11.11</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. Physician/APP did not receive email request to participate in the post-intervention survey.*

Survey Results

A Likert scale (1 = lowest and 5 = highest) was used for questions on the pre- and post-intervention survey, as seen in Figure 1. Descriptive analysis of survey data revealed improvement in team member satisfaction with treatment team process, perceived efficiency of the treatment team meetings, and perceived treatment team helpfulness to patients.

Figure 1

*Pre- and Post-Intervention Survey Results*
To determine significance in treatment team member satisfaction, perception of efficiency, and perception of helpfulness to patients, Mann Whitney U tests were performed. Analysis of differences in pre- and post-intervention team member satisfaction with treatment team process revealed a significant increase (p = .001). Analysis of differences in pre-and post-intervention perceived efficiency of treatment team process revealed a significant increase (p = .003). Analysis of differences in pre-and post-intervention perceived treatment team helpfulness to patients was not significantly different (p = .053).

**LOS and Recidivism**

To analyze LOS and recidivism, data were collected for the two months pre-intervention and two months post-intervention with one month in between. As shown in Table 2, there was a slight improvement in both LOS and the recidivism rate. A two-sample proportion test was conducted and revealed that there is no sufficient evidence at a p=0.05 alpha to conclude that pre- and post-intervention LOS or recidivism data differ significantly. Neither LOS nor recidivism differed significantly pre- and post-treatment team process change.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>LOS (in days)</td>
<td>8.34</td>
<td>297</td>
<td>11.5</td>
</tr>
<tr>
<td>Recidivism rate (%)</td>
<td>21.54 n/a</td>
<td>0.018</td>
<td>19.84 n/a</td>
</tr>
</tbody>
</table>
Observations

By removing role-based tasks from meetings and uncoupling treatment team and daily discharge huddle, time spent in treatment team meetings and number of delays or interruptions decreased. The days per week that meetings occurred was reduced from seven days to three. Pre-intervention, team members spent an average of 629 minutes per week in treatment team meetings and experienced an average of 11 delays per meeting. Post-intervention, team members spent an average of 248 minutes per week in treatment team meetings with an average of two delays per meeting.

Discussion

The purpose of this project was to improve the quality of the current psychiatric treatment team process on a 51-bed inpatient behavioral health unit. The project was successful in improving treatment team member satisfaction and improving team efficiency.

Team Member Satisfaction

Survey results revealed a statistically significant improvement in both team member satisfaction and perceived efficiency in treatment team process when surveyed two months after the new format was implemented. Treatment team members were more satisfied when meetings became more structured and efficient. These findings are consistent with studies that implemented a meeting template or tool and provided consistent facilitation to improve meeting efficiency (Gilliland et al., 2018; Krishnamohan et al., 2019; Mattinson & Cheeseman, 2018; Mercedes et al., 2016; Patel et al., 2019; Shetty et al., 2017). Additionally, team members who felt uncared for in the old process were less motivated to engage in a process to improve patient care. The new format provided a consistent method for all team members’ input to be given by following the same order of discussion by role for each patient, with each following their
template as a guide. Developing the process improvement in the framework of the quality-caring model proved to increase team member engagement and thus satisfaction in the treatment team process (Duffy, 2018). To facilitate the culture change, active leadership participation and coaching were required to ensure that team members did not revert to the previous, less efficient process. Strong leadership and facilitation were key factors in the success of this project and is consistent with other studies (Collins et al., 2014; Vinokur-Kaplan, 1995).

Of note, no providers participated in the post-intervention survey, so it is not understood if providers’ satisfaction increased or if they perceived an improvement in treatment team meeting efficiency. The providers were inadvertently left out of the post-intervention survey notification process; however, they were most vocal against the treatment team process changes. Anecdotally there is evidence that provider satisfaction decreased while non-provider treatment team satisfaction increased. Banfield et al. (2018) found a similar lack of physician engagement in their rounding process improvement study.

Helpfulness to Patients

The survey revealed an improvement in perception of treatment team to be helpful to patients, however, it was not a statistically significant difference. This result was not surprising as many of the survey respondents were nurses. As patient advocates, nurses believe patients should be active participants during treatment team or at the very least that the primary nurse should be participating in treatment team, however there is evidence to show that this can be challenging to operationalize, adding extensive meeting time without significant benefit (Fischer & Neale, 2008; Haines et al., 2018). Haines et al. (2018) suggest that including the patient in the treatment team meeting simply gives them the opportunity to make requests for things they want in the moment, such as television, medications, or food rather than actively participating in
treatment planning. While patients are not present at the meetings in this meeting format, the new process does provide an opportunity for the voice of the patient to be heard. The nurse who participates in treatment team for the day asks each patient on the list what is most important to them to have discussed during treatment team and brings the topic to the meeting. They return to the patient to provide information after each meeting.

Other measures of helpfulness to patients are reduced LOS and recidivism. While both LOS and recidivism rates declined, there were no statistically significant differences noted. There are complex barriers to decreasing LOS and recidivism, such as limited outpatient resources, limited housing to meet patient needs, and negative patient behaviors or co-occurring personality disorders (Mattinson & Cheeseman, 2018). Most patients fell within the eight-to-eleven-day range; however, the data include LOS of greater than 200 days. In those cases, it can be assumed that there were barriers creating an extended LOS that the new treatment team format would not have impacted.

Limitations

During all stages of implementation, there was resistance to change by team members in three specific roles: providers, UR clinicians, and discharge planners. The catalyst for resistance was consistent with what others describe as a difference in professional power dynamics and a conflict of ideas in what each considers important to the overall treatment plan (Haines et al., 2018).

Provider staffing (resignations, locums, providers covering from other facilities, new hires with lack of provider orientation) created a lack of project awareness and thus a barrier to active engagement by providers. Additionally, providers did not receive post-intervention survey emails due to an inadvertent oversight which limited provider input into this project.
Data collection and analysis limitations were identified. Post-intervention surveys were conducted prior to completion of all five PDSA cycles. Additionally, only two months of LOS and recidivism data were collected for analysis.

This project was conducted during the height of the COVID-19 pandemic. This complicated the process improvement process, especially one that requires multiple team members to communicate effectively. Social distancing, mask wearing, and moving to virtual meetings all inherently make effective communication more challenging. Additionally, at certain times during this project, there were periods of multiple team members absences from work or leaving jobs altogether. The staffing shortages and stress of working under the threat that COVID-19 presented often resulted in distractions or impatience with others on the team.

**Recommendations for Future Study**

Future study for this project includes conducting another round of observations to ensure drift from intended process has not occurred. Once reinforcement of the process is complete, another round of surveys will be distributed and analyzed. Focus will be given to provider input with stratification of provider and non-provider data to determine level of satisfaction for each group. LOS/recidivism data will continue to be monitored and recalculated.

Patient flow from Emergency Departments continues to be a challenge (Bauchwitz et al., 2018). While the impact of the treatment team change on patient flow from the Emergency Department (ED) was not analyzed during this project, it has the potential to reduce delay of admissions for those waiting for an inpatient BH bed from the previous night and warrants future study.
Relevance and Recommendations for Clinical Practice

Implementation of a standardized template and format, with specific roles and responsibilities, and strong meeting facilitation provides an efficient, concise treatment team meeting that increases team member satisfaction and has the potential to improve patient outcomes. This project led to a successful, sustainable, transferable process that will be considered for adopted by all inpatient behavioral health units within the organization.

Conclusion

When psychiatric treatment team meetings are perceived as a waste of time and energy, frustration and lack of engagement results among multidisciplinary team members. The quality of the psychiatric treatment team process on a 51-bed inpatient behavioral health unit improved throughout this project. The intervention involving implementation of role-based templates and strong meeting facilitation contributed to a statistically significant improvement in team member satisfaction. While there were also improvements in perceptions of helpfulness to patients, length of stay, and recidivism, they did not prove to be statistically significant. Treatment team members are more satisfied when meetings are efficient and when they believe their input is valued. Leadership involvement and meeting facilitation are important to ensure team members come prepared and focus on task. Most importantly, patients are more likely to benefit when treatment team members are engaged in treatment planning.
References


http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx


https://www.ibm.com


https://www.microsoft.com


https://doi.org/10.1097/ncm.0000000000000318


https://doi.org/10.1007/bf02106536


https://doi.org/10.1002/bs.3830390405
### Appendix A

**STRUCTURED REVIEW OF PATIENT CARE - Utilization Review**

<table>
<thead>
<tr>
<th>Patient details (or Sticker) and Rm #</th>
<th>Date of Treatment Team:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td></td>
</tr>
<tr>
<td>First Name:</td>
<td></td>
</tr>
<tr>
<td>DOB:</td>
<td></td>
</tr>
</tbody>
</table>

**UR Review:**

<table>
<thead>
<tr>
<th>Admission Date/# of days since arrival</th>
<th>Current Working Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payor Source</td>
<td>UR Review Date</td>
</tr>
<tr>
<td>Last Covered Day and If Passed, # of Days Uncovered</td>
<td>Peer Review Date and Feedback</td>
</tr>
<tr>
<td>Medicare/Avoidable Days</td>
<td></td>
</tr>
</tbody>
</table>

**Tasks to be completed:**
## Appendix B

**STRUCTURED REVIEW OF PATIENT CARE - Therapist Review**

<table>
<thead>
<tr>
<th>Patient details (or Sticker) and Rm #</th>
<th>Date of Treatment Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name</td>
<td></td>
</tr>
<tr>
<td>First Name</td>
<td></td>
</tr>
<tr>
<td>DOB</td>
<td></td>
</tr>
</tbody>
</table>

**Therapy Review:**

<table>
<thead>
<tr>
<th>Clinical Observations</th>
<th>Participation in Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collateral Info</th>
<th>Psychosocial Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family Meeting Needs</th>
<th>Functional Level/Level of Care Needed at D/C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guardian Competency</th>
<th>Established Community Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Treatment Team Discussion:**

<table>
<thead>
<tr>
<th>Tasks to be completed:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
# Structured Review of Patient Care - Nursing Review

<table>
<thead>
<tr>
<th>Patient details (or Sticker) and Rm #</th>
<th>Date of Treatment Team:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td>Current Legal Status:</td>
</tr>
<tr>
<td>First Name:</td>
<td>IVC Expiration Date:</td>
</tr>
<tr>
<td>DOB:</td>
<td>IVC Status Action Needed</td>
</tr>
</tbody>
</table>

**Nursing Review:**

<table>
<thead>
<tr>
<th>Active Symptoms and Behaviors</th>
<th>Continued Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRN Meds Given in Last 24 hours and Indication</td>
<td>Medical Concerns or Requests</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sleep Hours and Pattern</th>
<th>Visitors and Contriband Concerns</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Current Precautions</th>
<th>Misc.</th>
</tr>
</thead>
</table>

**Patient View Discussion:** "We will be discussing your care today as a team. What do you think would be most helpful to you that we need to talk about?"

**Tasks to be completed by primary nurse:**
### STRUCTURED REVIEW OF PATIENT CARE - Provider

<table>
<thead>
<tr>
<th>Patient details (or Sticker) and Rm #</th>
<th>Date of Treatment Team:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td>Anticipated D/C Date</td>
</tr>
<tr>
<td>First Name:</td>
<td>Discharge Delayed (N/Y)</td>
</tr>
<tr>
<td>DOB:</td>
<td>New D/C Date</td>
</tr>
</tbody>
</table>

#### Provider Review:

<table>
<thead>
<tr>
<th>Medication Management Plan</th>
<th>Plans for ECT or other alternative treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(adjustments and expected outcome)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family or Support Person Meeting Needs</th>
<th>Medical Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continue all current precautions?</th>
<th>Outstanding Assessments/Consults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Request to Move Patient Room when Available</th>
<th>Level of Outpatient Care Needed at D/C</th>
</tr>
</thead>
</table>

**Further Discussion:**
1. If D/C delayed, share with team why a patient isn’t ready to be discharged to a lower level of care at this time.
2. Is there anything you need from anyone on the care team that hasn’t been identified?

**Tasks to be completed:**
# Appendix E

## STRUCTURED REVIEW OF PATIENT CARE - BH Care Specialist

<table>
<thead>
<tr>
<th>Patient details (or Sticker) and Rm #</th>
<th>Date of Treatment Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
<td>D/C Date</td>
</tr>
<tr>
<td>First Name:</td>
<td></td>
</tr>
<tr>
<td>DOB:</td>
<td></td>
</tr>
<tr>
<td>BHCS:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barriers to D/C</th>
<th>Transportation Method</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Medications Required at D/C</th>
<th>Appropriate for D/C Lounge</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Other Concerns</th>
<th>PPD and COVID testing for D/C</th>
</tr>
</thead>
</table>

Tasks to be completed:
Appendix F

Discharge huddle and treatment team will be uncoupled. Treatment team will occur via Zoom on Monday, Wednesday, and Friday at 1p. It will only include patients needing an initial review (within 72 hours), day 7 review, and those needing a safety summit review. Each team member will come to treatment team prepared with role specific structured review of patient care ready. Template forms are not to be part of the medical record. Schedule for initial treatment team as follows:

<table>
<thead>
<tr>
<th>If admitted on...</th>
<th>Initial Treatment Team due...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>Monday</td>
</tr>
<tr>
<td>Monday</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Wednesday</td>
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<tr>
<td>Wednesday</td>
<td>Friday</td>
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<tr>
<td>Thursday</td>
<td>Friday</td>
</tr>
<tr>
<td>Friday</td>
<td>Monday</td>
</tr>
<tr>
<td>Saturday</td>
<td>Monday</td>
</tr>
</tbody>
</table>
## Appendix G

### The 4P communication tool

<table>
<thead>
<tr>
<th><strong>Purpose:</strong> Why are we doing this?</th>
<th>Our current treatment team process provides opportunities to become more effective and efficient. A recent literature review reveals that a treatment team template, role clarity, and clear purpose can improve treatment team member satisfaction and helpfulness to patients.</th>
</tr>
</thead>
</table>
| **Picture:** What will it look like when we get there? | ✓ Each team member will have clear roles and responsibilities, before, during and after treatment team meetings  
✓ Time delays and interruptions will be reduced  
✓ An evidence-based treatment team template will be used to streamline discussion  
✓ Barriers to discharges will be identified and removed, decreasing length of stay (LOS) and 30-day readmissions  
✓ Patient care and team member satisfaction will be improved |
| **Plan:** What is our plan to change? | A new treatment team format will be piloted. Tweaks to the process will be made using the Plan-Do-Study-Act (PDSA) model. Measurements of success will include team member satisfaction, time delays/interruptions, and LOS/30 day readmits. |
| **Part:** What is my role going to be in the plan? | Review template and roles/responsibilities, come to meetings prepared, remain patient and engaged while the process is initiated and modified, and provide constructive feedback on process. |
Appendix H

Treatment Team Process
Pre-Intervention Survey

1. I have participated in an FMC treatment team in the last 3 months.
   - Yes
   - No

2. I work in the following role:
   - Physician or APP
   - Nurse
   - Social Worker
   - Utilization Review
   - Discharge Planner

3. I am satisfied with the current treatment team process.
   - Very satisfied
   - Satisfied
   - Neither satisfied nor dissatisfied
   - Dissatisfied
   - Very dissatisfied

4. The current treatment team process is efficient.
   - Strongly Agree
   - Agree
   - Neither Agree nor Disagree
   - Disagree
   - Strongly Disagree

5. The current treatment team process is helpful to our patients.
   - Extremely helpful
   - Very helpful
   - Somewhat helpful
   - Not so helpful
   - Not at all helpful
Appendix I

**Treatment Team Process**

**Post-Intervention Survey**

1. I have participated in an FMC treatment team meeting using the new format.
   - Yes
   - No

2. I work in the following role:
   - [ ] Physician or APP
   - [ ] Nurse
   - [ ] Social Worker
   - [ ] Utilization Review
   - [ ] Discharge Planner

3. I am more satisfied with the new treatment team process.
   - [ ] Very satisfied
   - [ ] Satisfied
   - [ ] Neither satisfied nor dissatisfied
   - [ ] Dissatisfied
   - [ ] Very dissatisfied

4. The new treatment team process is more efficient than the previous format.
   - [ ] Strongly Agree
   - [ ] Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Disagree
   - [ ] Strongly Disagree

5. The new treatment team process is more helpful to our patients than the previous format.
   - [ ] Extremely helpful
   - [ ] Very helpful
   - [ ] Somewhat helpful
   - [ ] Not so helpful
   - [ ] Not at all helpful