Qualitative Improvement Project Aimed to Develop 1:1 Patient Monitoring Guidelines in the form of a Flowchart for Inpatients Diagnosed with Components of Disorganized Behaviors.

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Guidelines in the form of a Flowchart for Inpatients Diagnosed with Components of

Disorganized Behaviors.

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges (Healthy people, 2020). Mental health is essential to personal well-being, family, and interpersonal relationships as well as the ability to contribute to community or society (Healthy people, 2020). Mental health inpatient hospitalizations have been on the rise with the increase in societal challenges reflected by an increase in social disparities, racial and ethical diversities, and this nations response to COVID that has brought uncertainties to all social groups. People with behavioral and psychotic experiences, increasing depression, drug or alcohol addiction are in disparate need of a safe and structured environment such as an inpatient mental health unit, to stabilize (Magoon et al., 2020).

Due to the severity of mental health symptoms, which range from being suicidal, aggressive, disoriented or confused, intrusive, mental health patients are often placed on a 1:1 observation or sitters. During their stay in the hospital, 13–16% of psychiatric inpatients will be placed on continuous observation, which includes a staff member continuously remaining within eyesight of a patient at all times (Barnicot et al., 2017). This intervention is frequently utilized to monitor patient symptoms with a desired outcome of maintaining safety for the patient and the unit. This proposal will address a quality improvement project related to creating awareness on the financial and staffing impact of a 1:1 sitter utilization within the inpatient mental health units. This proposal will also seek to develop guidelines/tools that will be used to make sure patients on a 1:1 sitter are timely reassessed to facilitate the discontinuation of this intervention as appropriate. The

expected outcome of these guidelines is to reduce the time patients are spent on 1:1 sitter, which will directly affect the facility financial and staffing resources.

Problem Statement and Project Significance and background

Staff nurses in inpatient acute mental health unit, one of the mental health units at a Hospital Setting, are not currently using standard guidelines/tools that is tailored towards reassessing patients on 1:1 sitters to facilitate the discontinuation of this intervention. The focus of the project is to develop a patient monitoring guideline and algorithm tool. Patient safety and quality improvement are intertwined. Quality improvement is gradually gaining grounds in the health care field and most improvement projects begin with staff/patient asking questions or bringing up an idea on how a situation/system can be better implemented. The notion that 1:1 sitter improves quality of care and increase unit safety can be challenged using developed guidelines as well as training and standardized decision-making tools (Wood et al., 2018). With the increase in sitter use in hospitals many associated challenges and burdens have come into play. Quality improvement projects have been carried out to determine the most appropriate process to assure efficient resource utilization and safe patient outcomes. One of such projects developed to reduce use of 1:1 sitter, was carried out by a group of proactive behavioral health managers in a general hospital using a quality improvement project.

The project shows the average monthly cost of observers was reduced by 33%, and length of stay was reduced 15% (Pinkhasov, et al., 2018). The quality project developed care protocols for 1:1 sitter that resulted in improvement in quality, reduction in cost, and enhanced behavioral health integration in the general hospital. With regards to Telesitters, it was found out that Telesitters also stand to reduce factors contributing to burnout of frontline patient care staff, mainly nurses, hospital aides, and healthcare security. Telesitters are staff who watched patients place on

1:1 monitoring using a device such as a computer. In a 2014 national survey of healthcare safety professionals, 59.2% felt the use of Telesitters for 1:1 observation would be useful (Krasniansky, 2020).

Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning (Healthy people, 2020). Mental disorders contribute to a host of problems. These problems also eventually influence individual wellbeing, which can contribute to challenges within families, healthcare facilities, communities, creating a domino effect as these challenges evolve into both social and global issues. The number of patients placed on a 1:1 sitter, especially in inpatient psychiatry, has been on the increase over the past several years; creating not only a financial burden on the hospitals but also creating staffing shortages and staff unsatisfaction (Voetelink et al., 2019). One to one sitter has also been a beneficial tool to patient outcome in that, it promotes staff and patient engagement and also helps keep patient safe.

The rationale for determining patients on 1:1 observation often stems from the concerns that the patient might be either actively suicidal and not contracting for safety, disoriented/confused, intrusive, or agitated. Following these symptoms, patients and staff are at risk for being assaulted (Wilson et al., 2017). Leaving these patients unsupervised poses an increased risk to both patients and staff. Placing these patients on 1:1 sitter monitoring is an intervention aimed to keep patients safe through observation by staff. This intervention is intended to assure patient and staff safety is upheld. The responsibility of the 1:1 sitter often includes helping to engage the patient, maintaining their safety, redirecting intrusive behavior, which eventually promotes a healing environment for other patients.

Hospitals have been facing this problem for many years and continue to seek for alternative

interventions that maintain staff/patient safety, as well as reduce the financial burden it places on them. The high variability in determining when a 1:1 staffing for safety is indicated, and the appropriate longevity of 1:1 patient monitoring, leads to resource strain and high cost to the hospital (Voetelink et al., 2019). Additionally, a shortage of ancillary personal throughout the healthcare facility, leads to a high degree of patient and professional staff dissatisfaction and a considerable amount of turmoil. Acute care hospitals in the United States can spend more than $1 million annually on sitters, and indications suggest this cost is increasing (Bock, 2017).

PICO Question

In an inpatient mental health unit serving patients 18 years and older, how does the implementation of a 1:1 Sitter Guideline influence unit budget and patient outcomes as compared to current practice?

Literature Search, Literature Matrix Table, Literature Synthesis

Literature Search

The data for the literature was obtained using various search terms such as safety in inpatient psychiatry, 1:1 sitter, safety strategies, cost of 1:1 sitter, ways to reduce 1:1 sitter, mental health symptoms. The databases used include Medline, EbSCO, Psych Info, CINAHL, web. The inclusion criteria were articles written in English, articles writer within 10 years span, articles on use of sitters in inpatient psychiatry and the cost of using these sitters. The exclusion criteria were articles on outpatient mental health settings as well as articles written in different languages.

Literature Matrix Table (Appendix 9, page 46)

Several articles were retrieved but not all were reviewed depending on the content of the articles. More than 18 articles were reviewed and retained. Literature Matrix Table (included in the Appendix 9 section, page 46) was designed to help the reader identify articles reviewed. It visually showed the purpose of the article, sample of the article, design of the article, intervention, and the results. These reviewed articles, are directly related to the project.

Literature Synthesis

The findings from the literature synthesis shows that hospital facilities are dealing with increasing number of patients placed on 1:1 sitter which is costing them lots of money. It is a problem so significant that there have been articles written to address the situation and create awareness (Wilson et al., 2017). The literature finding lacked evidence of any ways that are evidenced based to deal with the increasing cost (Voetelink et al., 2019). From the entire literature search, one can draw that it is important to develop a guideline that be used to guide the timely discontinuation of this intervention. Focusing on enabling the patient on 1:1 sitter to be ready for discharge, one could gather from the literature search that placing a patient on 1:1 sitter for many days during hospitalization delayed the discharge process, increasing length of hospitalization (Pinkhasov, et al., 2018).

Organizational Project Information

The Organization in which the project was conducted is located downtown in a metropolitan area with diverse population. This hospital serves a diverse and disparate population of people providing inpatient services to patients. Inpatient care is the most intensive level of treatment for individuals suffering from illnesses. Inpatient care for example offers 24-hour care in a safe and secure facility, making it best for patients with severe mental health or substance

abuse issues who require constant monitoring. Diversity refers to the numerous ways in which individuals and groups differ in their beliefs, behaviors, values, backgrounds, preferences, and biology (Issel, 2018). Patients who present to this hospital have varied culture, ethnicity, race and varied living conditions. Most of the patients admitted in the psychiatry inpatient unit for instance do not only have mental illnesses but are homeless. In mental health units, the intervention of using 1:1 sitter promotes safety and prevent injury for the patient as well as for the unit. This eventually improves quality of life and well-being. The sitters for patients who are placed on 1:1 due to suicide or self-injurious behaviors for instance are responsible to engage and distract these patients from their thoughts helping to promote self-confidence and eventually prevent them from injuring themselves (Wood et al., 2018).

The Gap Analysis

The problems encountered with this intervention are that there are limited tool/guidelines to monitor these patients hence; it is common to see patients on 1:1 observation for many days sometimes months. This decision on when to discontinue patients on 1:1 observation partly rests on how the patient's symptoms continue, resolve, or how the team members collaborate with each other to come up with specific interventions to address these symptoms. It is important to frequently reassess patients who are on 1:1 sitter status and choose the appropriate monitoring method instead of leaving them with sitters for a prolong period when their symptoms have improved (Voetelink et al., 2019).

Managing a nursing department budget becomes more challenging due to the additional staff needed to fill the 1:1 sitter needs each shift because of the increase in mental health related hospitalization. The reason for this explosion could be related firstly to increase severity of mental health symptoms and additional staff concerns stemming from greater numbers of hospital

admissions for older patients. Inpatient psychiatry across the country has seen an increase in hospitalization rates during Covid-19 pandemic supporting recent increase in 1:1 observation. Some alternatives that have been advocated for are the use of cameras to monitor patients that are on 1:1 observation (Krasniansky, 2020).

Many healthcare networks are exploring the possibility of TeleSitters, or virtual monitoring systems to support patient care (Krasniansky, 2020). These virtual monitoring systems however come with some ethical considerations that must be evaluated before being used. There has been some success with the use of Tele-sitter video observation system as an alternative to 1:1 sitter to improve patient safety and lower staffing cost at Benefits Health System (Spitzer, 2021). Some hospitals use specially trained "sitters" whose only role is to cover patients on 1:1 observation.

The expense of using sitters is crippling budgets, leaving fewer financial resources available to achieve strategic objectives. Hospitals, rehabilitation centers, and psychiatric facilities have been mandated to implement alternatives to using 1:1 caregiver (Hader, 2017). The American Psychiatrist Association is one of the bodies recommending the reduction of 1:1 observation and advocating for more patient/staff engagement. The analysis shows a gap that must be addressed.

Organization's Needs Assessment

This hospital is located downtown, and like many hospitals is facing increasing number of patients on a 1:1 sitter on its mental health units. This is in part due to increased prevalence and symptomologies of mental health disorders requiring hospitalizations. It is common to find patients admitted in mental health units at in this hospital who have been on 1:1 sitter for many days and sometimes months (Spainhower, personal communication, 2021). Another common phenomenon is that these 1:1 sitters are sometimes Registered Nurses (RN) who who at times may be working

overtime, which contributes to additional costs. Paying a RN who is on overtime is about triple the pay for a Certified Nursing Assistant (CNA), who can fill in this same role. For instance, an unlicensed staff working as a 1:1 sitter is paid about $15-$20/hour while a licensed RN assuming the same role is paid more than $38/hour depending on their seniority, the discrepancy on cost is significant. The amount triples for a RN who is working overtime/double time. All these factors put a huge burden on the hospital on the hospital's financial expenditures. (Spainhower, personal communication, 2021

Converting these hours into dollars demonstrates a huge cost on the hospital especially if nurses are paid for these overtimes. For example, if a licensed sitter is paid $20/hour, the total number of hours will be estimated to be $20.00 multiply by 2400.75 equaling $48,015/2weeks. If an RN who is paid $38.00/hour, the total amount in dollars will be estimated to be $38 multiply by 2400.75 equaling $91,228.5. This hourly rate increases when staff on 1:1 sitter are on overtime or double time. Other hospitals locally in the same metropolitan area, are facing increasing numbers of patients who need 1:1 sitters. Most of the staff in these hospitals share common concerns regarding the increasing number of patients who are on 1:1 observation.

Appendix 4: Strengths, Weaknesses, Opportunities, and Threats (SWOT Analysis)

Strengths	Weaknesses
-Staff has great teamwork spirit. -Management is open to new ideas. There is a suggestion box for both staff and patients to make suggestions/comments.	**-**Lacks process to discontinue patient on 1:1 sitter. -Systems are merging and there is a gap with this intervention. -RNs are mostly utilized to cover 1:1 sitters.

Opportunities	Threats
-Create awareness on impact of 1:1 sitters. -Develop guidelines to timely discontinue this intervention.	**-**This hospital will be closing its doors in July 2022. -The census in the unit is gradually decreasing.

The table above explores the strength, weaknesses, opportunities and threats of the hospital during the project timeframe. There is great team work spirit amongst staff and management is open to new ideas incorporating diversity. The hospital uses these strengths to explore its opportunities. With respect to weaknesses, the hospital currently merged with another healthcare system creating many gaps in processes. Many processes such as the discontinuation of 1:1 sitter was not clearly defined with patients remaining on 1:1 sitters for many days and RNs being used as 1:1 sitters. The hospital announced that it was closing its doors and as a result lost a lot of staff and the unit grid in inpatient psychiatry unit where the project was implemented was gradually decreasing.

Proposed Solution

The project's proposed solution as evidenced by literature is having a guideline/tool incorporated as a standard of care that allow nursing staff to assess patient mental stability to determine the need for a 1:1 care every shift which might be 8 hours or 12 hours. These guidelines/tools currently do not exist or even if they exist, it is not effective in reducing the number of patients with sitters, contrasting this problem to the desired outcome.

Theoretical or conceptual frameworks

Hospitals are struggling with the challenges caused by the increasing number of 1:1 sitter

needs that is the result of increased inpatient acuity for patients with mental health issues. The advent of 1:1 care resulted from the state and federal regulations against restraint use. Theoretical and conceptual frameworks recommend restraints and seclusion be minimal or zero in any given day. The Human Rights Based Approach (HRBA) is an example of a conceptual framework that is encouraged to be incorporated by psychiatry staff as they take care of patients (Broberg et al., 2020). HRBA framework emphasis on treating patients with dignity and eliminate the use of coercive measures in psychiatry. Following this framework, restraining patients, and putting them in seclusion is expected to be minimal. Instead, interventions such as using 1:1 sitter and incorporating individualized care are encouraged.

Another framework applicable to this project is Jean Watson's Caring Theory. This theory emphasis the development of a helping-trust relationship between the nurse and the patient. It includes congruence, empathy, and warmth, and the therapeutic use of self. Jean Watson believed that the strongest tool a nurse has is his or her mode of communication, which establishes a rapport with the patient as well as caring by the nurse (Natale et al., 2017). These theories support the importance of milieu management. Increasing staff on the milieu could potentially reduce the use of restraints. This is because the presence of staff in the milieu of the unit could be impacted positively and thus prevent escalating behavioral issues which may necessitate restraints. 1:1 sitter will be a favorable intervention with Jean Watson's Theory of Caring.

Overall Mission Statement

This hospital is part of a huge healthcare system. The mission of the healthcare system is driven to heal, discover and educate for longer, healthier lives (Fairview, 2020). The project mission statement is to ensure a 1:1 sitter intervention is monitored every shift and timely discontinued as appropriate. This project mission statement aligns with Fairview mission statement

due to the project's ability to ensure an intervention is appropriately monitored to help meet a patient's ability to function independently.

Project Aims/ Goal/objectives/Outcome

Patients on 1:1 sitter will be appropriately monitored by staff each shift which could be 8 hours or 12 hours, and the 1:1 sitter will be timely removed where appropriate based on developed guidelines.

Project Recommendations, Objectives, and Outcome Measures

Recommendation 1

Develop and implement a 1:1 Sitter Guideline for Inpatient Mental Health patients.

Objective 1

By week 2, the project director, will have developed specific guidelines for monitoring patients on 1:1 sitter in Inpatient Mental Health unit.

Outcome Measures

The guideline or tool will be created by the specific date.

Recommendation 2

Develop an educational process and provide education to staff and stakeholders on the 1:1 sitter Guideline for Inpatient Mental Health Patients.

Objective 2

By week 3 and week 4, the project director will educate staff (both charge nurses and staff) on these guidelines using paper handouts which will be distributed every shift by the charge nurses

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for a period of two weeks. Education will take place in a unit council meeting through teams as well as during shift changes.

Outcome Measure

There will be a list to check off staff who have been educated. 100% of staff including float pool/casual staff who work during these 2-week period will be educated.

Recommendation 3

Develop a tracking log to document 1:1 order is in place every shift with appropriate justification.

Objective 3

Every day of this project from week 5 through week 8, patients on 1:1 will be justified each shift.

Outcome Measure

There will be a checklist for all patients on 1:1 sitter. The project leader will be looking in the Electronic Health Record (EHR) to make sure there is an active order for all the patients on a 1:1.

Recommendation 4

Keep a tracking log to document staffing skill used as 1:1 Sitter.

Objective 4

Every day of this project from week 5 through week 8, NA/BT/PA will be used as 1:1 sitters not RNs.

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Outcome Measure

There will be a list to document staffing skills every shift for those placed on 1:1 sitters.

This will be evaluated by the reduction of the number of RNs being used by 75%.

Appendix 1: Gantt Chart

Objectives	Week one	Week two	Week three	Week four	Week five- Week 8
Develop guidelines and meet with unit manager and clinical nurse specialist for approval.	███				
Guidelines ready to be implemented.		███			
Get paper handouts/questionnaires			███		
Educate staff on guidelines			███	███	
Implementation of project -monitor skills of staff used as 1:1					███
Implementation of project -monitor every patient on 1:1 has an order					███

Work Plan/breakdown

This project will require assistance from all the stakeholders. The project director and unit

manager will help coordinate this project. The charge nurses, nurses and Behavioral Technicians/

Psych Associates will be helping where necessary and providing insight on what will work well and what needs to be adjusted. The project will be conducted in a 2-month period. By week one, the project director will develop guidelines and meet with the unit manager, charge nurses and clinical nurse specialist for approval. By week two, objective one will be completed and paper handouts(pre-questionnaires) will be available. The project director will have developed the guidelines/tools to be ready for use by unit 4500 staff. By week three, objective two will be on going. The timeframe to complete this objective is two weeks. The charge nurses will be responsible for distributing paper handouts to staff during change of shift report. Beginning week five, objective three will be going on. Objective three will be expected to be done every day and every shift beginning from week five. All staff working in unit 4500 during this time will be expected to be working with these guidelines. This will be implemented for a period of 8 weeks. Post questionnaires will be handed by week 8. Objective 4 will go alongside with objective 3. Objective 3 and objective 4 will be implemented for a period of 8 weeks.

Communication Matrix

Setting. This intervention will be implemented in one of the acute mental health units, which is one of the mental health units in this hospital (Spainhower, personal communication, 2021). This hospital is part of a huge Healthcare System. The unit is an acute psychiatry unit located on the 4th floor of the hospital. The unit has a capacity of 25 patients. The patients admitted in this unit are diagnosed with schizophrenia, psychosis, alcohol withdrawal, bipolar disorders, anti-personality disorder, delusions and paranoia, catatonia etc. The symptoms associated with these diagnoses can at times be associated with risk of violence and increase safety issues.

The symptoms commonly presented are intrusiveness, violent/aggressive behaviors, actively suicidal and homicidal, threatening behaviors, inability to attend to Activities of Daily

Living (ADLs) and sometimes falls. This unit is structured to accommodate patients with these acute symptoms and has a seclusion or restraint area as one of the rooms in this unit. With 25 beds, the unit is big and spacious, and is large enough to accommodate high patient acuities. There are many calls to Security for show of support and many behavioral codes daily in unit 4500. To accommodate this need, there is always an acuity staff mostly on every shift. The criteria for admission in this unit is the acuteness of patient symptoms and adults 18 years and above (Spainhower, personal communication, 2021).

Population. The participants will be the staff working in this unit. The staff have been chosen because they provide care to patients in this unit. This intervention is considered within the normal scope of their work expectations. Included in this project interventions are the unit manager, nurses, clinical director and clinical nurse specialist. The inclusion criteria will be patients admitted in this unit who are placed on 1:1 sitter. These patients are 18 years and above. The exclusion criteria will be patients admitted in unit 4500 who are not on 1:1 sitter. All staff who work in this unit during the implementation of this project will be included. This will include nurses, doctors, nurse practitioners, nursing assistants, psychiatry associates, nurse managers, clinical nurse specialists. This will also include staff who work full time, part time or casual positions as well as staff who float to this unit. The rationale of including both full time and part time staff is that there is a potential that they will provide care to patients who are on 1:1 sitter status. The staff who do not work in this unit during the implementation of this project will be excluded.

Interprofessional Team. This project will involve interprofessional cooperation. Nurses, social workers, psych associates, behavioral technicians, unit manager, clinical director, clinical

nurse specialist and clinical nurse educator will be involved in this project. Meetings will be held

with staff to discuss the project before, during and after implementation of this project.

Stakeholders. The hospital is a stakeholder in this project considering the financial

constraints 1:1 sitters place on the hospital. Acute care hospitals in the United States can spend

more than $1 million annually on sitters, and indications suggest this cost is increasing (Bock,

2017). Fortunately, the hospital uses its staff to cover 1:1 sitter and does not contract with float

staff from other agencies. Other stakeholders include patients in unit 4500 who are on 1:1 sitter

and their families. Families included because of the importance of involving families in patient

care after getting Release of Information (ROI) from the patient. The staff in this unit who provide

direct care to patients are stakeholders because of their role of providing direct care to these

patients daily. Other unit staff include nurse manager, clinical nurse educator, clinical nurse

specialist and leadership who provide indirect care to patients are stakeholders because of the

impact their daily decisions on policies have on the patients.

Logic Model

The logic model is important because it visually describes decisions and strategies for

thinking, planning and communicating about the project's goals and deliverables. It guides the

project to an expected destination in an efficient amount of time (Reavy, 2016). See Appendix 9

for Project Implementation Plan Using Logic Model. The logic model gives a visual summary of

the project and its implementation. It explains the framework of the project bringing to

visualization the problem that is being addressed. It shows the stakeholders that influences the

outcome of the implementation, the short term and long-term goals, the activities that are

required to achieve these goals as well as the resources needed.

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Budget Considerations

Project director will be responsible for printing and distribution of questionnaires. Project director estimates minimal budget to be used during project implementation. Financial consideration was linked to time staff put into the project and its successful completion.

Methodology, Analysis, IRB/Ethical Considerations

For this project to reach its full potential it is necessary to have a system of methods in place to carry out this proposal. The methodology for this project is broken into pre-implementation, implementation, and post-implementation.

Pre-implementation: Protection of Human Subjects: Patient's information will be kept confidential throughout the project implementation process. Pre-implementation, questionnaires will be distributed only to staff who will influence the project's outcome. Questionnaires will be kept in a locked cabinet when not in use. Staff will be educated on the importance of maintaining confidentiality when answering questions on the questionnaires. The project does not require staff to include their names on the questionnaires. The Health Insurance Protection and Portability Act (HIPPA) will be followed. This project will be reviewed by the College of St. Scholastica's Internal Review Board for human subjects' use. The project will follow the ANA code of ethics and will adhere to 45 CFR 46 on the use of human subjects in research. The only personal data collected will be participants names used to ensure attendance of the session. The attendance sheets will not be correlated to any data and will be kept secure in a locked cabinet by the project director. During this pre-implementation phase, 1:1 sitter guideline will be included in the weekly huddle sheet and will be used to educate the participants.

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 The pre questionnaire will be created and ready to be implemented. Prior to meeting with the stakeholders – approval must be granted by MHealth Fairview Nursing Research Review Board and Onboarding completed. The College of St. Scholastica's Institutional Review Board must be completed as well. Once approval is granted, meeting with the stakeholders will take place. Suggestions will be taken into considerations and changes will be made where deemed appropriate.

Implementation: Protection of Human Rights: Patients admitted in this unit are provided a copy of their patient rights at time of admission. Patients' information is confidential, private and protected. Patients' medical records and other personal health information to safeguard and to protect the privacy of their personal health information, and sets limits and conditions on the uses and disclosures that may be made of such information without patient authorization (The HIPAA Privacy Rule). With this improvement project, patients placed on 1:1 sitter will be educated on the project. The project will involve family members when appropriate for patients who have signed Release of Information (MHealth Fairview, 2021). Each patient will be treated with respect, care and dignity, maintaining nursing values and integrity of the patient and of the profession (ANA Code of Ethics). Each patient is expected to sign a Release of Information Form (ROI) at admission and during the course of their stay if not signed at admission following MHealth Fairview's policy and HIPAA. ROI will be verified before any contact and sharing of information with family member, as needed. The 1:1 sitter guideline will be implemented during this phase.

Post-Implementation/Monitoring: Protection of Human Rights: Follow up post questionnaire will be implemented during this phase. Any information collected will be locked up and destroyed at the completion of this project.

-Project Tasks

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Stakeholders: Meet with project director to discuss proposed guidelines.

Participants: Project director will have a check out list to monitor staff's attendance during shift changes. Participants are required to provide response to pre implementation questionnaires and post implementation questionnaires.

Data Analysis Approach

Results from Data Collection

Data was collected using pre and post questionnaires. Pre questionnaires contained 8 questions and post questionnaires contained 4 questions. The pre-questionnaire questions informed the project director on how participants approach towards 1:1 sitter inquiring if there is a guideline that is being used with patients on this intervention. Then, the sitter guideline was introduced and used for over a 2-month period. During this time, the project director monitored all patients placed on 1:1 sitter and followed up if the guideline is being used to direct judgement. After this 2-month period, the post questionnaire was introduced with questions inquiring if the sitter guideline was helpful in reducing the number of days patients were on 1:1 sitter.

Chi-Square Goodness of Fit Test (Pre- Questionnaire)

Introduction

A Chi-square goodness of fit test was conducted to examine whether Pre_questionnaire_Q1 was equally distributed across all categories. There were 2 levels in Pre_questionnaire_Q1: Yes and No.

Results

The results of the test were not significant based on an alpha value of .05, $\chi^2(1) = 1.80$, $p = .180$, indicating the null hypothesis (the levels of Pre_questionnaire_Q1 are equally

likely) cannot be rejected. Since the test was not significant, the differences between observed and expected frequencies were not significantly different for Yes and No. Table 4 presents the results of the Chi-Square goodness of fit test.

Table 4
Chi-Square Goodness of Fit Test for Pre_questionnaire_Q1

Level	Observed Frequency	Expected Frequency
Yes	13	10.00
No	7	10.00

Note. $\chi^2(1) = 1.80$, $p = .180$.

Chi-Square Goodness of Fit Test

Introduction

A Chi-square goodness of fit test was conducted to examine whether Q3 was equally distributed across all categories. There were 2 levels in Q3: Yes and No.

Results

The results of the test were significant based on an alpha value of .05, $\chi^2(1) = 5.00$, $p = .025$, indicating the null hypothesis (the levels of Q3 are equally likely) can be rejected. There were fewer observations than expected in No. There were more observations than expected in Yes. Table 5 presents the results of the Chi-Square goodness of fit test.

Table 5
Chi-Square Goodness of Fit Test for Q3

Level	Observed Frequency	Expected Frequency
Yes	15	10.00
No	5	10.00

Note. $\chi^2(1) = 5.00$, $p = .025$.

Chi-Square Goodness of Fit Test

Introduction

A Chi-square goodness of fit test was conducted to examine whether Q4 was equally distributed across all categories. There were 2 levels in Q4: Yes and No.

Results

The results of the test were significant based on an alpha value of .05, $\chi^2(1) = 5.00$, $p = .025$, indicating the null hypothesis (the levels of Q4 are equally likely) can be rejected. There were fewer observations than expected in Yes. There were more observations than expected in No. Table 6 presents the results of the Chi-Square goodness of fit test.

Table 6
Chi-Square Goodness of Fit Test for Q4

Level	Observed Frequency	Expected Frequency
Yes	5	10.00
No	15	10.00

Note. $\chi^2(1) = 5.00$, $p = .025$.

Chi-Square Goodness of Fit Test

Introduction

A Chi-square goodness of fit test was conducted to examine whether Q5 was equally distributed across all categories. There were 2 levels in Q5: Yes and yes.

Results

The results of the test were significant based on an alpha value of .05, $\chi^2(1) = 16.20$, $p < .001$, indicating the null hypothesis (the levels of Q5 are equally likely) can be rejected. There were fewer observations than expected in yes. There were more observations than expected in Yes. Table 7 presents the results of the Chi-Square goodness of fit test.

Table 7
Chi-Square Goodness of Fit Test for Q5

Level	Observed Frequency	Expected Frequency
Yes	19	10.00
yes	1	10.00

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Table 7

Chi-Square Goodness of Fit Test for Q5

Level	Observed Frequency	Expected Frequency

Note. $\chi^2(1) = 16.20, p < .001$.

Chi-Square Goodness of Fit Test

Introduction

A Chi-square goodness of fit test was conducted to examine whether Q6 was equally distributed across all categories. There were 5 levels in Q6: 1-3 days, 3-7days, 3-7 days, 3- days, and >7days.

Results

The results of the test were significant based on an alpha value of .05, $\chi^2(4) = 21.50, p < .001$, indicating the null hypothesis (the levels of Q6 are equally likely) can be rejected. There were fewer observations than expected in 3-7 days, 3- days, and >7days. There were more observations than expected in 3-7days. Table 8 presents the results of the Chi-Square goodness of fit test.

Table 8

Chi-Square Goodness of Fit Test for Q6

Level	Observed Frequency	Expected Frequency
1-3 days	4	4.00
3-7days	12	4.00
3-7 days	2	4.00
3- days	1	4.00
>7days	1	4.00

Note. $\chi^2(4) = 21.50, p < .001$.

Chi-Square Goodness of Fit Test

Introduction

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

A Chi-square goodness of fit test was conducted to examine whether Q6 was equally distributed across all categories. There were 5 levels in Q6: 1-3 days, 3-7days, 3-7 days, 3- days, and >7days.

Results

The results of the test were significant based on an alpha value of .05, $\chi^2(4) = 21.50$, $p < .001$, indicating the null hypothesis (the levels of Q6 are equally likely) can be rejected. There were fewer observations than expected in 3-7 days, 3- days, and >7days. There were more observations than expected in 3-7days. Table 9 presents the results of the Chi-Square goodness of fit test.

Table 9
Chi-Square Goodness of Fit Test for Q6

Level	Observed Frequency	Expected Frequency
1-3 days	4	4.00
3-7days	12	4.00
3-7 days	2	4.00
3- days	1	4.00
>7days	1	4.00

Note. $\chi^2(4) = 21.50$, $p < .001$.

Chi-Square Goodness of Fit Test

Introduction

A Chi-square goodness of fit test was conducted to examine whether Q7 was equally distributed across all categories. There were 2 levels in Q7: No and Yes.

Results

The results of the test were significant based on an alpha value of .05, $\chi^2(1) = 9.80$, $p = .002$, indicating the null hypothesis (the levels of Q7 are equally likely) can be rejected. There were fewer observations than expected in No. There were more observations than expected in Yes. Table 10 presents the results of the Chi-Square goodness of fit test.

Table 10

Chi-Square Goodness of Fit Test for Q7

Level	Observed Frequency	Expected Frequency
No	3	10.00
Yes	17	10.00

Note. $\chi^2(1) = 9.80$, $p = .002$.

Filtered By: Pre_questionnaire_Q1 (Yes and No)

Chi-Square Goodness of Fit Test

Introduction

A Chi-square goodness of fit test was conducted to examine whether Subjects was equally distributed across all categories. There were 20 levels in Subjects: Nurse 1, Nurse 2, Nurse 3, Nurse 4, Nurse 5, Nurse 6, Nurse 7, Nurse 8, Nurse 9, Nurse 10, Nurse 11, Nurse 12, Nurse 13, Nurse 14, Nurse 15, Nurse 16, Nurse 17, Nurse 18, Nurse 19, and Nurse 20.

Results

The results of the test were not significant based on an alpha value of .05, $\chi^2(19) = 0.00$, $p = 1.000$, indicating the null hypothesis (the levels of Subjects are equally likely) cannot be rejected. Since the test was not significant, the differences between observed and expected frequencies were not significantly different for Nurse 1, Nurse 2, Nurse 3, Nurse 4, Nurse 5, Nurse 6, Nurse 7, Nurse 8, Nurse 9, Nurse 10, Nurse 11, Nurse 12, Nurse 13, Nurse 14, Nurse 15, Nurse 16, Nurse 17, Nurse 18, Nurse 19, and Nurse 20. Table 11 presents the results of the Chi-Square goodness of fit test.

Table 11

Chi-Square Goodness of Fit Test for Subjects

Level	Observed Frequency	Expected Frequency
Nurse 1	1	1.00
Nurse 2	1	1.00
Nurse 3	1	1.00
Nurse 4	1	1.00
Nurse 5	1	1.00

Table 11

Chi-Square Goodness of Fit Test for Subjects

Level	Observed Frequency	Expected Frequency
Nurse 6	1	1.00
Nurse 7	1	1.00
Nurse 8	1	1.00
Nurse 9	1	1.00
Nurse 10	1	1.00
Nurse 11	1	1.00
Nurse 12	1	1.00
Nurse 13	1	1.00
Nurse 14	1	1.00
Nurse 15	1	1.00
Nurse 16	1	1.00
Nurse 17	1	1.00
Nurse 18	1	1.00
Nurse 19	1	1.00
Nurse 20	1	1.00

Note. $\chi^2(19) = 0.00$, $p = 1.000$.

Chi- square statistical method was used to evaluate findings. This test was appropriate for the project due to its ability to measure if the data supports the literature. Project data was collected and measured on a nominal (categorical) scale, making the Chi-square statistical method appropriate. This method was able to visualize the difference between using a guideline and not using a guideline with patients placed on a 1:1 sitter.

Descriptive Statistics (Post Questionnaires)

Introduction

Frequencies and percentages were calculated for Subjects, Q3, Post_questionnaire_Q1, Q4, and Q2.

Frequencies and Percentages

The most frequently observed categories of Subjects were Nurse 1, Nurse 2, Nurse 3, Nurse 4, Nurse 5, Nurse 6, Nurse 7, Nurse 8, Nurse 9, Nurse 10, Nurse 11, Nurse 12, Nurse 13, Nurse 14, and Nurse 15, each with an observed frequency of 1 (6.67%). The most frequently observed category of Q3 was yes ($n = 15$, 100.00%). The most frequently observed category of Post_questionnaire_Q1 was yes ($n = 15$, 100.00%). The most frequently observed category of Q4 was yes ($n = 15$, 100.00%). The most frequently observed category of Q2 was yes ($n = 15$, 100.00%). Frequencies and percentages are presented in Table 1.

Discussion of Data/ Outcomes Interpretation

The results in the context of the study showed that thirteen out of 20 nurses stated there was no guideline that is currently used when patients are ordered a 1:1 sitter guideline. This is an important point to help illustrate why this improvement project was needed. Fifteen nurses out of the twenty nurses acknowledged the importance of having a guideline to improve the process of discontinuing a patient placed on a 1:1 sitter. The average length of time patients was on 1:1 sitter per question 6 prequestionnaire was 3-7 days without sitter guideline. During the implementation of the sitter guideline, sixteen patients were placed on 1:1 sitter for varied reasons. The average length of time patients was on 1:1 sitter during the time the guideline was implemented was 3-5 days. The strength of the guideline from the findings centered on the fact that patients whose order stated "1:1 sitter every shift" were being gradually tapered to perhaps "only night shift, or only day or evening shift" and then completely discontinued. Not only did the duration dropped, but the frequency of the order dropped as well reducing significantly the cost of 1:1 sitter during this implementation period.

Pre guideline, thirteen nurses stated they always know why the patient is ordered a 1:1 sitter and seven nurses stated they don't always know. Many of the nurses stated they assess a patient on 1:1 sitter as needed. This information is significant to the project because this shows a gap in nursing practice with the seven nurses who don't always know why a patient is ordered a 1:1 sitter and majority of the nurses assessing the patients as needed. With the guideline, nurses assessed the patients more than twice during their shift, not relying on the sitter to provide them with information on how the patient did during their shift. Fifteen nurses stated they check to see if there is an order for patients placed on 1:1 sitter and five nurses stated they don't. Again, this is significant in the project because a patient should not be on a 1:1 sitter without having an order and if a nurse is not checking to see if there is an order or not, then they might be times when patients have a sitter that they are not supposed to have. A sitter order per the unit protocol, should be renewed every 24 hours. After the sitter guideline was implemented, there was a post questionnaire of four questions. The findings showed that all the nurses (fifteen of them who filled out the questionnaire) liked the guideline. They stated the guideline helped their assessment of the patient and they saw a reduction in the duration of this intervention. The nurses all recommended a guideline be used in the future.

Abstract

Purpose: The purpose of this quality improvement project was to create awareness on 1:1 sitter and develop a guideline to timely discontinue this intervention in the inpatient mental health units.

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Background: The number of patients placed on a 1:1 sitter, in inpatient psychiatry, has been on the increase over the past several years; creating a financial burden on the hospitals. Acute care hospitals in the United States can spend more than $1 million annually on sitters, and indications suggest this cost is increasing (Bock, 2017). Using a standardized tool to assess patients who are on 1:1 sitter has proven to be helpful in reducing the number of days patients are on 1:1 sitter. This tool, requires staff to frequently assess patients meeting Watson Caring Theory. During this assessment, staff provides a supportive and caring environment for the patient, leaving the patient to feel loved and cared for.

Method: Data was collected from December 20th, 2021-Feb 10th 2022. The participants were nurses in an inpatient psychiatry unit and patients that were on 1:1 sitter order during this period. Sitter guideline was developed by writer based on literature and implemented during this period. Pre and post questionnaires were administered to determine knowledge on guideline. Writer met with unit staff during implementation. Intellectus Statistics was used to analyze data and Chi-Square Goodness of fitness was used to evaluate findings.

Outcome: The findings from the project suggests that having a standardized guideline reduces the duration patients were on 1:1 sitter averagely dropping to 2-3 days. The frequency dropped as well, tapering from every shift to perhaps only night shift or only active shifts then discontinuation of the order. Upon completion of the project, the staff's' attitude towards 1:1 sitter improved with the nurses willing to use the guideline post implementation.

Discussion: It has been shown through this project that patients who are on 1:1 sitter need a guideline to help them get out of this intervention. Otherwise, patients can remain on 1:1 sitter for several days without proper assessment, thus putting a financial strain on the unit/hospital budget.

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Recommendation: Based on the outcome of the project, it is my recommendation that each facility should have a guideline that should be used to assess patients placed on 1:1 sitter and unit managers should reinforce its use.

Conclusion

The use of 1:1 sitter is in the rise in hospitals due to the increase in mental health symptomology requiring hospitalization. Limited literature is known to suggest this intervention

is effective and hospitals are struggling with the daily increase of the use of sitters. It was important to review articles that will pull strength to support this paper. Articles reviewed focused on understanding the use of 1:1 sitters and potential challenges. These articles give an insight on past and current interventions that is being used or had been used to address 1:1 sitter in mental health units. Current interventions used and outcome for these interventions have not been sufficient to reduce the financial burden this problem pose on organizations.

This quality improvement project gathered data through pre and post questionnaires to help inform outcome of results. The strength of the guideline from the findings centered on the fact that not only did the length of time spent on 1:1 sitter dropped, but the frequency of the order dropped as well reducing significantly the cost of 1:1 sitter during this implementation period. Upon completion of the project, the staff's' attitude towards 1:1 sitter improved with the nurses willing to use the guideline post implementation. Based on the outcome of the project, it will be recommended for future practice that each facility has a guideline to assess patients placed on 1:1 sitter and unit managers should reinforce its use. The guideline also impacted the frequency of nurses' assessment with nurses creating time to check on the patient more than twice during their shift. This finding is significant and impacts practice surrounding 1:1 sitters. The findings from this project showed that with the use of well-defined guideline, the cost of 1:1 sitter can be significantly reduced

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Appendix 1

Timeline

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Objectives	Week one	Week two	Week three	Week four	Week five- Week 8
Develop guidelines and meet with unit manager and clinical nurse specialist for approval.	■				
Guidelines ready to be implemented.		■			
Get paper handouts/questionnaires			■		
Educate staff on guidelines			■	■	
Implementation of project -monitor skills of staff used as 1:1					■
Implementation of project -monitor every patient on 1:1 has an order -patient's on 1:1 are reassessed					■

Appendix 2.

IRB approval

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Date: 11/22/2021 07:30 PM

To: "Rhea Ferry" <rferry@css.edu>, "Ngunge Antongawoa" <nantongawoa@css.edu>

From: "Nicole Nowak" <no-reply@irbnet.org>

Reply To: "Nicole Nowak" <nnowaksaenz@css.edu>

Subject: IRBNet Board Document Published

Please note that The College of Saint Scholastica Institutional Review Board has published the

following Board Document on IRBNet:

Project Title: [1826978-1] A Qualitative Improvement Project Aimed to Develop 1:1 Patient

Monitoring Guidelines for Inpatients Diagnosed with Components of Disorganized Behaviors.

Principal Investigator: Ngunge Antongawoa, DNP

Submission Type: New Project

Date Submitted: November 19, 2021

Document Type: Not Research Letter

Document Description: Not Research Letter

Publish Date: November 22, 2021

Should you have any questions you may contact Nicole Nowak at nnowaksaenz@css.edu.

Thank you,
The IRBNet Support Team

www.irbnet.org

Appendix 3
Letter of Support from the Facility

FAIRVIEW
HEALTH SERVICES

11/09/2021

To whom it may concern

Ngunge Alemka Antongawoa, graduate student of the College of St Scholastica will be implementing her project proposal in unit 4500, St Joseph Hospital. Ngunge Alemka Antongawoa is working on :A Qualitative Improvement Project Aimed to Develop 1:1 Patient Monitoring Guidelines and Algorithm for Inpatients Diagnosed with Components of Disorganized Behaviors. Please let me know if you need more clarifications or have questions.

Thanks,

Allison Spainhower RN, BSN Interim Clinical Director & Clinical Manager 4500

MHealth Fairview Mental Health and Addiction Services

St Joseph's Hospital 45 W. 10th Street St. Paul, MN 55102

Allison.spainhower@fairview.org

Office: 651-232-3627Gender Pronouns: she/her

Appendix 4

SWOT Analysis

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Strengths	Weaknesses
-Staff has great teamwork spirit. -Management is open to new ideas. There is a suggestion box for both staff and patients to make suggestions/comments.	-Lacks process to discontinue patient on 1:1 sitter. -Systems are merging and there is a gap with this intervention. -RNs are mostly utilized to cover 1:1 sitters.
Opportunities	Threats
-Create awareness on impact of 1:1 sitters. -Develop guidelines to timely discontinue this intervention.	-This hospital will be closing its doors in July 2022. -The census in the unit is gradually decreasing.

Appendix 5

Pre- Questionnaire

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

My name is Ngunge Alemka Antongawoa and I am carrying out a DNP project on 1:1 sitter and the impact it has on staffing shortages and financial impact on the facility. Please answer the following questions to the best of your ability.

1.   Do you always know why the patient is ordered a 1:1 sitter?

a.   Yes

b.   No

2.   How often do you assess your patient on 1:1 sitter during your shift?

a.   Once a shift

b.   Twice a shift

c.   As needed

3.   Do you check if there is an order for the 1:1 sitter?

a.   Yes

b.   No

4.   Is there a guideline for discontinuing 1:1 sitter?

a.   Yes

b.   No

If No, how is the criteria for determining discontinuation?

_____

_____

_____

_____

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

5.   Do you think a guideline/tool will improve the process of discontinuing this intervention?

a.   Yes

b.   No

If No,

why_____

_____

_____

_____

6.   What do you think is the average length of time a patient is on a 1:1 sitter in the unit?

a. 1-3 days

d. 3-7 days

c > 7days

7.   Do you think it can be reduced?

a. Yes, if yes

how_____

_____

_____

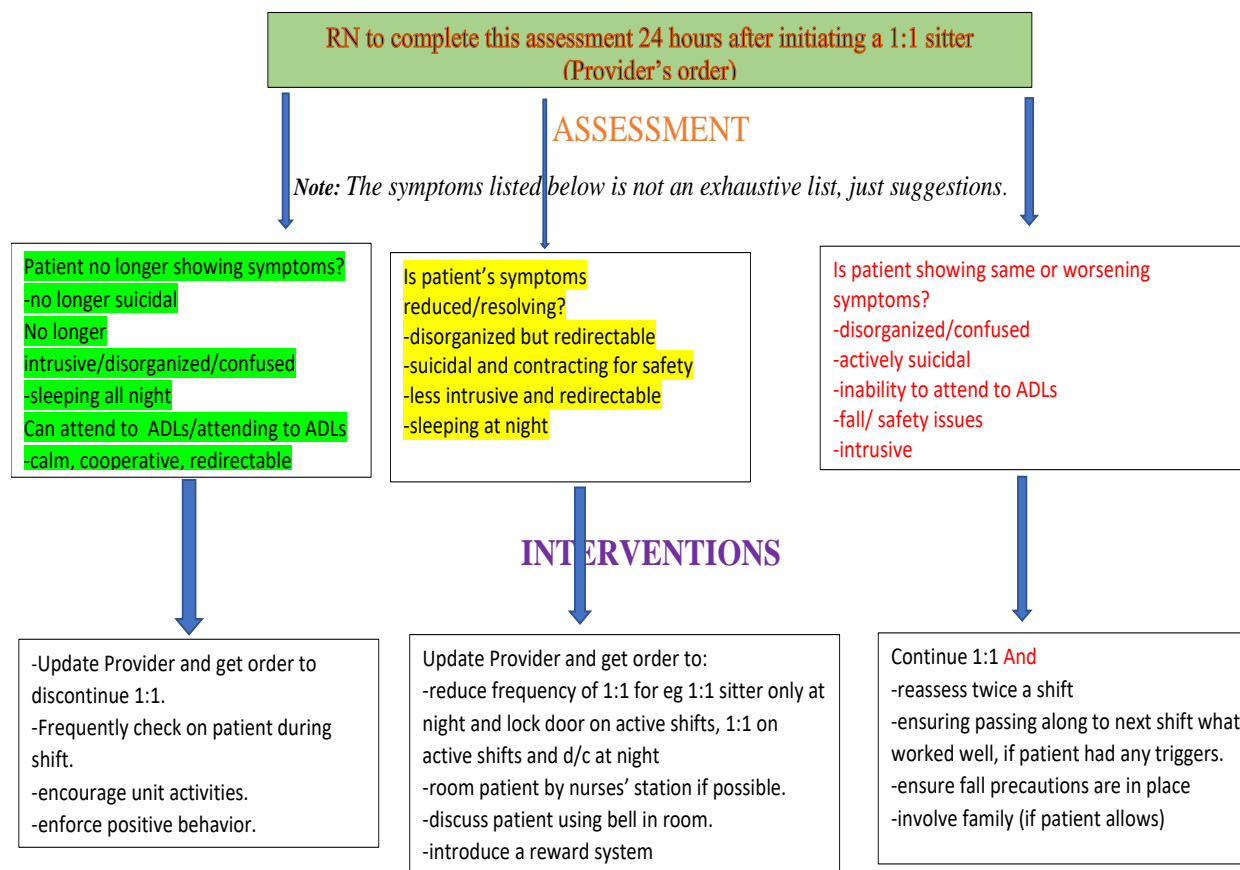b. No, if No

why?_____

_____

_____

_____

8.   Do you think there is staffing shortages due to 1:1 sitters?

a.   Yes

b.   No

Thank you for answering these questions.

Appendix 6

1:1 Sitter Guideline flowchart

RN to complete this assessment 24 hours after initiating a 1:1 sitter (Provider's order)

ASSESSMENT

Note: The symptoms listed below is not an exhaustive list, just suggestions.

Patient no longer showing symptoms?	Is patient's symptoms reduced/resolving?	Is patient showing same or worsening symptoms?
-no longer suicidal	-disorganized but redirectable	-disorganized/confused
No longer intrusive/disorganized/confused	-suicidal and contracting for safety	-actively suicidal
-sleeping all night	-less intrusive and redirectable	-inability to attend to ADLs
Can attend to ADLs/attending to ADLs	-sleeping at night	-fall/ safety issues
-calm, cooperative, redirectable		-intrusive

INTERVENTIONS

-Update Provider and get order to discontinue 1:1.	Update Provider and get order to:	Continue 1:1 And
-Frequently check on patient during shift.	-reduce frequency of 1:1 for eg 1:1 sitter only at night and lock door on active shifts, 1:1 on active shifts and d/c at night	-reassess twice a shift
-encourage unit activities.	-room patient by nurses' station if possible.	-ensuring passing along to next shift what worked well, if patient had any triggers.
-enforce positive behavior.	-discuss patient using bell in room.	-ensure fall precautions are in place
	-introduce a reward system	-involve family (if patient allows)

Pearls

1. Nurse to note time 1:1 sitter started and document in 1:1 sitter log.

2. Nurse to note details of order for example 1:1 sitter every shift, 1:1 sitter only night shift, 1:1 sitter only active shifts.

3. Ways to keep patients engaged could be the following:

- ✓ **Playing cards, puzzles, coloring, word search.**
- ✓ **Encourage group activities.**
- ✓ **Utilizing the comfort room.**
- ✓ **Watched TV**

4. Ways to encourage positive behavior could be the following:

- ✓ **Acknowledge patient's efforts.**

5. Examples of a reward system:

- ✓ **Identify patient's hobbies and try to accommodate on your shift following unit polic**

Appendix 7

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Post Questionnaire

My name is Ngunge Alemka Antongawoa and I am carrying out a DNP project on 1:1 sitter and the impact it has on staffing shortages and financial impact on the facility. Please answer the following questions to the best of your ability regarding the 1:1 Sitter Guideline Flowchart.

1. Did you like the guideline?

   Yes_____

   No_____

2 Did the guideline help your assessment on a patient on a 1:1 sitter? Was it helpful?

Yes_____

_____

No_____

_____

1. Do you think this guideline should be recommended to be used for patients with 1:1 sitter?

Yes_____

No_____

_____

2. Using the Guideline Flowchart did you see a reduction in the duration of this intervention?

Yes_____

No_____

Thank you for answering the questions.

Literature Matrix Table

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Reference	Purpose/Question	Design	Sample	Intervention	Results	Notes
Slemon, A., Jenkins, E., & Bungay, V. (2017). Safety in psychiatric inpatient care: The impact of risk management culture on mental health nursing practice. *Nursing inquiry*, 24(4), e12199. https://doi.org/10.1111/nin.12199	Safety, defined as risk identification and associated risk management strategies (Lupton, 2013), is a discourse that gives rise to and legitimizes nursing practices that are ineffective and unethical and eclipse meaningful treatment within psychiatric	Qualitative review of articles	Articles on safety and risk management	Addressing safety in psychiatry inpatient mental health focusing on close observations, seclusion, door locking and defensive nursing practice.	recommendations for reconceptualizing safety and risk within the context of nursing practice and psychiatric inpatient care.	
Polacek, M. J., Allen, D. E., Damin-Moss, R. S., Schwartz, A. J. A., Sharp, D., Shattell, M., Souther, J., & Delaney, K. R. (2015). Engagement as an Element of Safe Inpatient Psychiatric Environments. *Journal of the American Psychiatric Nurses Association*, 21(3), 181–190. https://doi.org/10.1177/1078390315593107	To describe, using supporting literature, the role that nurse–patient engagement plays in creating safe, therapeutic environments for individuals with severe mental illness.	Qualitative design		-Define engagement - describe why it is an important element of safe treatment environments;	Engagement may provide the foundation for safe, therapeutic, and recovery-oriented treatment.	

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Graham, F., Eaton, E., Jeffrey, C., Secher-Jorgensen, H., & Henderson, A. (2020). *"Specialling" and "Sitters": What does communication between registered nurses and unregulated workers reveal about care?* Collegian. https://doi-org.akin.css.edu/10.1016/j.colegn.2020.12.004	To describe information exchanges between nurses and 1:1 sitters.	Qualitative and quantitative	All Assistants in Nursing (AINs) who worked as "specials' in a large Australian metropolitan hospital	Online survey and group discussion	Important psychosocial information is not communicated preventing resolution of patient symptoms.	
Natale, G., Fitzgerald, A., Landry, M., Harmon, K., (2017). Applying Jean Watson's Caring Theory to Reduce Restraint Use in the Acute Psychiatric Area. Derived from *https://www.nursingald.com/articles/18363*-applying-jean-watson-s-caring-theory-to-reduce-restraint-use-in-the-acute-psychiatric-area	The theory supporting the use of less restrictive interventions other than restraints in nursing.	Qualitative review of articles			Less restrictive interventions other than restraints advocated.	
Magoon, C., Rosenberg, Lieberman, J. (2020). Preparing for the Mental Health Repercussions of the COVID-19 Pandemic. Retrieved from https://www.psychiatrictimes.com/view/preparing-mental-health-repercussions-covid19-pandemic	The impact of Covid 19 on mental health	Qualitative			Effects of Covid 19 in mental health symptoms.	
Krasniansky, A. (2020). TeleSitters are entering hospital rooms. *How will they change patient care? Derived from https://blog.petrieflom.law.harvard.edu/2020/03/10/tel esitters-are-entering- hospital-rooms-how-will-they-change-patient-care/*	The relevance of TeleSitters in patient care.	Qualitative			Telesitters can be alternative to 1:1 sitter.	

1:1 SITTER IN INPATIENT MENTAL HEALTH UNITS

Spitzer, J. (2018). Reduce Patient Fall Rates and 1:1 Sitter Staffing. Derived from https://avasure.com/reduce-patient-fall-rates-and-11-sitter-staffing/	1:1 sitter related to increasing patient falls.	Qualitative			Increase in patient falls increases 1:1 sitter usage.	
Rochefort, C. M., Ward, L., Ritchie, J. A., Girard, N.,& Tamblyn, R. M. (2012). *Patient and nurse staffing characteristics associated with high sitter use costs*. Journal of Advanced Nursing, 68(8), 1758–1767. https://doi-org.akin.css.edu/10.1111/j.1365-2648.2011.05864.x	Impact of staffing with increasing 1:1 sitters.	Qualitative			Increasing sitter use creates staffing shortages.	
Voetelink, K. E., Trout, H. B., Murphy, T., Rogers, M., Harris, J. A., & Ramagnano, S. (2019). Using Six Sigma to Reduce the Utilization of Continuous Observations (1:1) for Safety Precautions. *Journal of Nursing Administration, 49(9), 418–422.* https://doi-org.akin.css.edu/10.1097/NNA.000000000000077	Quality improvement projects aim at 1:1 sitters.	Qualitative			Quality Improvement projects improve patient care.	
Hader, R., (2017). The struggle of 1:1, Nursing Management (Springhouse): *July 2012 – Volume 43 - Issue 7 - p 6* doi:10.1097/01.NUMA.0000415495.22364.19	1:1 sitters and impact on budget.	Qualitative			Increasing use of sitters in hospitals causing increasing cost.	
Adams, J., & Kaplow, R. (2013). A Sitter-Reduction Program In an Acute Health Care System. *Nursing Economic$, 31*(2), 83–89.	To reduce sitter use by 50 percent across the health care system.	Obtained data from staffing software and analyzed data	A study team was used.	Individually invited to participate by the specialty director of the Clinical	alternative use of sitters which include personal alarms, diversional activities and family support resulted in significant cost savings.	

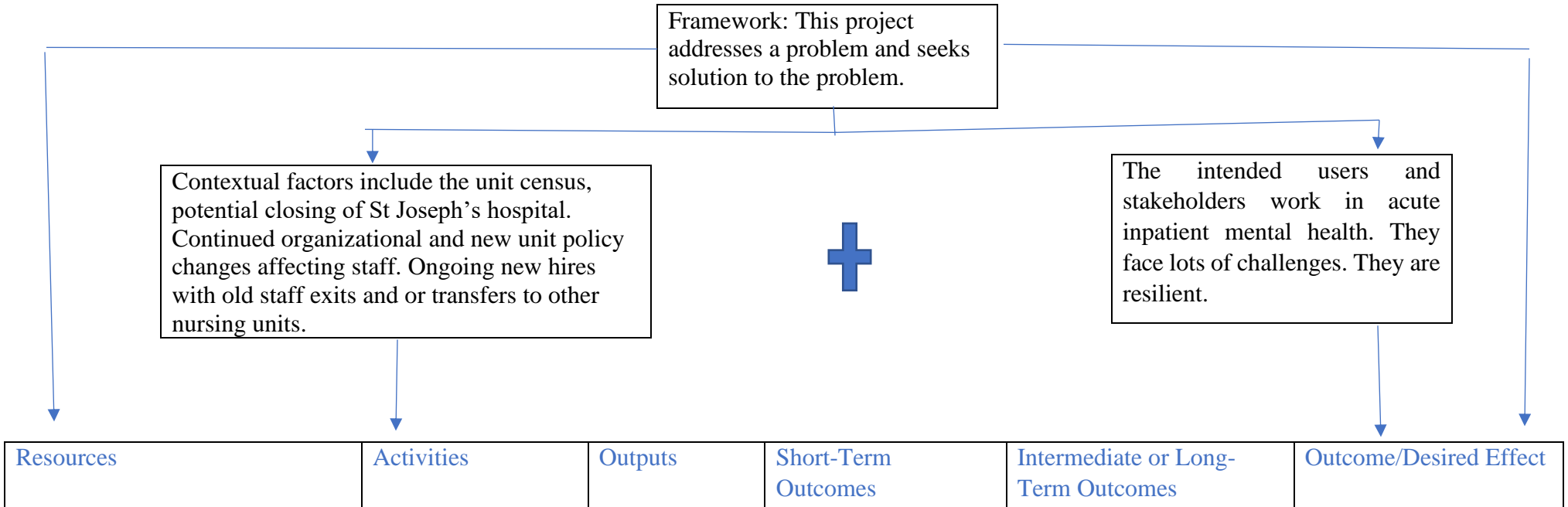|				Staffing Resources Center (CSRC)		
Broberg, E., Persson, A., Jacobson, A., & Engqvist, A. K. (2020). A Human Rights-Based Approach to Psychiatry: Is It Possible?. *Health and human rights*, 22(1), 121–131.	The purpose is to describe the lessons we learned through the adoption of a human rights-based approach (HRBA) to psychiatric care, as part of a regional governmental initiative.	A pilot study.	A pilot project was formulated with three areas that would reflect the region's overall responsibilities concerning health care, culture, regional development, and public transport.	In the paper, we structure our experiences of an HRBA around the United Nations' guiding principles of dignity and empowerment, equality and non-discrimination, participation and inclusion, accountability, and transparency.	This project showed that it is fully possible to apply an HRBA to psychiatric care and that such an approach has great benefits for individuals and organizations alike.	
Pinkhasov, A., Singh, D., Chavali, S., Legrand L., Calixte, R.,(2018). Use of Constant Observation in a General Hospital. *Psychiatrist Services.* *https://doi.org/10.1176/appi.ps.201700456*	A QI project aimed at reduction of CO utilization, with the goal of improving outcomes while reducing costs	Development of a comprehensive evaluation and management Algorithm.	formal QI project using early and proactive involvement of a designated BH team to manage care	formal QI project using early and proactive involvement of a designated BH team to manage care of	the average monthly costs of CO were reduced by 33%, with an associated 15% reduction in length of stay, from seven days to six days. Savings	

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			of patients requiring CO	patients requiring CO	were over $750,000 per year.	
Wilson, C., Rouse, L., Rae, S., & Kar Ray, M. (2017). Is restraint a "necessary evil" in mental health care? Mental health inpatients' and staff members' experience of physical restraint. International Journal of Mental Health Nursing, 26(5), 500–512. https://doi-org.akin.css.edu/10.1111/inm.12382	To improve understanding of the experience of restraint for patients and staff with direct experience and witnesses	Interviews were conducted with 13 patients and 22 staff	Interviews were conducted using questionnaires.		more research is needed into alternatives to restraint, while addressing the safety concerns of all parties.	
Wood, J.V., Vindrola- Padros,C., Swart, N., Mclntosh, M., Crowe, S., Morris, S., Fulop, N. .'J.(2018). One to one specialling and sitters in acute care hospitals: A scoping review. International Journal of Nursing Studies,Volume 84, August 2018, Pages 61-77	To explore the breadth and scope of literature on one to one specialling, sitters	scoping review methodology following a five stage scoping review process.	Sample of research articles	Research questions were used to guide the review.	There is need for clear standards and guidelines to regulate the quality and cost of 1:1 specialling.	

Appendix 9

Logic Model

Framework: This project addresses a problem and seeks solution to the problem.

Contextual factors include the unit census, potential closing of St Joseph's hospital. Continued organizational and new unit policy changes affecting staff. Ongoing new hires with old staff exits and or transfers to other nursing units.

The intended users and stakeholders work in acute inpatient mental health. They face lots of challenges. They are resilient.

Resources	Activities	Outputs	Short-Term Outcomes	Intermediate or Long-Term Outcomes	Outcome/Desired Effect

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-In order to accomplish the project goal, resources needed will mainly be staff at mental health facility. -I will print and distribute questionnaires. - I will educate staff through teams meeting.	-Meet with Management to discuss guideline. -Educate staff on guideline through team meeting. -Print educative material	When activities are completed, staff will be utilizing 1:1 sitter guideline.	During the implementation process, staff will understand the importance of having a tool/guideline to ease the assessment of patients on 1:1 sitter status.	If this guideline is routinely used, the duration of patient on 1:1 sitter will be reduced.	-The facility will see a reduction in cost related to 1:1 sitter. -More appropriate allocation of nursing staff. -Decrease staffing expenditures.