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Improving Pain Reassessment Within One Hour Following the Administration of Pain  
Medication

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### **Clinical Leadership Theme**

The focus of this project is on education and in-service training of staff members. It emphasizes the role of the Clinical Nurse Leader (CNL) as an educator, team manager, and patient advocate. The aim of this project is to improve the overall pain management in a 24-bed inpatient psychiatric health facility (PHF) located in the San Francisco Bay area.

### **Statement of the Problem/ Project Overview**

The purpose of this project is to identify ways to improve pain reassessment, currently at 67%, within one hour of administering pain medication. One of the reasons why pain is not reassessed within one hour of giving pain medication includes forgetfulness on the part of the medication nurse (usually the psychiatric technician). Another reason is the failure of nurses and psychiatric technicians to document the pain reassessment in the appropriate log.

The process begins with identifying areas to improve pain management at the facility including assessing pain level and character, providing intervention, and documenting results of the intervention. The process ends with implementing ways to improve pain reassessment within one hour after administering pain medication.

Implementation of the study findings is expected to improve quality patient care, comfort, and patient's ability to participate in group therapy without pain, and above all improve patient satisfaction. It is important to work on this now because pain management is an integral part of patient's wellbeing. In addition, comfort measures promote patients' participation in other forms of their treatment. Patients report that pain often interferes with their ability to function in other areas of life such as occupational, social, and recreational activities. This may lead to increase isolation, and feelings of worthlessness (Otis & Hughes, 2010).

According to Otis and Hughes (2010), anxiety, substance use, and other mental disorders have ongoing pain issues. Approximately 27% of patients with pain meet the criteria for major depression (Otis & Hughes, 2010). As a result, addressing pain in psychiatric patients boost their morale to engage in treatment.

It is anticipated that the implementation of this project would improve the rate of pain reassessment within one hour after administering pain medication by 30 percent in the facility. Ultimately, this project is to have patients assessed for pain in addition to vital signs on admission, during each nursing shift assessment, and one hour after administration of pain medication.

### **Rationale**

Microsystem needs assessment conducted indicated that pain is not being addressed promptly in the unit. Data collected shows that the unit is at compliance rate of 67 percent when it comes to pain reassessment within one hour of giving pain medication. As a result, it is unclear if patients are relieved of pain or not. Patients can effectively benefit from their treatment by attending and participating in group therapies when their pain is well managed.

It was interesting to note that most of the time pain assessment is omitted by staff. If unlicensed staff members assess pain during vital signs check, the pain is often not communicated to the nurses to follow up and provide intervention. When unlicensed staff does pain assessment, it is obvious that they do not do a thorough pain assessment of the patient. Still, it is documented that comprehensive chronic pain assessment is required to determine the underlying causes of patient's pain and recommend appropriate treatment (Doshi, 2015). (See Appendix A for Root Cause Analysis regarding pain reassessment).

The cost of this project includes CNL hours of onsite microsystem assessment, staff education, in-service training, and meeting with information technology team. Others include the cost of providing educational materials for in-service education, and laminated visual aids at the nurses station area to remind nurses to reassess for pain. (See Appendix B for laminated card). The facility ensures that staff education of this nature occurs during one's assigned working hours so as not to incur additional cost and overtime. As a way of incentive for participation and a job well done, a large size pizza is provided for the shift with significant improvement in reassessment rate after the implementation of the project as requested by the staff. (See Appendix C for project budget that includes the cost of pizza).

### **Methodology**

Thirty patients charts were randomly selected and audited over a two-week period. The selection includes ten charts from each shift between August 16, 2016 and September 8, 2016. It was found that six patients were given pain medication during this period and only four patients were reassessed within one hour following pain medication administration.

The change theory that guided this project is the Kotter's 8 step-process for leading change. Kotter's 8 steps include the following: (1) create a sense of urgency, (2) build a guiding coalition, (3) form a strategic vision and initiatives, (4) enlist a volunteer army, (5) enable action by removing barriers, (6) generate short term wins, (7) sustain acceleration, and (8) institute the change (Kotter, 2016). This is appropriate for the project because it ensures staff readiness and engagement for change. The steps serve as a metrics for baseline evaluation.

The implementation of this project started with a meeting of the facility's nurse educator, CNL student, and the preceptor to discuss how access to certain quality monitoring systems could be granted to the student. A careful study of the various features of the electronic medical

record system at the facility was conducted, to ascertain how some of the features could help improve pain reassessment. There was also communication with the Information Technology Department to enlist their help. Nurses and psychiatric technicians were assisted to add the title “pain reassessment due @TIME” to their headers in their electronic patient assignment list. This feature serves as a reminder/alert that reassessment is due at a given time. Staff is constantly reminded not to ignore these alerts. According to the HealthIT.gov (2013), electronic health record alerts provide safety net and improve overall patient care. The reaction from nurses knowing that they can utilize an existing feature of the electronic medical record (EMR) to improve pain reassessment was phenomenal!

A brochure was made to facilitate in-service education for nurses and psychiatric technicians and presented during nursing staff meetings. Another intervention implemented was a laminated card in the form of a visual aid to remind staff to reassess pain after giving pain medications (See Appendix B for laminated card). One-on-one in-service education was conducted with nurses and psychiatric technicians whose names always come up as not following the policy of pain reassessment within one hour of giving pain medication.

A system known as Infoview is a useful tool to run reports on pain reassessment within one hour. This system was used to determine the effectiveness of implementation by running reports to compare the rate of compliance before and after the project. This allows for monitoring of the effectiveness of the project.

### **Literature Review**

There is documented evidence that indicate the importance of pain management. According to Song, Eaton, Gordon, Hoyle, and Doorenbos (2015), failure to document pain management process prevents communication among the interdisciplinary team members. This

further affects clinical decision-making regarding patients pain management interventions. The study identified that post intervention pain assessment was not completed in cancer patients after pain relieving interventions. The authors asserted that the absence of documentation of intervention in pain management raises the concern of the possibility of inadequate pain management. Periodic staff education on pain assessment documentation guidelines and policies through monthly in-service education, handouts, and posters in the unit, as well as one-on-one monitoring are therefore recommended (Song, Eaton, Gordon, Hoyle, & Doorenbos, 2015).

According to the joint commission (TJC, 2016), pain management promotes functionality and participation in their treatment at the behavioral health center. The joint commission has set out a standard that requires all accredited organizations to adhere to those standards. The standard requires that accredited organizations establish policies regarding comprehensive pain assessment and provide educational efforts to ensure adherence. Another requirement is that, health care organizations reassess and respond to the patient's pain based on the results of the pain reassessment.

In addition, according to Herr (2011), lack of pain assessment and reassessment result in consequences of untreated pain including depression, anxiety, falls, malnutrition, impaired sleep, functional disturbances, decline in social and recreational activities, as well as reduced quality of life. Also, regular pain reassessment should be conducted to monitor for improvement or deterioration in pain, function, and complications.

According to Zoëga, Sveinsdottir, Sigurdsson, Aspelund, Ward, and Gunnarsdottir (2015), pain is identified to be the frequent cause of hospitalization. The study found that many patients reported being pain free and had better outcomes when patients were involved in the pain treatment decision-making. The authors however suggested that less effective pain

management would be achieved unless educational, organizational, and individual barriers that hinder effective pain management are removed.

A study by Wadensten, Fröjd, Swenne, Gordh, and Gunningberg (2011) looked at the prevalence of pain and pain assessment among inpatients in a hospital. It found out that too many patients are suffering from pain because they are not being assessed, reassessed and managed, especially in non-surgical wards. The study concluded that pain assessment improve nurse patient communication regarding pain and allow patients the opportunity to participate in their own care.

Another study asserts that pain management needs improvement due to low satisfaction scores. A quality improvement project that included programs to educate nurses and development of evidenced-based pain management for nurses was developed. Nurses showed improvement in pain management at the end of the project. Patient satisfaction scores also increased as a result of improved nurse knowledge in pain assessment and management (DeVore, Clontz, Ren, Cairns, & Beach, 2016).

The population, interventions, comparison and outcome (PICO) statement used in the search is: reassessment of pain in hospitalized patients within one hour of intervention is effective in pain management. The literature search was done utilizing the Cumulative Index of Nursing and Allied Health Literature (CINHAL) database.

### **Timeline**

This project began in August 2016 and concluded in November 2016. Microsystem needs assessment was conducted in August and was determined that there was a problem with pain reassessment. Data was collected through charts audits in August and September. A meeting followed with the microsystem's nurse manager and preceptor to present findings and

ideas to address the problem. Interviews were conducted with nurses and psychiatric technicians to find out why pain assessment is not being done. Visual aids were prepared and displayed at the nurses' station to remind nurses to reassess pain within an hour of giving pain medication. The months of October and part of November were dedicated to in-service training and implementation of the project. Post intervention evaluation was conducted in November 2016. (See Gantt chart in Appendix D for timeline).

### **Expected Results**

At the end of the project, it is expected that there will be a 30% increase in pain reassessment rate following pain medication. Staff will increase their knowledge in the joint commission standard on pain reassessment and the facility's policy on pain reassessment. Nurses and Psychiatric Technicians (LPTs) will become familiar with pain reassessment after giving pain medication. At the conclusion of the project, it will be obvious that nursing education is important in patient care and yield positive outcomes.

### **Nursing Relevance**

Improving pain reassessment after administration of pain medication is vital in nursing. It is a way of ensuring that our patients are safe and able to engage in all aspects of their treatment. This project indicates that nurses are required to reassess patient's pain within one hour of pain medication administration, so as to ensure effective pain management. Pain decreases the patient's full functionality to participate in their care as well as promote independence.

### **Summary Report**

The project was an eye opener into the different roles of the CNL within the microsystem. Pain has been identified as the main reason why patients go to the hospital and are

hospitalized. Pain reassessment following administration of pain medication is vital to overall pain management.

This project was conducted in a 24-bed stand-alone inpatient psychiatric facility in an urban area. It was found that pain reassessment in this facility was not consistent with the facility's policy and the Joint Commission standard of pain management. The staff involved in the project included nurses and LPTs. The CNL roles involved in the project are educator, team manager, and patient advocate.

The microsystem consists of nurses, psychiatrists, psychologists, licensed clinical social workers, chemical dependency counselors, dieticians, case managers, and mental health workers. The patient population in this facility is made up of adults 18 years old and above, with the following diagnosis: anxiety disorder, bipolar disorder, depression, personality disorders, schizophrenia, post-traumatic stress disorder, substance abuse, and suicidal ideation or attempts. Some of the patients also have dual diagnosis; that is a mental illness with substance use. There are other patients who also have Axis III diagnosis (general medical conditions).

During the implementation phase of the project, teaching and visual aids such as brochure and posters were utilized in an in-service training of Nurses and LPTs. Staff members were also sensitized of an alert feature in the electronic health record system to remind them to reassess for pain. A laminated visual aid was developed and posted at the nurses' station and all workstations on wheels (WOWs) to remind nurses to reassess for pain within one hour after giving pain medication.

During the baseline data collection, it was noted that all three shifts had a deficiency in pain reassessment at the start of the project, at a rate of 67%. The project concluded by utilizing a software tool called Infoview to evaluate for evidence of change. Although not as anticipated,

there was an improvement in the rate of pain reassessment as compared to the pre-implementation phase. The rate of pain reassessment increased from 67% before the project began to 79% after the implementation phase. In all, 28 patients received pain medication during the implementation phase. Of these, 22 patients were reassessed within one hour following the medication administration. In addition, it was found that night shift had the most improvements in pain reassessment, followed by evening and morning shifts respectively.

The project is expected to be ongoing due to the interest shown by staff, support by the leadership team of the department, and the benefit to patients of being pain free. (See Appendix E for the analysis of strengths, weaknesses, opportunities, and threats that could impact the sustainability of this project). This has enabled patients to participate in group therapies and other activities during hospitalization. Also, to sustain the project, nurses from each shift have been assigned the duty to ensure that all patients who receive pain medication during the shift are reassessed within one hour. If pain medication is administered during shift change, it needs to be communicated to the next shift to reassess when the time is due.

In conclusion, pain reassessment ensures treatment effectiveness. Patients are independent when pain is managed and are able to participate in group therapies.

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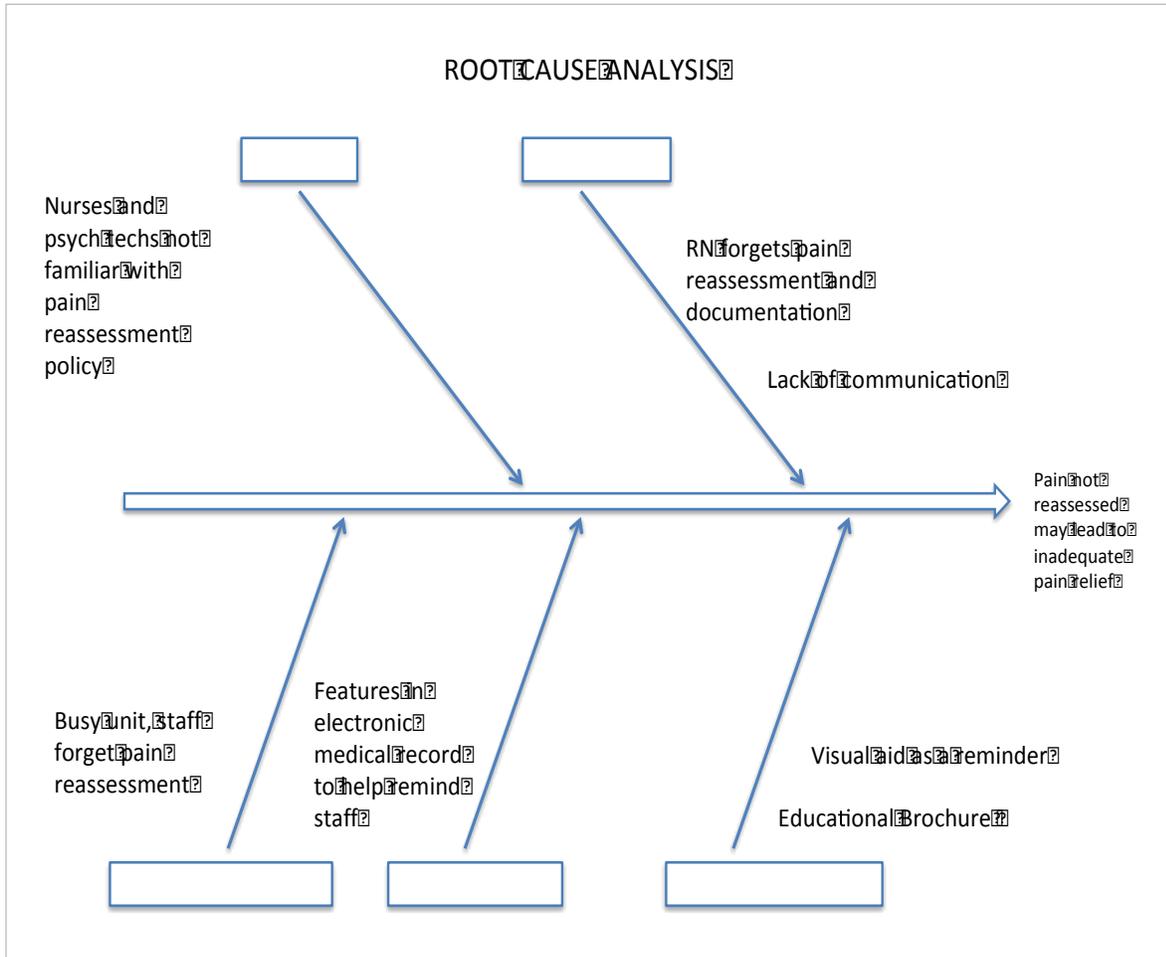
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Appendix A

Figure 1.0: Fish Bone Diagram



## Appendix B

Figure 1.1: Sample Visual Aid Posted at Workstations.

*Reminder! Reminder!! Reminder!!!*

## Pain management is a patient right



- Nurses must make a conscious commitment to support this right
- "It's good thing!"

Please reassess for pain within 1 hour after giving pain medication, & document in doc flow sheet. It is TJC standard and facility policy!

## Appendix C

Table 1.0: Projected Cost of Project

<b>Items</b>	<b>Unit Price (\$)</b>	<b>Total Cost (\$)</b>
40 hours CNL time	50 per hour	2,000
20 printed handouts	6 per handout	120
6 laminated visual aids	5 per piece	30
3 large size pizza	25 per 1	75
		2,225

Appendix D

Table 1.1: Gantt Chart

Months	August				September				October				November			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Microsystem assessment	■	■	■	■												
Pre implementation chart audit			■	■	■	■										
Meting with nurse educator							■									
Interview nurses							■									
Making visual aids								■								
In-service and intervention									■	■	■	■	■	■		
Post implementation chart audit														■	■	■

Appendix E

Figure 1.2: SWOT Analysis

