**Evidence -Based Plan Paper**

Name

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Course

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A quality improvement [QI] in the healthcare unit refers to a systematic framework in which healthcare facilities adopts to monitor, evaluate, and enhance the quality of healthcare services provided. The chain of activities in an organization is cyclic. There is need, therefore, for continuous improvement plans to enhance the performance. Implementation of continuous improvement plans can change the processes in a health facility from the old inefficient models and transform it to more efficient and effective processes enhancing productivity (Williams & Caley, 2020). The purpose of this paper is to discuss the quality improvement model that should be implemented to address the incidence of Central line-associated bloodstream infections [CLABSI].

**Quality Improvement [QI] Model**

There are several QI models that can be utilized to address nursing problems. The QI model that would be adopted in addressing the high incidences of CLABSIs is the Plan-Do-Study-Act (PDSA) Cycles. CLABSIs continue to be a challenge to health facilities specifically in the developing nations. Developed nations like United States and the United Kingdom have managed to address the incidence of CLABSIs by closely monitoring the incidence of these cases and adopting interventions to manage it. PDSA cycle refers to a four-stage model that is used to solve problems. CLABSIs is a major nursing problem that has had adverse effects on the provision of quality care. According to Karagiannidou et al. (2019), CLABSIs contributes to higher rates of mortality and morbidity. It also contributes to longer stays in the hospitals and increases the cost of care. This is supported by the study by Chi et al. (2020) which explained that patients diagnosed with CLABSIs are at 2.75 higher risk of losing their lives compared to patients without it. The study also indicated that CLABSIs increases the length of hospital stays by about 21days.

Based on the adverse impacts of this nursing problem, an evidence-based intervention that can address the challenge is the implementation of CLABSI care bundle. A CLABSI care bundle is a care model that provides a framework of the evidence-based processes that should be observed by healthcare professionals while they are inserting and maintaining the central line. This approach has been proven to be an effective approach of managing the incidence of CLABSIs (Payne et al., 2018). This care strategy encourages healthcare professionals to implement evidence-based practices such as maintaining hand hygiene, review of the line necessity on daily basis, optimal catheter-site choice, using closed needleless intravascular catheter systems and making sure the line dressing is intact and clean.

To implement this care bundle, the PDSA cycle would be utilized. The first stage of this QI model is the Planning stage. At this stage a team consisting of the healthcare professionals who understand the issue would be assembled. After the team has been created, an aim statement for the study would be created (Crowfoot & Prasad, 2017). Based on the nursing issue that has been developed, the team would collect primary data to assess the actual extent of the nursing problem in healthcare facilities. Evaluation of existing literature would also be done to assess the extent of the issue. After the evaluation, the nursing issue would be described based on the impacts it has on the facility and a problem statement would be developed. An analysis of the causes of the problem would then be made. Flowcharts would be utilized at this stage to provide a visualized chart of the problem. Alternatives on how to mitigate the issue would also be stated (Crowfoot & Prasad, 2017). This would be done by stipulating the interventions that can be adopted and what is set to be achieved when the intervention is implemented.

The second stage of the PDSA cycle is to Do. At this stage the proposed intervention (care bundle] would be implemented in the various units of the healthcare facilities. Data regarding the effectiveness and the challenges associated with the adoption of the intervention would be collected. This information would be utilized in the third stage of the model: Study stage (Crowfoot & Prasad, 2017). A check sheet would be used to capture data regarding the new intervention on what happens on daily basis. At the third stage: Study stage, an assessment of what was drafted as the aim statement would be done. This would help assess whether the intervention achieved what was set to attain. Questions that would be answered at this stage include determining whether the intervention led to a reduction in the incidences of CLABSIs, if there were any other unforeseen side effects and if there are challenges associated with the implementation of the intervention (Crowfoot & Prasad, 2017). A Pareto chart would be used to create a visual evaluation on improvements if any.

The outcome of this stage determines the step taken at the fourth stage: Act. If the results from the third stage shows that the intervention results in positive outcomes, the improvement plan would be standardized and made to be part of daily routine in healthcare facilities. Upon implementation in entire processes in an organization, the team would go back to the first stage to re-assess the process and determine whether further improvements can be made (Crowfoot & Prasad, 2017). In case, the intervention did not achieve the intended purposes [reducing the incidence of CLABSIs to zero], another intervention can be fronted and follows the exact same four stages.

References

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