Improving the Postpartum Depression Discharge Education to Increase Quality and Safety of Care: A Quality Improvement Initiative

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Improving the Postpartum Depression Discharge Education to Increase Quality and Safety of Care: A Quality Improvement Initiative

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NURS 958: Clinical Nursing Leadership

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May 7, 2024
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Abstract

**Background:** Postpartum depression (PPD) is the most prevalent psychological condition to affect mothers following childbirth which can have detrimental consequences on the physical and mental health of the mother, child, and spouse (Wang et al., 2021). Globally, postpartum depression affects 17.2% of the world population, and in the United States 1 in 8 women who recently gave birth reported symptoms of PPD, and 1 in 10 women reported experiencing a major depressive episode within a year following delivery (CDC, 2023). Patients’ spouses and family members are in a unique position to identify early manifestations of PPD which can lead to necessary intervention early enough to protect not only the mother, but also the baby (Pebryatie et al., 2022).

**Local Problem:** Discharge education in the microsystem did not include any specific information about PPD, and all the education given was geared toward the patient specifically, with little-to-no education given to the support person(s).

**Methods:** An intervention was created consisting of an educational sheet including the signs and symptoms of PPD to be provided to the patient’s support person, and in-depth education regarding PPD taught by the RN during the discharge teaching period. The Plan-Do-Study-Act (PDSA) model was used to test the intervention over 2 weeks, and measures for data collection involved both pre-intervention and post-intervention surveys.

**Results:** Prior to implementing the intervention, 100% of microsystem staff strongly disagreed that current discharge education about PPD was adequate and being taught to patients’ support people, compared to post-intervention where 100% of responses changed to strongly agree with those two statements. Following implementation of the intervention, 100% of staff strongly agreed that the information sheet was easy to understand and utilize, and that it contained no extraneous information that needed to be removed. Regarding if the information sheet was missing any important information that should be included, 78% staff answered no, 17% answered maybe, and 6% answered yes. There was an increase in patient preparedness to be discharged with 78% of respondents strongly agreeing and 22% somewhat agreeing, and 94% of staff members felt very confident in providing the information during discharge education whereas only 6% felt somewhat confident.

**Conclusion:** The specific aim of achieving having 75% of the nursing staff provide the education sheet and associated teaching to patients’ support person(s) during the discharge period was met and surpassed, with 100% of staff providing the intervention on the unit. The results of this study suggest that creating standardized education sheets focused on a specific topic is a simple yet effective way to reduce knowledge gaps patients experience and ease anxiety surrounding discharge home and the postpartum period. Recommendations for further studies to be conducted include identifying the most effective method of delivering discharge education, addressing the creation of an evidence-based standardized PPD education sheet, and examining the role of patients’ support person(s) once they leave the hospital.

**Keywords:** Postpartum depression, Partner, Support person, Education, Intervention, Postnatal, Mental health, and Discharge.
Introduction

Problem Description

Postpartum depression (PPD) is the most prevalent psychological condition to affect mothers following childbirth which can have detrimental consequences on the physical and mental health of the mother, child, and spouse (Wang et al., 2021). It is characterized by emotions ranging from sadness, anxiety, irritability and transient mood lability, to marked agitation, delirium, and delusions accompanied by behavioral changes (Rai et al., 2015). Globally, postpartum depression affects 17.2% of the world population (Wang et al., 2021). In research conducted by the Centers for Disease Control and Prevention (CDC) in 2023, 1 in 8 women in the United States who recently gave birth reported symptoms of PPD, and 1 in 10 women reported experiencing a major depressive episode within a year following delivery (CDC, 2023). Commonly seen risk factors include gestational diabetes mellitus (GDM), receiving epidural anesthesia during delivery, and having a prior history of depression (Liu et al., 2021). While these increase a woman’s chances of developing PPD, perfectly healthy mothers are not exempt and are also at risk for developing the condition (Shorey et al., 2018)

The labor and delivery microsystem has policies in place to be proactive in identifying mothers at risk for developing PPD including screening for PPD with the completion of the 10-question Edinburgh Postnatal Depression Scale (EPDS) as part of the discharge process which is standardized across most labor and delivery units in the US (“Edinburgh Postnatal Depression Scale”, n.d.). Any patient that scores a 10 or higher on the EPDS receives a psychological consult before they can be safely discharged from the hospital (M. Colizzi, personal communication, February 15, 2023). While the EPDS is an effective tool backed by evidence-based practice used to identify the risk and/or presence of PPD, the tool is designed to reflect on the last 7 days to be
most accurate which is not possible in the hospital setting as the average length of stay is 2 to 3 days. Additionally, PPD often does not usually begin to present itself until 4 to 8 weeks after delivery, long after a patient is discharged from a maternity unit (NIH, 2023). For this reason, it is imperative for proper education and resources to be delegated to each patient before discharge, regardless of their current risk.

Education that was provided to patients in the microsystem included the basic symptoms of depression such as feelings of sadness or losing joy typically found in things, information regarding the infant like the period of purple crying and safe sleep practices, and symptoms of heart disease and hypertension to look out for. While this information is valuable, it is mostly all geared toward the patient specifically with little-to-no education given to the spouse or patient’s family. This is especially true when it comes to PPD education. Patients’ spouses and family members are in a unique position to identify early manifestations of PPD which can lead to necessary intervention early enough to protect not only the mother, but also the baby (Pebryatie et al., 2022). Almost 100% of patients on the microsystem are accompanied by a partner or family member (M. Colizzi, personal communication, February 15, 2023).

In providing education about what to look out for to the support person, signs of PPD are more likely to be identified earlier on which can reduce rates of PPD and the number of severe cases. This can in turn help decrease maternal and infant mortality rates. A review of the literature was conducted to address the research question: For in-patient labor and delivery patients, how does providing an education-based intervention regarding the early signs and symptoms of postpartum depression designed for their support person aid in reducing rates of PPD and increasing early intervention for treatment?
Available Knowledge

Databases used to identify records included in this review are the Cumulative Index to Nursing and Allied Health Literature (CINAHL Complete), MEDLINE, Cochrane Database of Systematic Reviews, and PubMed Central. Keywords that were utilized during the search process were: postpartum depression, partner, support person, education, intervention, postnatal, mental health, and discharge. Limits that were used while conducting the literature search involved only including articles that were written and/or available in English, had the full text available, and were published during 2014 or later.

The initial search of the databases produced 1,141 records. Of those, 996 records were identified via CINAHL Complete, MEDLINE, and Cochrane, and 145 via PubMed Central. From there, 394 exact duplicate records were removed resulting in 747 records. All records older than 2014 were then removed, as well as any non-English texts and articles that did not have the full text provided, which resulted in 162 records to be screened for eligibility.

Inclusion criteria for screening the identified 162 records involved the focus of the article being on in-patient labor patients and their support person whether that be a spouse, partner, family, or friend. The focus of the studies had to be on Postpartum Depression as the issue, and the intervention had to be education-based. Exclusion criteria included any studies where the population focus was not on labor patients’ support person, or if the patients were outpatient. Any studies that focused on a topic other than Postpartum Depression were excluded, and studies that had multiple focuses such as including partner violence were not included either. All studies that included an intervention that was not education-based, or nurse driven were removed as well.
After screening the 162 records with the inclusion and exclusion criteria, 157 were removed for irrelevancy, leaving 5 records that met the criteria to be appraised in the review. The level of evidence for each article was appraised using the Joanna Briggs Institute (JBI) tool based on the quality of the design, risk of bias, internal validity, and strength of the evidence (Joanna Briggs Institute, n.d.).

**Critical Appraisal of a RCT by Abbaspoor et al. (2023)**

The randomized controlled by Abbaspoor et al. (2023) was designed to identify the effect of providing education to spouses of new mothers regarding the postnatal period. The primary study outcome that was analyzed was the perceived level of social support the new mothers received as well as their perceived stress levels and mental status, and the secondary outcome analyzed was the level of maternal self-efficacy. The researchers utilized a control group that received no intervention to compare against, and provided four online education sessions to patients’ spouses in the intervention group. These sessions included information regarding the importance of maternal health and social support in the postpartum period, physical and mental changes that occur postnatally, and how the spouse can help during this time (Abbaspoor et al., 2023). The study outcomes were measured in three intervals: prior to the intervention for a baseline, four weeks after delivery, and eight weeks after delivery through online self-reported surveys completed by the patient. The results of this study found that prior to the intervention, there was no statistical difference in maternal self-efficacy, perceived social support, and mental status between the control and intervention groups. However, following implementation of the intervention, it was found that the mean scores of the intervention group significantly increased for perceived social support ($P < 0.001$) and maternal self-efficacy ($P < 0.001$), and decreased for stress levels ($P < 0.001$) and poor mental state when compared to the control group.
Strengths of this study include that according to the JBI level of evidence appraisal tool, this article is a level 2 because it is a randomized controlled trial which is the second highest level of evidence. This study was conducted over the span of a few months at the end of 2021 so it is less than 3 years old making it more up-to-date evidence-based practice. Additionally, the inclusion and exclusion criteria for this study aligns with the target population being examined in the PICO research question. The authors analyzed the significance of the data using descriptive statistics and inferential statistics, as well as performing the Kolmogorov-Smirnov test, Fisher’s exact test, Chi-square test, and independent t-test to prove its statistical significance (P<0.001) (Abbaspoor et al., 2023).

Weaknesses of this study include the population size which was only 100 participants, as well as the location of the study which was conducted only at health centers and hospitals located in Kermanshah, Iran. Due to the limited population size and the location being localized, the data may not be generalizable to regions such as the United States which limits its applicability. The authors suggest conducting another randomized controlled trial with a larger sample size to confirm results of this study.

**Critical Appraisal of a RCT by Missler et al. (2020)**

The study by Missler et al. (2020) is a randomized controlled trial studying how effective implementing a psychoeducational intervention is in reducing psychological distress for parents postpartum and enhancing well-being. The intervention was presented in the format of an information booklet accompanied by an online video, a prenatal home visit, and postnatal phone call. The information presented was in regard to the changes birthing a child can cause both physically and mentally, and positive coping strategies to reduce risk of depression, anxiety, and stress (Missler et al., 2020). Data was collected online through questionnaires filled out by both
the patient and their partner at five different points: an initial baseline during the third trimester, again at the end of the third trimester, 2 weeks after giving birth, 6 weeks after, and 10 weeks after. The outcomes that were studied included the level of perceived stress, presence of depression or anxiety symptoms, and parental well-being. While the results did indicate a small change between the control and intervention groups, they were not statistically significant ($P < 0.01$). Participants also did state that although the intervention was not effective at preventing stress and depressive symptoms postnatally, they did find it useful and felt that it filled a gap in currently available information for new parents (Missler et al., 2020).

Strengths of this study include the level of evidence being a level 2 according to the JBI appraisal tool which is the second highest level of evidence possible making it credible. The inclusion and exclusion criteria matched the desired target population for the PICO research question, and the sample size of 234 participants was calculated according to an odds ratio (OR) to be effective for conducting a randomized controlled trial.

Weaknesses of this study include the intervention being targeted at new parents prior to the delivery of the newborn rather than in the immediate postpartum period which is the target focus of the PICO. This is due to there being a lack of high evidence articles studying the exact target intervention. However, the target population, topic, and design of the intervention matched the inclusion criteria which made the evidence applicable. This study also included solely Dutch participants, so the setting differed from the target making the results less generalizable.

Critical Appraisal of a Systematic Review by Noonan et al. (2021)

The systematic review by Noonan et al. (2021) synthesizes data from studies examining the inclusion of partners and family members in interventions designed for women at risk of perinatal depression. The authors searched five databases for records which they narrowed down
to 9 empirical studies meeting eligibility criteria. The studied interventions each involved partners and/or family members to some extent and were largely education based to identify the effect they had on a woman’s risk for developing antenatal depression or postpartum depression (Noonan et al., 2021). Information included in the interventions was in regard to the importance of communication in the postpartum period and associated mental health changes, as well as facts about PPD and resources for mothers experiencing symptoms. In assessing the evidence, Noonan et al. (2021) found that 8 out of the 9 studies reported statistically significant improvements in maternal depression and anxiety scores following the interventions, as well as significant decreases in self-reported postnatal depressive symptoms. In addition, the evidence showed that following implementation of the interventions, partners of new mothers were more attuned to and aware of symptoms of depression presenting themselves (Noonan et al., 2021).

Strengths of this study include that the authors looked at a variety of different studies conducted in various locations around the globe including the United States, Iceland, Australia, Iran, Spain, and France (Noonan et al., 2021). Two separate authors also reviewed all articles independently using Tidier. All studies that were analyzed were either randomized controlled trials or quasi-experimental designs. Additionally, because this is a systematic review, the evaluated level of evidence according to JBI is a level 1, which is the highest possible level of evidence. The authors declared no conflicts of interest, and there was no external funding for research which helps to eliminate bias.

Weaknesses of this study are that the studies included showed heterogeneity. The format and contents of the interventions assessed varied widely by approach and the participants were screened using different tools and with different criteria (Noonan et al., 2021). Because of this,
further research is recommended to establish how effective partner and family designed interventions are before they are adopted into routine antenatal and postnatal care.

**Critical Appraisal of a Systematic Review by Cluxton-Keller & Bruce (2018)**

The systematic review conducted by Cluxton-Keller & Bruce (2018) synthesizes evidence on how effective implementing family-based interventions is in preventing and treating perinatal depression, as well as its influence on maternal depressive symptoms. The authors searched six databases which yielded 7 eligible studies that they assessed for the review. Inclusion criteria for the review included women who were antenatal or postnatal up to 6 months, an intervention targeted at preventing and/or treating maternal depression, and at least one family member involved where family is defined as the patient’s partner/spouse, parent, or adult sibling (Cluxton-Keller & Bruce, 2018). The evidence from the 7 respective studies all showed a statistically significant reduction in maternal depressive symptoms following implementation of the interventions. Additionally, a fixed effects model showed that new mothers who had a higher level of family involvement during the intervention had an even greater significant decrease in depressive symptoms. While the interventions varied between studies, they all involved educating the patient and their family in some format, such as using psychoeducation, cognitive behavioral skill training, or therapy.

Strengths of this study include that the inclusion and exclusion criteria align with the desired population identified in the PICO research question, and the sample size was sufficient. All studies assessed in the review were either randomized controlled trials or cluster randomized trials that underwent a two-stage review process where the quality of design and threat of bias were assessed (Cluxton-Keller & Bruce, 2018). When evaluated using the JBI critical appraisal
Weaknesses of this study include that it was published 6 years ago, so it is not as up-to-date as desired due to a lack of current systematic reviews studying the same topic. The samples used in the studies lacked diversity as the majority of the participants were middle class, primiparous mothers and their family which can limit the generalizability of the results, and all couples that participated were heterosexual (Cluxton-Keller & Bruce, 2018). Furthermore, due to the nature of the data being self-reported for collection, it is subject to bias. Cluxton-Keller and Bruce (2018) suggest additional studies be conducted regarding this area of research to provide more insight into which interventions are most effective at preventing and treating perinatal depression.

**Critical Appraisal of a Meta Synthesis by Alves et al. (2018)**

The qualitative systematic review by Alves et al. (2018) synthesizes literature studying partner-inclusive interventions designed for the prevention and treatment of Postpartum Depression in new mothers. The inclusion criteria included non-biological interventions delivered within the first 12 months of postpartum designed with the goal of preventing or treating PPD, as well as including partners during the intervention. The preventive interventions analyzed in these studies included education about PPD and mental health during the perinatal period, strategies to cope with depressive symptoms and parenting concerns, and problem-solving strategies (Alves et al., 2018). After synthesizing the evidence presented, the results showed that women affected by PPD had a more rapid recovery when their partner was involved in the intervention than those who received no partner intervention. Efficacy of the interventions
on improving maternal mental health and depressive symptoms was also seen in comparison to women who did not receive any partner-centered intervention.

Strengths of this study are that the authors systematically assessed 26 articles which is a large sample of studies in order to get a comprehensive understanding of the available evidence. Additionally, the inclusion and exclusion criteria directly relate to the PICO research question being examined in this literature review making the conclusions relevant for consideration when developing an intervention.

Weaknesses of this study include the level of evidence, type of analysis, the heterogeneity of the samples studied, and the sample sizes. For this review, the authors conducted a qualitative analysis without a quantitative synthesis which causes the level of evidence when evaluated with the JBI appraisal tool to be a level 5 which is considered lower quality. However, qualitative data can provide alternative insights to quantitative data such as participants thoughts and feelings regarding the interventions. Many of the studies included in the review had small sample sizes, and mixed quality due to their methodologies despite the heterogeneity of their assessment measures (Alves et al., 2018). Lastly, of the 26 studies identified as meeting eligibility criteria for the review, the authors were unable to receive access to the full text of 8 of the included articles which leaves room for error due to not having access to the studies in their entirety. While the rigor of a meta synthesis is less than a systematic review, the results nicely supplement the results from the other studies and supports the importance of partner involvement in PPD focused interventions.

Evidence Synthesis

Involving the patient’s support person, such as their partner, parent, sibling, or close friend in interventions designed to prevent and/or reduce symptoms of postpartum depression in
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new mothers improves the efficacy of the intervention. After assessing the presented evidence, it can be determined that the respective interventions in the studies by Abbaspoor et al. (2023), Noonan et al. (2021), and Cluxton-Keller & Bruce (2018) were all statistically significant in their effect on preventing and treating PPD for new mothers. Although none of the interventions were identical, they all had the fundamental element in common of being education-based. Each intervention provided information about the importance of maternal health and social support in the postpartum period, accompanied physical and mental changes that occur, and depressive symptoms that can indicate PPD. The format that the information was provided in was different between each study, but there was no evidence supporting that one format was more effective than another. The randomized controlled trial by Abbaspoor et al. (2023) used online training sessions once per week, whereas the systematic reviews by Noonan et al. (2021) and Cluxton-Keller & Bruce (2018) included the use of psychoeducation, cognitive behavioral skill training, online therapy, and information booklets.

The results of the high-level evidence articles are further supported by the qualitative systematic review by Alves et al. (2018) which focused more on treating new mothers affected by depressive symptoms or with diagnosed PPD. Alves et al. (2018) found that designing a partner-centered intervention was more effective in decreasing depressive symptoms and improving mental health than simply providing the same information to the patient alone. Additionally, new mothers already dealing with PPD saw faster recovery rates following the implementation of partner-based interventions than new mothers who had a non-involved partner (Alves et al., 2018). Although this level of evidence is lower due to the qualitative nature of the design, this review further supports that involving the support person in the intervention makes a
positive difference for new mothers at risk of developing PPD as well as those who are currently struggling with it.

While the evidence is compelling, the results of the randomized controlled trial conducted by Missler et al. (2020) found that there was no statistically significant difference ($P < 0.01$) between the intervention group receiving the education and the control group, with both reporting almost equal levels of perceived stress and depressive symptoms postnatally. This conflicts with the results of the other studies and demonstrates that more research needs to be done in order to solidify understanding.

The combination of this evidence reveals that including the patient’s support person as an integral part of education-based interventions designed to reduce and/or prevent PPD is effective and supports implementing a similar intervention. However, due to the overall lack of high-level quality evidence that is currently being done on this topic, further research should be conducted to achieve a better understanding of exactly how effective different interventions are, and which specific interventions have the greatest impact on preventing PPD.

**Clinical Implications**

When creating an intervention designed to be implemented with the goal of quality improvement, it is important to diagnose the problem and analyze current research to understand the applicable evidence-based practice. This is one of the important roles of a Clinical Nurse Leader (CNL). Presently, postpartum depression affects over 1 in 7 women annually (Mughal et al., 2022). However, 98.4% of women in the United States choose to deliver in a hospital which puts the CNL and labor and delivery nurses in a unique position to be able to complete interventions targeted at reducing patients’ risk for PPD (Mughal et al., 2022).
The mounting evidence in support of creating partner-based interventions in order to help prevent PPD indicates that there is an opportunity for improvement on labor and delivery units that are not administering education to the support person and are solely providing information to the patient. While there is no current evidence suggesting one format of intervention is the best, the findings from Abbaspoor et al. (2023), Noonan et al. (2021), Cluxton-Keller & Bruce (2018), and Alves et al. (2018) indicate that creating any type of user-friendly method for delivering education to the patient’s support person is effective. As long as the vital information is included regarding the typical physical and mental changes that happen postnatally, depressive signs and symptoms, and how the partner can support the patient, then the intervention is evidence-based. After implementing this intervention, rates of readmission may decrease, and patient satisfaction and quality of life may increase which are key indicators that CNLs monitor and constantly aim to improve. Therefore, the evidence supports the creation of an education-based intervention targeted towards patients’ support person about the normal changes associated with postpartum versus what constitutes as signs and symptoms of PPD so they can intervene early and get their partner the help they need.

**Rationale**

This quality improvement initiative was guided by the Plan-Do-Study-Act (PDSA) model which is one of the most popular approaches for implementing change in healthcare due to its structured nature and ability to learn quickly how effective an intervention is (Reed et al., 2016). During the Planning phase, an assessment of the unit’s purpose, patients, professionals, processes, and patterns (5 Ps) was conducted to get a comprehensive understanding of the microsystem where the problem of postpartum depression education was identified, and evidence-based literature was reviewed. A statistical analysis was delineated along with a
detailed description of the intervention and study of the intervention in the methods. In the Do phase, a targeted intervention was implemented on the microsystem, and in the Study phase data was collected on what percent of the nursing staff provided the intervention and how effective they believe it to be. Finally, in the Act phase the findings were disseminated to key stakeholders and the intervention was accepted or rejected based on an analysis of the results. If it was rejected, any necessary adjustments were made to the change idea.

**Global Aim**

The global aim was to improve PPD discharge education in the in-patient labor and delivery unit. The process begins with nurses on the unit providing more in-depth education regarding the signs and symptoms of PPD. The process ends with the nurse providing the information sheet to the patient and their support person to take home with them and answering any posed questions. By working on this process, we expected to reduce rates of PPD among patients once they are discharged home from the hospital and increase early intervention for patients at-risk of developing PPD. It was important to work on this now because PPD greatly impacts the quality of life of the mother and has risks to the safety and health of both the mother and baby, so by initiating this process there was a chance for improvement in maternal and infant mortality rates (Pebryatie et al., 2022).

**Specific Aim**

The specific aim for this QI project was to achieve having 75% of the nursing staff deliver the postpartum depression education intervention to their patients’ support person by July 26th, 2024. Progress was measured using staff surveys to assess how many nurses delivered the intervention material to patients, and how many patients received the intervention education.
This quality improvement project was designed to address the lack of education in the microsystem provided to patients’ support people regarding the signs and symptoms of postpartum depression (PPD).

**Methods**

**Context**

**Cost and Benefit Analysis**

Costs associated with implementing this quality improvement project are limited due to the nature of the intervention. For data collection, the online survey tool *Qualtrics*® was utilized which is provided for no cost through the University of New Hampshire. The intervention itself included a printed sheet of paper that was distributed to each patient along with the rest of their discharge materials. The standard cost for printing is between 0.5 cents to 2 cents per sheet (Errera, 2023). The microsystem serves an average of 30 to 60 patients per month, and has around 650 deliveries annually (M. Colizzi, personal communication, Jan. 15, 2024). To supply the educational sheet to every patient discharged from the unit, it cost between 15 cents to $1.20 per month depending on the census, and between $3.25 to $13.00 for a full year. The nurses delivered the education during the discharge teaching period, which is part of their regular job duties, so there was no required extra costs associated with delivery of the teaching.

Postpartum depression treatment can be costly for both the patient and the hospital. A recent study conducted by the Department of Health and Human Services found that patients with PPD had larger medical expenditures by $5,078 than patients who did not have PPD (Pollack et al., 2022). Additionally, readmissions are associated with adverse outcomes and
increased costs to hospitals, with an average cost of $15,200 per readmission (Beauvais et al., 2022).

Initiating this quality improvement project financially cost the hospital up to $13.00 per year and cost a few extra minutes of nurses’ time during their regular job hours in order to provide the education. In comparison to the average cost of $5,078 per patient to treat PPD, and $15,200 per readmission, the benefits of implementing the intervention significantly outweigh the financial costs.

**Intervention**

The intervention was an information sheet directed at the patient’s support person containing ways to identify early symptoms of PPD in the patient. The information was taught to the support person by the Registered Nurse during the discharge teaching period. The education provided by the intervention included the evidence-based early signs of PPD such as feelings of being overwhelmed, anxious, more sad than usual, irritable, crying for no apparent reason, unexplained feelings of guilt or fatigue, and more (Rai et al., 2015). Furthermore, the information sheet included the 988-crisis lifeline they can call if symptoms progress to psychosis, suicidal ideations, or thoughts of harming the baby. This intervention was added to the current discharge teaching provided to the patient.

This intervention involved several members of the interdisciplinary team in order to be successful, including the project lead, the Registered Nurses (RNs), Clinical Nurse Leader (CNL), unit managers, Unit Coordinator (UC), and the Clinical Educators. The Clinical Educators and CNL approved the intervention and assisted in the implementation such as helping to print out the sheets and distributing them into the discharge folders that get placed into each
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The RNs provided the education on the topic to the patient’s support person during discharge teaching and answered any questions they may have.

**Study of the Intervention**

Data collection and analysis were conducted through the survey platform *Qualtrics* which collected all of the data in one location. It formatted the data into different charts and graphs in order to analyze and compare findings immediately. The survey was emailed to each RN on the unit for them to complete after administering the intervention to at least one patient.

Both pre-intervention and post-intervention surveys were used to study the process and outcomes of implementing the intervention on the unit. The rationale behind using surveys to measure the intervention is to receive instant feedback in a format that is easy to compare results and collect both qualitative and quantitative data to measure the outcomes. The questions are also designed to identify areas for improvement with the intervention to drive further research and inform additional QI projects.

**Measures**

Survey questions included qualitative questions such as the number of patients the nurse has provided the intervention to so far, in addition to Likert scale questions judging the ease of using the information sheet, if there is any important information missing from the sheet/ if they would add or remove anything from it, if the support person or patient had any questions regarding the teaching, how prepared the nurse feels the patient and support person are to leave the hospital, and how knowledgeable they are on what to look out for once they are at home when compared to before being given the intervention.

The survey was designed specifically for this intervention, so all questions are pertinent and applicable to the intervention. Additionally, the survey platform *Qualtrics* was utilized to
organize the data into graphs and charts to allow for easy analysis of the findings. Limitations to the validity and reliability of this measure are that the survey was created specifically for this intervention and is not an evidence-based measurement tool due to the lack of existing evidence on this topic. However, to assess for content validity the survey was previewed by the Clinical Educators who agreed it is a valid way to gain information on the topic.

The aim was to have at least 75% of the nurses participate in delivering the intervention to at least one of their patients’ support persons and complete the post-intervention survey. The operational definition of the term “support person” in this case is referring to the person that accompanied the patient onto the labor and delivery unit and stays with them throughout their admission. This includes the father of the baby, patient’s spouse or partner, or close family member to the patient such as their parent, grandparent, or sibling.

Analysis

The pre- and post- surveys collected both quantitative and qualitative data regarding the ease of use of the intervention, its effectiveness, and any changes that are recommended to be made to the intervention. All collected data was compiled by Qualtrics© so it could be easily compared, and quantitative data was categorized and displayed into chart or graph form to assist with analysis. In addition, the quantitative data was analyzed using descriptive statistical analysis to generate summaries about the findings and determine the effectiveness of the intervention. Questions about frequency of distribution were presented as frequency and percentage, and the Likert-style questions were reported with the mean, standard deviation, and range for aggregate data. Qualitative data was assessed for commonalities between responses and grouped together by key themes in order to inform what changes should be made to the intervention moving forward.
Ethical Considerations

Respecting the rights and integrity of everyone involved is preeminent when collecting data and studying an intervention. All nurse participants completing surveys were provided with a consent page including the purpose of the QI project and the contents of the survey prior to being able to answer the questions. The first question of the survey is a forced response where the participant must consent to participating to be directed to the questions. Any staff who do not consent will be automatically redirected to a thank you page and will not be included in the study.

All responses are anonymous to decrease bias and promote honesty. The intervention and surveys were designed to protect HIPAA and do not breach patient confidentiality as all patient information is protected and not included. This QI project will be reviewed by the Department of Nursing Quality Review Committee to confirm that it meets the criteria for a QI project which exempt of full International Review Board (IRB) review.

Results

Evolution of the Intervention

The initial steps in conducting this quality improvement project involved interviewing staff members about the current state of postpartum education such as how much of the education was focused on postpartum depression, and how much education was directed towards the support person as opposed to the patient themselves. Interviews were conducted with staff members in person during clinical hours on the unit and were done in an informal manner to allow for open and honest communication. Questions asked to each staff member remained the
same to allow for comparison and use as pre-survey data. In total, 20 staff members were interviewed for the pre-intervention phase which lasted for the span of 3 weeks for data to be collected.

This deviated from the original plan to create an online pre-survey to send out to staff members’ emails in order to collect data to compare against collected post-intervention data. However, due to the nature of the improvement, interviewing staff proved to be more time-effective and streamlined for getting the intervention implemented which is why the change was ultimately made. Beyond the changes that were made regarding the pre-survey, there were minimal deviations made during planning and execution of the intervention compared to the originally outlined plan.

**Process Measures and Outcomes**

Process measures designed to improve discharge education regarding PPD through the inclusion of the present support person included conducting a pre-intervention survey and post-intervention survey. The pre-intervention survey was conducted over the span of 2 weeks including 4 clinical days, where staff members were verbally interviewed regarding the current status of PPD education during discharge and if they were including the patient’s support person in the teaching. This survey was used to collect necessary data in order to determine the most effective intervention to tackle the apparent knowledge gap that existed surrounding PPD for patients.

The post-intervention survey was conducted online through the platform Qualtrics© and included a total of 7 questions that were a combination of quantitative data and Likert style questions. Questions assessed the nurses’ use of the information sheet and how many patient rooms they have provided the education in, as well as gauged the ease of use of the information
sheet, their confidence in delivering the education, the information included on the sheet, and how prepared patients’ support people feel to be discharged home after being presented with the sheet and education. The initial questions were designed to get an understanding on how many times the nurse had conducted the intervention and their level of comfort doing so. The Likert style questions aimed to understand how effective the information sheet and education is at preparing patients and their support people to be discharged home, as well as if any changes need to be made to the sheet to make it even more effective moving forward.

**Contextual Elements**

The most prevalent contextual element that interacted with the quality improvement project was that the survey data was collected using an online platform sent to staff members with a link to complete, whereas the intervention was conducted in person with paper materials. The disconnect between the media types may have caused some confusion for nurses not present the day the intervention was explained in-person, as they would have to rely on either checking the flyer on the communication board, or being told by one of the in-person staff what the intervention is and how to complete it. This may have led to fewer nurses either completing the post-intervention survey, or not providing the information to the correct target population.

Stakeholder buy-in was an important contextual element as well because providing the staff members with the information sheet can only go so far, with them needing to take the extra step and provide the education on the sheet to their patients at discharge. By personally interviewing staff members to determine their grievances with postpartum discharge education and ways they would like to see it improved, stakeholder buy-in was facilitated as the project became something interesting and important to them. This may have improved staff members
willingness to deliver the information to their patients’ support people and follow-up with the post-intervention survey detailing how effective they felt the teaching was.

**Observed Associations**

The pre-intervention survey completed in-person revealed that there was a lack of education specific to postpartum depression being taught to patients during discharge education, with 100% of the 16 RNs interviewed agreeing that education regarding PPD is inadequate. Additionally, all of the 16 RNs interviewed pre-intervention said that no education was being provided directly to patients’ support person(s) whatsoever. This indicated a knowledge deficit for patients regarding being properly prepared to leave the hospital and be on their own at home.

A PPD information sheet targeted at the support person was developed as the intervention to respond to this knowledge gap, and after its implementation 18 nurses from the labor and delivery microsystem completed the post-intervention survey.

The first two questions on the post-intervention survey aimed to narrow down respondents to solely staff members who have participated in implementing the intervention in order to glean accurate data. Out of 18 responses, all 18 had provided the information sheet to at least 1 support person and delivered the corresponding education which is shown in Figure 1. Of those, 15 of the 18 respondents (83%) had provided the education to between 1 and 5 different patient rooms, and 3 of 18 (17%) had provided the education to over 5 patient rooms depicted in Figure 2.

**Figure 1**

**Question 1**
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Figure 2

Question 2

The first Likert scale question asked about the ease of use of the information sheet to determine if the created intervention is conducive to its purpose. The results revealed that 100% of staff strongly agreed that the information sheet is easy to understand and implement. 0% of staff somewhat agreed, neither agreed nor disagreed, somewhat disagreed, or strongly disagreed that the intervention was easy to understand.
The following questions regarding if the information sheet was missing any important information or containing any irrelevant information were aimed at understanding what changes should be made to improve the information sheet moving forward. When asked if the information sheet was missing any important information that should be included, 78% staff answered no, 17% answered maybe, and 6% answered yes which is shown in Figure 4. However, 100% of staff agreed that there was no irrelevant information included on the information sheet that needed to be removed as seen in Figure 5.

While the majority of staff answered that nothing was missing from the information sheet, the 17% that said maybe and the 6% that said yes show a need for the intervention to be re-worked in order to include all necessary relevant education. Follow-up with the staff is necessary in order to determine what information they feel is missing and is pertinent to be
included. This can in turn better reduce the PPD knowledge gap present and continue to improve discharge education.

**Figure 4**

*Question 4*

Is the information sheet missing any important information?

- Yes
- Maybe
- No

**Figure 5**

*Question 5*

Would you remove anything from the information sheet?

- Yes
- Maybe
- No
The second Likert scale question asked staff to respond to the statement that the information sheet better prepares patients and their support person(s) to be discharged home. The results found that 78% of respondents strongly agreed with the statement, 22% somewhat agreed, and 0% neither agreed or disagreed, somewhat disagreed, or strongly disagreed which is depicted in Figure 6.

When compared to the pre-intervention results of 100% of staff agreeing that the current PPD discharge education is inadequate and that 0% of them provided education directly to the support person(s), this shows a positive increase in patient/support person preparedness to be discharged home. These results indicate that following the delivery of the information sheet, patients’ support people are more knowledgeable and feel more prepared to go home than they did prior to receiving the education which suggests a desirable outcome from implementing the intervention.

Figure 6

Likert Question 2
The last question is a Likert style question designed to evaluate the level of comfort the RNs have in delivering the education from the information sheet to the patients’ support person(s). The results as seen in Figure 7 show that 94% of staff members felt very confident in providing the information during discharge education, 6% felt somewhat confident, and 0% felt not very or not at all confident. This data indicates that the nurses felt overall confident in delivering the education and implementing the intervention, so any prior results would not be skewed due to lack of confidence while delivering the information sheet and teaching. It also indicates that the nurses felt well prepared to participate in the intervention and are within their scope of practice to do so.

**Figure 7**

*Likert Question 3*

![Likert Question 3](image)

**Unintended Consequences**

There were few unintended consequences associated with implementing the intervention, including no related unintended costs or failures whatsoever. An unintended problem that occurred was the implementation of the information sheet due to time constraints preventing
explanation of the intervention to the whole staff together such as in a staff meeting. Only being able to provide information regarding the intervention and how to enact it to one group of day shift nurses created an issue with implementation preventing it from going smoothly.

An unintended benefit of the intervention was the unexpected stakeholder buy-in that occurred from numerous staff members without the need for additional incentive. By including them from the start in the identification of a problem they felt the consequences of, many of the nurses on the unit were actively involved and very few staff members were resistant to the change.

**Missing Data**

Each participant that completed the post-intervention survey answered all questions with none being left blank. This means that there is no missing data from the participants that would affect analysis of the results. However, not all staff members on the microsystem conducted the survey, so the population was not 100% representative of the unit, and left room for some missing data that could have contributed to the results overall. In addition, 16 staff members were interviewed during the pre-intervention whereas 18 staff members conducted the post-intervention survey, so the populations interviewed varied slightly.

**Discussion**

**Summary**

**Key Findings**

The findings from the post-intervention survey suggest that the intervention was successful in increasing the number of nurses on the unit who provide discharge education regarding PPD directly to patients’ support people. Prior to implementation of this quality
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improvement project, 0% of staff members interviewed were providing discharge education
directly to the patient’s support person and were rather only directing education towards the
patient themselves. Additionally, there was no education being provided about PPD beyond the
basic symptoms of depression including feelings of sadness and hopelessness. Post-intervention,
the percentage of staff members who provided PPD specific education to patient’s support people
rose to 100% which is a significant increase. In regard to the specific aim, it surpasses the goal of
having 75% of staff members deliver PPD focused discharge education to patients’ support
person(s) by July 26, 2024, which indicates the specific aim for the project was met.

Other results from the post-intervention survey indicate that the information sheet was
well-designed for the target population and includes the necessary information to be effective in
helping loved ones to identify signs and symptoms of PPD early enough to intervene. These
findings include 100% of staff agreeing the information sheet is easy to understand and use,
100% answering that there was no extraneous information they would remove from the sheet,
78% of respondents strongly agreed that the information sheet better prepares patients and their
support person to be discharged home, and 22% somewhat agreed. The finding that 78% of
respondents felt no important information was missing from the sheet, 17% answered maybe,
and 6% answered yes, further supports that the creation of the standardized information sheet
was successful. However, it also implicates that adjustments can and should be made to the sheet
to ensure it is not missing any important information to provide the best education and in turn the
highest odds of reducing PPD.

**Particular Strengths of the Project**

This project had many strengths throughout that helped it be successful including
feasibility and stakeholder buy-in. Due to the simplicity and structure of this project, it made it
very easy to formulate a PDSA cycle to test and stay on track throughout the process. This project was formulated through close collaboration with RNs on the unit, management, and the nurse educator which resulted in a high level of stakeholder buy-in as staff members were closely involved throughout the process. This allowed for an easier and more streamlined implementation of the project as most of the people necessary were already involved in the planning process, so they were familiar with the concept and on board with the change when it came time to initiate the intervention. It also ensured that participation in pre- and post-intervention surveys was high, so data collected was most representative of the unit. There was an 112% increase in survey participation between the initial survey and the post-survey which further supports the success of attaining stakeholder buy-in.

**Interpretation**

**Association Between the Intervention and Outcomes**

Prior to the intervention being implemented, the nurses on the unit reported a lack of discharge education being delivered to patients’ support people, as well as a lack of education being taught specific to PPD. There was an agreement that the current discharge education was inadequate for properly preparing patients to go home. The intervention had a direct impact on the discharge process on the unit, altering the way the nurses provide education to patients as well as the type of education they provide. There was a significant increase in the number of staff members who provided education specifically surrounding PPD following implementation of the intervention, as well as a significant increase in the number of staff who included the patient’s support person in the discharge education. In combination with an overwhelming majority of nurses claiming very high confidence in delivering the education, these findings indicate that the intervention was effective in integrating PPD into the discharge education process.
There was a high vote of confidence from nurses that the information sheet does indeed better prepare patients to be discharged home than the previous education they were receiving prior to the intervention. This evidences that the designed intervention of an information sheet and in-person teaching performed by staff are effective at filling the knowledge gap patients most commonly experience regarding the signs and symptoms of PPD. The sheet was easy to understand and utilize, and information on the sheet was sufficient and did not contain any extraneous material that could distract or confuse non-medical personnel. These findings likely contributed to the increased percentage of nurses feeling that patients are better educated and prepared to be discharged post-intervention in comparison to pre-intervention. Creation of standardized education to be delivered to every patient room along with the other discharge education already in circulation ensures all patients are receiving the same necessary information to best prepare them when they leave the hospital and create the highest chance of reducing PPD rates.

**Comparison of the Results**

Due to the innovative nature of this intervention, there are no other studies or research that can be directly compared to these results to prove effectiveness. This is due to the intervention being created specifically for this quality improvement project instead of utilizing a standardized tool. However, numerous studies exist focusing on the same topic that use similar enough interventions that the results from this project can be compared against for validity.

The systematic review by Noonan et al. (2021) discussed how the implementation of education-based interventions including involvement of the patient’s partner is essential in reducing anxiety leaving the hospital, and when following up in the postpartum period it was correlated with significantly reduced levels of anxiety and depressive symptoms. The results also
showed that self-advocacy for patients increased due to the increase of available knowledge about symptoms of PPD to look out for. These results supplement those found through this QI project that nurses providing specific PPD education during discharge to support people is vital in giving patients the best chance of identifying PPD symptoms early enough to get treatment and proper support. These results are also comparable to those found by Abbaspoor et al. (2023), Cluxton-Keller & Bruce (2018), and Alves et al. (2018) which all indicate nurses play an integral role in PPD prevention through the education they provide to patients prior to discharge.

**Impact of the Project**

The most notable impact of this project was the positive change it made to the discharge education process by providing necessary information to patients and their loved ones in order to reduce postpartum complications. Creating an information sheet with all of the necessary education to provide to loved ones of patients on what symptoms to look for that may indicate PPD not only remedies the knowledge gap that existed prior to the implementation of this project, but also promotes standardization of the discharge education. This ensures that all patient rooms receive the same information and are provided with the same resources, so no disparities occur between them, and all patients are given the most up-to-date evidence-based practice for preventing development of PPD. This impacts both the system as it alters the discharge process that occurs on the unit, as well as the people as it changes their duties and responsibilities in their role as educators. It makes the education process as easy as possible, so nurses do not need to spend extra time coming up with the education on their own, and the simplistic format ensures all nurses are comfortable with delivering the teaching.

In addition, this project impacts patients and their support people by increasing their knowledge on important topics that directly affect them that they would otherwise have limited
to no knowledge about. It also offers an opportunity for patients to ask questions to a healthcare personnel about the education, so they feel better prepared to be on their own at home rather than leaving unsure or with questions about the teaching.

**Reasons for Any Differences**

While there were a few differences seen from what results were anticipated to what the actual outcomes were, the most notable difference was likely due to the intervention being a change in the RNs’ typical discharge routine. Results that were not expected were due to a more improved outcome than estimated which is a positive finding and indicative of the intervention being more of a success than first anticipated. An example of this is the specific aim having a goal of 75% of nurses providing the education, whereas the data reports 100% of nurses delivered the education.

However, a difference observed in the data that varies from the anticipated result was regarding the information included on the information sheet where 17% of staff felt that important information may be missing from the sheet, and 6% felt that yes important was missing from the sheet. This finding differs from the initially anticipated result as the sheet was developed with numerous staff members who approved it prior to being implementation. This difference is likely due to two factors. The first being that the nurses who answered “maybe” or “yes” to the survey question (Figure 4) were not the ones involved in the creation process so they would have contributed the lacking information during that time. The second most likely reason for the disparity is that nurses who provided the education to multiple patient rooms may have been met with the same questions more than once, which prompted them to indicate additional information should be added to the sheet to accommodate for this.
**Costs and Strategic Trade-offs**

This project had a low cost associated with creation and implementation due to the nature of it being education-based. The only financial cost was the cost of printing out the information sheets with the rest of the discharge information packet which comes out to approximately $0.60 for the two week cycle this intervention was tested for.

Non-financial costs of implementing the intervention include the cost of time. However, doing so only took up a few extra minutes of nurses’ time spent providing education to patients prior to discharge during their already scheduled work hours, so there was no requirement for them to donate their time making this cost very inconsequential. The payoff of the few extra minutes of time spent providing education being greatly improving patients’ quality of life after leaving the hospital makes the trade-off of costs more than worth it.

Additionally, through the provision of the PPD information sheet and discharge education, financial costs associated with readmission and PPD treatment will decrease. With the help of their loved ones, patients will be able to identify early warning signs to get the help they need before needing to be hospitalized which can become a significant financial burden on both the patient and the hospital.

**Limitations**

*Limits to the Generalizability of the Work*

Although the results of this quality improvement project showed a positive outcome and was effective in achieving the specific aim, there are limits to the generalizability of the findings. The first limit is the sample size used for this project. A total of 16 nurses participated in the pre-intervention survey and 18 in the post-intervention survey. While this is a large majority of
nurses on the unit, this small population size limits the findings as the sample is not large enough to account for random error.

Another limit to the generalizability of this work is that the project was only conducted in this specific microsystem on the seacoast of New Hampshire. The patient census on the unit may vary immensely from other labor and delivery units in other regions of the country, and the number of patients served and staff to patient ratios may vary which can negate how effective this intervention is for those differing settings.

The information sheet was also created in English as 92% of the New Hampshire population speaks English which limits generalizability for other regions where English may not be the primary dialect (U.S. Census, 2023).

**Factors Limiting Internal Validity**

The primary factor that limits internal validity of the quality improvement project is that the survey was developed specifically for the intervention instead of using a pre-existing standardized survey to get results that was backed by evidence-based practice. This can limit internal validity as the survey has not been previously used or been tested for validity. In addition, questions used may have been worded poorly causing inaccurate answers by respondents, as well as questions that should have been asked to thoroughly analyze the data may have been missed.

The pre-intervention interview was conducted in person during clinical shifts that occurred during the day which did not allow for nurses on the night shift to have their thoughts included and could have skewed the results when comparing pre-intervention with post-intervention results. However, this decision was made due to the nature of the intervention being
specific to discharge education which very rarely occurs on the night shift due to almost all patients being discharged during the day shift hours of 0700 and 1900.

**Efforts made to Limit and Adjust for Limitations**

Because no pre-existing standardized survey was able to be found that tested for the precise factors this project required, a new survey had to be created specific to the intervention. However, to remedy this the survey was developed using examples from other evidence-based studies as a guide. The survey was also created collaboratively with the Nurse Educator and Nurse Manager of the unit to adjust for this limit to internal validity. Additionally, all survey questions were worded neutrally to avoid bias from the participants, collecting strictly quantitative data and using Likert scale questions for qualitative data collection.

Data analysis was conducted directly through the survey platform *Qualtrics*© to avoid data transfer and input errors which could limit validity and create inaccurate results. By keeping data in the same portal as the survey, it reduces the risk for human error in creating figures and analyzing results, therefore ensuring that any conclusions drawn from the data is accurate of the actual data and not the result of an error.

**Conclusion**

**Usefulness of Work**

This quality improvement initiative was useful in getting nurses on the unit to start incorporating their patients’ support person(s) into the discharge education process, as well as start providing specific education regarding life altering conditions such as postpartum depression. This lays the groundwork for more education topics to be incorporated into the discharge process to best prepare patients for discharge and the realities of the postpartum period.
The creation of a standardization education sheet to be provided to a patient’s support person ensures that all the education each patient receives prior to discharge is the same, providing everyone with equal opportunities to decrease their risk of PPD. It reduces stress placed on the nurses to have to come up with their own education and reduces the probability that a patient does not receive the proper education. Supplying the sheet for the patient’s loved one to take home also reinforces the teaching provided and acts as an important resource in early identification of PPD.

**Sustainability**

The sustainability of this project is yet to be seen. However, it has the potential to remain in use in this microsystem due to the nature of the intervention and the low costs, but high rewards associated with it. Due to the low cost of this intervention only taking up a few extra minutes of nurses’ time during their already scheduled hours of work, continuing to implement it moving forward is very realistic. Because the intervention is education based, it can be continually updated to ensure it includes the most up-to-date evidence-based practice and will never become irrelevant.

With time, if nursing staff continue to implement the intervention, it is plausible that it will become ingrained in their discharge routines and become the new normal for them, making it sustainable. However, one factor that may reduce sustainability of this project is the stakeholder buy-in of the intervention. As time progresses, staff may get tired of remembering to print out the PPD information sheet as well as the standardized discharge education packet. Their loss of investment in the project can lead to a decrease of participation and use and affect the sustainability of the project as time progresses.
Potential for Spread to Other Contexts

The findings from this project have the ability to be utilized and spread to other contexts to continue improving both the unit itself, and other Microsystems within the macrosystem. The results showed that following implementation of the intervention, nurses began to provide education during the discharge process to not only the patient, but also the patient’s loved one. This creates an opportunity for the loved one to be involved in the patient’s care and increases the opportunities for warning signs and symptoms of common postpartum complications such as PPD to be identified early. This can be spread to other topics of education that are not currently included in the standardized discharge process which can help reduce rates of other postpartum complications.

The inclusion of patients’ support person is also applicable to many other Microsystems wherever the patient is accompanied by a loved one. Making it standard practice to direct discharge education to the support person as well ensures that no important information is missed or forgotten once the patient is discharged home and provides the patient with someone to help them out during the period of time following discharge when things may be unstable and uncertain.

Implication for Practice and Further Study in the Field

The results of this study implicate that creating standardized education sheets focused on a specific topic is a simple yet effective way to reduce knowledge gaps patients experience and ease anxiety surrounding discharge home and the postpartum period. Further studies should be conducted regarding the most effective methods of delivering discharge education, creating a standardized PPD education sheet that is evidence-based, and the role of patients’ support person(s) once they leave the hospital. The information sheet created for this quality
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improvement project was found to be effective during the 2-week PDSA cycle it was tested, but it is only a start. While there are numerous studies that have been conducted surrounding PPD, more of a focus should be placed on identifying effective methods to prepare patients prior to leaving the hospital, and on ways to identify early signs of PPD development so it can be treated prior to adverse outcomes occurring.

In addition, the findings showed that incorporating patients’ loved ones into their care and specifically during discharge education decreases anxiety and increase feelings of self-efficacy. This suggests that patients’ support people should be more closely included throughout their stay in the hospital and throughout the entire discharge process, not just when receiving education about PPD symptoms. As someone who is close to the patient and who knows them well, support people are likely to notice if there is a change in the patient that they themselves might not notice. This opens a door for early identification and intervention of complications made possible simply by educating loved ones who accompany patients.

**Suggested Next Steps**

Moving forward from this quality improvement project, the information sheet should be reworked in collaboration with all staff members on the unit to ensure that all necessary information is included. This can include any trends of information patients’ support people ask questions about consistently as the period of time the intervention is in use continues.

Methods to achieve this would be to discuss changes that should be made during a staff meeting when all of the staff is present and has a voice. The Nurse Manager and/or Nurse Educator could also post the information sheet on the huddle board and attach a survey for staff to fill out regarding what information they would like to see added to it. Although creating an online survey and collecting responses through that method may be more time consuming, it
allows for all thoughts to be documented in one place, and also provides anonymity for staff who may feel uncomfortable speaking out during a meeting with all of their peers in attendance.

Another next step following this project is creating a means of following up with patients and their families who receive the intervention to track what percent of people end up developing PPD symptoms in the long-term, and if they need to be hospitalized to receive treatment or not. This would allow for the extent of how effective the intervention truly is to be studied and would help validate the information sheet as a next step in standardizing it for widespread use.
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