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### Improving Preeclampsia Education and Assessment Frequency Among Nurses in the Postpartum Unit

Jazmin Garduno  
jgarduno@usfca.edu

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**Improving Preeclampsia Education and Assessment Frequency Among Nurses in the  
Postpartum Unit**

Jazmin Garduno, RN

University of San Francisco School of Nursing and Health Professions

NURS653-01: Internship

Dr. Nicole Beamish, DNP, APRN, PHN, CNL

December 15, 2023

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IMPROVING PREECLAMPSIA EDUCATION AND ASSESSMENT FREQUENCY AMONG

NURSES IN THE POSTPARTUM UNIT

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### **Abstract**

**Problem:** This study aims to improve maternal-child health education and assessment among the multidisciplinary staff in a postpartum unit. Pre-assessment questionnaires and data will be collected over one month, and will guide the changes that need to be implemented.

**Context:** Clinical Nurse Leader students conducted a microsystem assessment in the Postpartum Unit of a hospital in the Bay Area, conducive to improving preeclampsia education and the frequency of assessment for patients with preeclampsia without severe features.

**Intervention:** We implemented supplemental Preeclampsia education for the nurses on the Maternal-Child Postpartum Unit. In addition to the education, we used pre- and post-intervention surveys. To further increase remembrance we created a handout for the nurses to take home with the same information we had discussed while on the unit.

**Measures:** A pre-intervention survey assessed the nurses overall experience with preeclampsia knowledge, protocol, and their comfort levels. The post-intervention survey re-assessed the comfort level with preeclampsia after the education, if they felt the education was helpful, and how satisfied they were with the recommendation.

**Results:** Although 70% of nurses on the unit felt that they already knew the information from the educational handout, the post-intervention assessment endorsed increased education frequency with 50% of nurses moving from being comfortable to very comfortable with preeclampsia.

**Conclusions:** The post-intervention data show the need for further research to determine the safety of monitoring preeclamptic patients without severe features once every 8 hours compared to every 4 hours. Furthermore, a random controlled trial study would be beneficial for assessing patient safety, nurse satisfaction, and significant outcomes.

## **Section II: Introduction**

Preeclampsia is a serious condition that significantly increases the risk for preterm births and neonatal morbidity and mortality (Hypertension in Pregnancy, 2013). With a 25% increase of incidence from 1990 to 2010 it is imperative that a task force be focused on research in order to prevent further growth (Hypertension in Pregnancy, 2013). With copious research and changing to standardized practices can create positive outcomes lowering maternal morbidity and mortality. Furthermore, Ahn et al. (2007) found that in an observational study of 3 months after women give birth the predictors of maternal health outcomes are related to a sense of mastery, infant temperament, received social support, and family income were significant predictors. This perpetuates the idea that women need to be supported longer than the 6 weeks after childbirth and that the expected time to fully recover can take more than 12 months especially with social factors such as being a single parent, having low income, and having a preterm infant (Ahn et al., 2007).

### **Problem Description**

Preeclampsia can be defined as a with or without severe features. Preeclampsia without severe features is when the blood pressure has a systolic of 140mmHg or greater or a diastolic of 90mmHg on two occasions that are at least 4 hours apart and have protein in their urine (Hypertension task force, 2021). Preeclampsia with severe features is considered when the blood pressure has a systolic of 160mmHg or greater or a diastolic of 110mmHg or more and protein in the urine (Hypertension task force, 2021). When the blood pressure is at a critical level it can be confirmed by a shorter interval for prompt antihypertensive treatment (Hypertension task force, 2021). Postpartum preeclampsia is defined by the same criteria except it occurs after the baby is

delivered. When women, with and without a history of hypertension, have new-onset postpartum preeclampsia they are at a higher risk of maternal morbidity and mortality than if they had preeclampsia that began in antepartum (Hacker et al., 2022). This disqualifies the myth that the cure to preeclampsia is giving birth (Preeclampsia Foundation, 2023).

The Hypertensive Disorders of Pregnancy (HDP) Task Force (2021) updated its toolkit bundle and found that the cost of preeclampsia within the first year of delivery was estimated to be \$2.18 billion, of which \$1.03 billion was for maternal care, and \$1.15 billion for neonatal and infant care in the United States. Preeclampsia is such a complex condition that the factors for causes are still being narrowed. In the new toolkit HDPTF (2021) has compiled a chart that shows preeclampsia and a spectrum of other hypertensive disorders that are closely related (refer to Appendix O). The HDP task force that is a part of the California Maternal Quality Care Collaborative (CMQCC) has been a key part of California pioneering efforts to reduce the maternal mortality rate. In the HDP educational slide set from the HDP task force (2021) it shows a surveillance report on pregnancy deaths in California and out of 608 deaths, 247 were from cardiovascular disease and hypertensive disorders of pregnancy from 2008-2016. Morton et al. (2019a) states that preeclampsia/eclampsia is a leading and preventable cause of maternal death in California and the United States. The HDPTF (2021) also found a major gap in knowledge in how acute control of blood pressure prevents strokes, which supports preventing cerebrovascular accidents by having severe hypertension controlled. Controlled severe hypertension is associated with reduced severe maternal morbidity associated with preeclampsia.

### **PICO Question**

In Postpartum Nurses (P) experiencing burnout, does implementing education and less frequent assessments (I), compared to no intervention (C) result in improved job satisfaction and better patient outcomes (O) within 3 months (T)?

### **Search Strategy**

When conducting our literature review we used several databases to assess current research on preeclampsia without severe features. A majority of the databases included Pubmed, Association of Women's health, Obstetric and Neonatal Nurses (AWHONN), Google Scholar, and Cumulative Index to Nursing and Allied Health (CINAHL). Search terms used included the following: preeclampsia without severe features, preeclampsia, delayed onset preeclampsia, hypertension disorder, hypertension disorders of pregnancy, quality improvement, and postpartum preeclampsia. The articles we were looking for included the interval 2017-2023 and peer-reviewed, however there were a few articles from outside that interval that provided supporting ideas. There were no studies in the literature that specifically compared the safety of monitoring patients who have preeclampsia without severe features every 8 hours compared to every 4 hours. This highlights the need for further research and studies.

### **Specific Project Aim**

The specific aim of this project was to decrease maternal-child morbidity and mortality by 10% through educational discussions and reinforced assessment frequency among the nursing staff by September 2024.



### **Section III: Methods**

#### **Microsystem Assessment**

The purpose of the microsystems assessment was to understand what roles were involved and how we could analyze and understand the type of microsystem that we were working with. From the microsystem assessment (refer to Appendix C) we were able to guide our specific aim and PICOT questions.

#### **Root Cause Analysis**

In our root cause analysis we described the main sections to be documentation, monitoring, policies & procedures, and people that contributed to nurses not complying with preeclampsia education. One of the most important key factors that leads to low compliance in preeclampsia education was lack of state national monitoring. As students we could see that nurses were busy so having the monitoring data from the leadership on the unit would have helped guide which process to intervene in. Another obstacle to preeclampsia compliance was having New Grad RNs who were not familiar with the updated protocols. We also found that there was extensive preeclampsia documentation for non-severe feature patients which could lead to increased workload and burnout. Lastly, on the unit the preeclampsia education was only given yearly which did not provide many options for nurses to attend. The preeclampsia policies were not readily available to nurses.

### **Timeline**

To monitor the process of this quality improvement project, we utilized a Gantt chart. This visual tool assisted our group in staying on track and completing our tasks in a timely fashion. The chart shows the timeline from September 2023 to December 2023 (refer to Appendix H).

### **Intervention**

First we completed a pre-assessment survey (refer to Appendix I) of the staff's current knowledge of preeclampsia, what they're experience has been, and any recommendations on changing their protocol. After educational discussions using the educational handout (refer to Appendix N) were had with nurses on the unit we gave them a post-survey assessment right after (refer to Appendix K). This was used to assess their comfort and satisfaction level after the reinforced current protocol.

### **Measures**

For this project we wanted to measure the effectiveness of having an educational discussion with nurses through their confidence in the material. We also chose to measure their baseline by measuring how long they had been a nurse, if they had any previous training on preeclampsia, how often they encounter preeclampsia on the unit, and any recommendations they would make to the current protocol. The nurses' readiness to learn was taken into account. On the pre-survey it was asked if the nurse believed it would be beneficial to have a class on preeclampsia. If they answered yes, then they were followed up with a question of how often they would like to receive that training. Regardless of their previous answer it also asked the nurse they're preferred learned method. After implementing our first survey we noticed that

sitting in a conference room with food incentives and waiting for nurses to come to use did not work in terms of getting responses . So we used the Plan, Do, Study, Act (PDSA) cycle (refer to Appendix E) to strategize how to collect our data and be able to talk to nurses on the unit. This was necessary as the discussion required at least five minutes to disseminate information from the educational handout (refer to Appendix N) and nurses were .

### **Ethical Considerations**

This project has been approved as a quality improvement project by faculty using QI review guidelines and does not require IRB approval (see Appendix F).

### **Section IV: Results**

Our intervention resulted in 50% of nurses moving from comfortable to very comfortable which showed that the (refer to Appendix J).

### **Section V: Discussion**

The intervention of educational discussions with nurses was successful as the nurse satisfaction was 91% were satisfied or somewhat satisfied with decreasing the vital sign check to every 8 hours as opposed to every 4 hours (refer to Appendix N). The majority of nurses, 70% (refer to Appendix M) also found the nursing education beneficial as a refresher.

### **Limitations**

There were multiple challenges when trying to complete this project. One of the major limitations was finding the right information and being able to comprehend it in such a short period of time. For example, Redman et al. (2019) defines the term of ‘delayed-onset postpartum preeclampsia’, which is fairly new, as a new diagnosis of preeclampsia presenting between 48

hours and 6 weeks postpartum. Hacker et al. (2022) used the term ‘New-onset postpartum preeclampsia’

### **Conclusion**

While preeclampsia is a complex condition that is only now starting to be slightly understood with the use of standardized practice we can continue to decrease the maternal mortality rate in the United States.

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*Obstetrics & Gynaecology*, 130(12), 1531-1540. <https://doi.org/10.1111/1471-0528.17572>

**Section VII: Appendices**

**Appendix A**

Statement of Determination

**Student Project Approval: Statement of Determination**

**Title of Project**

Improving Preeclampsia Education and Assessment Frequency Among Nurses in the Postpartum Unit

**Brief Description of Project:**

This project aims to improve maternal-child health education and assessment in the Postpartum Unit through the process of having a discussion about preeclampsia with nurses on the unit, providing educational handouts to promote retention of information, and allowing patients to rest with less frequent assessments.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:

(<http://answers.hhs.gov/ohrp/categories/1569>)

This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Students may proceed with implementation.

Comments:

Signature of Supervising Faculty           Nicole Bramish           (date) 12/14/2023  
DocuSigned by:  
C4D682E2A0E24D1...

Signature of Student           Aqim Godino           (date) 12/12/23



**Appendix B**

Literature Review Table

<b>Title &amp; Author(s)</b>	<b>Objective &amp; Design</b>	<b>Sample Setting</b>	<b>Results &amp; Conclusions</b>	<b>Level of Evidence</b>
<p>Predictors of women's postpartum health status in the first 3 months after childbirth. Asian nursing research</p> <p>- Ahn, S., &amp; Youngblut, J. M. (2007).</p>	<p>The objective of this study was to identify predictors of women's postpartum health status in the first 3 months after childbirth. Descriptive correlational design.</p>	<p>Mothers with newborn infants were recruited from postpartum units at four hospitals in Midwestern and Southern United States and followed for 3 months postpartum. The final sample included 152 mothers (80 with full term babies, 72 with preterm babies) at 6 weeks postpartum (T1) and 131 mothers (72 with full term babies, 59 with preterm babies) at 3 months postpartum (T2).</p>	<p>This study suggests that mothers caring for infants may need support and guidance, and additional postpartum follow-up with their health care providers beyond the traditional 6-week recovery period in order to promote their postpartum health. Perinatal nurses should make it a practice to let mothers of infants know that it might take months for their health to return to normal. In addition, they need to encourage these mothers to form healthpromoting lifestyle habits and remind them that they need to receive regular health care rather than ignore their health care needs.</p>	<p>II</p>
<p>Implementation</p>	<p>Evaluate the feasibility</p>		<p>Feasible implementation</p>	<p>IV</p>

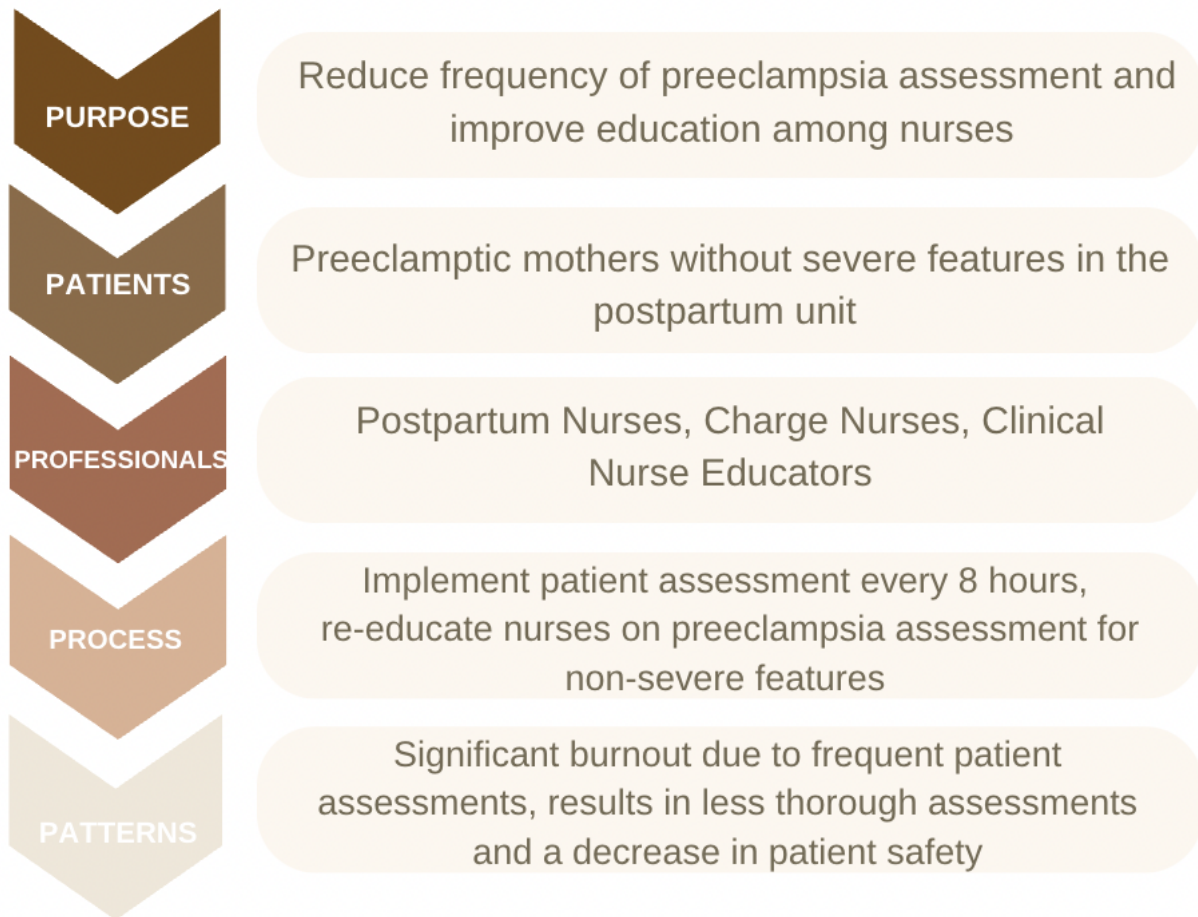
<p>of a universal postpartum blood pressure monitoring program: feasibility and outcomes. - Hacker, F. M., Jeyabalan, A., Quinn, B., &amp; Hauspurg, A. (2022).</p>	<p>and outcomes of a universal postpartum blood pressure monitoring program. Descriptive study.</p>		<p>with positive outcomes for postpartum blood pressure monitoring.</p>	
<p>Quality Improvement Opportunities identified through case review of pregnancy-related deaths from preeclampsia/Eclampsia. - Morton, C. H., VanOtterloo, L. R., Seacrist, M. J., &amp; Main, E. K., (2019a).</p>	<p>Identify quality improvement opportunities through case review of pregnancy-related deaths from preeclampsia/Eclampsia. Descriptive study.</p>		<p>Identified opportunities for quality improvement in preeclampsia/Eclampsia care.</p>	<p>IV</p>
<p>Translating maternal mortality review into quality improvement opportunities in response to pregnancy-related deaths in California. - Morton, C. H., VanOtterloo, L.</p>	<p>Translate maternal mortality review into quality improvement opportunities in response to pregnancy-related deaths in California. Descriptive study.</p>		<p>Successful translation of maternal mortality review into quality improvement opportunities.</p>	<p>IV</p>

<p>R., Seacrist, M. J., &amp; Main, E. K., (2019b).</p>				
<p>Clinical Course, Associated Factors, and Blood Pressure Profile of Delayed-Onset Postpartum Preeclampsia.</p> <p>- Redman, E. K., Hauspurg, A., Hubel, C. A., Roberts, J. M., &amp; Jeyabalan, A. (2019).</p>	<p>Explore clinical course, associated factors, and blood pressure profile of delayed-onset postpartum preeclampsia. Prospective cohort study.</p>		<p>Delayed-onset postpartum preeclampsia associated with high blood pressure, need for monitoring.</p>	<p>III</p>
<p>Postpartum readmission for hypertension and pre-eclampsia: Development and validation of a predictive model.</p> <p>- Venkatesh, K. K., Jelovsek, J. E., Hoffman, M., Beckham, A. J., Bitar, G., Friedman, A. M., Boggess, K. A., &amp; Stamilio, D. M. (2023).</p>	<p>Develop and validate a predictive model for postpartum readmission for hypertension and pre-eclampsia. Prospective cohort study.</p>		<p>Developed and validated a predictive model for postpartum readmission for hypertension and pre-eclampsia.</p>	<p>II</p>

**Appendix C**

5 P's Microsystem Assessment

# Microsystem Assessment-5 P's

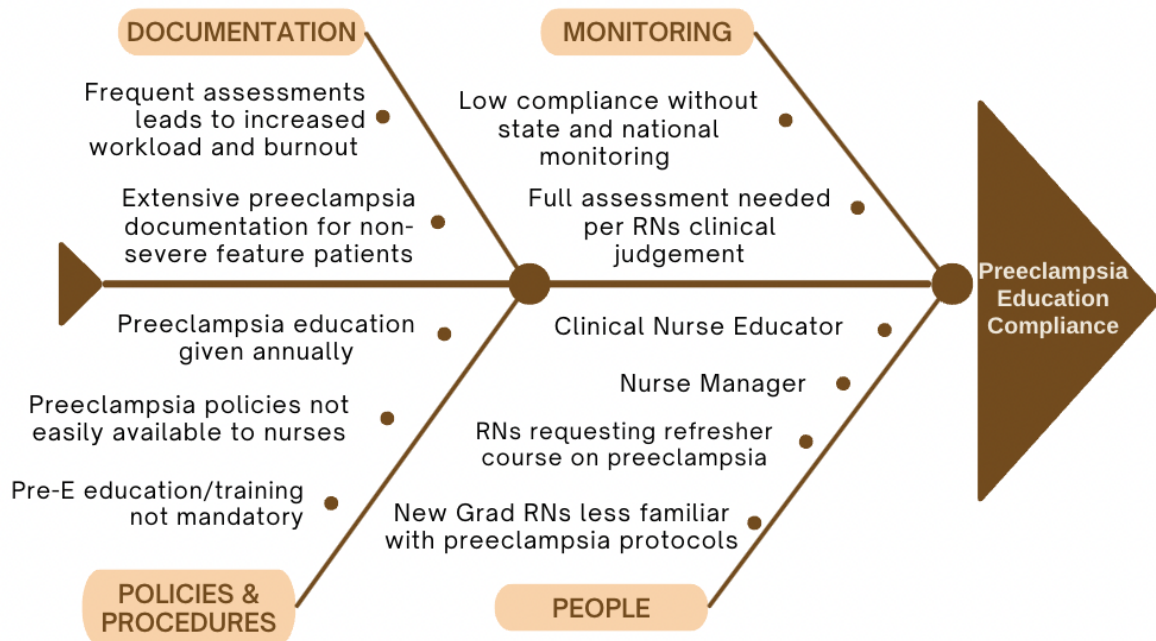


### Appendix D

#### Root Cause Analysis: Fishbone Diagram

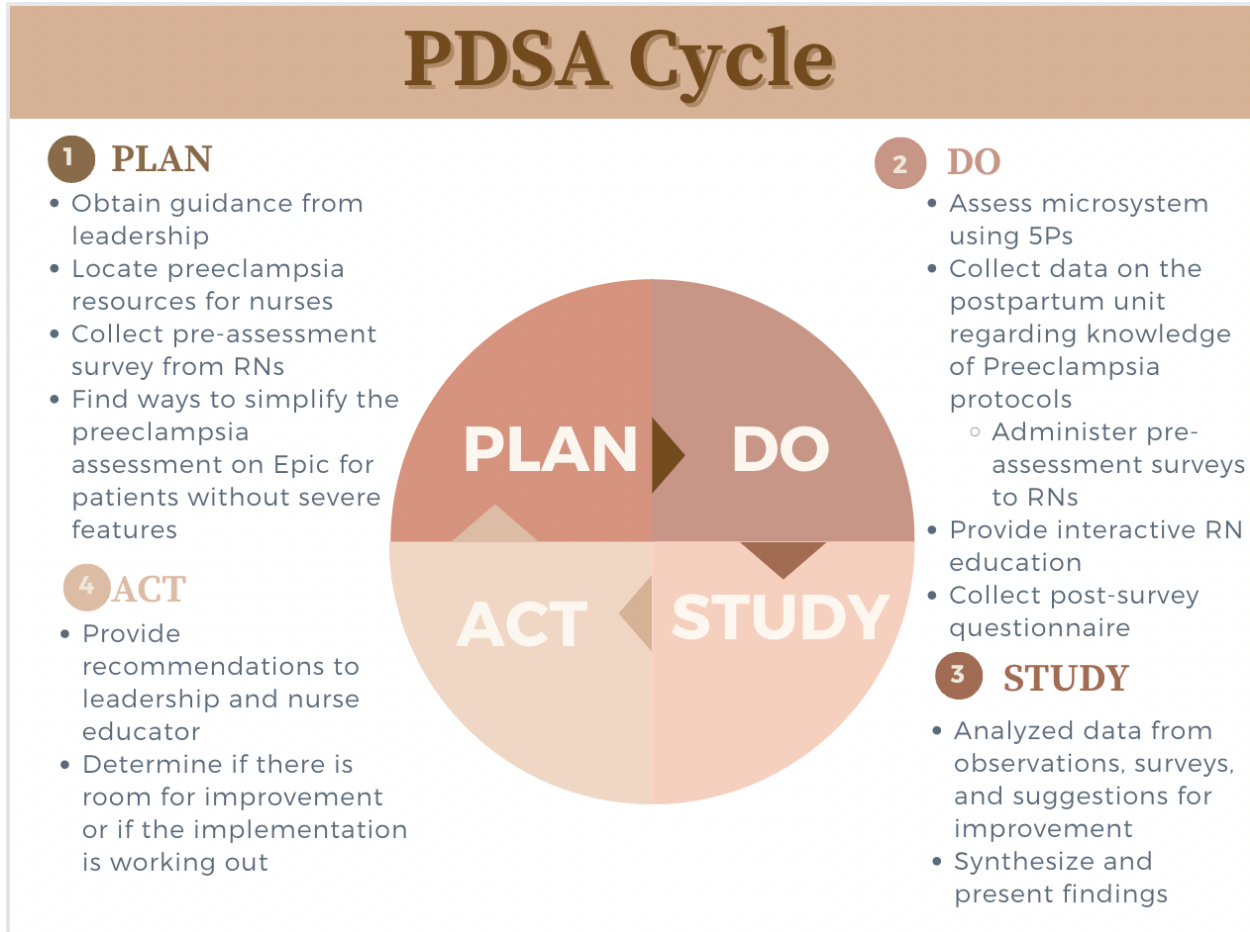
## ROOT CAUSE ANALYSIS: FISHBONE DIAGRAM

Factors that contribute to lack of preeclampsia compliance on the postpartum unit



**Appendix E**

Plan, Do, Study, Act (PDSA) Cycle



**Appendix F**

Evidence-Based Change of Practice Project Checklist

**EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST \* STUDENT**

**NAME:** Jazmin Garduno

**DATE:** 12/14/2023

**SUPERVISING FACULTY:** Dr.Nicole Beamish, DNP, APRN, PHN, CNL

**Instructions: Answer YES or NO to each of the following statements:**

Project Title: Improving Education and Frequency of Assessment Among Nurses in the Postpartum Unit	Y E S	N O
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.	X	
<p>The project is <b>NOT</b> designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does <b>NOT</b> follow a protocol that overrides clinical decision-making.</p> <p>The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does <b>NOT</b> develop paradigms or untested methods or new untested standards.</p> <p>The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does <b>NOT</b> seek to test an intervention that is beyond current science and experience.</p> <p>The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.</p> <p>The project has <b>NO</b> funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.</p>	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., <b>not</b> a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and agency oversight committee are comfortable with the following statement in your methods section.	X	

**ANSWER KEY:** If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. IRB review is not required, except at Stanford Hospital. Keep a copy of this checklist in your files. If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

\*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.





## Appendix H

### Pre-Survey Assessment

#### Pre-Eclampsia Pre-Assessment Survey

Any information shared will remain confidential. Your participation is greatly appreciated.

**Name:**

**Date:**

- 1) How long have you been a nurse?
  - <1 year
  - 1+ year
  - 5+ years
  - 10+ years
- 2) Have you received any previous training specific to preeclampsia?
  - Yes
  - If not, why?
- 3) What is your comfort level with Preeclampsia?
  - Not comfortable
  - Unsure
  - Comfortable
  - Very comfortable
- 4) How often do you encounter patients with preeclampsia?
  - Very often
  - Often
  - Rarely
  - Never
- 5) When was the last time you received education on pre-eclampsia?
  - Weeks ago
  - Months ago
  - Years ago
  - Never
- 6) Would you find it beneficial to have a training class on preeclampsia?  
If not, why?  
  
If yes, how often?
  - Every month
  - Every 6 months
  - Every year
  - Every 2 years
- 7) What style or learning method would best help you feel comfortable with preeclampsia education?
  - Online course
  - Interactive (in-person) class
  - Simulations
  - Unit training
- 8) How are you currently staying informed on pre-eclampsia guidelines?
- 9) Based on your experience, how frequently do you think Preeclampsia assessments should be done?  
Severe features:  
Non severe features:
- 10) If you could make a change to the preeclampsia protocol, what would your suggestion be?

## Appendix I

### Post-Survey Assessment

#### **Preeclampsia Post-Assessment Survey**

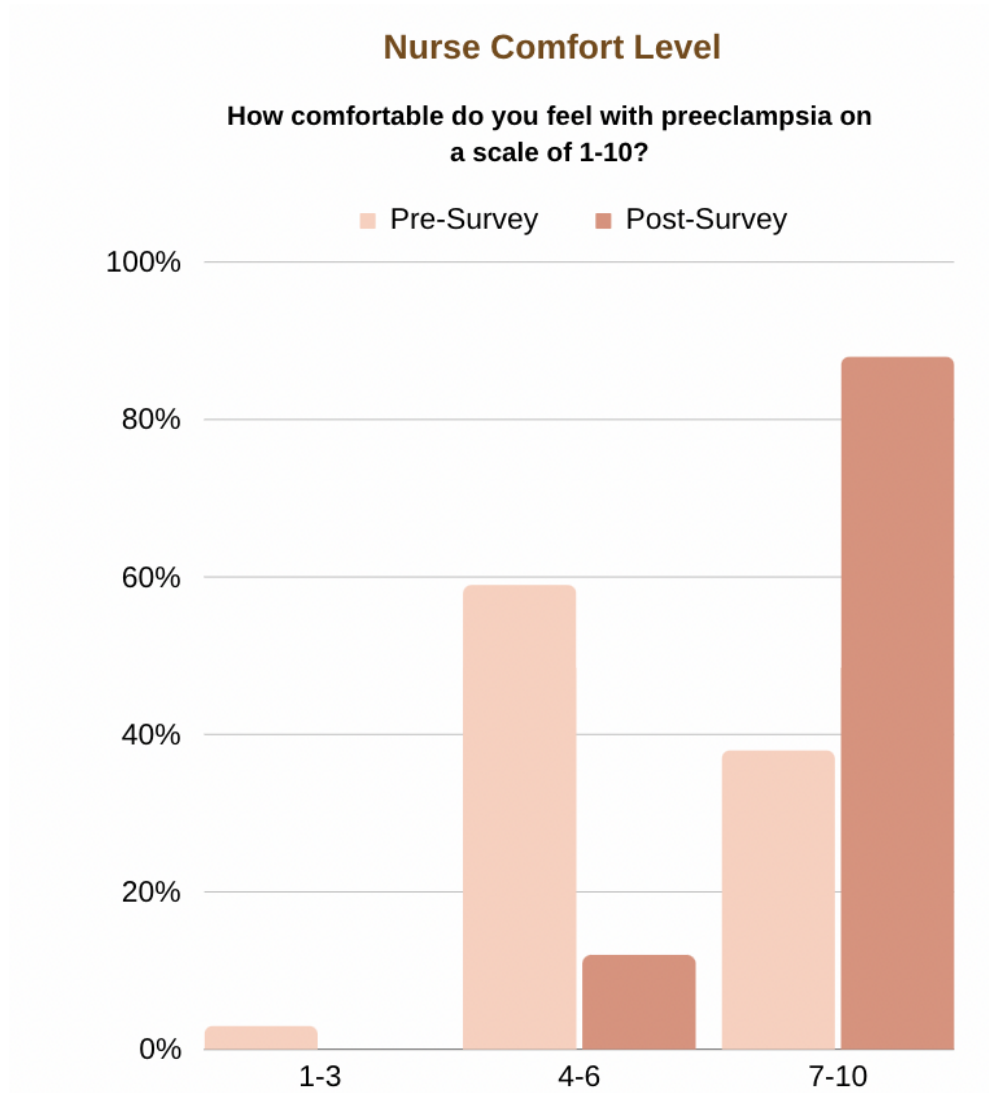
Your participation is greatly appreciated.

- 1) After the implemented education, how comfortable do you feel with preeclampsia on a scale of 1-10?
  - 1-3 Not comfortable
  - 4-6 Comfortable
  - 7-10 Very comfortable
  
- 2) How has the education provided helped you better understand preeclampsia?
  - Yes-I needed a refresher
  - Not Really-I was comfortable with the material before
  
- 3) How satisfied are you with the new nursing frequency assessment recommendation of Q 8hrs (once a shift), instead of Q 4hrs?
  - Very dissatisfied
  - Somewhat dissatisfied
  - Somewhat Satisfied
  - Very Satisfied
  
- 4) Do you feel confident teaching a patient what to report to you as the RN since patient assessments will be less frequent?
  - Yes, Patients will be better prepared for discharge home.
  - No, I may still assess patients Q 4hrs until I feel comfortable.
  
- 5) Please share any additional comments below.

**Thank you for your time!**

### Appendix J

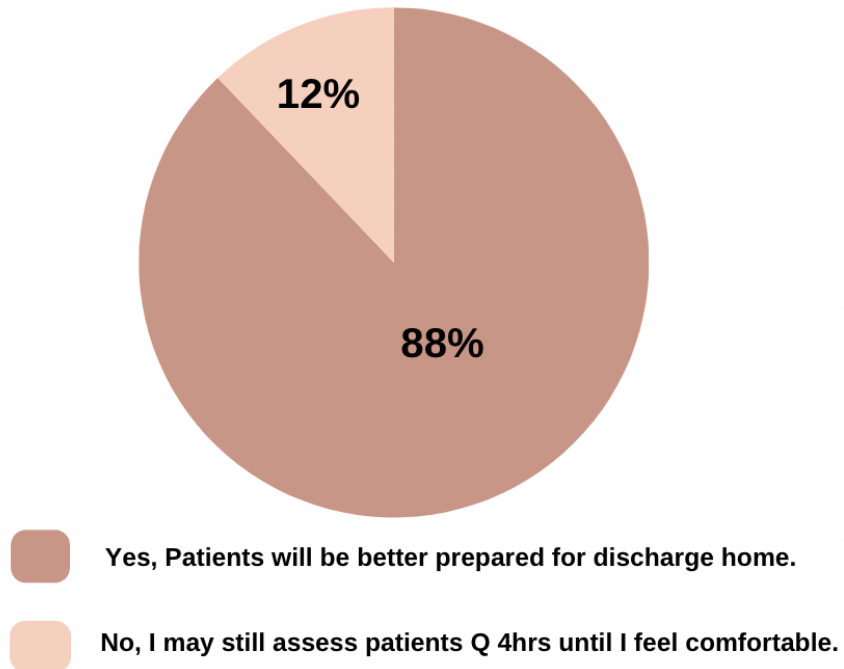
#### Nurse Comfort Level Pre and Post Survey



**Appendix K**

Post-Survey Data: Nurse Comfort Level with Patient Teaching

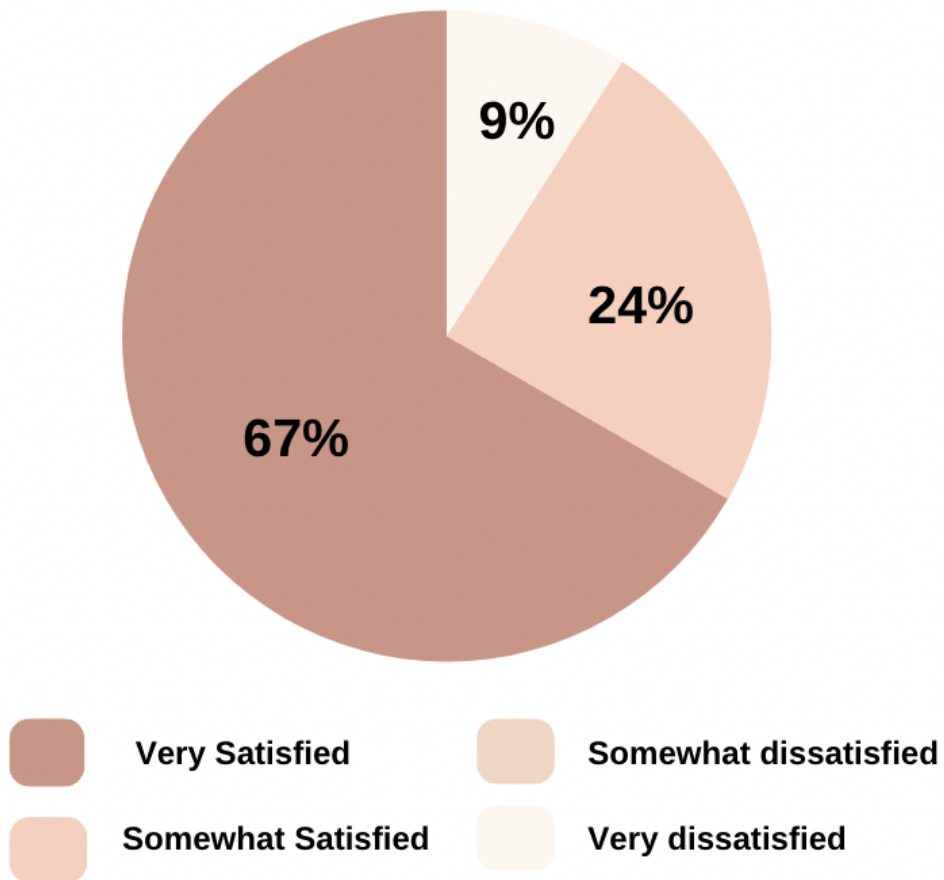
**Do you feel confident teaching a patient what to report to you  
as the RN since patient assessments will be less frequent?**



**Appendix L**

Post-Survey Data: Nurse Satisfaction

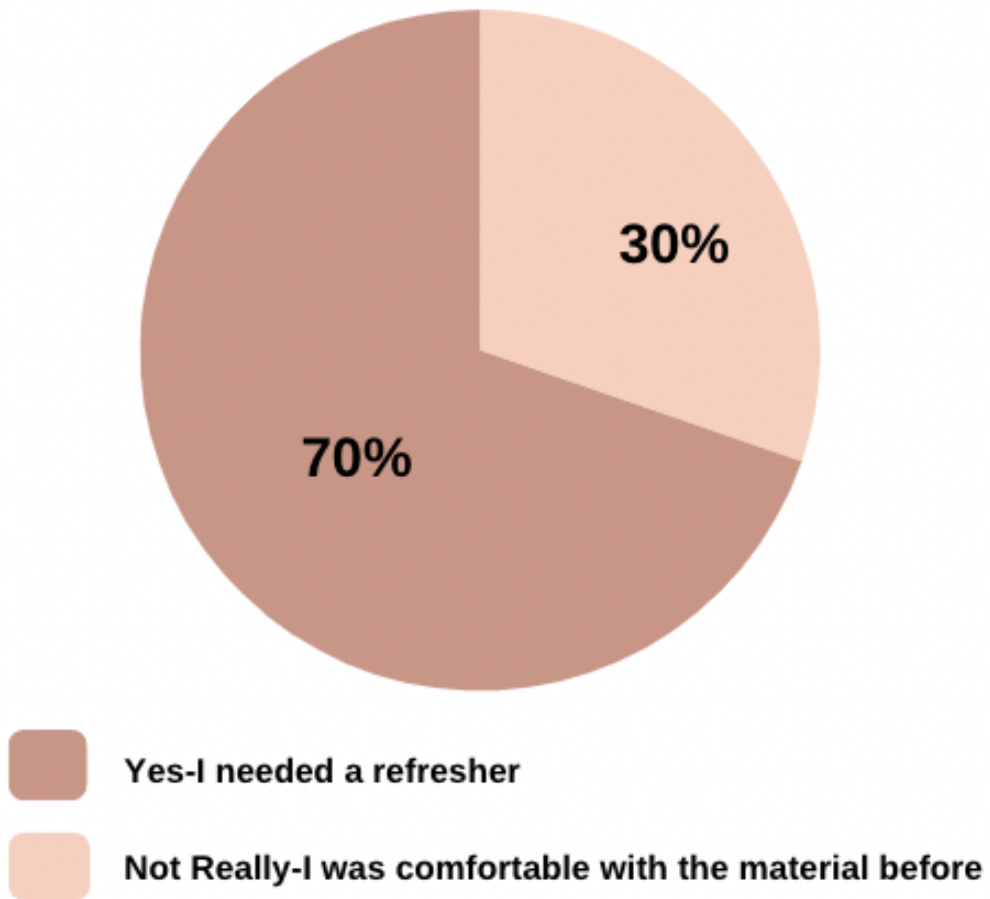
**How satisfied are you with the new nursing frequency assessment recommendation of Q 8hrs (once a shift), instead of Q 4hrs?**





**Appendix M**

Post-Survey Data: Nursing Education Benefit

**How has the education provided helped you better understand preeclampsia?**



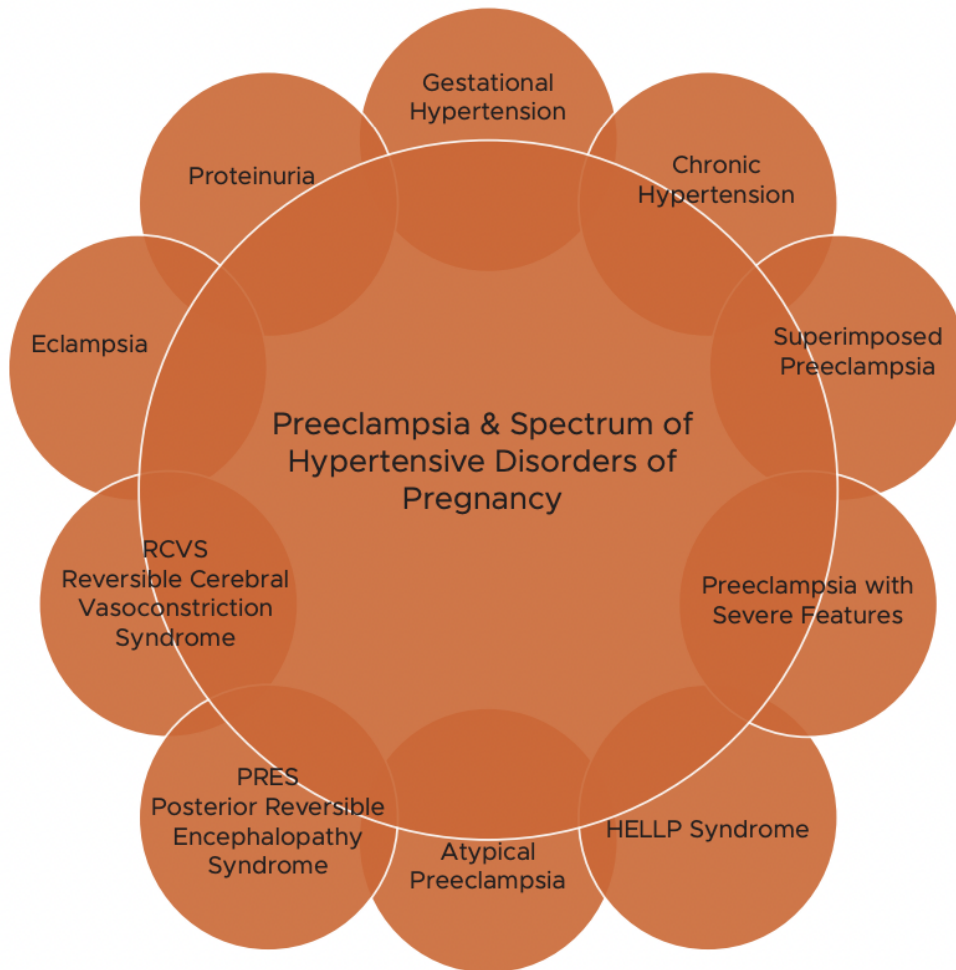
**Appendix N**  
Educational Handout

 <p>UNIVERSITY OF SAN FRANCISCO</p>	<h2 style="margin: 0;">Improving Maternal Health Outcomes</h2> <p style="margin: 0;"><i>in the Postpartum Unit</i></p>	Jazmin Garduno, RN Monica Heredia, RN Alyssa Willsher, RN															
<p><b>What is Preeclampsia?</b> Preeclampsia (Pre-E) is a severe hypertensive disorder that occurs during pregnancy <u>after 20th week</u>. This condition can affect other organs in the body and it is dangerous for mom and fetus.</p> <p><b>Clinical Manifestations</b></p> <ul style="list-style-type: none"> <li>• High BP</li> <li>• Proteinuria</li> <li>• SOB</li> <li>• Edema</li> <li>• Increased DTRs</li> <li>• Headaches</li> <li>• Visual disturbances</li> </ul>	<p><b>Why is this important?</b></p> <ul style="list-style-type: none"> <li>• Pre-E occurs in 5-7% of all pregnancies.</li> <li>• Annually, it is responsible for 70,000 maternal deaths and 500,000 fetal deaths worldwide.</li> <li>• Early-onset HTN has increased by approx. 143% from 1990 and 2010 in the US.</li> <li>• Pre-E has risk factors common with cardiovascular disease and sleep-disordered breathing including obesity, essential HTN, and diabetes.</li> </ul>	<p><b>Continued ...</b></p> <ul style="list-style-type: none"> <li>• Postpartum fatigue was related to reduced amounts of sleep and low levels of ferritin and hemoglobin.</li> <li>• Screening for symptoms of sleep-disordered breathing should be considered in women with early-onset preeclampsia.</li> </ul>	<p><b>Risk Factors</b></p> <ul style="list-style-type: none"> <li>• Chronic HTN</li> <li>• Multiparity</li> <li>• Pregnancies ≥35y/o</li> <li>• Diabetes</li> <li>• Obesity</li> </ul> <p><b>Diagnostics/Tests</b></p> <ul style="list-style-type: none"> <li>• Blood pressure: ≥ 140/90 mmHg</li> <li>• 24-hr urine collection:                         <ul style="list-style-type: none"> <li>≥ 300mg protein</li> <li>≥ 0.3mg/dL protein/creatinine</li> <li>≥ 1.1mg/dL serum creatinine</li> </ul> </li> <li>• Dipstick: 2+</li> <li>• Thrombocytopenia: ≤ 100 x 10</li> <li>• Weight gain ≥ 3-5 lbs/week</li> </ul>														
<p><b>Recommended Nursing Assessment</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #fff9c4;"> <th style="text-align: center;">Assessment/Findings</th> <th style="text-align: center;">Postpartum Nursing Assessment Frequency</th> </tr> </thead> <tbody> <tr> <td>BP ≥ 140/90 mmHg Pulse Respirations sPO2</td> <td>Q 4-8 hrs</td> </tr> <tr> <td>Temperature</td> <td>Per unit protocol</td> </tr> <tr> <td>Intake and Output (I&amp;Os)</td> <td>Q 8 hrs</td> </tr> <tr> <td>Lung Auscultation</td> <td>Q 4-8 hrs</td> </tr> <tr> <td>Deep tendon reflex Clonus Level of consciousness (LOC) Edema Headache, visual disturbances, epigastric pain</td> <td>Q 4-8 hrs PRN</td> </tr> <tr> <td>Fetal status and uterine activity</td> <td>Not applicable</td> </tr> </tbody> </table>		Assessment/Findings	Postpartum Nursing Assessment Frequency	BP ≥ 140/90 mmHg Pulse Respirations sPO2	Q 4-8 hrs	Temperature	Per unit protocol	Intake and Output (I&Os)	Q 8 hrs	Lung Auscultation	Q 4-8 hrs	Deep tendon reflex Clonus Level of consciousness (LOC) Edema Headache, visual disturbances, epigastric pain	Q 4-8 hrs PRN	Fetal status and uterine activity	Not applicable	<p><b>Patient Outcomes</b></p> <ul style="list-style-type: none"> <li>• Uninterrupted rest periods necessary for recovery</li> <li>• Increased patient safety</li> </ul> <p><b>Nurse Outcomes</b></p> <ul style="list-style-type: none"> <li>• Decreased assessment frequency allows more time for RN to adequately complete patient assessments</li> </ul>	<p>Data supports assessing patients q 4-8hr (Once per shift) However, clinical judgement and providing education to patients on what symptoms to look for is critical in ensuring patient safety.</p>
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<p><b>THANK YOU FOR YOUR PARTICIPATION!</b></p>		<p><b>References</b></p> 															



**Appendix O**  
CMQCC Preeclampsia & Spectrum of HDP

**Figure 1.** The spectrum of hypertensive disorders of pregnancy



*This figure was adapted from the Improving Health Care Response to Preeclampsia: A California Quality Improvement Toolkit, funded by the California Department of Public Health, 2014; supported by Title V funds.*