Maternal Hypertension Initiative Teams Call Response

October 24, 2016
12:30 – 1:30 pm
Overview

• HTN Initiative Updates (8 mins.)
• 4th Annual Conference (2 mins.)
• Clinical Education (20 mins.)
  • Preeclampsia Patient Education, Engagement and Postpartum Follow-up – Roma Allen and Debbie Schy
• Patient and Family Engagement (20 mins.)
  • Tara Bristol Rouse, MA, Director of Patient and Family Partnerships, PQCNC
  • Katie Drew, Patient Partner to Cone Women’s Health
  • DeeDee Plummer, RNC, Clinical Operations Analyst for Women’s and Children’s Services, Novant Health Huntersville Medical Center
• Team Talks (10 mins.)
  • Marilyn Paolella BSN, RNC, E-EFM, Silver Cross Hospital
  • Chris Lopian BSN, RNC-OB, C-EFM, St. John’s Hospital
• Next Steps & Questions
HTN Initiative Updates

Data Entry Status
Planning for Future Calls
Updated Key Driver Diagram
# Severe Hypertension Data Entry Status

<table>
<thead>
<tr>
<th></th>
<th>Total Records</th>
<th># Teams with Data</th>
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</thead>
<tbody>
<tr>
<td>Baseline (2015)</td>
<td>1367</td>
<td>80</td>
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<tr>
<td>June</td>
<td>457</td>
<td>67</td>
</tr>
<tr>
<td>July</td>
<td>514</td>
<td>69</td>
</tr>
<tr>
<td>August</td>
<td>549</td>
<td>74</td>
</tr>
<tr>
<td>September</td>
<td>325</td>
<td>63</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>3212</strong></td>
<td><strong>94</strong></td>
</tr>
</tbody>
</table>
Maternal HTN: Time to Treatment

ILPQC: Maternal Hypertension Initiative
Percent of Cases with New Onset Severe Hypertension Treated within 60 Minutes
All Hospitals, 2016

<table>
<thead>
<tr>
<th></th>
<th>Jun-16</th>
<th>Jul-16</th>
<th>Aug-16</th>
<th>Sep-16</th>
<th>Oct-16</th>
<th>Nov-16</th>
<th>Dec-16</th>
</tr>
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<tbody>
<tr>
<td>All Hosp</td>
<td>55.8%</td>
<td>47.1%</td>
<td>50.5%</td>
<td>56.2%</td>
<td></td>
<td></td>
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<tr>
<td>Baseline (2015)</td>
<td>40.1%</td>
<td>40.1%</td>
<td>40.1%</td>
<td>40.1%</td>
<td>40.1%</td>
<td>40.1%</td>
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</tbody>
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## HTN Team Calls: Through October

<table>
<thead>
<tr>
<th>Call Date</th>
<th>Slides Due to ILPQC</th>
<th>Topic</th>
<th>Team Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 27</td>
<td>June 6</td>
<td>Readiness and Reporting - Drills, Simulation, and Debriefs</td>
<td>Sherry Jones, Melissa Claudio, Nicole Ury, Sam Schoenfelder</td>
</tr>
<tr>
<td>12:30 – 2:30 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 25</td>
<td>July 6</td>
<td>Recognition - Accurate BP Measurement &amp; Diagnosis</td>
<td>Heather Stanley Christian, Soti Markuly, Debbie Schy, Mona LaGrand, Sam Schoenfelder, Robbin Uchison</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 22</td>
<td>August 1</td>
<td>Response - BP Medication and Treatment Algorithms</td>
<td>Jim Keller, Angelique Rettig, Felicia Fitzgerald, Deena Layton, Roma Allen</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 26</td>
<td>September 7</td>
<td>Response - Timing of Delivery</td>
<td>Jim Keller, Deena Layton, Sue Fulara</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 24</td>
<td>October 3</td>
<td>Response - Patient Education/Engagement and Postpartum Follow-up</td>
<td>Angelique Rettig, Debbie Schy, Roma Allen</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
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<td></td>
<td></td>
</tr>
</tbody>
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*Maripat Zeschke and Carol Burke representing HTN Leadership across teams*
Planning Future HTN Team Calls

• Maximizing utility of the Key Driver Diagram (Revised KDD in the following slide)

• Focus calls from Nov/Dec 2016 - June 2017 on QI tools to implement Key Driver Diagram Interventions:
  • 20 minutes – Reviewing collaborative data relevant to monthly call topic, general initiative announcements
  • 20 minutes – QI focused discussion of Key Driver Diagram Interventions including tips and examples on each call related to provider engagement and QI tools
  • 20 minutes – team talks recruited based on QI topic
    • Pull teams from posters at annual conference, OB Teams Survey, QI topic calls
## Proposed Future Call Schedule and Topics

<table>
<thead>
<tr>
<th>Call Date</th>
<th>Topics –Top 5 system level changes/interventions to decrease the time to treatment and improve discharge education and follow-up:</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 19, 2016</td>
<td>Establish a system to perform regular debriefs after all new onset severe maternal hypertension cases</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
</tr>
<tr>
<td>January 23, 2017</td>
<td>Develop and implement standard order sets, protocols, and checklists for recognition and response to severe maternal hypertension and integrate into EHR</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
</tr>
<tr>
<td>February 27, 2017</td>
<td>Implement a system to identify pregnant and postpartum women in all hospital departments and execute protocol for measurement, assessment, and monitoring of blood pressure and urine protein for all pregnant and postpartum women</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
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<tr>
<td>March 27*, 2017</td>
<td>Ensure rapid access to IV and PO anti-hypertensive medications with guide for administration and dosage (e.g. standing orders, medication kits, rapid response team)</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
</tr>
<tr>
<td>April 24, 2017</td>
<td>Implement a system to provide patient-centered discharge education materials on severe maternal hypertension and implement protocols to ensure patient follow-up within 10 days for all women with severe hypertension and 72 hours for all women on medications</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
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<tr>
<td>May</td>
<td>Anticipate Face –to – face meeting</td>
</tr>
</tbody>
</table>
AIM: By December 2017, to reduce the rate of severe morbidities in women with preeclampsia, eclampsia, or preeclampsia superimposed on pre-existing hypertension by 20%
HTN Toolkit Binder

• HTN Toolkit Binder resources on this clinical education topic:
  • Under Tab 7 in the Binder (or click hyperlinks below):
    • Algorithms for Treatment
      • ACOG DII (New York) Algorithm for Postpartum Education
  • Under Tab 6 in the binder (or click hyperlinks below):
    • Patient Communication & Education
      • CMQCC Prenatal and Postpartum Patient Counseling or Education
      • ACOG DII (New York) Preeclampsia Patient Education Handout
      • FPQC Sample Discharge Instructions
      • Preeclampsia Foundation Patient Tear Pad

• All resources available on ILPQC Maternal Hypertension page
HTN Initiative: MOC Part IV Credits

• Annual offering - team lead and physician attestations are due to us by **December 1 for 2016 participation**
• Team lead and physician attestations required
• Attestations collected via survey monkey tool found here:
  https://www.surveymonkey.com/r/ILPQCMoc
• Attestations include:
  • Description of physician’s meaningful participation during the initiative
  • Physician’s name, hospital, role on the quality improvement team, and at least 2 examples of the physician’s meaningful contribution to the initiative
HTN Initiative: MOC Part IV Credits

• ILPQC will submit list of participating physicians to ABOG for physicians with BOTH Hospital and Physician Attestations completed

• Within 1 month of receiving list from ILPQC, ABOG will send physicians email requesting: Completion of 4 simple questions in portal within 30 days

• Document outlining process will be distributed in biweekly newsletter and posted to the website

• Jazzmin Cooper, ILPQC Intern, will be available to take questions during breaks and lunch at the registration desk at the Annual Conference!
Annual Conference

Registration
Potential Diaper Drive
ILPQC 4th Annual Conference

• Looking forward to seeing everyone on 11/3 at the Westin in Lombard!
• Shannon Lightner, Welcome
• Registration closed
  • 324 registrants as of 10/20
• Poster session
  • 40 posters submitted total
    • 31 posters reviewed for excellence (met early deadline)
ILPQC 4th Annual Conference: Diaper Drive

• ILPQC approached to host a diaper drive at the Annual Conference – more details coming soon!

• IL Baby Diaper Facts

• Diapers would be distributed to diaper banks located across the state
  • Champaign
  • Chicago
  • Evanston
  • Galesburg
  • Gifford
  • Gurnee
  • McHenry
  • Peoria
  • Quincy
  • Springfield
  • Tinley Park
  • Wauconda
  • Waukegan
Response

Preeclampsia Patient Education, Engagement, & Postpartum Follow-up
Preeclampsia Patient Education, Engagement and Postpartum Follow-up

October 24, 2016

Roma Allen, MSN, DNPC, RNC-OB
Carol Burke MSN, APRN
Jean Goodman, MD, MFM
Angelique Rettig, MD, OB-GYN
Debbie Schy, MSN, APN/CNS, RNC-OB, RNC-EFM, IBCLC, LCCE
Goal of patient education

Increase reporting and early access to care for patients experiencing symptoms of preeclampsia by increasing their knowledge through standard patient education materials that provide information on the signs, symptoms and treatment of preeclampsia.
Maternal Recognition Improves Outcomes

“The best way to diagnose preeclampsia is to listen to your patients.”
~ Dr. Baha Sibai
WHY IS PATIENT EDUCATION NEEDED?

Pre-eclampsia is a global health problem, which complicates 2–8% of all pregnancies and contributes to 15% of preterm births and 9–26% of maternal deaths worldwide

(World Health Organization (WHO), 2005; Duley, 2009; Steegers et al, 2010)

Postpartum presentation of severe hypertension and preeclampsia

• 75% of deaths due to severe hypertensive disorders of pregnancy occur after delivery
• 41% of all deaths due to preeclampsia/eclampsia occur after 2 days
• 55% had not been diagnosed with preeclampsia in the antepartum or peripartum period

(Alliance for Innovation on Maternal Health, 2016)
Do PNC providers discuss preeclampsia with their patients?

- Preeclampsia Foundation study of 754 women (51% reporting some form of hypertensive condition during pregnancy) primarily visitors to the preeclampsia foundation website
  - 40% PNC provider definitely described preeclampsia
    - 54% fully understood the explanation
    - 37% understood most of the explanation
    - 15% understood some or did not remember
  - 35% definitely not given information
  - 16% did not remember (Wallis, 2013)

Late postpartum eclampsia can be prevented through patient education and improved healthcare response (Chames, 2002)
A study report of Delayed Postpartum Preeclampsia / Eclampsia

Detroit deliveries over a 6 ½ year period

152 women (5% of Detroit deliveries) readmitted within 6 weeks of discharge with diagnosis of delayed PP preeclampsia or eclampsia

22 (14.5% of 152) women developed eclampsia either at home or post readmission (90% within 7 days)

96 women (63.2%) had no antecedent diagnosis of hypertensive disease in current pregnancy

Eclampsia 17/22 with no antecedent diagnosis

Most common complaints:
- Headache, n = 105 (69%)
- Shortness of breath
- Blurry vision
- Nausea
- Vomiting
- Edema
- Seizure (n=6)
- Other neurological deficit
- Epigastric pain

28 women (18.4%) had preeclampsia

14 women (9.2%) had chronic hypertension

7 women (4.6%) had gestational hypertension

7 women (4.6%) had preeclampsia superimposed on CHTN
Comparing Written vs. Verbal Methods of Patient Education on Preeclampsia: A Randomized Controlled Trial

Purpose of study: What education method leads to superior understanding of information?

120 women from university based clinic
- Randomized into 3 groups
- Given written or verbal information
- Interviewed for knowledge about preeclampsia
- 24 question survey (graphic card scored highest – 71%)
- Not given written information to keep
- 1-2 weeks later given same 24 question survey – best retention of knowledge was with the graphic card group (67%)
- Conclusion: simplicity of the message is more important and knowledge retained for a prolonged period of time

You, et al., 2012
Comparing Different Methods of Patient Education on Preeclampsia: A Randomized Controlled Trial

Began recruiting May, 2016: National Institutes of Health Clinical Center

Purpose of study: What type of education is most effective?

RCT plan:

• Primigravida
• 18-24\textsubscript{6} weeks randomization
• Questionnaire on baseline preeclampsia knowledge, demographics, and patient anxiety before exposure to the educational interventions.
• 32-36\textsubscript{6} gestation: Complete a follow up preeclampsia knowledge survey to assess retention of knowledge.

- Graphic card
  - Signs and symptoms of preeclampsia
  - Patients permitted to keep this card

- Preeclampsia Foundation Video
  - Shown an educational video on preeclampsia* (2 min/45 sec)

- Routine prenatal care
  - No visual form of patient education; exposed only to the counseling they receive with their routine prenatal care.

http://www.preeclampsia.org/component/allvideoshare/video/featured/7-symptoms-every-pregnant-woman-should-know?Itemid=479
Sources of information about pregnancy and birth

Listening to mothers survey, (Declercq, 2013)

- 82% of women used the internet to gather information regarding pregnancy and childbirth between prenatal appointments
- Over 600 pregnancy and childbirth apps on iTunes – most are from unknown sources
- 53% of all mothers reported taking a childbirth education class at some point
- Some hospital systems and practices provide accurate information by creating apps of their own

**Figure 4.** Mothers’ ratings of sources of pregnancy and childbirth information used during recent pregnancy as “very valuable,” by childbearing experience

<table>
<thead>
<tr>
<th>Source</th>
<th>First-time Mothers</th>
<th>Experienced Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity care provider</td>
<td>76%</td>
<td>82%</td>
</tr>
<tr>
<td>Childbirth education class</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>Pregnancy/childbirth websites for pregnant women</td>
<td>66%</td>
<td>60%</td>
</tr>
<tr>
<td>Apps with pregnancy/childbirth information</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>General medical or health websites</td>
<td>51%</td>
<td></td>
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<tr>
<td>Health plan</td>
<td>47%</td>
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<tr>
<td>State or federal government agencies</td>
<td>48%</td>
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</tr>
<tr>
<td>Employer</td>
<td>38%</td>
<td>36%</td>
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</tbody>
</table>
Are hospital websites the best source?

240 healthcare institutional and/or departmental websites were searched using keywords: *preeclampsia, toxemia, hypertensive disorders of pregnancy*

114 websites had some content that could be analyzed

Vast majority was above the recommended 6th grade reading level

95% had definition of preeclampsia

Variable content

Only 44% mentioned postpartum occurrence or maternal stroke

> 92% had S/S swelling, proteinuria, headache, hypertension, N&V weight gain, vision changes

Only 27% had shortness of breath

Risk factors varied: excluded Hispanics, 4% new paternity or kidney disease and 24% with family history of preeclampsia

AMA guidelines for health information on the internet

- Patient education material should be less than or equal to the 6th grade reading level
- Healthcare information needs to provide patients with the content that they need in order to make informed decisions about their health
Preeclampsia

What Is It?
Preeclampsia is a serious disease related to high blood pressure. It can happen to any pregnant woman.

Risks to You
- Seizures
- Stroke
- Organ damage
- Death

Risks to Your Baby
- Premature birth
- Death

Signs of Preeclampsia
- Stomach pain
- Headaches
- Feeling nauseous, throwing up
- Seeing spots
- Swelling in your hands and face
- Gaining more than 5 pounds in a week

What Should You Do?
Call your doctor right away. Finding preeclampsia early is important for you and your baby.

More information go to www.preeclampsia.org

Preeclampsia foundation. Graphics-based education tool is an effective means of providing patient education about preeclampsia and appears to be better (at least in the short term) to a ACOG informational pamphlet. You, et al, 2012.

The patient education tool is written in Spanish on the other side.

“7 Symptoms Every Pregnant Woman Should Know” video available in English and Spanish on YouTube™
Training Kit - CD
This kit provides information necessary to evaluate, organize, and educate staff and patients on the accurate measurement of blood pressure for the adult patient. It consists of a Training Guide, PowerPoint presentation, and training video, all packaged on a CD. The kit is available to any healthcare agency or medical professional and for training of healthcare staff.

What’s the BIG DEAL about controlling my blood pressure?

Even one lifestyle change I make for my health . . .

- Walking 30 minutes, five days a week: can decrease blood pressure by small amounts
- Losing 5–10 lbs. of weight: can decrease blood pressure by 10 points
- Quitting tobacco (call 1-800-QUITNOW): can decrease blood pressure by 5 points
- Limiting sodium (salt) to 1,500 mg. per day: can decrease blood pressure by 2–8 points

and small decreases in blood pressure result in huge health benefits.

Every 5 points decrease in blood pressure reduces:
- risk of stroke by 34%
- risk of heart attack by 21%

Every 3 points decrease in blood pressure reduces:
- risk of stroke by 8%
- risk of heart attack by 5%
Home Monitoring of B/P

Calibrate patient equipment for accuracy

Provide patient education that includes:

- Return demonstration of self B/P check
  - Placement
  - Positioning during reading
  - Time of day
- Documentation and reporting of home B/Ps
- Patient verbalizes signs and symptoms of preeclampsia
Key points

• **THE PROBLEM IS NOT OVER WITH DELIVERY**
  • Patient knowledge about preeclampsia may improve health outcomes
  • Majority of women do not have antecedent diagnosis of preeclampsia
  • ILPQC, based on ACOG Hypertension in Pregnancy document (2013) and CMQCC, recommends outpatient post-discharge follow-up:
    – within 3 days if discharged on medication
    – **within 10 days for all women with severe HTN**
  • ED must have awareness and ‘go to the front of the line’ culture for women being pregnant or having delivered within 6 weeks with hypertension, symptoms of preeclampsia or eclampsia and assessed/admitted to an obstetrical service.
  • Hospitals should look at internet resources / departmental pages and update using 6th grade reading level and appropriate content
  • Advocacy organizations (Preeclampsia foundation) have a unique and powerful voice to advance the goals of the healthcare system.
Consideration for the ED

- Consider preeclampsia:
  - In any patient who presents with symptoms suggestive of severe disease regardless of blood pressure
  - In any patient with new blood pressure elevation, even when antepartum and intrapartum blood pressures were normal

- Obtain:
  - Blood work screening for HELLP syndrome and assess renal function
  - Obstetrical consultation

- Staff education
- Review checklist
If you are currently pregnant or have been pregnant within the last 6 weeks, please alert the staff for prompt evaluation.
# Emergency Department

## Postpartum Preeclampsia Checklist

**If Patient < 6 Weeks Postpartum with:**
- BP ≥ 160/110 or
- BP ≥ 140/90 with unremitting headache, visual disturbances, epigastric pain

- Call for Assistance
- Designate:
  - Team leader
  - Checklist reader/recorder
  - Primary RN
- Ensure side rails up
- Call obstetric consult; document call
- Place IV; Draw preeclampsia labs
  - CBC
  - PT
  - PTT
  - Uric Acid
  - Fibrinogen
  - Chemistry Panel
  - Hepatic Function
  - Type and Screen
- Administer seizure prophylaxis
- Administer antihypertensive therapy
  - Contact MFM or Critical Care for refractory blood pressure
- Consider indwelling urinary catheter
  - Maintain strict HCO3 patient at risk for pulmonary edema
- Brain imaging if unremitting headache or neurological symptoms

### Magnesium Sulfate

- Contraindications: pulmonary edema, renal failure, myasthenia gravis
- IV access:
  - Load 4-6 grams 10% magnesium sulfate in 100 mL solution over 20 min
  - Label magnesium sulfate: Connect to labeled infusion pump
  - Magnesium sulfate maintenance 1-2 grams/hour
- No IV access:
  - 10 grams of 50% solution IM (5 g in each buttock)

### Antihypertensive Medications

For SBP ≥ 150 or DBP ≥ 110
- **Labetalol** (20 mg, 40, 80 N* over 2 min, escalating doses, repeat q 10 min; Avoid in asthma or heart failure)
- **Hydralazine** (5-10 mg IV* over 2 min, repeat q 20 min until target BP reached)
- **Oral Nifedipine** (10, 20, 40 mg capsules; repeat BP q 20 min until target BP reached); Capsules should be administered orally, not punctured or otherwise administered sublingually

* Maximum cumulative IV-administered doses should not exceed 220 mg labetalol or 25 mg hydralazine in 24 hours

**Note:** If first-line agents unsuccessful, emergency consult with specialist (MFM, internal medicine, OB anesthesiology, critical care) is recommended

### Anticonvulsant Medications

For recurrent seizures or when magnesium sulfate contraindicated
- **Lorazepam (Ativan)**: 2-4 mg IV x 1, may repeat once after 10-15 min
- **Diazepam (Valium)**: 5-10 mg IV q 5-10 min

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**Safe motherhood initiative**

ACOG District II

Consideration for the ED cont.

• For hypertensive emergency:
  – Threshold for stroke is lower
  – Prompt treatment for SBP > 155 - 160 mm Hg or DBP > 105 – 110 mm Hg

• If eclampsia:
  – May present as late as 6 weeks postpartum
  – May occur in the absence of antecedent hypertension
  – Bolus with magnesium sulfate per hospital protocol
  – Following bolus, evaluate for other causes of seizures
Long Term Implications

• Increased risk for development of cardiovascular and renal disease later in life
• 2 fold increased risk of long-term cardiovascular disease
• 5-12 fold increased risk of end-stage renal disease
• Based on low levels of evidence due to a lack of studies on screening and prevention in formerly preeclamptic women

• EVERY WOMAN NEEDS EDUCATION
**Recommendation for Hospital Discharge Education**

- **ALL WOMEN** should receive written discharge education
- Reference material available in multiple languages per patient population
- All women receive education on preeclampsia prenatally and upon discharge after childbirth such as:
  - Preeclampsia is a serious disease related to high blood pressure. It can happen to any pregnant woman during the second half of her pregnancy, or up to 6 weeks after delivery.
- Instructions to seek immediate medical attention for any of the following signs and symptoms
  - Headache
  - Visual changes
  - Nausea and vomiting
  - Abdominal pain
  - Shortness of breath
  - Edema
  - Sudden weight gain
  - “I just don’t feel right”
Considerations for Discharge Protocol to Improve Outcomes

- Report between nurse’s when transferring patient to postpartum status includes identification as severe HTN
- Hard stop in EMR that prompts follow-up appointment within 10 days with OB provider if identified as having severe HTN during labor
- Automated instructions populate with discharge antihypertensive medication order for follow-up in 3 days with OB provider
- Assist patient in scheduling appointment prior to leaving hospital
- Have patient bring home B/P equipment to hospital prior to discharge to reinforce correct self monitoring of blood pressure
- Refer to written material for preeclampsia when performing discharge teaching with patient verbalizing signs and symptoms
- Organizations that conduct discharge follow-up phone calls include screening for S & S of preeclampsia
- Utilize lactation consultants as resources to screen patients for S &S and B/P when returning for outpatient appointments
- Create hard stops throughout the organization’s EMR that questions the patient's OB history and prompts referrals to their OB provider
References

• Maurice L. Druzin, MD; Laurence E. Shields, MD; Nancy L. Peterson, RNC, PNNP, MSN; Valerie Cape, BSBA. “Preeclampsia Toolkit: Improving HealthCare Response to Preeclampsia.” California Maternal Quality Care Collaborative Toolkit to Transform Maternity Care. Developed under contract #11-10006 with the California Department of Public Health; Maternal, Child and Adolescent Health Division; Published by the California Maternal Quality Care Collaborative, November 2013.
• http://here.doh.wa.gov/search?SearchableText=hypertension
Patient and Family Engagement
Engaging Patients and Families in Conservative Management of Preeclampsia (CMOP)
How Can Patients and Families Contribute to Improvement Efforts?
## Framework for PFE

<table>
<thead>
<tr>
<th>Depth of Engagement</th>
<th>Roles for Patients and Families</th>
<th>Considerations</th>
</tr>
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<tbody>
<tr>
<td>Ad Hoc Input</td>
<td>Survey or Focus Group Participants</td>
<td>Ensure diversity and representation, validity</td>
</tr>
<tr>
<td>Structured Consultation</td>
<td>Council Members or Advisors Providing Input</td>
<td>Early consult supports partnership model</td>
</tr>
<tr>
<td>Influence</td>
<td>Occasional Reviewers/Consultants to Project</td>
<td>Allows flexible ways to participate; requires background and orientation</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Member of Improvement Team</td>
<td>Requires training in improvement</td>
</tr>
<tr>
<td>Delegation</td>
<td>Co-Chair of Improvement Team</td>
<td>High level of expertise or skill necessary</td>
</tr>
<tr>
<td>Advisor Control</td>
<td>Implementer or Peer Support Role</td>
<td>Strong training component, mentoring and compensation</td>
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The Role of Patients and Families in Quality Improvement

- Share personal stories, leading to a more focused commitment by improvement teams
- Identify pieces of the process that are confusing or missing from a patient/family perspective
- Participate in information/data gathering
- Discuss and analyze findings
- Assist in developing action plans and recommendations
- Contribute to the design and content of materials
- Provide objective feedback from the patient/family perspective
- Assist with piloting and testing new materials and processes and follow up with other patients/families to gather their opinions
Our Story
Hypertensive Disorders of Pregnancy

Your blood pressure will be monitored often during the next few hours, and the results will help plan your care. It's important that we get the most accurate readings possible. When your blood pressure is being taken, it is helpful that:

- You are in a sitting or semi-reclining position.
- You sit quietly for 5 minutes before the first blood pressure is measured.
- Your arm is supported at heart level.
- Your legs are uncrossed.
- Talking and texting are avoided.
- Your arm remains as still as possible.

What if someone tells them to lay on the left hand side? Does that need to be addressed or specifically excluded?

Will staff give them 5 minutes of quiet time?

You are not talking or texting

Is there an elegant way to say... have stressful people that might elevate your BP step outside when a reading is taken?

Does it matter if BP is taken on the same side as the IV?

There may be times when your blood pressure will be measured, automatically, when your nurse or tech is not at the bedside. It's important to follow those helpful hints during those times, too. Also, keeping the lights in your room dim, and avoiding extra stimulation will help you rest.

Keep the lights dim.

Avoid extra stimulation.

Is this the best heading for the goal of the handout? Should it say something more about obtaining an accurate blood pressure reading?

Are these bullet items in the best order from most important?

in the room with you.

Will this intentionally be highlighted in yellow?

Is it really ok?

Your monitor knows when your blood pressure is too high, and an alarm will sound in your room. It's ok if you hear this. It's helping keep you and your baby safe. Please, call your nurse to let her know so that she can confirm your blood pressure reading, and answer any questions that you might have.

She will

- Call your nurse for alarms.
- Ask any questions

if the blood pressure monitor is alarming.

I always had high BP when the person taking my BP would talk to me. Not that everyone is like I am, but is it helpful if the person taking the BP doesn't talk to the patient? Also, seems like I recall the room should be fairly quiet so the person taking the BP could hear whatever it is you guys listen for. :)

Is this draft for text review only or also for format/graphic review?

Do patients know what hypertensive disorders even means?

3/9/2016

Is there a better picture available? One with a happy looking patient?
Blood Pressure Control Tips

Your blood pressure (BP) will be monitored often, and the results will help plan your care. It’s important that we get the most accurate readings possible. When your BP is being taken, it is helpful that:

- You sit quietly for 5 minutes before the first BP is measured.
- You are in a sitting or semi-reclining position (lying on your side, in between BP readings, is also good for your baby).
- Your arm is supported at heart level.
- Your legs are uncrossed.
- Your arm remains as still as possible.
- You are not talking or texting.
- You breathe regularly.

There will be times when your BP is measured and your nurse is not in the room with you. It’s important to follow these helpful hints during those times, too. Also, keeping the lights in your room dim, and avoiding extra stimulation, or stressful situations will help you rest.

- Keep the lights dim.
- Avoid extra stimulation.

Your monitor knows when your BP is too high, and an alarm will sound in your room. It’s ok if you hear this. It’s helping keep you and your baby safe. Please, call your nurse to let her know that the BP monitor is alarming. She will confirm your BP reading, and answer any questions that you might have.

- Call your nurse for alarms.
- Ask any questions.
BP Control Tips: Patient Feedback Survey

1. Did your nurse talk through the “Blood Pressure Control Tips” sheet with you?
   - Yes
   - No

2. Before being introduced to the information, how much do you feel you knew about blood pressure control?
   - A lot
   - Some
   - Very Little
   - Nothing at All

3. Was the information easy to understand?
   - Yes
   - No

4. Would you use the information shared to help you ask questions and/or call your nurse when a high blood pressure alarms sounds?
   - Yes
   - No

5. As a patient, how do you experience the tone of this material?
   - Cold and Official
   - Warm and Friendly
   - Just the Facts
   - Welcoming my Partnership, knowledge, and concerns

6. Please share how the tone could be changed to make your feel more comfortable.

7. What additional information should be added to the teaching sheet?

Thank you for participating in our survey. Your feedback is important.
SBP > 160 or DBP > 110 Controlled Percentage

Starting: 2016-01-01; Ending: 2016-07-01
TELL ME
AND I FORGET
TEACH ME
AND I REMEMBER
INVOLVE ME
AND I LEARN

BENJAMIN FRANKLIN
Why Patient Family Education Matters to Me

Katie Drew, Patient Partner to Cone Women’s Health
Expectations vs. Reality
Reported to OBGYN on April 7th, 2014 with:

- Extremely high BP
- Headaches
- Severe Nausea
- Fatigue

- Admitted same day for an 11 day stay at Women’s
- 7 days in Antepartum
- 1 day in the ICU after delivery
- 3 days PostpartumC
From the day I was discharged... to today, 2 years later!
What I knew before and during my stay

What I know now
## Goals of CMOP

- Proper Diagnosis
- Proper Management
- Proper Discharge

<table>
<thead>
<tr>
<th>Secondary Aim</th>
<th>Primary Drivers</th>
<th>Secondary Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Proper Diagnosis</td>
<td>1.1 Accurate measurement of blood pressure in all patients diagnosed with preeclampsia</td>
<td>1.1.1 Proper placement, proper cuff size</td>
</tr>
<tr>
<td></td>
<td>1.2 Proper definition of hypertensive disorders</td>
<td>1.1.2 Each L&amp;D develops appropriate education to ensure staff competency</td>
</tr>
<tr>
<td></td>
<td>1.3 Early ID of severe features</td>
<td>1.1.3 Annual competency assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2.1 Use and Incorporate ACOG Position paper into hospital policy for defining hypertensive disorders of pregnancy (5 ACOG Diagnoses) (see CMOP Action Plan Appendix)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2.2 Each L&amp;D develops appropriate education to ensure staff competency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.1 Adoption of preeclampsia early recognition tool (PERT) or equivalent tool (see CMOP Action Plan Appendix)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.2 Each L&amp;D develops appropriate education to ensure staff competency and family understanding (e.g., use of the Preeclampsia Foundation Signs and Symptoms Information Sheet and ACOG Key Components of Effective Health Communication and Patient Education(see CMOP Action Plan Appendix))</td>
</tr>
</tbody>
</table>
Proposed Resources

Why did I just receive shots of antenatal corticosteroid treatment, or ACT?

- You were prescribed a course of ACT while in your first trimester because your baby is likely to have a healthy, full-term baby. The corticosteroids help your baby's lungs develop fully.
- You were prescribed a course of ACT while in your first trimester because your baby is likely to have a healthy, full-term baby. The corticosteroids help your baby's lungs develop fully.
- ACT helps your baby's lungs develop fully. Your baby may also be more likely to live longer if you live longer.
- ACT helps your baby's lungs develop fully. Your baby may also be more likely to live longer if you live longer.

Ask your healthcare provider to fill in information about the kind of ACT you got.

| Name: | ____________________________ |
| DO Provider Name: | ____________________________ |
| Date: | ____________________________ |
| Date of Delivery: | ____________________________ |

| Week of Pregnancy: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| Date of Birth: | ____________________________ |
| Birth Weight: | ____________________________ |
| Gestational Age: | ____________________________ |

| Date of Delivery: | ____________________________ |
| Birth Weight: | ____________________________ |
| Gestational Age: | ____________________________ |

Tip: Take a photo of this handout with your phone in case you lose it!

Precautions for Discharge

If you experience any of the symptoms above in the VACUZ zone, call your doctor.

- Name of Doctor or CDA1: ____________________________
- Phone number during business hours: ____________________________
- Phone number after hours: ____________________________
- If you experience any of the symptoms above in the VACUZ zone, go to your delivery hospital right away.

Precautions for Discharge

Using SBAR to Introduce Yourself to Care Providers

SBAR

- Situation: ____________________________
- Background: ____________________________
- Assessment: ____________________________
- Recommendation: ____________________________

An example of using SBAR is to introduce yourself to a care provider on admission for a patient.
Percentage of Patients with SBP >160 or DBP >110 Controlled within One Hour

![Graph showing the percentage of patients controlled with and without a patient on the team. The graph indicates a trend where having a patient on the team improves control rates.](graph.png)
## Framework for PFE

<table>
<thead>
<tr>
<th>Depth of Engagement</th>
<th>Roles for Patients and Families</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Hoc Input</td>
<td>Survey or Focus Group Participants</td>
<td>Ensure diversity and representation, validity</td>
</tr>
<tr>
<td>Structured Consultation</td>
<td>Council Members or Advisors Providing Input</td>
<td>Early consult supports partnership model</td>
</tr>
<tr>
<td>Influence</td>
<td>Occasional Reviewers/Consultants to Project</td>
<td>Allows flexible ways to participate; requires background and orientation</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Member of Improvement Team</td>
<td>Requires training in improvement</td>
</tr>
<tr>
<td>Delegation</td>
<td>Co-Chair of Improvement Team</td>
<td>High level of expertise or skill necessary</td>
</tr>
<tr>
<td>Advisor Control</td>
<td>Implementer or Peer Support Role</td>
<td>Strong training component, mentoring and compensation</td>
</tr>
</tbody>
</table>

Institute for Patient- and Family-Centered Care, 2014
# Orientation to the Improvement Team

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
</table>
| History of the Team         | • Purpose  
• Accomplishments  
• Barriers  
• Background |
| Goals and Objectives        | • Progress  
• Measures of Success  
• Priorities  
• Strategic Objectives |
| Team Composition            | • Roster and Background of Members  
• Roles and Responsibilities |
| Clinical Background Materials | • Current Research  
• Relevant Policies and Protocols |
# Orientation to the Improvement Team, cont’d

<table>
<thead>
<tr>
<th>Topic</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training in Improvement Science</strong></td>
<td>• How is staff trained in improvement methodology?</td>
</tr>
<tr>
<td></td>
<td>• Is the existing training an option for patient/family advisors? If not, what resources are available for new patient/family advisors?</td>
</tr>
<tr>
<td><strong>Organization-Specific Improvement Methods</strong></td>
<td>• What methodology does the organization use for improvement (e.g., Lean, Six Sigma, PDSA)?</td>
</tr>
<tr>
<td></td>
<td>• Is there consistency in methodology across departments, or are different groups using different strategies and tools?</td>
</tr>
<tr>
<td><strong>Mentorship</strong></td>
<td>• Who can serve as a patient and family advisor mentor (e.g., other advisors or hospital employees)?</td>
</tr>
</tbody>
</table>
What can Clinical Leaders do?

1. Create ways to allocate time for staff to work on fulfilling the role
   - Provide “class-time” or “education time” on each schedule (2-4 hours per pay period, per month)
   - Pro-actively pull staff off schedule during low census times
   - Clinical ladder credit

2. Identify 2 staff members instead of 1
   - Allows more flexibility in schedules
   - Increases opportunity for meeting times with patient advocate
   - Provides peer support and enables patient to foster relationships with more staff members

3. Structure staff meetings with work accomplished by dyad on every agenda
   - Promotes the importance of the work to all staff
   - Begins to change the culture by consistently introducing the new member of the health care team

4. Consider utilizing existing patient liaisons in your facility
For further resources, support, or if you have questions or suggestions, contact:

Tara Bristol Rouse, MA
Director of Patient and Family Partnerships
Perinatal Quality Collaborative of North Carolina
Tara.Bristol@pqcnc.org
Engaging patients in your QI efforts improves your outcomes!
Team Talks

• Silver Cross Hospital
  • Marilyn Paolella BSN, RNC, E-EFM
• St. John’s Hospital
  • Chris Lopian BSN, RNC-OB, C-EFM
Moved from Joliet to New Lenox in 2012.

Level 2-E with approximately 2,900 births this year.

Started severe hypertension journey to improve care in 2013.
In 2013:

- No standard order set for severe hypertension.
- Housewide RRT, hemorrhage RRT, but no specific RRT for L&D.
- First dose meds in pyxis.
- Only debriefed very complex cases.
- Although we had numerous quality measures, no standard chart review for time to treatment for severe hypertension.
- NO ER involvement.
Developed standard order set for severe hypertension. (Amended it this year to add Nifedipine oral dose). Physician must come to hospital when initially implemented.

Developed RRT for L&D specifically to address implementation of severe hypertension order set, and inclusion of in-house obstetrician.

Increases amount of medication on over-ride in unit based pyxis, both Labetalol and Hydralazine.

Changed ER policies so that any postpartum hypertension is a “stat back”, ER administers the first dose of anti-hypertensive while simultaneously calling L&D and in-house OB physician.

Education on correct way to take BP.

Chart review but no goals set.
Started chart review for time to treatment. Opportunity found for patients admitted to OB triage, time lost moving patient to L&D prior to first dose. Also found opportunity on M/B with understanding the criteria for implementing standard order set and creating sense of urgency.

Added Cerner charting field for debrief discussion, as there was no place in chart to ascertain if debrief actually occurred.

Sent certified letter to all physicians practicing at SCH regarding severe hypertension project, time to treatment measure, debrief, and requirements for follow up care.

Any misses in time to treatment are reviewed by committee (including department chair) for opportunities. We use a log book in L&D for staff to place stickers, and follow that up with a pharmacy report for medication usage on our floor. ED uses a log book, but all of those patients eventually come up to OB and are counted and reviewed.

Need to implement plan / do / check / act cycle for follow up care appointments for severe hypertensives, especially if BP stabilized quickly on M/B.
Level III Perinatal Center

- Serving 37-area counties
- 24/7 in-house Perinatal & Neonatal Services
- 200 deliveries monthly
- 12 LDR rooms
- 14 PP rooms
- 12 Ante partum rooms
AIM: To reduce the rate of severe maternal mortality and morbidity in pregnancy and post-partum patients with pre-eclampsia, eclampsia, CHTN, GHTN, or superimposed pre-eclampsia by 20% by the end of 2017.
TEAM BUILDING

HSHS ST. JOHN’S TEAM

- Physician Lead- Dr. Angelique Rettig, OBGYN
- OB Physician Champion- Dr. Robert Abrams, Perinatal Medical Director
- Team Lead- Christine Lopian, BSN, RNC-OB-C-EFM
- Quality Lead- Kathy Nein, Birth Center System Analyst
- Other team members
  - Kathy Chepulis- Quality Management Dept.
  - Brandi Strader-Pharmacy Clinical Manager
  - Dr. Elizabeth Unal, Maternal Fetal Medicine
DATA COLLECTION PROCESS

- Retrospective chart review and data collection (Oct. 2015-February 2016)
- Education of the ILPQC HTN Initiative and bedside HTN data collection tool with staff
- Implementation of bedside HTN data collection tool and placed at all nurses desk in RED folders (March 2016)
- Folder with charge nurses to log pt. stickers who present with severe hypertension
- Daily admission log audit by Quality Lead (Kathy Nein)
- Bi-monthly pharmacy reports on pts. receiving Mag sulfate, Labetalol, Hydralazine, and Procardia in OB, ICU, and ED
- Monthly ICD-10 coding reports on pts. with hypertension
Barriers to Data Collection (Initial)

- ED participation
- Staff buy-in to complete data forms
- Pharmacy reports lengthy and time consuming
- ICD-10 reports not inclusive
- Debriefing issues, team uncomfortable with process
- Pt. inclusion unclear to staff
- Not all unit PYXIS loaded with HTN meds
Successes (Current)

- Daily admission log review helpful
- Added HTN meds to ALL PYXIS on unit
- All HTN meds removable on override from PYXIS
- Education on HTN data collection process and ILPQC initiative included in daily nursing huddle
- One-on-One staff education
- ED sending/notifying OB dept. of all pregnant or PP pts. (PP within 6 wks.)
- ICD-10 reports more inclusive with Pre-eclampsia/HTN diagnosis
Data excerpts for HSHS St. John’s Hospital
January 2016- Current date- August 2016
70% population with severe range BP’s are white in their 20’s and 250+lbs. 41% of the patients were between 35-37 wks. gestation. Of those patients that were preterm, <36 weeks, 79% received antenatal corticosteroids prior to delivery. Severe range BP’s occurred during the Post Partum period 22% of the time and occurred around 5-6 post delivery. 67% of the pts. discharged to home on BP meds DID NOT have a F/U appt. within 3 days but did have education on taking BP’s at home with parameters to call. 1 week was average follow up timeframe at discharge. Earlier follow up in the office should be occurring.
Debriefs between nursing and physicians continues to be a challenge to complete. Nurses state they “don’t feel comfortable with the process of debriefing” and the physicians think they are questioning them. This is just a practice change for nursing that is becoming more important to become comfortable due to the increasing level of acuity of our patient population. SJS is doing well with identifying and treating severe range BP’s within 30 minutes compared to 6 months ago when the average was 60-90 minutes.
Identifying Patient/Family Advisors for the QI Team

• Developed tool to help staff/providers engage patient/family members in discussion about working in QI available in download box

• Last chance today to invite patient/family team member to attend ILPQC Annual Conference for free on November 3rd – contact Kate to facilitate free registration

• One Pager on the value of patient/family engagement posted to front page of ILPQC website!
HTN Initiative Next Steps

• ABOG Part IV MOC attestations are due from **both the physician and team lead by December 1 for 2016 participation** – please share with physicians!

• Data past and upcoming due dates:
  • Severe HTN Data Form
    • September data was due October 15th
    • October data is due November 15th
  • AIM Quarterly Measures
    • 2016 Q3 (July - September) was due October 15th
    • 2016 Q4 (October – December) is due January 15th
  • Quarterly Implementation Checklist
    • 2016 Q3 (July - September) was due October 15th
    • 2016 Q4 (October – December) is due January 15th

• Last teams call of 2016 will be December 19th from 12:30 – 1:30 pm (merging November/December calls)

• Email [info@ilpqc.org](mailto:info@ilpqc.org) with any questions!
Q&A

• Ways to ask questions:
  • Raise your hand on Adobe Connect to ask your question by phone
  • Post a question in the Adobe Connect chat box
Contact

- Email info@ilpqc.org
- Visit us at www.ilpqc.org
THANKS TO OUR SPONSORS