Maternal Hypertension Initiative Teams Call
Implementing System for ID and Protocols for Measurement, Assessment, & Monitoring of BP

February 27, 2017
12:30 – 1:30 pm
Overview

- HTN Initiative: Collaborative Tools and Updates (20 mins.)
- Winnie Palmer Hospital for Women & Babies – Florida (20 mins.)
  - Lorraine Parker, Patient Care Administrator
- Team Talks (10 mins.)
  - Northwest Community Hospital
    - Dr. Soti Markuly
  - Rush-Copley
    - Karen Werrbach MSN, RNC-OB, NEA-BC
    - Kristi Walker MSN, RNC-OB, C-EFM
- Patient and Family Advisors
- Next Steps & Questions
HTN Initiative: Collaborative Tools and Updates

Face-to-Face Updates
Collaborative Data Review
Implementation Checklist
How to View Reports
Severe HTN Initiative: Face-to-Face

• Save the date – May 18\textsuperscript{th}, 2017
• President Abraham Lincoln Springfield – a DoubleTree by Hilton Hotel
• Tentatively scheduled from 10 am – 3:30 pm
• Larry Shields confirmed to speak on early standardized treatment of critical blood pressure (crBP) elevations is associated with a reduction in eclampsia
• More information on fee and registration coming soon!
Severe HTN Initiative: Face-to-Face Breakout Topics

- Potential breakout topics – please select the top 3 you would be interested in attending on the poll (you will get to choose when you register, recommend coordinate across topics with your team members)
  - Implementing and monitoring standardized BP identification protocols
  - Implementing severe HTN treatment protocols into hospital’s standard of practice
  - Lack of nursing/provider buy-in to adopting protocols, independent providers
  - Optimizing the Use of Debriefs to Drive Improvement
  - Systems Approaches to Standardize Patient Education and Discharge Follow Up
  - Implementing and Sustaining Team Based Communication to Support a Culture of Safety and Empower Team Members
  - ED Implementation
  - HTN Simulation and Drills
## Collaborative Call Schedule: Focus on System Changes

<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 <strong>regular debriefs</strong> after all new onset severe maternal hypertension cases</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
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</tr>
<tr>
<td>January 23, 2017</td>
<td>Develop and implement <strong>standard order sets, protocols, and checklists</strong> 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 <strong>identify pregnant and postpartum women</strong> in all hospital departments and execute <strong>protocol for measurement, assessment, and monitoring of blood pressure and urine protein for all pregnant and postpartum women</strong></td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
<td></td>
</tr>
<tr>
<td>March 27*, 2017</td>
<td>Ensure <strong>rapid access to IV and PO anti-hypertensive medications</strong> 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 <strong>discharge education materials</strong> on severe maternal hypertension and implement protocols to ensure patient <strong>follow-up within 10 days</strong> for all women with severe hypertension and 72 hours for all women on medications</td>
</tr>
<tr>
<td>12:30 – 1:30 pm</td>
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<tr>
<td>May</td>
<td>Anticipate Face-to-face meeting</td>
</tr>
</tbody>
</table>
Maternal HTN: Time to Treatment

ILPQC: Maternal Hypertension Initiative
Percent of Cases with New Onset Severe Hypertension Treated in <30, 30-60, 60-90, >90 minutes or Not Treated
All Hospitals, 2016
Maternal Hypertension Data: Time to Treatment

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

- 75-100% of women treated within 60 minutes
- 1-74% of women treated within 60 minutes
- No women treated within 60 minutes

Overall % Treated in 60 Mins
Maternal Hypertension Data: Patient Education

ILPQC: Maternal Hypertension Intiative
Percent of All Reporting Hospitals Where Women Received Discharge Education Materials
All Hospitals, 2016

- 75-100% of women received discharge education material
- 1-74% of women received discharge education material
- No women received discharge education material

Overall % of women receiving discharge education material
Maternal Hypertension Data: Patient Follow-up

ILPQC: Maternal Hypertension Initiative
Percent of All Reporting Hospitals Where Follow-up Appointments were Scheduled within 10 Days
All Hospitals, 2016

- 75-100% of women had follow-up scheduled within 10 days
- 1-74% of women had follow-up scheduled within 10 days
- No women had follow-up scheduled within 10 days

Overall % of women who had follow-up scheduled within 10 days
Maternal Hypertension Data: Debrief

ILPQC: Maternal Hypertension Initiative
Percent of All Reporting Hospitals Where Cases of New Onset Severe Hypertension were Debriefed
All Hospitals, 2016

- 75-100% of cases debriefed
- 1-74% of cases debriefed
- No cases debriefed

Overall % of cases debriefed

- Baseline
- July
- August
- September
- October
- November
- December

Graph shows the percentage of cases debriefed from baseline to December 2016.
# Severe Hypertension Data Entry Status

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Records</th>
<th># Teams with Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (2015)</td>
<td>1619</td>
<td>87</td>
</tr>
<tr>
<td>July</td>
<td>566</td>
<td>74</td>
</tr>
<tr>
<td>August</td>
<td>635</td>
<td>82</td>
</tr>
<tr>
<td>September</td>
<td>564</td>
<td>84</td>
</tr>
<tr>
<td>October</td>
<td>438</td>
<td>72</td>
</tr>
<tr>
<td>November</td>
<td>478</td>
<td>79</td>
</tr>
<tr>
<td>December</td>
<td>502</td>
<td>72</td>
</tr>
<tr>
<td>January</td>
<td>418</td>
<td>67</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>5220</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
GET READY
IMPLEMENT STANDARD PROCESSES for optimal care of severe maternal hypertension in pregnancy

RECOGNIZE
IDENTIFY pregnant and postpartum women and ASSESS for severe maternal hypertension in pregnancy

RESPOND
TREAT in 30 to 60 minutes every pregnant or postpartum woman with new onset severe hypertension

CHANGE SYSTEMS
FOSTER A CULTURE OF SAFETY and improvement for care of women with new onset severe hypertension

GOAL: To reduce preeclampsia maternal morbidity in Illinois hospitals

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%

Key Drivers

Interventions

- Develop standard order sets, protocols, and checklists for recognition and response to severe maternal hypertension and integrate into EHR
- 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)
- Educate OB, ED, and anesthesiology physicians, midwives, and nurses on recognition and response to severe maternal hypertension and apply in regular simulation drills

- Implement a system to identify pregnant and postpartum women in all hospital departments
- Execute protocol for measurement, assessment, and monitoring of blood pressure and urine protein for all pregnant and postpartum women
- Implement protocol for patient-centered education of women and their families on signs and symptoms of severe hypertension

- Execute protocols for appropriate medical management in 30 to 60 minutes
- Provide patient-centered discharge education materials on severe maternal hypertension
- Implement protocols to ensure patient follow-up within 10 days for all women with severe hypertension and 72 hours for all women on medications

- Establish a system to perform regular debriefs after all new onset severe maternal hypertension cases
- Establish a process in your hospital to perform multidisciplinary systems-level reviews on all severe maternal hypertension cases admitted to ICU
- Incorporate severe maternal hypertension recognition and response protocols into ongoing education (e.g. orientations, annual competency assessments)
Maternal Hypertension Data: Physician/Nurse Education

ILPQC: Maternal Hypertension Initiative
Percent of Teams with ≥50% of Nurses and Physicians Educated on Severe Maternal Hypertension in Last 2 Years
All Hospitals, 2016

<table>
<thead>
<tr>
<th></th>
<th>2016 Q2 (N=58)</th>
<th>2016 Q3 (N=51)</th>
<th>2016 Q4 (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥50% Physicians Educated</td>
<td>32.8%</td>
<td>43.1%</td>
<td>65.1%</td>
</tr>
<tr>
<td>≥50% Nurses Educated</td>
<td>46.6%</td>
<td>72.5%</td>
<td>86.0%</td>
</tr>
</tbody>
</table>

Steady growth!

Thanks to all those teams who entered this data in the past month!
Maternal Hypertension Data: HTN Drills

HTN ILPQC: Maternal Hypertension Initiative
Percent of Teams that Held a Severe HTN Drill During the Quarter
All Hospitals, 2016

- 2016 Q2 (N=58): 17.2%
- 2016 Q3 (N=51): 23.5%
- 2016 Q4 (N=43): 30.2%

Discuss opportunities to help teams incorporate drills.
Maternal Hypertension Data: ED Practices

HTN ILPQC: Maternal Hypertension Initiative
Percent of Teams that have a Process for Timely ID, Triage, and Evaluation of Pregnant/Postpartum Women with HTN in the Emergency Department
All Hospitals, 2016

Discuss what’s happening here?
Different teams entering data? More awareness? Not yet system changes?

- Baseline (N=71): 36.6%
- 2016 Q3 (N=34): 64.7%
- 2016 Q4 (N=27): 55.6%
Severe HTN Implementation Checklist

- Open REDCap while on the call and click on ‘My Projects’
  - Complete Severe HTN Implementation Checklist for 2016 Q3 and Q4
  - 14 easy yes/no questions
How to Access Reports

1. Log into REDCap and select project
2. Click on Reports
3. Enter 3 digit Hospital ID
4. View and download reports
QI Methods Example: Linking data review to PDSA cycle

• Review your team data in your next team meeting

• How are you doing over time?
  • Consistent? Improving?

• How do you compare to other teams?

• Do you see opportunities for improvement?
  • Are you identifying missed opportunities? Delay in treatment? Variability in treatment time across cases or across units?

• Have you tried any system changes to develop and implement reliable systems for identification of severe BP, measurement, assessment, and monitoring of BP?
  • If yes, could they be improved?
  • If no, why not try now?
  • These systems based changes help to empower nurses and drive sustainable culture change across units
QI Support Plan Updates

- Individual QI Support Calls
  - All QI Support Calls Completed – expect follow up in 1 month from Patti
  - Key takeaways:
    - Teams having issues with providers/nurses conditionally following protocols
    - Staffing/resources challenges
    - Not viewing REDCap Reports – recommend reviewing on next OB Teams call

- Individual Data Support Calls
  - Calls with all but 2 teams – Kate continues outreach
  - Key takeaways:
    - Teams have data collected but may be lacking resources/time to enter data forms into REDCap
    - Multiple hospitals have key staff members on leave leading to delays in data entry

- QI Topic Calls
  - 6 QI Topic calls held in January/February with 4-10 teams on each call
  - Please let us know of additional topics for future calls!
Lorraine Parker, Patient Care Administrator at Winnie Palmer Hospital for Women & Babies, Florida
Our HIP Initiative Journey

Winnie Palmer Hospital for Women & Babies

Partnering to Improve Health Care Quality for Mothers and Babies
Where We Started

- 2009 - Started HTN algorithm in triage
- Difficulty hardwiring process in other areas within the hospital
- Inconsistent management practices among providers
- No specific guidelines/policy that focused on HTN management
What We’ve Achieved

- Implementation of HTN crisis algorithm to all areas of the hospital
- Standardization in management of severe range blood pressures
- Clear goals for HTN crisis management
- Development of an order set and policy
- Developed consistent staff education
What We’ve Achieved

- Clear admission/transfer guidelines
- Improved physician consistency
- Collaboration with ED’s in developing management recommendations
Challenges Still to Tackle

- Hardwire process for management of HTN patients in ED’s
- Ensure consistent documentation standards
- Notification of RRT consistently
- Continue to hardwire processes
- Increase use of order set
Team Talks

- Northwest Community Hospital
  - Dr. Soti Markuly
- Rush-Copley
  - Karen Werrbach MSN, RNC-OB, NEA-BC
  - Kristi Walker MSN, RNC-OB, C-EFM
Northwest Community Healthcare

- 489 bed hospital with main campus in Arlington Heights, Illinois. Non-profit independent facility with additional outpatient sites and immediate care centers.
- Level III Perinatal services
- 2600 births annually
- 249 NICU admissions in 2015
- 16 bed single room NICU with 8 designated Level III beds
- 44 bed OB postpartum/antepartum/gyne
Team members:

Team consists of OB Hospitalist, ED physician, Nursing Managers, Clinical Educators (OB & ED), & Staff Nurses.

Team Chair sits on “workgroup advisory board”.

Team meeting every other month.

Birth Certificate Registrar and Pharmacy consulted on as needed basis.
Feb: BP Measurement Education
March: OB department meeting
April:
May: Sample of letter provided to OB department members.

Dear Colleague:

Northwest Community Hospital is a participating hospital in the Illinois Perinatal Quality Collaborative Maternal Hypertension Initiative aiming to reduce maternal morbidity associated with severe hypertension by 20%. Severe hypertension is defined as a systolic BP greater than or equal to 160 and/or diastolic BP greater than or equal to 110, sustained for 15 minutes. This includes both pregnant and postpartum patients evaluated in L&D, Postpartum, and the Emergency Department.

When these patients present, it is imperative they be identified, assessed and treated in a timely manner. The American College of Obstetricians and Gynecologists Committee Opinion number 623, Feb 2015 addresses the emergent treatment of acute-onset of severe hypertension during the pregnancy and postpartum period.

June:/July: Formalizing Patient Education Handouts
Nursing Staff Education & Updates at Unit based Meetings.
Fall 2016:

- Physician Champion presented at ED physician meeting
- Computer Based Training Module assigned to all RN’s in L & D., Postpartum, and ED.
- Presented progress and outcomes at department staff meetings.
- Physician Champions and Nursing attended ILPQC Springfield meeting.

Winter 2016:

- January 2017 Physician Champion presented to the OB/GYN Department Meeting: Data from 2016, pitfalls, areas of improvement discussed. Letter containing same sent to all members of the department.
- RN Champion presented education to community Promotoros program members.
  The program consists of peer counselors who support patients inpatient & after discharge.
- Protocol and order set in development for presentation at OB Department meeting.
- Hypertension simulation planned for Spring.
Karen Werrbach MSN, RNC-OB, NEA-BC
Director, Women’s Health Institute

Kristi Walker MSN RNC-OB, C-EFM
Clinical Educator, Family Birth Center, MFM and Pelvic Medicine
Rush Copley Family Birth Center

- Level III Hospital— 6th busiest delivering hospital in Illinois
- 14 LDR’s
- 6 Triage Rooms
- 1 Alternative Birthing Suite (only one in the western Suburbs)
- 2 OR’s
- 28 Bed M/B unit
- 27 Bed NICU
Rush Copley Hypertension Team

- Kristi Walker Clinical Educ FBC - Team Lead
- Karen Werrbach Director
- Peggy Mikkelsen Mgr L&D
- Andrea Grzyb Mgr M/B
- Antoinette Trobl Quality ED
- Melissa Reeder Staff Educ FBC
- Mary Antongorgi Coordinator MFM
- Nancy Pietrzak Mgr ED
- Maureen Lugod Educ ED
- Jennifer Perry Director ED
- Melissa Knapik Staff RN FBC
- Lindsay Ammenhauser Patient Rep
- Lorna Kaitei Quality Coordinator FBC
- Dr McCulloch Provider Champion MFM
- Dr Hendren Provider Champion ED
- Garth Xander Pharmacist Champion
Does This Look Familiar?

- Patient Talking on Phone while taking Blood Pressure
- Side lying during BP
- BP During Contraction
- Cyclic Blood Pressures While RN out of room
Computer-Based Learning Module
Education and Test

Required by all Family Birth Center and ED Staff
Train the Trainer

• Each Trainer Met 1:1 with staff
• Reviewed the Education on proper assessment and documentation
• Observed the staff perform BP assessment
• Signed off competency skills checklist
# Competency Worksheet

## Competency: Blood Pressure Assessment

### Reference(s):
- ILPQC Maternal Hypertension Initiative

### Clinical/Technical Skills

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Critical Thinking Skills</th>
<th>Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies when and how frequently Blood Pressure is to be taken</td>
<td>Identifies situations in which you should take a manual blood pressure for verification</td>
<td>Communicates a procedure to patient</td>
</tr>
<tr>
<td>Explains importance of taking and documenting Blood Pressure on time.</td>
<td>Identifies normal ranges Blood Pressure</td>
<td>Promptly reports abnormal values to nurse or provider.</td>
</tr>
<tr>
<td>Demonstrates appropriate technique for obtaining a blood pressure utilizing proper cuff size, position and process</td>
<td>Discusses actions to take when abnormal reading obtained.</td>
<td></td>
</tr>
<tr>
<td>Demonstrate proper technique for Automatic and manual Blood Pressure assessment.</td>
<td>Discuss process for taking cyclic Blood Pressures</td>
<td></td>
</tr>
<tr>
<td>Demonstrates proper documentation of blood pressure in SCM or OBTV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Department(s)
Nursing

### Date
Revised June 2016

Signature of Educator/Super user: ______________________
Provider Education

• AIM Modules sent out to all providers

• Education provided at 3 OB Gyne Department Meetings

• Policies, order sets and algorithms currently being reviewed brought to OB/Gyne Department and E-mailed to providers for feedback
Changes in progress

- Order sets – Revised to Change BP parameters 160/105
- Hypertension in the Pregnant and Postpartum Patient Policy – Includes ED section/Algorithms for meds, ED workflow and BP workflow
- Labetalol and Hydralazine Policy – Developed to guide the M/B nurses who are not as familiar with IV push medication for hypertension
2nd Train the Trainer Training

• Education on Policies, Order sets, Time to treat, Patient Education, Discharge Follow-up and debrief
• Education Reference binders placed on each unit and provided to the trainers
• Sign off sheets provided to each trainer
Moving forward

Provider/Staff - Buy In/ Practice Change

Review our data

Initiate PDSA cycles based off our data → To improve outcomes
Patient & Family Advisors
Patient/Family Advisors

- Stacey Porter and Jennifer Heiniger participating as patient advisors to the ILPQC OB Maternal Hypertension projects
- ILPQC encourages hospital teams to identify and include a patient/family advisor on their QI team
- ILPQC developed tool to help staff/providers identify and provide information to potential patient/family members about working in QI
- ILPQC email text to communicate with team members to assist in identifying potential pts will be sent in the upcoming newsletter
- Stay tuned for an updated Patient Engagement webpage on the ILPQC website with additional resources
Team Talks – HTN Initiative

- Teams assigned an OB Teams Call – look for email from Kate
  - January -
    - Alexian Brothers Women’s and Children’s Hospital
    - Memorial Hospital East/Belleville
  - February
    - Northwest Community Hospital
    - Rush-Copley
  - March
    - Elmhurst Memorial
    - Unitypoint Health Trinity
    - Alexian Brothers Women’s and Children’s
  - April
    - SwedishAmerican
    - Palos Community Hospital

- Generate discussion and learning through sharing
  - Good foundation for storyboard/poster presentations!
  - Present 5-10 mins. on current QI work based on monthly call topic:
    - January – implementing standard order sets, protocols, and checklists
    - February – standardizing identification, BP measurement, assessment, and monitoring for pregnant/postpartum women
    - March – rapid access to IV and PO anti-hypertensive medications
    - April – implement system for standardized patient discharge education and follow-up
HTN Initiative Next Steps

• Focus on QI strategies and reliable systems changes to reduce time to treatment for all patients, all units, all hospitals
• Review your hospitals REDcap Data at your next meeting, share it to drive QI
• Identify a patient/family advisor for your HTN Initiative Team and invite them to participate in your monthly QI team meetings
• ILPQC HTN Initiative Face to Face May 18, Springfield: Save the Date!
• Data past and upcoming due dates:
  • Severe HTN Data Form
    • January data is due between February 15th and 28th
    • February data is due between March 15th and 31st
  • AIM Quarterly Measures
    • 2016 Q3 (July - September) was due October 15th
    • 2016 Q4 (October – December) was due January 15th
  • Quarterly Implementation Checklist
    • 2016 Q3 (July - September) was due October 15th
    • 2016 Q4 (October – December) was due January 15th
• Next teams call will be March 27, 2017 from 12:30 – 1:20 pm
• Email 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
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