



Maternal Hypertension Initiative Teams Call Response

September 26, 2016 12:30 – 1:30 pm

Overview



- Maternal Mortality in the News
- Data
- Provider Engagement
- Quality Improvement Tools
- Clinical Education
 - Timing of Delivery Dr. Jim Keller, Sue Fulara, & Carol Burke
- Team Talks
 - Jennifer Rizzo, RNC, BSN, Advocate Sherman Hospital
 - Kristen Farney, RNC, BSN, Carle Foundation Hospital
- Patient and Family Engagement
- 4th Annual Conference
- Next Steps & Questions

Maternal Mortality in the News Perinatal Quality Collaborative

- "Maternal Mortality Rate in U.S. Rises, Defying Global Trend, Study Finds" published in the New York Times (9/21)
 - Institute of Health Metrics and Evaluation, a research group funded by the Gates Foundation
 - 28 maternal deaths per 100,000 births in 2013, up from 23 per 100,000 births in 2005 in the US
 - US Maternal Mortality rate 3x the rate of Canada
 - Link: http://mobile.nytimes.com/2016/09/22/health/maternal-mortality.html?smprod=nytcore-iphone&smid=nytcore-iphone-share&r=0&referer



Data Review

Data Entry Status
Time to Treatment Progress
Response Data from Implementation Checklist
Response Data from AIM Baseline Survey

Severe Hypertension Data Entry Status

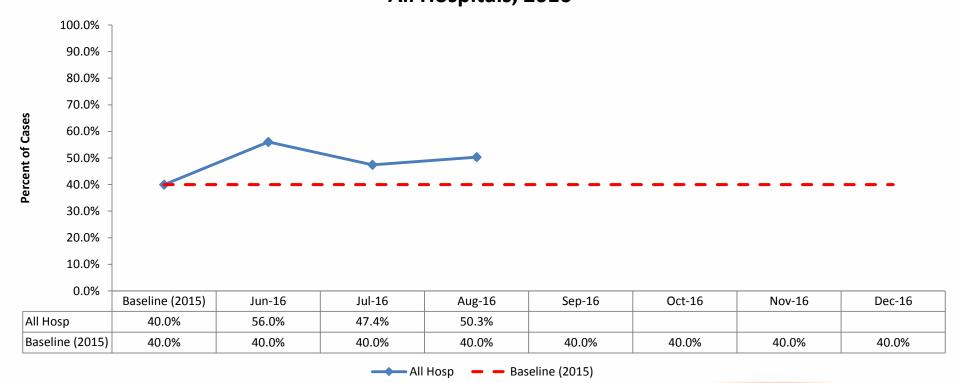


	Total Records	# Teams with Data
Baseline (2015)	1343	78
June	448	65
July	498	67
August	371	61
Overall	2660	90

Maternal HTN: Time to Treatment



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



Implementation Checklist - IL PQC 'Response' To Dos for Every Case: (Response' To Dos for Every Case:

- Facility-wide standard protocols with checklists and escalation policies for management and treatment of:
 - Severe HTN
 - Eclampsia,
 - Seizure prophylaxis, and
 - Magnesium over-dosage
 - Postpartum, emergency department and outpatient presentations

Implementation Checklist - ILC PQC (Response' To Dos for Every Case: Quality Collaborative)

Protocol must include:

- Notification of physician or primary care provider if systolic BP =/>160 or diastolic BP =/>110(105) for two measurements within 15 minutes;
- After the second elevated reading, treatment should be initiated as soon as possible and within 30-60 minutes of verification;
- Standard ACOG treatment guidelines of IV therapy for severe HTN
- Includes escalation measures for those unresponsive to standard treatment;
- Includes onset and duration of magnesium sulfate therapy for seizure prophylaxis (not treatment of HTN) when indicated;
- Describes manner and verification of timely follow-up for blood pressure check and evaluation within 7 to 14 days postpartum;
- Describes postpartum patient education for women with hypertension / preeclampsia describing postpartum preeclampsia.

Implementation Checklist - IL PQC 'Response' To Dos for Every Case: Quality Collaborative

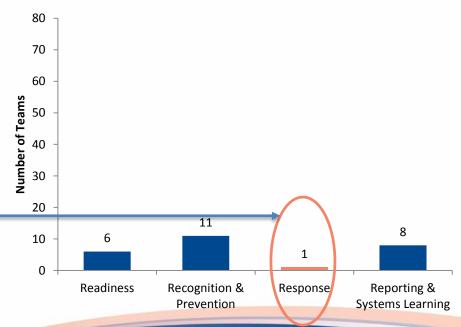
3. Support plan for patients, families, and staff for ICU admissions and serious complications of severe hypertension.

Implementation QI at the Hospital Level: Response



- Response for all cases
 - Use standardized treatment and escalation protocols meeting minimum requirements
 - Implement support plan for patients, families, and staff
- Number of IL hospital teams with both items in place = 1

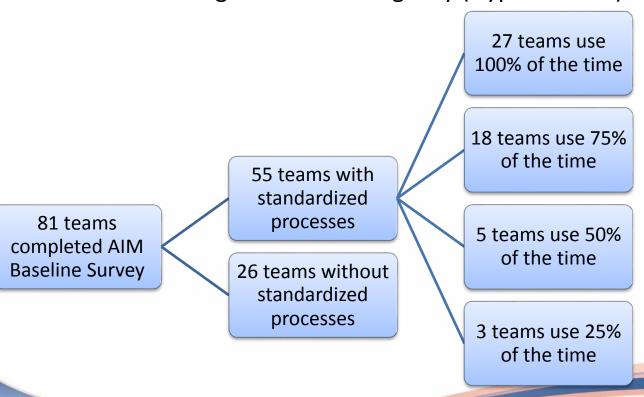
ILPQC: Maternal HTN
Hospital Teams Reporting All
Checklist Items in Place, By "R"
September 8, 2016
(78 teams reporting)



AIM Baseline Survey:

Response – for all cases

- 81 teams have completed the AIM Baseline Survey (74%)!
- AIM Baseline Survey question on response: Does the OB Department have standardized processes (i.e. order sets, unit policies, practice protocols) for the following obstetric emergency (Hypertension)?



Take aways:

 68% of teams have standardized processes in place

Quality Collaborative

- Of those that do, 47% of teams do not use them 100% of the time
- Policies are reviewed/updated every year by 30% of teams with policies, less frequently for other 50%



Provider Engagement

Provider/Physician Engagement & Resources Grand Rounds

Provider/Physician Engagement & Resources



- Short and to-the-point provider education resources:
 - AIM emodules
 http://www.safehealthcareforeverywoman.org/aim-emodules-3.php
 - AIM 15 minute recorded webinar with Larry Shields,
 Maurice Druzin, Elliott Main (coming soon)
- ABOG MOC Part IV Credits
- Use of data share baseline data from ILPQC Data
 System to build the case

Maternal Hypertension Grand Rounds



- ILPQC has created a Grand Rounds slide set
 - Slides distributed in last week's email
 - Also available on the website and for download here
- For questions or support regarding Grand Rounds, please contact <u>info@ilpqc.org</u>



Quality Improvement Tools

QI Topic Calls HTN Toolkit Binder





- Upcoming QI Topic Calls
 - Adapting Standard Protocols 10/11 from 12-1 pm
 - Garnering Physician/Provider Buy-in 10/20 from 12-1 pm
 - Standardizing Response in the ER TBA
- All of the calls have the following call-in information:

Conference Line: 1-877-860-3058

Participant Code: 850 207 6731

HTN Toolkit Binder



- HTN Toolkit Binder resources on this clinical education topic:
 - Under Tab 7 in the Binder (or click hyperlinks below):
 - BP Medication and Treatment Algorithms
 - ACOG Committee Opinion 623, Emergent Therapy for Acute-Onset, Severe Hypertension During Pregnancy
 - CMQCC Sample Preeclampsia/Elcampsia Medication Toolbox
 - CMQCC Steps for Preparation, Storage, Ordering and Administration of Magnesium Sulfate
 - ACOG Conservative Management of Preeclampsia
 - Algorithms for Treatment
 - ACOG DII (New York) Labetalol Algorithm
 - ACOG DII (New York) Hydralazine Algorithm
 - ACOG DII (New York) Oral Nifedipine Algorithm
 - ACOG DII (New York) Algorithm for Postpartum Education
- All resources available on <u>ILPQC Maternal Hypertension page</u>



Response

Conservative Management of Preeclampsia



Timing of Delivery

Dr. J. Keller MD, MHSA
Susan Fulara MSN, RNC-OB, C-EFM, NE-BC
Carol Burke MSN, APRN

The AIM Patient Safety Bundle - Hypertension





READINESS

Every Unit

- Standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)
- Unit education on protocols, unit-based drills (with post-drill debriefs)
- Process for timely triage and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas
- Rapid access to medications used for severe hypertension/eclampsia: Medications should be stocked and immediately available on L&D and in other areas where patients may be treated. Include brief guide for administration and dosage.
- System plan for escalation, obtaining appropriate consultation, and maternal transport, as needed



RECOGNITION & PREVENTION

Every Patient

- Standard protocol for measurement and assessment of BP and urine protein for all pregnant and postpartum women
- Standard response to maternal early warning signs including listening to and investigating patient symptoms and assessment of labs (e.g. CBC with platelets, AST and ALT)
- Facility-wide standards for educating prenatal and postpartum women on signs and symptoms of hypertension and preeclampsia



RESPONSE

Every case of severe hypertension/preeclampsia

- Facility-wide standard protocols with checklists and escalation policies for management and treatment of:
- Severe hypertension
- Eclampsia, seizure prophylaxis, and magnesium over-dosage
- Postpartum presentation of severe hypertension/preeclampsia
- Minimum requirements for protocol:
- Notification of physician or primary care provider if systolic BP =/> 160 or diastolic BP =/> 110 for two measurements within 15 minutes
- After the second elevated reading, treatment should be initiated ASAP (preferably within 60 minutes of verification)
- Includes onset and duration of magnesium sulfate therapy
- Includes escalation measures for those unresponsive to standard treatment
- Describes manner and verification of follow-up within 7 to 14 days postpartum
- Describe postpartum patient education for women with preeclampsia
- Support plan for patients, families, and staff for ICU admissions and serious complications of severe hypertension

REPORTING/SYSTEMS LEARNING

Every unit

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of all severe hypertension/eclampsia cases admitted to ICU for systems issues
- Monitor outcomes and process metrics

Note: "Facility-wide" indicates all areas where pregnant or postpartum women receive care. (E.g. L&D, postpartum critical care, emergency department, and others depending on the facility).

Standardization of health care processes and reduced variation has been shown to improve outcomes and quality of care. The Council on Patient Safety in Women's Health Care disseminates patient safety bundles to help facilitate the standardization process. This bundle reflects emerging clinical, scientific, and patient safety advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Although the components of a particular bundle may be adapted to local resources, standardization within an institution is strongly encouraged.

The Council on Patient Safety in Women's Health Care is a broad consortium of organizations across the spectrum of women's health for the promotion of safe health care for every woman.

May 201

SAFETY

BUNDLE

Hypertension

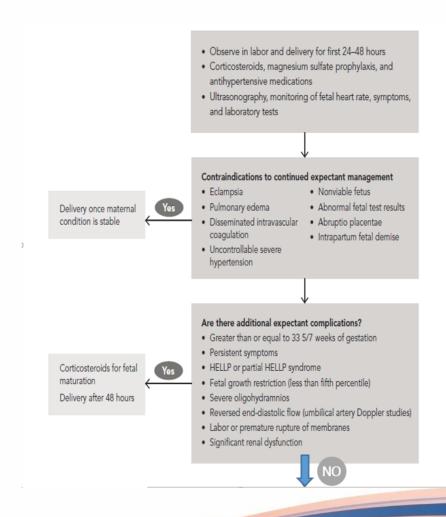


Response



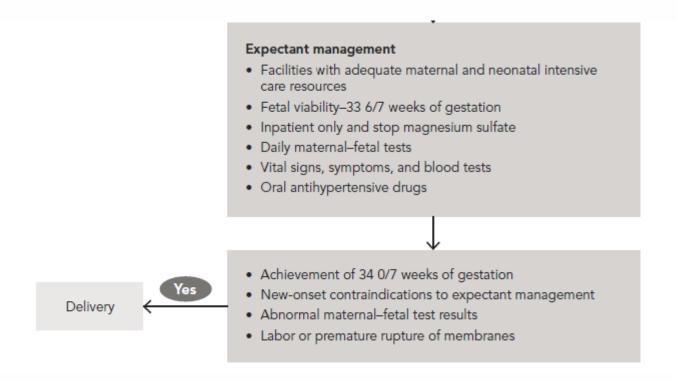
- Facility-wide standard protocols with checklists and escalation policies for management and treatment of:
 - Severe Hypertension
 - Eclampsia
 - Postpartum Presentation of severe hypertension / preeclampsia
- Minimum requirements for protocol
- Support plan for patients family and staff for ICU admissions and serious complications of severe hypertension

Management of Severe Preeclampsiq at Less Than 34 Weeks Gestation



Illinois Perinatal Quality Collaborative

Management of Severe Preeclampsiq at Less Than 34 Weeks Gestation Cont.



American College of Obstetricians and Gynecologists, Task Force on Hypertension in Pregnancy. Hypertension in pregnancy. Report of the American College of Obstetricians and Gynecologists' Task Force on Hypertension in Pregnancy.

Obstet Gynecol. 2013 Nov;122(5):1122-31.

Illinois Perinatal Quality Collaborative



Delivery v. Expectant Mangement Hypertension in Pregnancy



Preeclamptic Balancing Act

- Stroke
- Hemorrhage
- Renal Failure
- Hepatic Failure
- Subcapsular Hepatic Hematoma
- Pulmonary Edema
- Retinal detachment
- Placental Abruption
- Fetal and Maternal Death
- Etc...

Prematurity

- ROP
- Sepsis
- NEC
- IVH
- CP
- RDS
- Etc...



When to Deliver



- For women with severe preeclampsia and before fetal viability, delivery after maternal stabilization is recommended
- Expectant management is not recommended

When to Deliver - Preeclampsia/Severe features

< 34 34 37 38 weeks weeks weeks

- Observe in L&D for first 24-48 hours
- Corticosteroids, mag sulfate prophylaxis and antihypertensive medications
- Ultrasound, monitor FHR, symptoms and lab tests

Deliver once maternal condition is stable with:

- Eclampsia
- Pulmonary edema
- DIC
- Uncontrolled severe HTN
- Abnormal fetal test results
- Abruptio placenta
- Intrapartum fetal demise

Expectant 24-48° → Deliver if:

- > 33 ^{5/7}
- Persistent symptoms (headache, mental status changes, scotomata, epigastric pain)
- HELLP
- Fetal growth restriction (< 5th percentile)
- Severe oligohydramnios (output < 500ml/24h)
- Reversed end-diastolic flow
- Labor or PPROM
- Renal dysfunction (creatinine > 1.2)
- Pulmonary edema or O2 sat < 95%

Deliver if new onset contraindications to expectant management develop



< 34 weeks

Expectant management of preeclampsia with severe features

(if no indications for delivery after first 48 hour observation)

- Facility with adequate maternal and NICU resources
- Fetal viability → 33 6/7 weeks
- Inpatient only and stop magnesium sulfate
- Monitor vital signs frequently (at least each shift)
- At least daily maternal assessment for subjective symptoms of severe preeclampsia
- At least daily assessment of fetal well-being
- Serial estimation of fetal growth and amniotic fluid volume
- Serial evaluation for HELLP syndrome and of renal function
- Oral antihypertensive drugs controlling blood pressure

When to Deliver

< 34 34-37 37 38 weeks weeks weeks</p>

Preeclampsia with severe features

- May expectantly manage in appropriate setting until 34 weeks gestation, <u>if maternal and fetal status stable</u>
- Deliver in 48 hours if stable and > 34 weeks:
 - PROM
 - platelets < 100,000
 - elevated LFTs
 - EFW < 5th percentile
 - AFI < 5 cm
 - abnormal umbilical artery Doppler
 - new onset/worsening renal dysfunction

Quality of evidence: Moderate Recommendation: Qualified

American College of Obstetricians and Gynecologists, Task Force on Hypertension in Pregnancy. Hypertension in pregnancy. Report of the American College of Obstetricians and Gynecologists' Task Force on Hypertension in Pregnancy. Obstet Gynecol. 2013 Nov;122(5):1122-31.

Key Clinical Pearl



In patients with preterm preeclampsia with severe features, the disease can rapidly progress to significant maternal morbidity and/or mortality.

*Transfer to appropriate level of care if possible





Preeclampsia: Outpatient Management: IL PQC Maternal Stability Maternal Stability

- BP in the non-severe range
- Has been monitored as in-pt and remained stable
- Gestational age < 37 weeks (At 37 weeks delivery should be considered)
- No indicators of severe features of preeclampsia
- None of the following maternal symptoms:
 - Headache
 - Visual disturbances
 - Abdominal pain
 - Gastrointestinal symptoms
- No evidence of hemolysis
- In essence a near normal laboratory assessment



- Appropriate fetal growth
- Reassuring antenatal fetal testing
- Normal amniotic fluid volume



Ability to be followed as an outpatient

- Communicative and reliable patient
 - Patient can check BP at home
 - Can reliably return for close follow up
- Twice weekly assessment in office:
 - Maternal blood pressure
 - Laboratory assessment for indicators of worsening disease (creatinine, liver function, platelets)
 - Fetal testing including amniotic fluid assessment
 - Periodic ultrasound assessment of fetal growth

Corticosteroids for expectantly managed preeclampsia 34-37 weeks

- Betamethasone may be considered in woman with a singleton pregnancy between 34 0/7 and 36/6/7 weeks gestation if at risk for imminent risk of preterm birth within 7 days
- Should not be used if antenatal corticosteroids already administered during pregnancy
- Specifically mentioned, an indicated delivery, such as with development of severe features in preeclampsia, should not be delayed in this time frame for administration of corticosteroids
- Use of corticosteroids during this time frame for patients with pregestational diabetes, is still being evaluated

When to Deliver

< 34 34 37 38 38 weeks weeks weeks</p>

Gestational hypertension

- Can be expectantly managed until 37 weeks
- Diagnosis made > 37 ^{0/7} deliver
- Deliver sooner if other indications arise

Preeclampsia without severe features

- Can be expectantly managed until 37 weeks
- Deliver at 37 weeks
- Deliver sooner if other indications arise

Quality of evidence: Low

Recommendation: Qualified

American College of Obstetricians and Gynecologists, Task Force on Hypertension in Pregnancy. Hypertension in pregnancy. Report of the American College of Obstetricians and Gynecologists' Task Force on Hypertension in Pregnancy. Obstet Gynecol. 2013 Nov;122(5):1122-31.

When to Deliver

< 34 34 37 38 weeks weeks weeks</p>

Chronic Hypertension

 With no additional maternal or fetal complications, delivery before 38 0/7 weeks not recommended Table 2: Daily Assessment for Delivery versus Continuing Pregnancy

Clinical Criteria:	Pr	esent
Persistent maternal headache	Yes	No
Visual disturbance (blurred or scotomata)	Yes	No
Hypoxia (O2 saturation < 95%) or pulmonary edema on clinical exam	Yes	No
Persistent BP > 160 mm Hg systolic or > 105-110 mm Hg despite medical management	Yes	No
Oliguria (< 500 ml/24 hours)	Yes	No
Evidence of renal failure (serum Creatinine > 1.2 mg/dL	Yes	No
Thrombocytopenia (platelet count < 100,0000/mm3	Yes	No
Elevated ALT > 70 U/L	Yes	No
Evidence of hemolysis (LDH > 600, bilirubin > 1.2 mg/dL or abnormal peripheral blood smear)	Yes	No
Abnormal coagulation (elevated PT/PTT or fibrinogen < 300)	Yes	No
Abnormal Fetal NST and/or BPP	Yes	No
	Yes To ANY of above CONSIDER DELIVERY	No To ALL of above CONTINUE PREGNANCY



Acknowledgments

This slide set was adapted from materials created by the following groups:

- N Carolina Perinatal Quality Collaborative
 - http://www.pqcnc.org/
- FPQC Hypertension in Pregnancy Initiative
 - http://health.usf.edu/publichealth/chiles/fpqc/hip
- CMQCC Preeclampsia Collaborative
 - https://www.cmqcc.org/projects/past-projects/cmqcc-preeclampsia-collaborative
- ACOG DII (New York) Safe Motherhood Initiative
 - https://www.acog.org/About-ACOG/ACOG-Districts/District-II/Safe-Motherhood-Initiative
- AIM Severe Hypertension in Pregnancy Bundle
 - http://www.safehealthcareforeverywoman.org/secure/hypertension-bundle.php



PDSA Example

Sue Fulara

Objective: To find the most accurate process to identify patients who meet the criteria for severe hypertension

- Recognized that this process was inaccurate at identifying patients who meet the criteria.
- Enlist the assistance of a Project manager to strategize a different approach.

Act

- What data collection process is accurate without being cumbersome?
- Identify ICD10 codes that can be used for hypertension in pregnancy and run a report.

This list should identify all patients whose BP reached the severe range.

Study

Do

Plan

- The report required very little effort to obtain information.
- The report identified only 3 patients in a 3 month period.

 A three month report was generated using ICD 10 codes.

Objective: To find the most accurate process to identify patients who meet the criteria for severe hypertension

- Met with Data specialist to fine tune report
- Report was pulling data from prenatal visits
- Parameters adjusted

Staff will identify patients who have SBP >140 or DBP>90

Staff will place a patient sticker on a collection form

Plan

Study

Act

v Do

- A new computer generated report was created to identify patients with severe criteria
- Staff collected data was compared to the new report
- Staff did not capture all patients
- Computer generated report over reported

- A clipboard was placed in L&D and MB with a collection form
- Staff put a patient sticker on the form





- Advocate Sherman Hospital
 - Jennifer Rizzo, RNC, BSn
- Carle Foundation Hospital
 - Kristen Farney, RNC, BSN



Our HTN Initiative Journey





Level 2E

Deliveries: 220/month

Outpatient Visits: 350-400/month

MFM Clinic: 525 patient visits/month



Perinatal Safety Structure

- Nursing Quality Review
- Medical Care Evaluation (MCE)
- OB Joint Practice
- Chain Of Command

PDSA-Cycle 1

Plan

- Develop a team
- Data collection
- Introduce to staff
- Monthly calls

Do

- Unit Meeting
- Data collection/entry
- Pharmacy reports
- Participated in monthly calls/meetings



PDSA Cycle 1 (cont.)

- Study
 - Missing forms-help with data collection
 - Need ED involvement
 - Formal education early
 - Patient placement
- Act
 - Brainstorming meeting
 - Education development

PDSA Cycle 2

Plan

- Identification of patients/data collection
- Education plan with timeline
- ED team involvement

Do

- Increase frequency of pharmacy reports
- Developed and built report in eMAR
- ED team formed
- Education roll-out

PDSA Cycle 2 (cont.)

- Study
 - Unfinished tasks
 - Discharge education documentation
 - PP nurse needed on the team
- ACT
 - ED education-easy fix
 - Need to regroup with the team

Current State

- Completed-September
 - Patient placement process & formal education for ED providers
- In Progress
 - ED nurse education in progress (Sept/Oct)
 - Building documentation for discharge education
 - Need to recruit a PP nurse
- Future
 - Perinatal safety structure-review of fall-outs
 - Simulation











Perinatal Care at Carle

- Labor & Delivery:
 - 7 Labor and delivery suites, 5 Triage rooms and 2
 OR suites.
- High Risk Antepartum Unit:
 - 9 High Risk Antepartum rooms
- Post-partum Unit:
 - 26 private rooms, 8 rooms equipped for antepartum patients



The Carle Hypertension Clinical Team

Jamie Fulfer, MD
Physician Champion
Melissa Tate, APN, MFM
Advance Practice Champion
Pam Unger, MSN,
Maternal/Child Director
Project Team Lead

Chantel Ellis, MSN, RNC
Labor and Delivery/High Risk Antepartum
Kristen Farney, BSN, RNC

Labor and Delivery/High Risk Antepartum Educator

Ashley Lingafelter, BSN, RNC

Labor and Delivery/High Risk Antepartum Educator

Jenn McBride, MSN, RNC

OB Quality Outcomes Coordinator

Erin Meyers, BSN, MSN, TNS, CEN

Emergency Department Manager

Emily Myers, DSS Senior Analyst

Information Management and Analytics













Team Leader Contact information:
Pamela.Unger@carle.com
217-326-0381

Team Talks - HTN Initiative



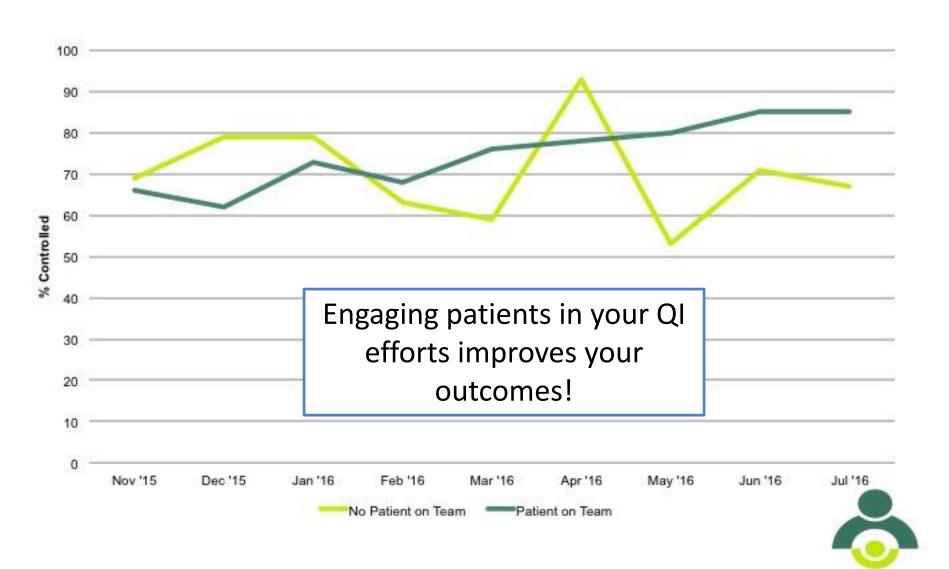
- Teams assigned an OB Teams Call look for email from Kate
 - October
 - St. John's
 - Silver Cross
 - Teams for future team talks will be contacted based on their work in certain areas related to that calls QI content

- Generate discussion and learning through sharing
 - Good foundation for storyboard/poster presentations!
- Present 5-10 mins. on current QI work, including:
 - Implementation of the data form
 - Process for identifying opportunities for improvement
 - Organization of your team meetings
 - PDSAs testing strategies to
 - Reduce time to treatment
 - Incorporate debriefs
 - Implement changes to patient education processes



Patient and Family Engagement

Percentage of Patients with SBP >160 or DBP >110 Controlled within One Hour



Patient/Family Advisors



- Patient/family advisors help advance QI efforts by providing the vitally important patient perspective
- Patient/family advisors are best recruited from physician and staff recommendations
- Please identify potential patient advisors for your team!
 - ILPQC working to create a tool for patient/family team member recruitment – stay tuned!
- Invite patient/family team member to attend ILPQC Annual Conference for free on November 3rd
 - Breakout session "Improving Outcomes Through Patient Engagement" led by Eleni Tsigas (Preeclampsia Foundation) and Terry Griffin (St. Alexius Hospital)
- One Pager is posted to front page of ILPQC website!



Annual Conference

Registration
Poster Abstracts
Potential Diaper Drive

ILPQC 4th Annual Conference: IL P Registration Open!



- Registration is now OPEN!
 - https://ilpqc4thannualconference.eventbrite.com
- Hotel rooms are available at the Westin for \$149 + tax (book before 10/14 at 5 pm CST)
 - https://www.starwoodmeeting.com/events/start. action?id=1607293024&key=31C94679
 - Or call (630) 719-8000 and request to book under the "ILPQC 4th Annual Conference" room block

ILPQC 4th Annual Conference: Call for Abstracts!



- Still accepting late breaking abstracts for 4th Annual Conference
 - https://www.surveymonkey.com/r/ILPQCposters2016
- Attendees to submit perinatal quality improvement abstracts in one of three categories:
 - Obstetrics
 - Neonatal
 - Patient & Family Engagement
- Late breaking abstracts due by October 1st EOB

ILPQC 4th Annual Conference: Potential Diaper Drive



- ILPQC approached to potentially host a diaper drive at the Annual Conference
- IL Baby Diaper Facts
 - http://nationaldiaperbanknetwork.org/wpcontent/uploads/2015/11/State-Baby-Facts-Illinois.pdf
- Diapers would be distributed to diaper banks located across the state
 - Champaign
- Gifford
- Quincy

Wauconda

Chicago

- Gurnee
- Springfield
- Waukegan

Evanston

- McHenry
- Tinley Park

- Galesburg
- Peoria

ILPQC 4th Annual Conference: OB Teams Survey



- ILPQC has created a mid-HTN Initiative check in survey
- Survey to be used to inform discuss during the OB Breakout Session at the conference
- Please complete survey by October 14th EOB
 - https://www.surveymonkey.com/r/ILPQCobteams survey2016

Next Steps



- QI Work
 - Attend an upcoming QI Topic Call
 - Begin using PDSA cycles for small tests of change at your hospital
- Data
 - Submit "ILPQC AIM Quarterly Measures" for 2016 Q3 (July September) in REDCap – October 15th
 - Submit Quarterly Implementation Checklist for 2016 Q3 (July September) in REDCap – October 15th
 - Submit September maternal hypertension data October 15th
 - Complete DUA
- Annual Conference
 - Register!
 - Submit a Late Breaking Abstract October 1st
- Next call is Monday, October 24th, 12:30 1:30 pm
- Email <u>info@ilpqc.org</u> 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

ILE PQC

Illinois Perinatal Quality Collaborative

- Email info@ilpqc.org
- Visit us at <u>www.ilpqc.org</u>









