



**Maternal Hypertension  
Initiative Teams Call**  
*Implementing System Patient  
Education & Discharge Follow  
Up*

April 24, 2017  
12:30 – 1:30 pm

# Overview

- HTN Initiative: Collaborative Tools and Updates (20 mins.)
- Patient Experience Discussion (20 mins.)
  - Jennifer Heiniger, ILPQC Patient Advisor
  - Stacey Porter, ILPQC Patient Advisor
- Team Talks (10 mins.)
  - Melissa Sheeran, Advocate Christ Medical Center
- Patient and Family Advisors
- Next Steps & Questions

# HTN Initiative: Collaborative Tools and Updates

Face-to-Face Updates  
Collaborative Data Review  
Implementation Checklist

# Severe HTN Initiative: Face to Face



- Save the date – May 18<sup>th</sup>, 2017
- President Abraham Lincoln Springfield – a DoubleTree by Hilton Hotel from 10 am – 3:30 pm
- Registration OPEN!
  - <https://ilpqchtnf2f2017.eventbrite.com>
- Hotel rooms available for \$112 + tax (reserve by 4/27)
  - <http://doubletree.hilton.com/en/dt/groups/personalized/S/SPIASDT-PQC-20170517/index.jhtml>
- Please reach out to **both nurse and physician / obstetric provider leaders** from your team to attend


# Severe HTN Initiative: Face to Face Storyboards



- Each team attending face to face should prepare a brief storyboard including:
  - Description of QI team and hospital
  - Process flow diagram
  - Progress on all key process measures (time to treatment, patient education, discharge follow up, debriefs)
  - Successes
  - Opportunities for Improvement and Sustainability

# Collaborative Call Schedule: Focus on System Changes

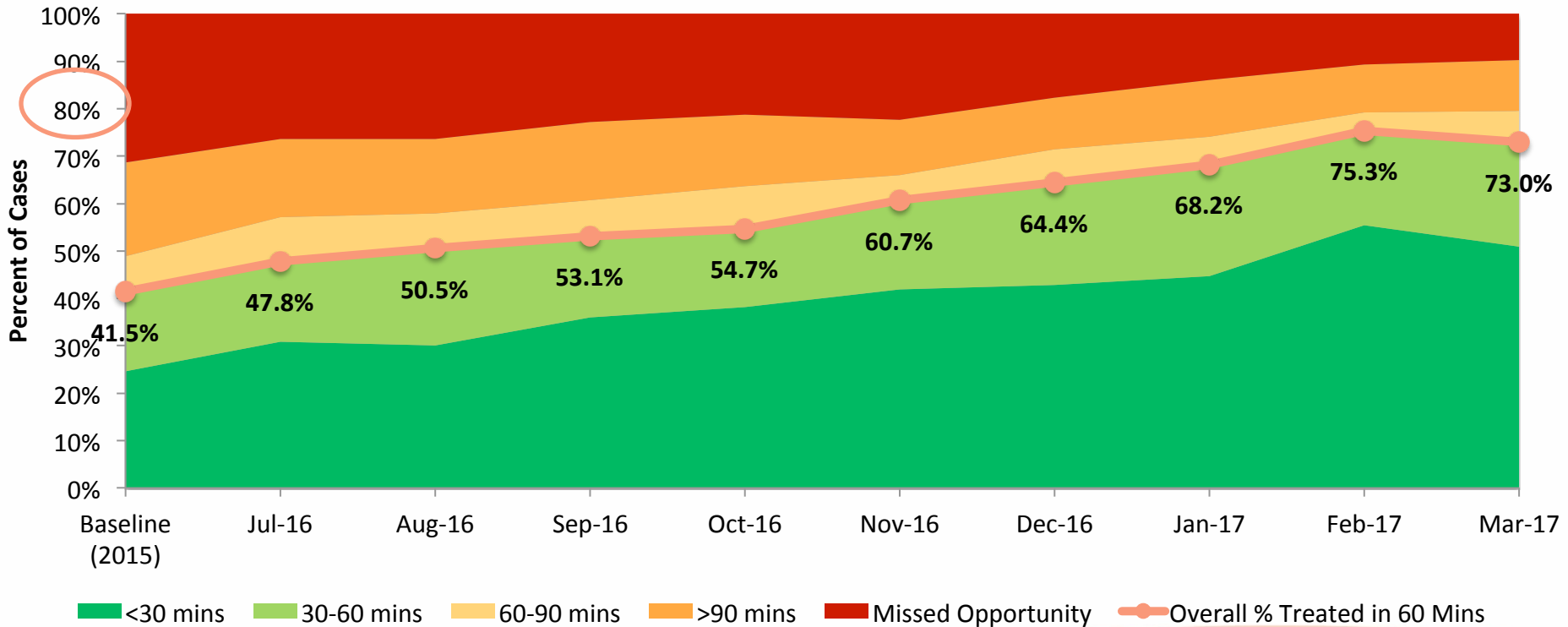


Call Date	Topics –Top 5 system level changes/interventions to decrease the time to treatment and improve discharge education and follow-up:
December 19, 2016 12:30 – 1:30 pm	Establish a system to perform <u>regular debriefs</u> after all new onset severe maternal hypertension cases
January 23, 2017 12:30 – 1:30 pm	Develop and implement <u>standard order sets, protocols, and checklists</u> for recognition and response to severe maternal hypertension and integrate into EHR
February 27, 2017 12:30 – 1:30 pm	Implement a system to <u>identify pregnant and postpartum women</u> in all hospital departments and execute <u>protocol for measurement, assessment, and monitoring</u> of blood pressure and urine protein for all pregnant and postpartum women
March 27, 2017 12:30 – 1:30 pm	Ensure <u>rapid access to IV and PO anti-hypertensive medications</u> with guide for administration and dosage (e.g. standing orders, medication kits, rapid response team)
 April 24, 2017 12:30 – 1:30 pm	Implement a system to provide patient-centered <u>discharge education materials</u> on severe maternal hypertension and implement protocols to ensure patient <u>follow-up within 10 days</u> for all women with severe hypertension and 72 hours for all women on medications
May 18, 2017 10:00 am – 3:30 pm	Face –to – face meeting

# Maternal HTN: Time to Treatment



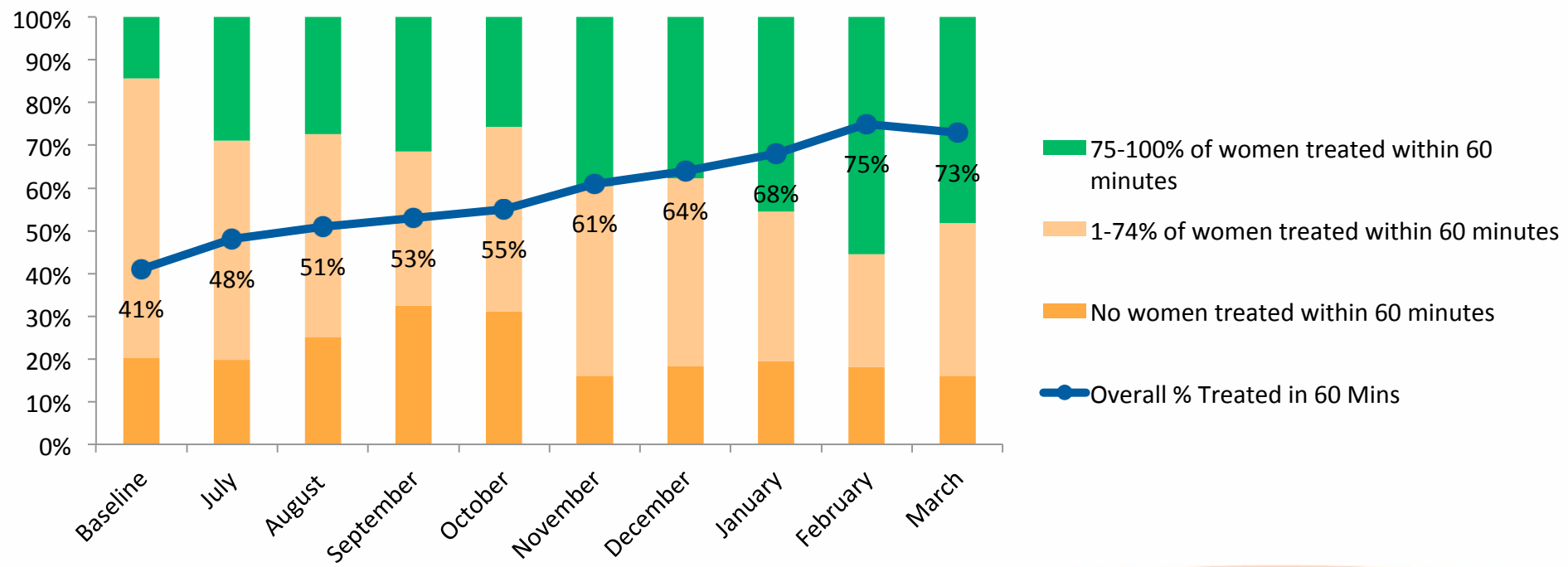
**ILPQC: Maternal Hypertension Initiative**  
**Percent of Cases with New Onset Severe Hypertension Treated in <30, 30-60, 60-90, >90 minutes or Not Treated**  
**All Hospitals, 2016-2017**



\*Preliminary March Data

# 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, 2016-2017

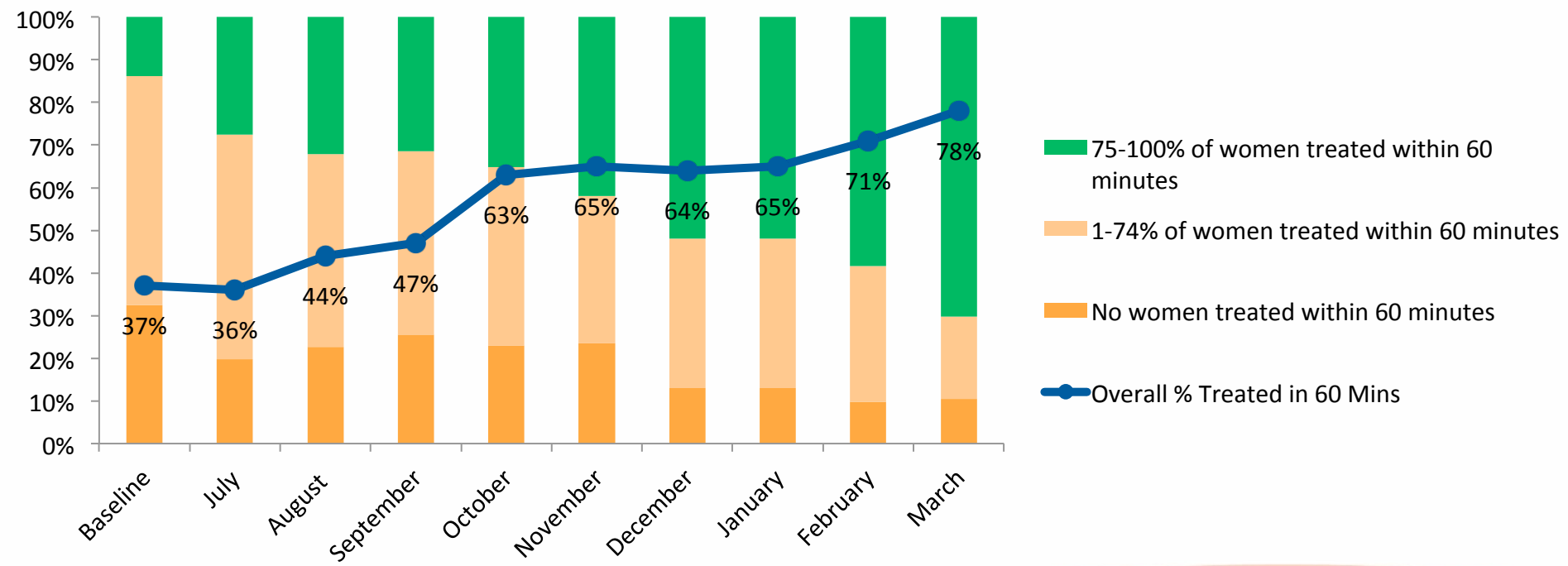


\*Preliminary March Data



# Maternal Hypertension Data: Patient Education

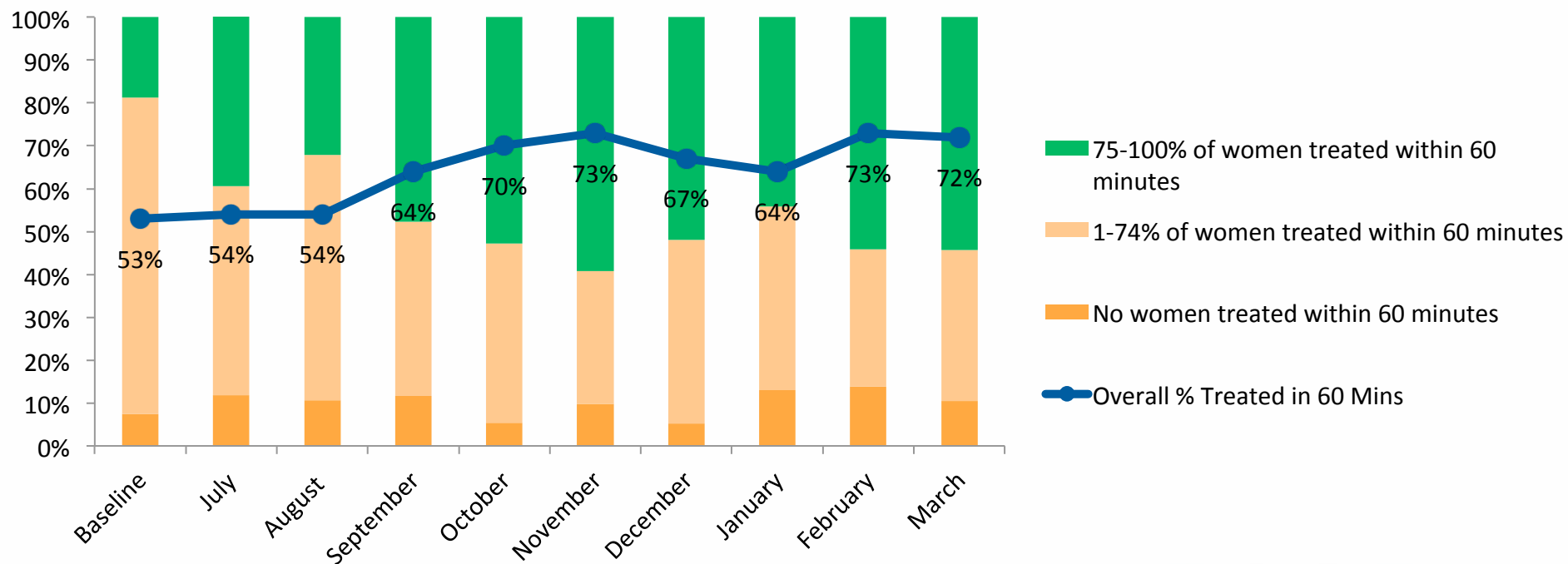
## ILPQC: Maternal Hypertension Initiative Percent of All Reporting Hospitals Where Women Received Discharge Education Materials All Hospitals, 2016-2017



\*Preliminary March Data

# 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, 2016-2017

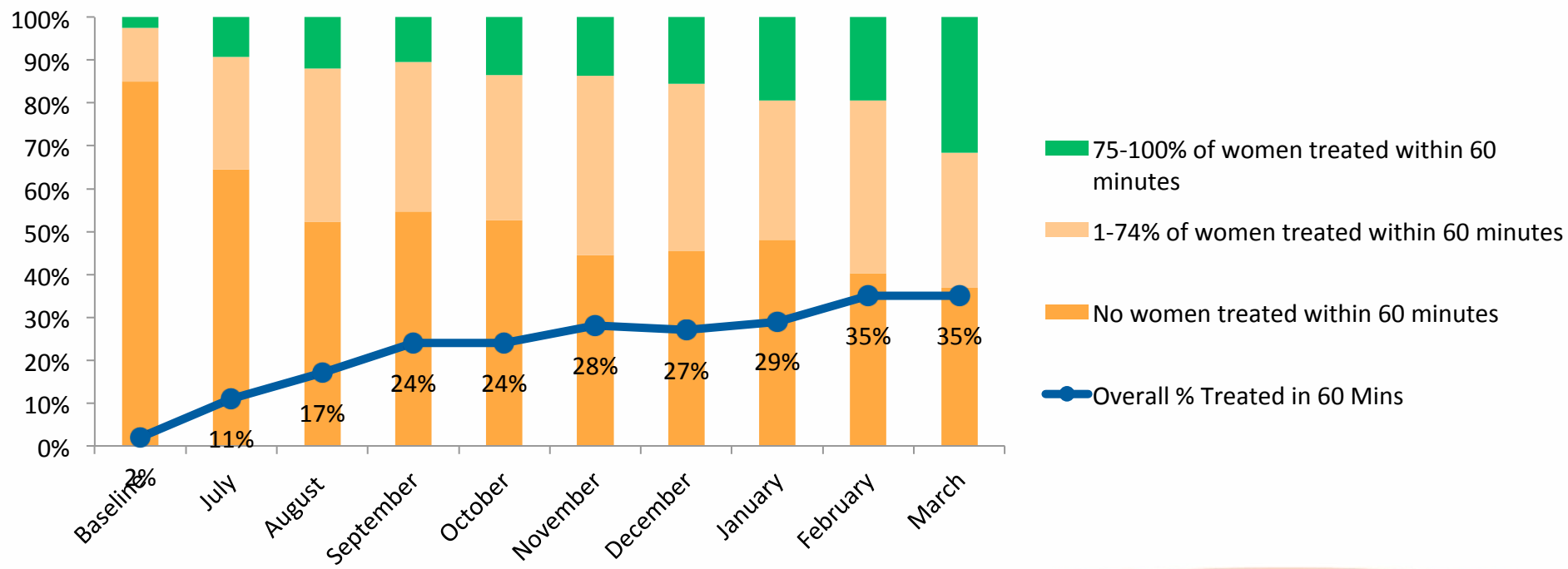


\*Preliminary March Data

# Maternal Hypertension Data: Debrief



## ILPQC: Maternal Hypertension Initiative Percent of All Reporting Hospitals Where Cases of New Onset Severe Hypertension were Debriefed All Hospitals, 2016-2017



\*Preliminary March Data

# Severe Hypertension Data Entry Status



	Total Records	# Teams with Data
Baseline (2015)	1626	88
July	581	76
August	641	84
September	571	86
October	504	74
November	548	81
December	552	78
January	501	77
February	442	72
March	379	61
<b>Overall</b>	<b>6345</b>	<b>101</b>

Get  
March  
data in by  
4/30!

# REVISED - Key Driver Diagram: Maternal Hypertension Initiative

GOAL: To reduce preeclampsia maternal morbidity in Illinois hospitals

## Key Drivers

**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

## 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)

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%

# AIM Quarterly Survey

**My Projects** Organize

Project Title
ILPQC Early Elective Delivery Initiative
ILPQC Birth Certificate Initiative
ILPQC Golden Hour
ILPQC Severe Hypertension Data Form
ILPQC AIM Yearly Measures
ILPQC AIM Outcome Measures
<b>ILPQC AIM Quarterly Measures</b>
ILPQC Severe HTN Implementation Checklist

**Aim Quarterly Measures Entry Form**  
Assign record to a Data Access Group? -- select a group --

Adding new Record ID 1

Record ID 1

Hospital ID   
\* must provide value

Please select the time period for this quarterly data:  
\* must provide value

- Q2 2016 (April - June 2016)
- Q3 2016 (July - September 2016)
- Q4 2016 (October - December 2016)
- Q1 2017 (January - March 2017)
- Q2 2017 (April - June 2017)
- Q3 2017 (July - September 2017)
- Q4 2017 (October - December 2017)

Provider Education

1a. At the end of this quarter, what cumulative proportion of OB physicians and midwives has completed (within the last 2 years) an education program on Severe HTN/Preeclampsia\* ?   
\*Question 1a focuses on clinical education related to severe HTN/Preeclampsia.

1b. At the end of this quarter, what cumulative proportion of OB physicians and midwives has completed (within the last 2 years) an education program on the Severe HTN/Preeclampsia bundle elements and the unit-standard protocol\*?   
\*Question 1b focuses on implementation education related to severe HTN/Preeclampsia bundle (Readiness, Recognition & Prevention, Resources, Reporting/Systems Learning) with a focus on the 14 items on the implementation checklist.

Nursing Education

2a. At the end of this quarter, what cumulative proportion of OB nurses has completed (within the last 2 years) an education program on Severe HTN/Preeclampsia\*?   
\*Question 2a focuses on clinical education related to severe HTN/Preeclampsia.

2b. At the end of this quarter, what cumulative proportion of OB nurses has completed (within the last 2 years) an education program on the Severe HTN/Preeclampsia bundle elements and the unit-standard protocol\*?   
\*Question 2b focuses on implementation education related to severe HTN/Preeclampsia bundle (Readiness, Recognition & Prevention, Resources, Reporting/Systems Learning) with a focus on the 14 items on the implementation checklist.

Unit Drills

3. In this quarter, how many OB drills (In Situ and/or Sim Lab) were performed on your unit for any maternal safety topic?

4. What topics were covered in drills this quarter?

- Hemorrhage
- Severe Hypertension
- Maternal Code
- Crash Cesarean Birth
- Shoulder Dystocia
- Other

Select all that apply

Form Status

Complete?

**Save Record**  
Save and Continue

- Open REDCap while on the call and click on 'My Projects'
  - Complete AIM Quarterly Measures for 2016 Q3 and Q4
  - Only 4 questions
  - **Q1 2017 due April 15th**

# Severe HTN Implementation Checklist

**My Projects** Organize

Project Title

- ILPQC Early Elective Delivery Initiative
- ILPQC Birth Certificate Initiative
- ILPQC Golden Hour
- ILPQC Severe Hypertension Data Form
- ILPQC AIM Yearly Measures
- ILPQC AIM Outcome Measures
- ILPQC AIM Quarterly Measures
- ILPQC Severe HTN Implementation Checklist**

Adding new Record ID 1

Record ID: 1

Hospital ID:

Please select the time period for this quarterly data:

- Q2 2016 (April - June 2016)
- Q3 2016 (July - September 2016)
- Q4 2016 (October - December 2016)
- Q1 2017 (January - March 2017)
- Q2 2017 (April - June 2017)
- Q3 2017 (July - September 2017)
- Q4 2017 (October - December 2017)

Readiness - For every unit in your hospital do you have:

- Standard protocols for early warning signs, updated diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms).
  - a. L&D: Yes/No
  - b. Antepartum/Postpartum: Yes/No
  - c. Triage/ED: Yes/No
- Unit education on protocols, unit-based drills or simulations (with post-drill debriefs).
  - a. L&D: Yes/No
  - b. Antepartum/Postpartum: Yes/No
  - c. Triage/ED: Yes/No
- Process for timely identification, triage, and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas.
  - a. L&D: Yes/No
  - b. Antepartum/Postpartum: Yes/No
  - c. Triage/ED: Yes/No
- System plan for escalation, obtaining appropriate consultation and maternal transport, as needed for severe maternal hypertension, preeclampsia, and eclampsia.
  - a. L&D: Yes/No

- 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
  - **Q1 2017 due April 15th**

# 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 implement patient education and discharge follow up?
  - If yes, could they be improved?
  - If no, why not try now?
  - These systems based changes help to empower nurses, make sure we give EVERY patient the best care and drive sustainable culture change across units



# Patient Education & Discharge Follow-Up: Questions on the Patient Experience & Implications for Quality Improvement

A Discussion with  
Jennifer Heiniger & Stacey Porter,  
ILPQC Patient Advisors

# Patient Education & Discharge Follow-Up Q & A



- Patient Education
  1. What are your thoughts/recommendations on how information and education regarding preeclampsia could be most effectively shared with moms?
  2. How can hospitals ensure that patients understand information and that key points are retained?
  3. Questions from OB Teams?

# Patient Education & Discharge Follow-Up Q & A



- Discharge Follow-Up
  1. How can hospitals encourage patients to schedule and go to preeclampsia follow-up visits within 10 days after discharge?
  2. How can hospitals improve preeclampsia follow-up visits?
  3. Questions from OB Teams?

# Additional Resources for Supporting Patients

- AIM Patient Safety Bundle- Support After a Severe Maternal Event (+AIM)
  - <http://safehealthcareforeverywoman.org/patient-safety-bundles/support-after-a-severe-maternal-event-supported-by-aim/>
  - A pdf of the bundle overview can also be found in the webinar downloads box

# Strategies for Rapid Identification & Recognition

Teal Bracelet

Memorial Medical Center - Florida

# Strategies for Identification & Treatment

- Memorial Healthcare System (FL)
  - Use of a teal bracelet for hypertension in pregnancy from identification through postpartum in 90% or more of women
  - Teal bracelet resulted in ED participation, recognition, and treatment of hypertension



# Strategies Using EMR

Incorporation of Discharge Instructions  
After Visit Summaries  
SmartPhrase for Follow-Up

# Strategies using EMR: Discharge Instructions

- Memorial Healthcare System (FL)
  - Integrated information regarding postpartum hypertension into postpartum discharge summary

The screenshot displays an EMR interface with a search results pane on the left and a document preview pane on the right. The search results pane shows a list of documents related to 'hypertension', with 'POSTPARTUM HYPERTENSION (ENGLISH)' highlighted. The document preview pane shows the content of the selected document, which is a discharge instruction for postpartum hypertension. Red arrows labeled '1st', '2nd', and '3rd' point to the search term, the search results list, and the highlighted document, respectively.

Master Index | Resume Search | Rx Search

Relevant Documents | Additional Search

hypertension Search

Age 31 Language: English

Sex Female

1st

2nd

3rd

hypertension

- BENIGN INTRACRANIAL HYPERTENSION, PSEUDOTUMOR CEREBRI (ENGLISH)
- DASH EATING PLAN (ENGLISH)
- HYPERTENSION (ENGLISH)
- HYPERTENSION DURING PREGNANCY (ENGLISH)
- HYPERTENSION DURING PREGNANCY, EASY-TO-READ (ENGLISH)
- HYPERTENSION IN PREGNANCY (ENGLISH)
- HYPERTENSION INFORMATION (ENGLISH)
- HYPERTENSION, EASY-TO-READ (ENGLISH)
- IDIOPATHIC INTRACRANIAL HYPERTENSION (ENGLISH)
- MANAGING YOUR HIGH BLOOD PRESSURE (ENGLISH)
- POSTPARTUM HYPERTENSION (ENGLISH)
- PREGNANCY - HYPERTENSION (ENGLISH)
- PSEUDOTUMOR CEREBRI (ENGLISH)
- PULMONARY HYPERTENSION (ENGLISH)

References/Attachments

Document Preview | Discharge Instructions

Master Index Language: English

Attach preview document

## Postpartum Hypertension

Postpartum hypertension is high blood pressure after pregnancy that remains higher than normal for more than two days after delivery. You may not realize that you have postpartum hypertension if your blood pressure is not being checked regularly. In some cases, postpartum hypertension will go away on its own, usually within a week of delivery. However, for some women, medical treatment is required to prevent serious complications, such as seizures or stroke. The following things can affect your blood pressure:

- The type of delivery you had.
- Having received IV fluids or other medicines during or after delivery.

### CAUSES

Postpartum hypertension may be caused by any of the following or by a combination of any of the following:

- Hypertension that existed before pregnancy (*chronic hypertension*).
- Gestational hypertension.
- Preeclampsia or eclampsia.
- Receiving a lot of fluid through an IV during or after delivery.
- Medicines.
- HELLP syndrome.
- Hyperthyroidism.
- Stroke.
- Other rare neurological or blood disorders.

In some cases, the cause may not be known.

### RISK FACTORS

Postpartum hypertension can be related to one or more risk factors, such as:

- Chronic hypertension. In some cases, this may not have been diagnosed before pregnancy.
- Obesity.
- Type 2 diabetes.
- Kidney disease.
- Family history of preeclampsia.



# Strategies using EMR: After Visit Summary (AVS)

- Tampa General Hospital
  - All pregnant and postpartum patients receive preeclampsia/hypertension information automatically upon discharge on the AVS

AVS

**Preeclampsia (High Blood Pressure)**

Preeclampsia is a serious disease related to high blood pressure. It can happen to any pregnant woman during the second half of pregnancy or up to 6 weeks after delivery.

**Risks to you:**

- Seizures
- Stroke
- Organ Damage
- Death

**Risks to your baby:**

- Premature birth
- Death

**Signs of Preeclampsia:**

- Headaches
- Stomach pain
- Feeling sick to your stomach or throwing up
- Swelling in your hands and face
- Blurry vision or seeing spots
- Gaining more than 5 pounds in a week

If you have any of these signs, call your doctor or midwife right away. Finding preeclampsia early is important for you and your baby.

# Strategies using EMR: SmartPhrase

- University of Florida Health
  - Integrated a SmartPhrase for preeclampsia/hypertension on discharge instructions regarding 1 week follow-up

The screenshot displays an EMR interface with a sidebar on the left containing various navigation options such as 'Immunizations', 'Discharge', and 'BestPractice'. The main window is titled 'Patient Instructions' and shows a text area with the following content: 'For more information about Preeclampsia and Hypertension in Pregnancy, please refer to the Preeclampsia tear off provided. Remember, it is important to follow up with your healthcare provider in 1 week.' The interface includes a toolbar with icons for text formatting and a 'SmartText' dropdown menu. At the bottom of the window, there are buttons for 'Update', 'Reviewed', 'Restore', 'Close', 'Previous', and 'Next'.

# Supplemental Patient Education Materials

New Preeclampsia Foundation  
Resources

# Supplemental Patient Education Materials

- Sarasota Memorial Hospital
  - Provided patients with new educational brochures from Preeclampsia Foundation
  - Brochures can be ordered via Preeclampsia Foundation Marketplace



<https://www.preeclampsia.org/market-place>

# Team Talks

- Advocate Christ Medical Center
  - Melissa Sheeran

# 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 a tool to help staff/providers identify and provide information to potential patient/family members about working on your QI team
- ILPQC sample email text to communicate with nurses/providers to assist in identifying potential patients who could be a good fit to serve on your QI team will be sent in the newsletter this week
- Stay tuned for an updated Patient Engagement webpage on the ILPQC website with additional resources
- Upcoming QI Topic Call (date TBD) - Engaging patients in QI - how to successfully engage a patient advisor as part of your QI team

# 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 monthly team meeting, share it to drive QI, set an improvement goal and share that goal
- 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: REGISTER!
  - Reach out to both nurse and physician / obstetric provider team leaders to attend
  - Prepare your team storyboard to share your progress, success and challenges
- Data past and upcoming due dates:
  - Severe HTN Data Form
    - March data is due between April 15<sup>th</sup> and 31<sup>st</sup>
  - AIM Quarterly Measures
    - 2017 Q1 (January - March) was due April 15<sup>th</sup>
  - Quarterly Implementation Checklist
    - 2017 Q1 (January - March) was due April 15<sup>th</sup>
- 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

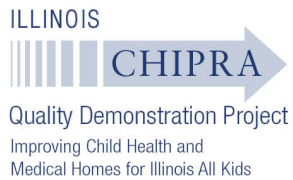


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