



# Maternal Hypertension Initiative Teams Call: Sustainability and System Changes for Drills and Simulations

September 25, 2017

12:30 – 1:30 pm

# Overview

- Updates (5 mins.)
- HTN Initiative and Data Updates (15 mins.)
- Drills, Simulations, and Team Communications– Angela Rodriguez, Jude Duval- Advocate Illinois Masonic Medical Center (20 mins.)
- Team Talk – Chantel Ellis, Carle Foundation Hospital (10 mins.)
- MNO Updates (5 mins.)
- Next Steps & Questions (5 mins.)

Save the  
Date!



ILPQC 5<sup>th</sup> Annual  
Conference

Tuesday,  
December 19

Westin Lombard

# New Project Coordinator

- Welcome to **Dan Weiss**, MPH, our new ILPQC Project Coordinator
- Dan has an MPH from UIC, experience working at Lake Count Health Department, and a passion for maternal child health
- Please help us to welcome Dan to the ILPQC team! He is looking forward to working with you.

# MOC Pathways for Part IV: Improvement in Medical Practice



## For Obstetrician-Gynecologists (ABOG)

**DUE: November 27, 2017**

- [Respond to MOC Attestation Survey](#) via Survey Monkey
- Ask your hospital QI team lead to complete survey

## For Multi-Specialty Physicians (ACOG MSPP)

**DUE October 27, 2017**

- [Respond to ACOG MSPP Physician Completion Survey](#) via Survey Monkey
- [Respond to Physician Attestation Survey](#) via Survey Monkey

**More details in upcoming OB Newsletter**

# Identifying Patient Advisors to serve on ILPQC hospital teams



- Matched 2 OB Teams with volunteer Patient Advisors!
- Following up with 4 other OB Teams to set up initial call with interested Patient Advisor
- If contacted, please join us in this exciting opportunity to gain a patient advisor for your team.

# Key strategies to meet initiative goals & sustain gains

- Staff education and standardized BP measurement
- Rapid access to medications
- IV treatment of BP's  $\geq 160$ mmHg systolic or  $\geq 110(105)$  mmHg diastolic within 1 hour
- Uniform policy for magnesium sulfate
- Early postpartum follow-up
- Standardized postpartum patient educational materials.

# OB Teams Monthly Calls: Back to the Bundle



Call Date	Topic	Volunteers
June 26 12:30 – 2:30 pm	Readiness - Implementing Provider / Staff Education across units and Checklists	Lori Andriokos
July 24 12:30 – 1:30 pm	Recognition & Prevention – Implementing Early Recognition Protocols (MEWS) and Patient Education	Felicia Fitzgerald
August 28 12:30 – 1:30 pm	Response - BP Medication and Treatment Algorithms	Soti Markuly, Jim Keller
September 25 12:30 – 1:30 pm	Reports/System Learning – Drills, Simulations, and Team Communications	Angela Rodriguez
October 23 12:30 – 1:30 pm	Sustainability Planning	Deb Miller



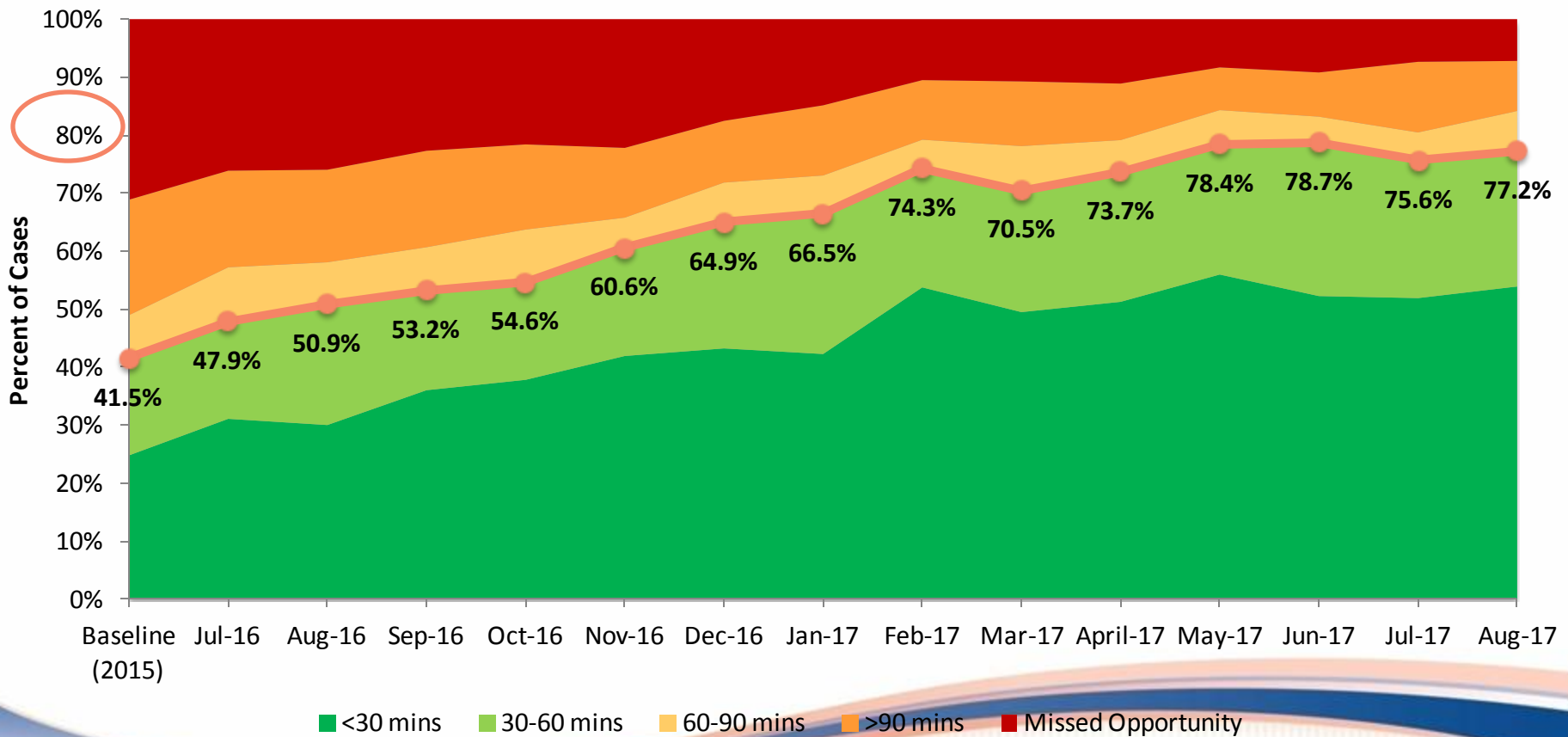
# Maternal Hypertension Data: Time to Treatment



## ILPQC: Maternal Hypertension Initiative

Percent of Cases with New Onset Severe Hypertension Treated in <30, 30-60, 60-90, >90 minutes or Not Treated

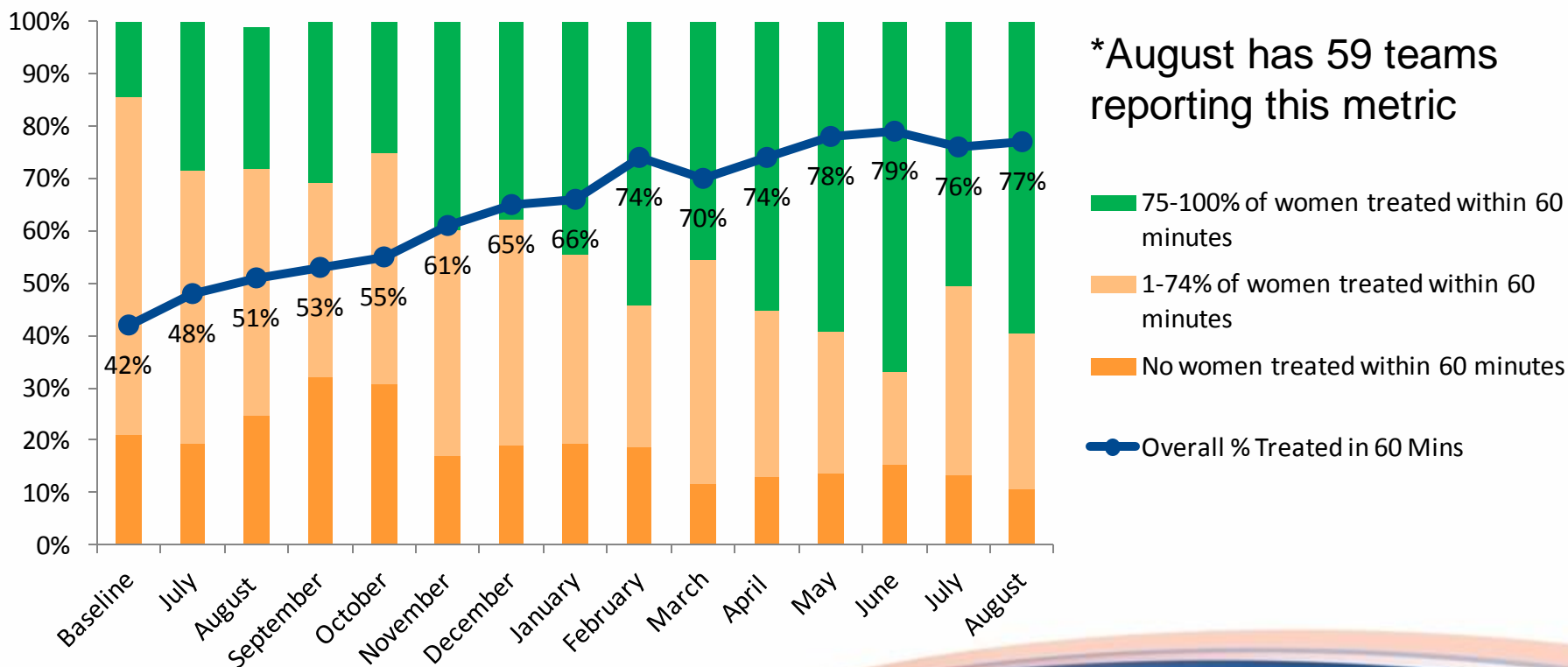
All Hospitals, 2016-2017



# Maternal Hypertension Data: Time to Treatment



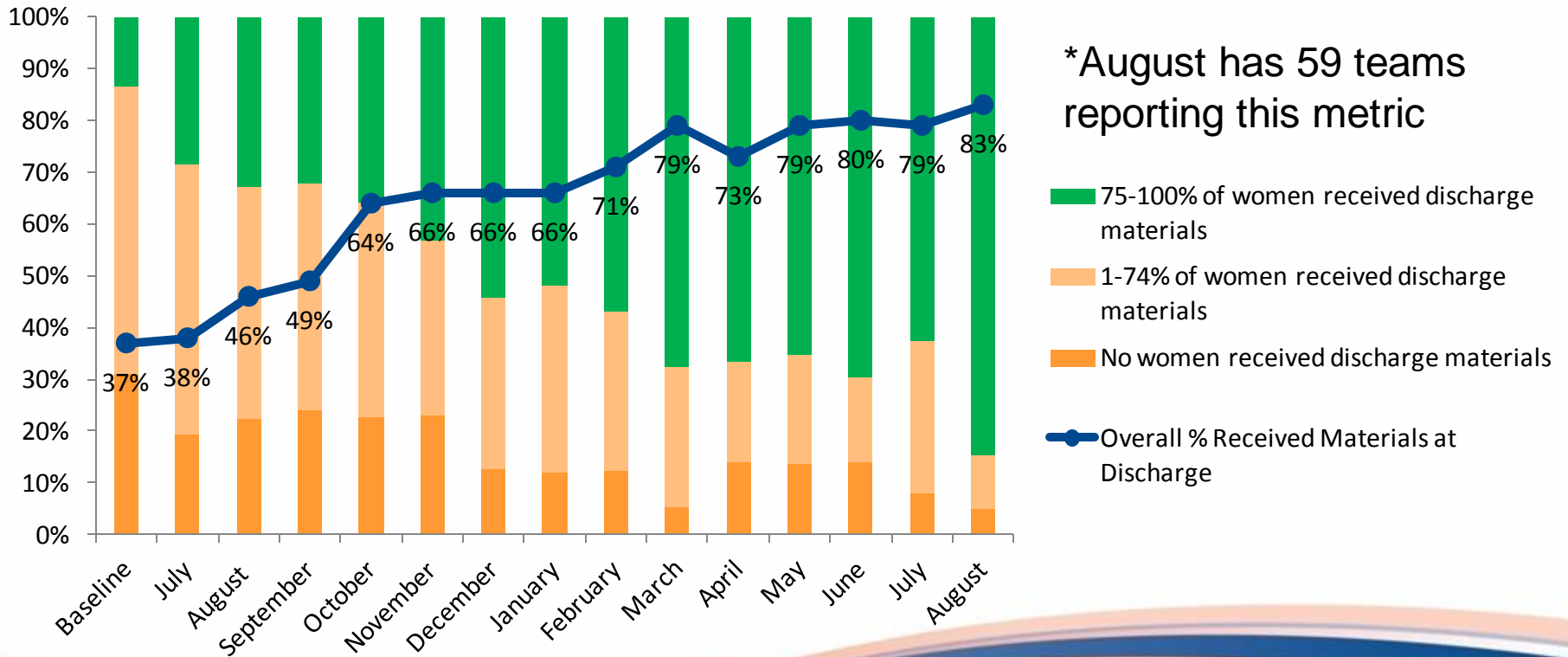
## ILPQC: Maternal Hypertension Initiative Percent of All Reporting Hospitals that Treated Cases with New Onset Severe Hypertension within 60 Minutes All Hospitals, 2016-2017



# Maternal Hypertension Data: Patient Education



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

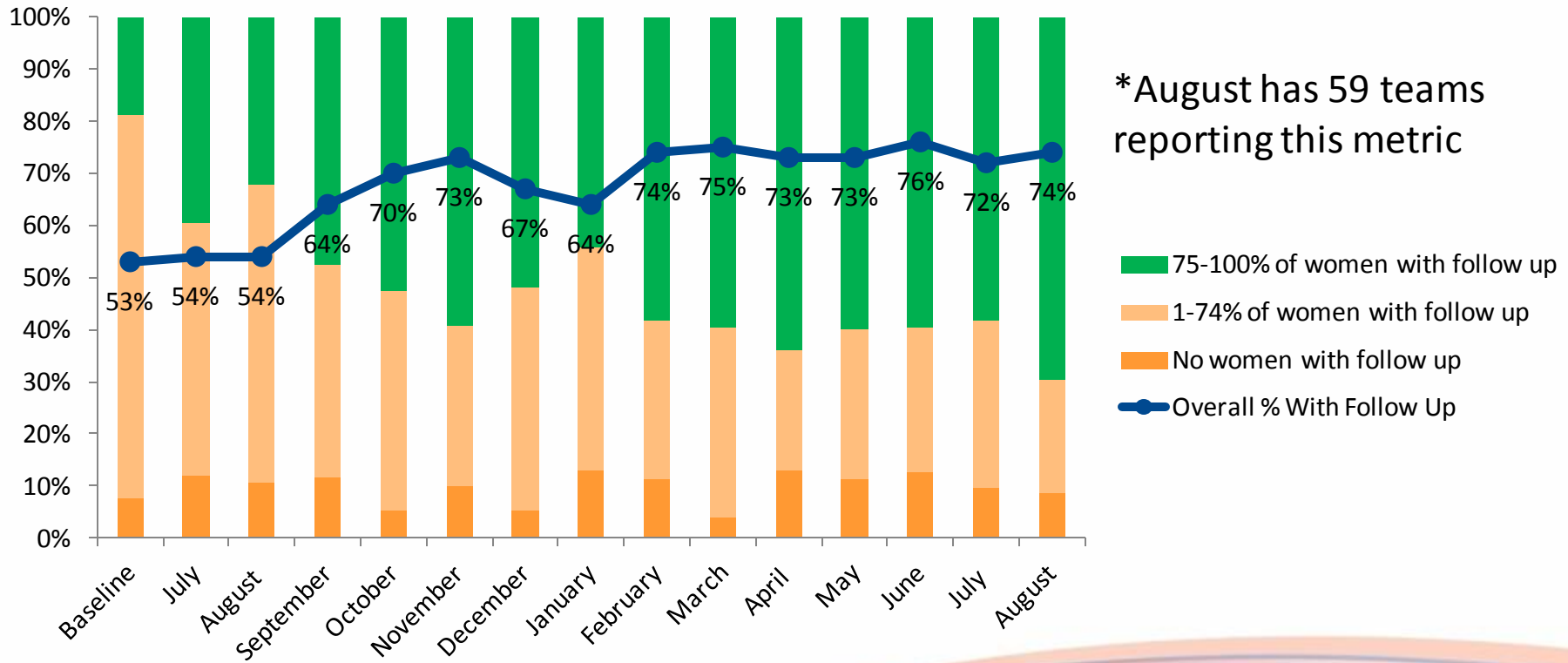


# Maternal Hypertension Data: Patient Follow-up



## ILPQC: Maternal Hypertension Initiative

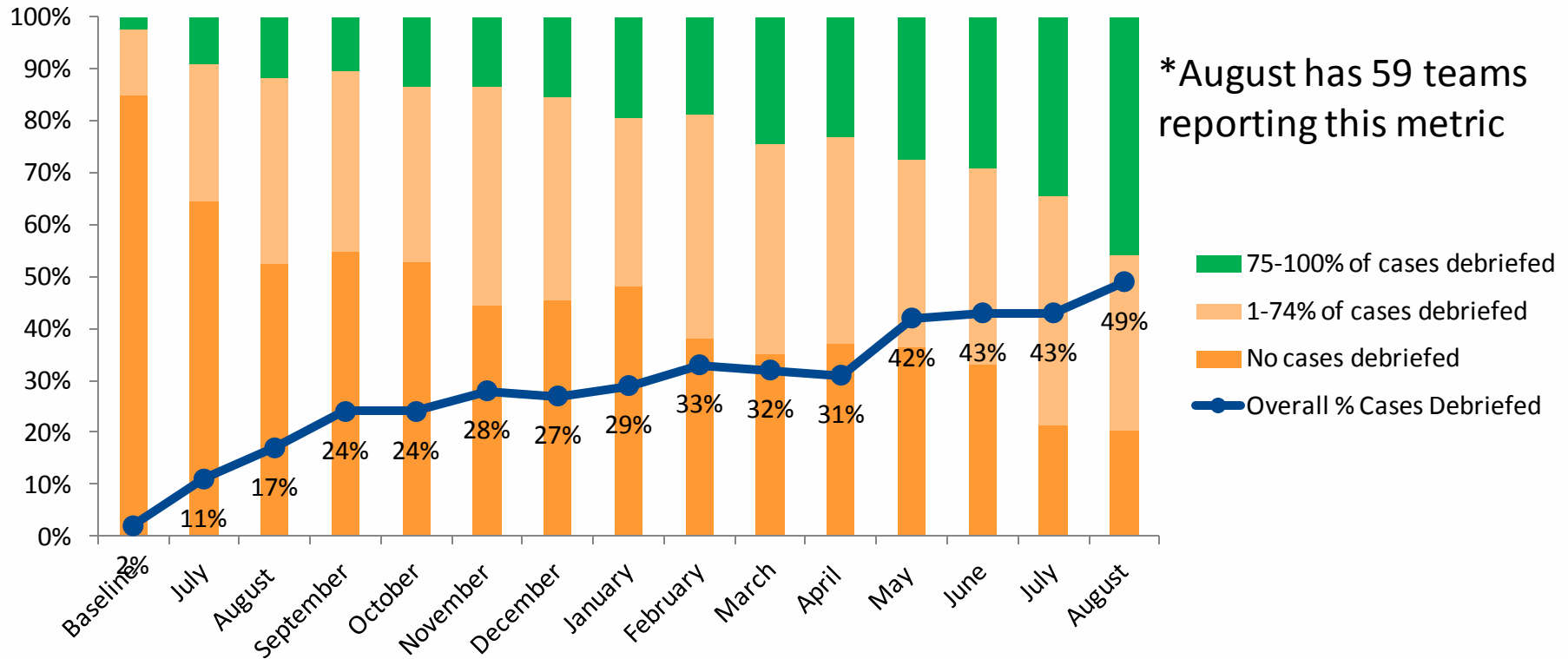
Percent of All Reporting Hospitals Where Follow-up Appointments were Scheduled within 10 Days  
All Hospitals, 2016-2017



# 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



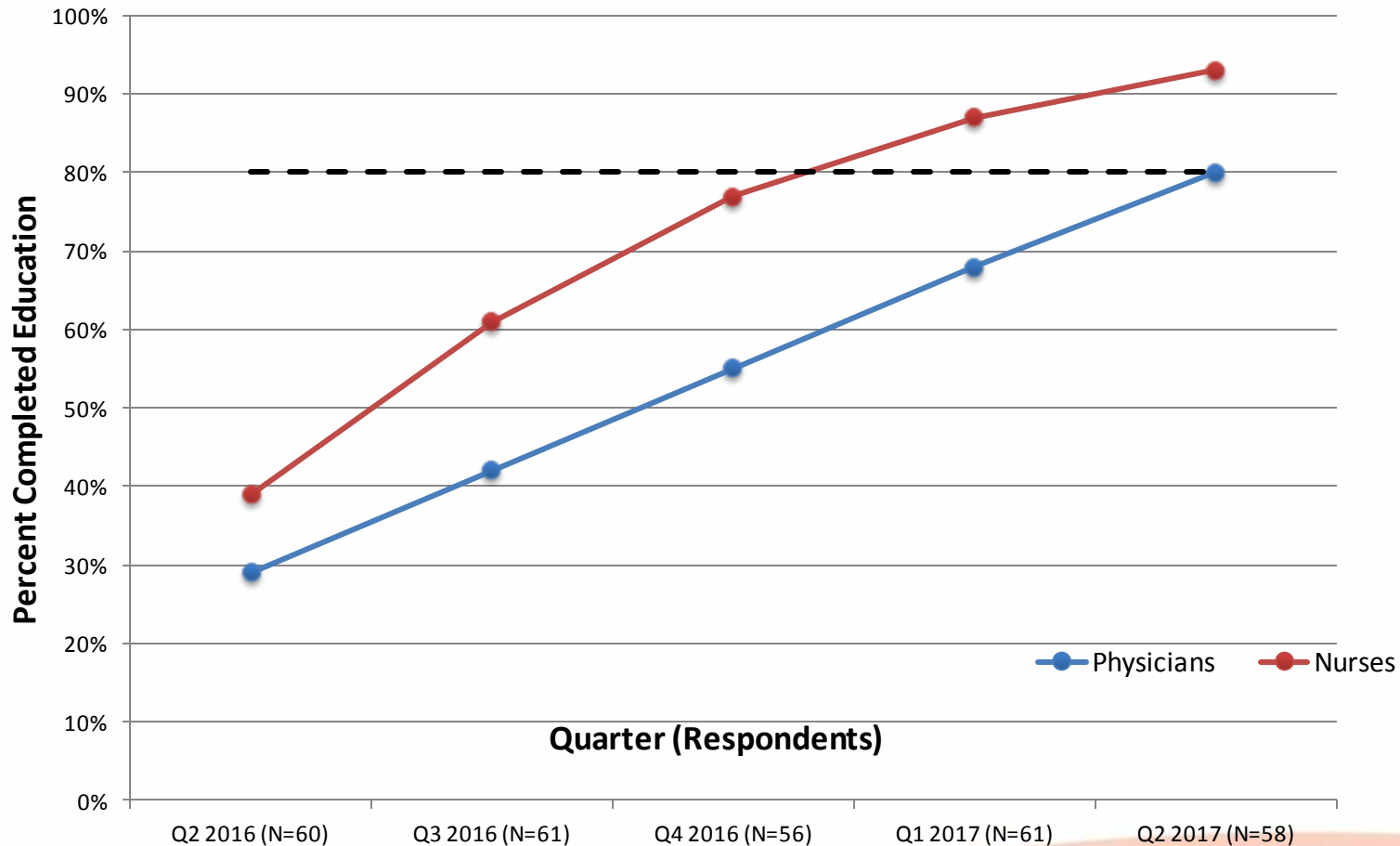
# Severe Hypertension Data Entry Status



	Total Records	# Teams with Data
Baseline (2015)	1644	90
July	591	77
August	659	85
September	573	87
October	517	75
November	566	83
December	570	79
January	566	83
February	510	81
March	559	77
April	505	78
May	592	81
June	510	79
July	547	75
August	395	56
<b>Overall</b>	<b>10887</b>	<b>102</b>

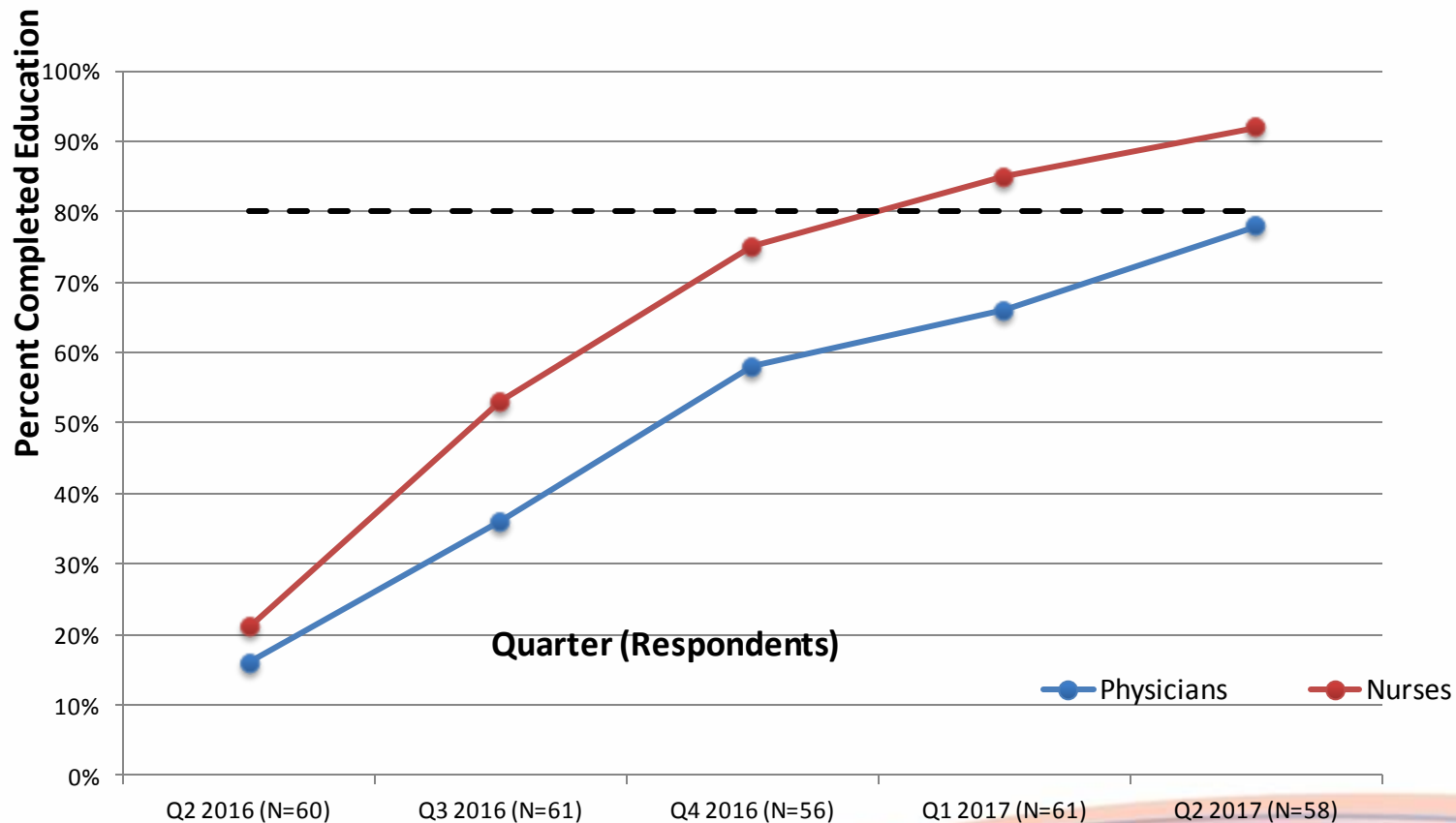
# Provider & Nurse Education

**Cumulative percent of OB providers and nurses completed (within last 2 years) clinical education on Severe HTN/Preeclampsia**



# Provider & Nurse Education

**Cululative percent of OB providers and nurses completed (within the last 2 years) implementation education on the Severe HTN/Preeclampsia bundle elements and unit-standard protocol**

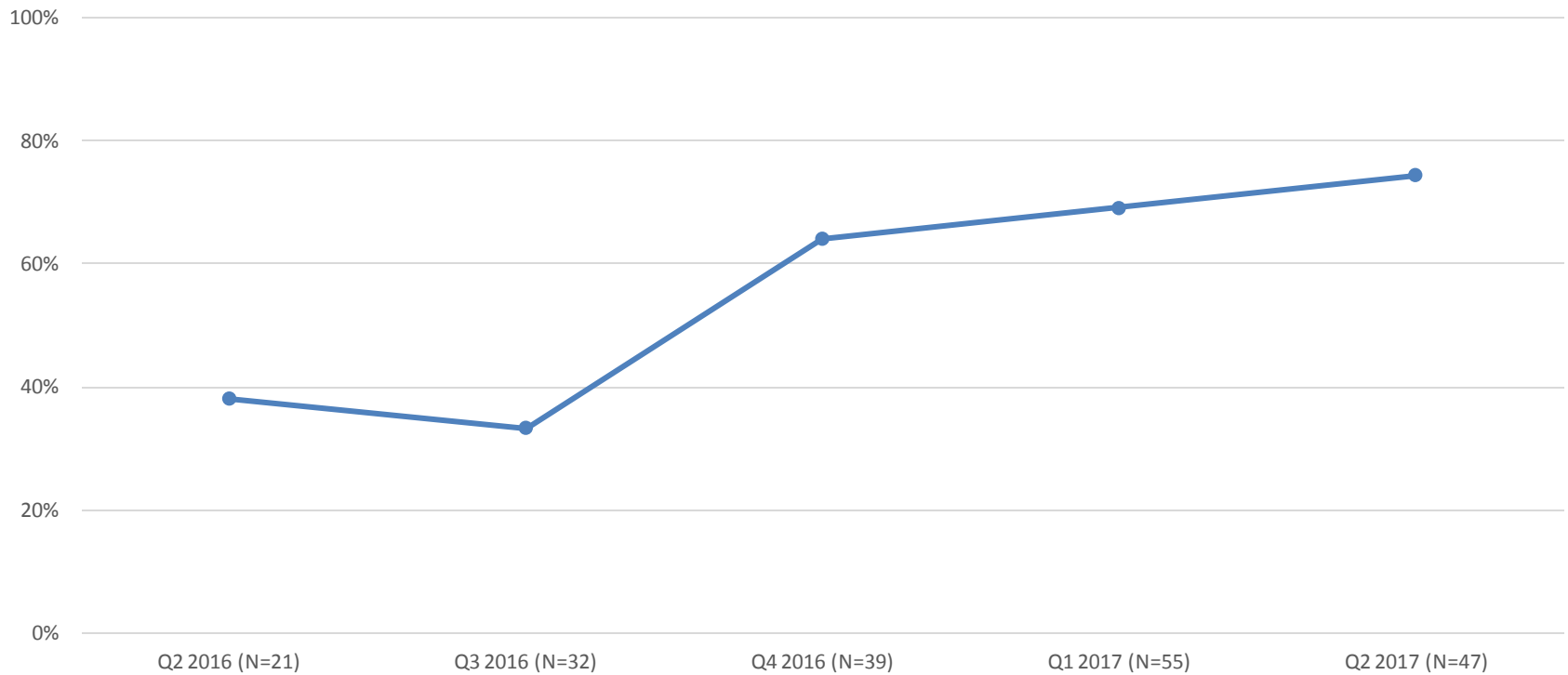




# Implementation Checklist: Facility-wide Patient Education



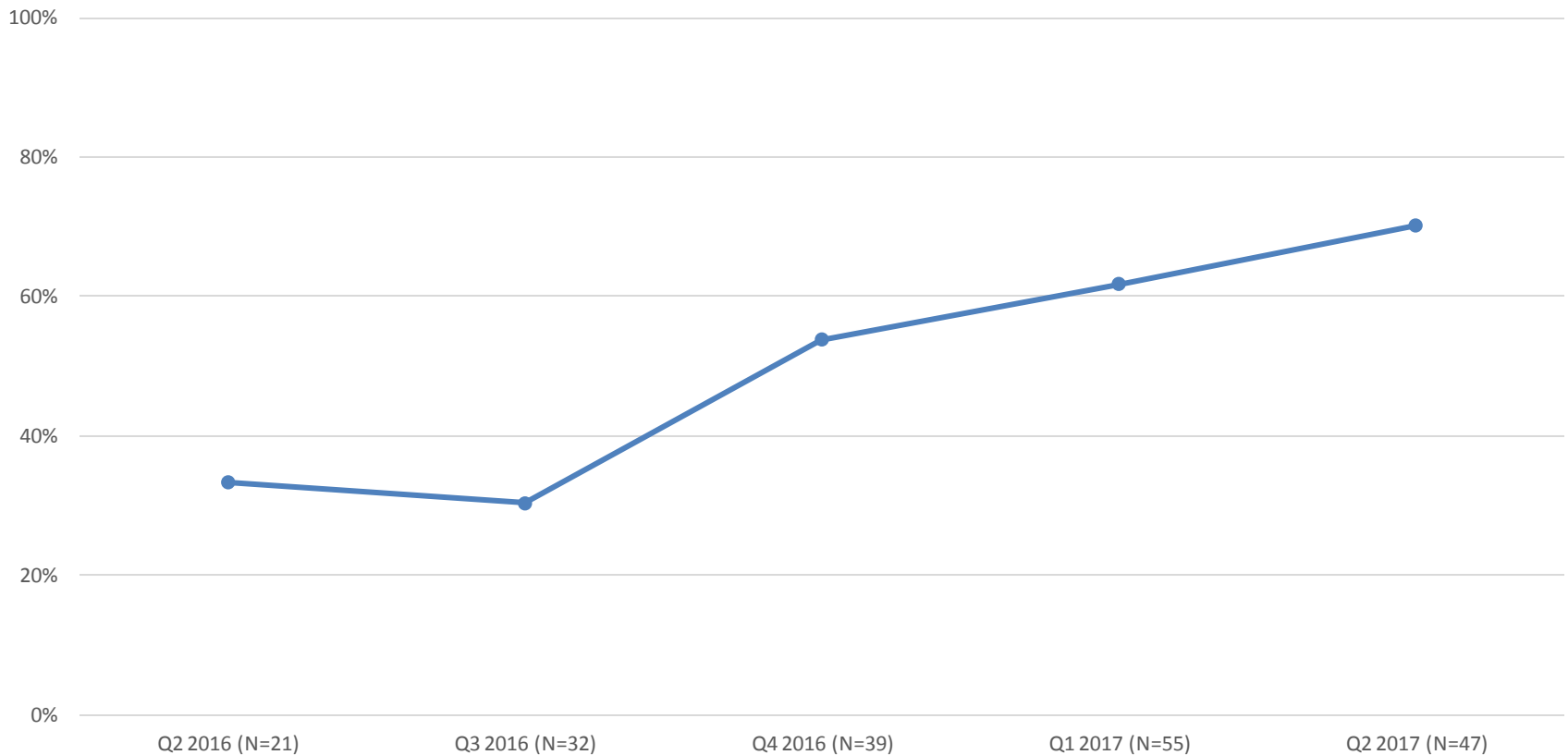
Percent of hospitals with facility-wide standards for educating prenatal and postpartum women on signs and symptoms of preeclampsia and severe hypertension.



# Implementation Checklist: Facility-wide Protocols and Treatment



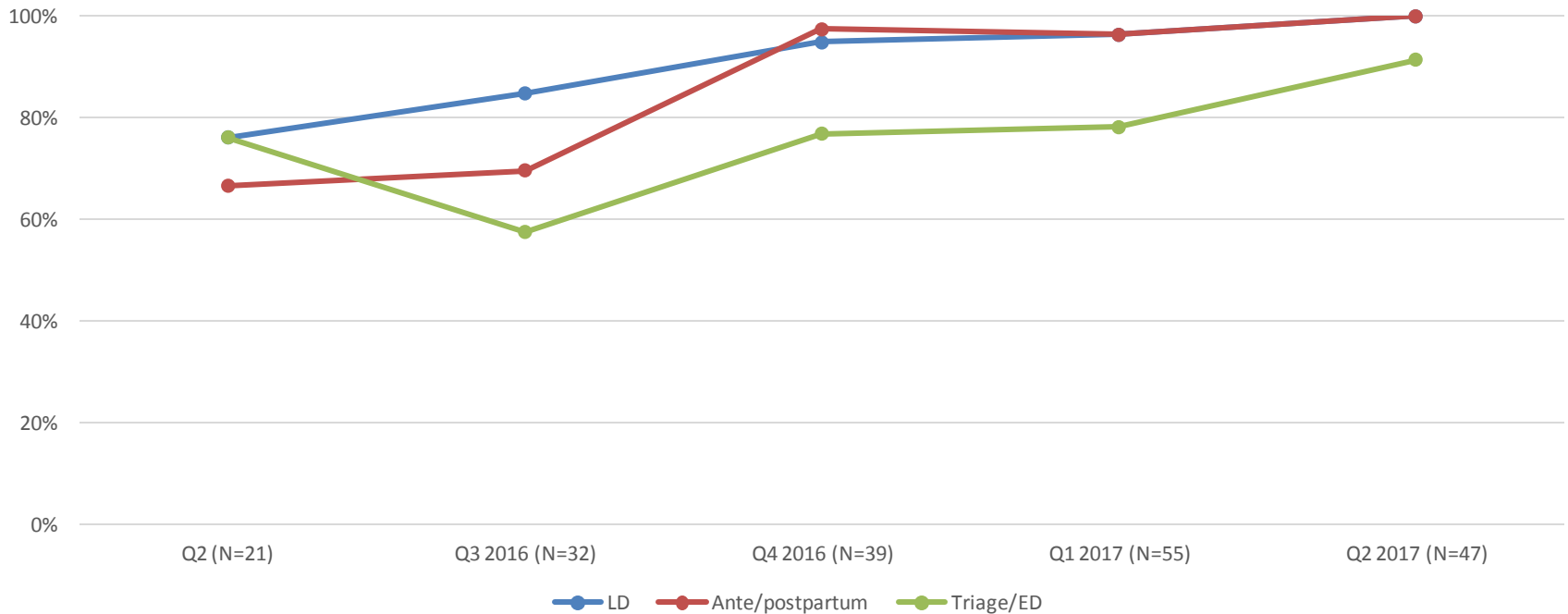
Percent of hospitals with Facility-wide standard protocols with checklists and escalation policies for management and treatment



# Implementation Checklist: Rapid Access to IV Medications



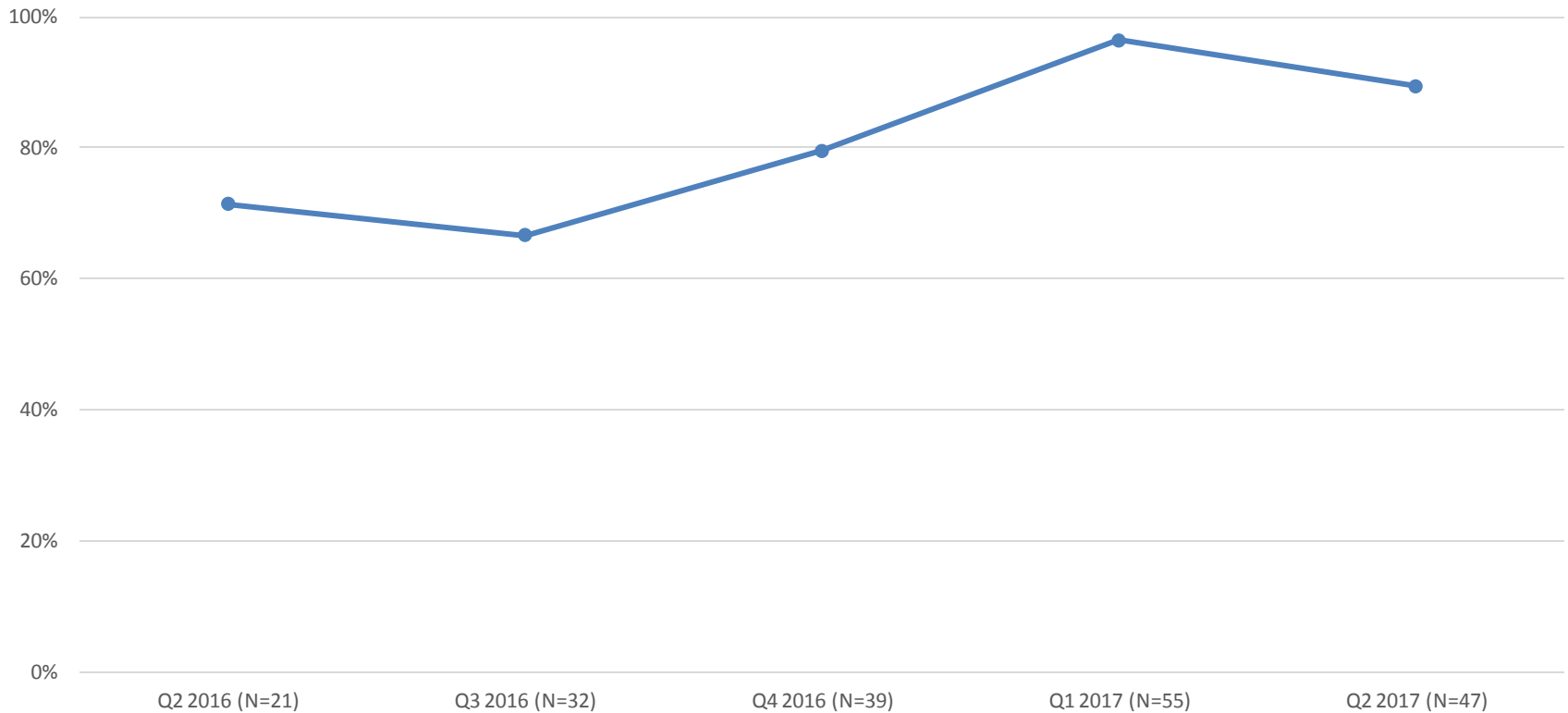
Percent of hospitals with rapid access to IV medications used for severe hypertension/eclampsia: Medications should be stocked and immediately available on L&D and in other areas where patients may be treated



# Implementation Checklist: Response to Early Warning Signs



Percentage of hospitals with standard response to maternal early warning signs including listening to and appropriately investigating patient symptoms and assessment of labs (i.e. CBC with platelets, AST and ALT).



# 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
- ❑ Implement a Maternal Early Obstetric Warning System at your hospital
- ❑ 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%

ANNOUNCING:

# QUALITY IMPROVEMENT RECOGNITION AWARDS

ILPQC SEVERE MATERNAL HYPERTENSION INITIATIVE

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## GOLD

- ✓ Structure Measures  
+
- ✓ **All 4** Process  
Measure goals met

## SILVER

- ✓ Structure Measures  
+
- ✓ **3 of the 4** Process  
Measure goals met

## BRONZE

- ✓ Structure Measures  
+
- ✓ **2 of the 4** Process  
Measure goals met

**DETERMINED BY DATA\* FOR QUARTER 3\*\* OF 2017  
(PLEASE SUBMIT NO LATER THAN NOVEMBER 15<sup>TH</sup>)**

**TO BE AWARDED AT 5<sup>TH</sup> ANNUAL ILPQC CONFERENCE: DECEMBER 19, 2017**

*\*SEVERE HTN DATA, AIM QUARTERLY MEASURES, & IMPLEMENTATION CHECKLIST*

*\*\*QUARTER 3 INCLUDES JULY, AUGUST, SEPTEMBER & OCTOBER 2017*

*PROCESS MEASURES WILL BE EVALUATED BASED ON OCTOBER 2017 DATA*

# Award Criteria

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## Award Criteria for IL Maternal Hypertension Hospital Teams:

### **Structure Measures: MUST HAVE BOTH**

🧠 *Severe Maternal HTN Policies in place in all units (Implementation Checklist question 1 A-C)*

🧠 Standard protocols for early warning signs, updated diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia on L&D, Antepartum/Postpartum, Triage

🧠 *Provider & Nursing education:  $\geq 80\%$  of providers and nurses educated (AIM Quarterly Measure)*

### **Process Measures: 4 / 4, 3 / 4, or 2 / 4**

🧠 Time to treatment  $\leq 60$  minutes:  $\geq 80\%$  of cases

🧠 Debrief:  $\geq 30\%$  of cases

🧠 Discharge education:  $\geq 70\%$  of cases

🧠 Follow-up appointments scheduled within 10 days of discharge:  $\geq 70\%$  of cases

# Meeting your teams goals

- At your monthly team QI meeting please review your data and what you need to accomplish to obtain a QI Award at the Annual Meeting 12/19
- If you need help interpreting your data let us know
- Share your goals and post what needs to be accomplished with your providers and staff
- Confirm structure measures in place and submit in AIM Quarterly Measures form for Q3: 1) policy across all units, 2) Education > 80%



# 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? Incomplete

**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
  - **Q3 2017 due Oct 15<sup>th</sup>**

# 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
<b>ILPQC Severe HTN Implementation Checklist</b>

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)

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

1. Standard protocols for early warning signs, updated diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms).

Yes  No

a. L&D

\* must provide value

b. Antepartum/Postpartum

\* must provide value

Yes  No

c. Triage/ED

\* must provide value

Yes  No

2. Unit education on protocols, unit-based drills or simulations (with post-drill debriefs).

Yes  No

a. L&D

\* must provide value

b. Antepartum/Postpartum

\* must provide value

Yes  No

c. Triage/ED

\* must provide value

Yes  No

3. Process for timely identification, triage, and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas.

\* must provide value

Yes  No

4. Rapid access to IV 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.

Yes  No

a. L&D

\* must provide value

b. Antepartum/Postpartum

\* must provide value

Yes  No

c. Triage/ED

\* must provide value

Yes  No

5. System plan for escalation, obtaining appropriate consultation and maternal transport, as needed for severe maternal hypertension, preeclampsia, and eclampsia.

Yes  No

a. L&D

\* must provide value

- 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
  - **Q3 2017 due Oct 15<sup>th</sup>**

- 3 key issues for compliance tracked for all cases severe HTN
  - Time to treatment severe HTN under an hour
  - Magnesium provided
  - Early follow up for BP check within 7-10 days
  - *IL Addition: Patient Education*

# HTN Timeline

- Active QI work: On target for 12/31/17?
  - Focused QI support for teams not at goals
- Sustainability phase through 12/31/18?
  - Begin to discuss sustainability planning for 2018
    - Compliance measures / education / drills / sims?
  - Measures for continued reporting
    - Severe HTN treated less than 60 mins?
    - Mag Sulfate administered?
    - Patient follow-up scheduled for 7-10 days?
    - Patient education at discharge?

# Sustainability Data Collection Form in REDCap:

## ILPQC Maternal Severe HTN Compliance Form



VIDEO: Basic data entry

Actions: Download PDF of instrument(s) ▾

### Maternal Severe HTN Compliance Form

Assign record to a Data Access Group? -- select a group -- ▾

Adding new Record ID 1

Record ID	1
Hospital ID	<input type="text"/>
Date of Maternal severe HTN (BP systolic $\geq$ 160 and/or diastolic $\geq$ 110)	<input type="text"/> 31 Today M-D-Y
How long after the BP reached systolic $\geq$ 160 and/or diastolic $\geq$ 110 and persistent for 15 minutes was first BP medication given?	<input type="radio"/> < 30 mins <input type="radio"/> 30-59 mins <input type="radio"/> 60-89 mins <input type="radio"/> >90 mins <input type="radio"/> BP came down without medication <input type="radio"/> No action taken
Was Magnesium Sulfate administered?	<input type="radio"/> Yes <input type="radio"/> No
Discharge Management: Was a follow-up appointment scheduled for within 3-10 days (for all women with any severe range hypertension/preeclampsia)?	<input type="radio"/> Yes <input type="radio"/> No
Discharge Education: Were education materials about preeclampsia given?	<input type="radio"/> Yes <input type="radio"/> No

**Form Status**

Complete?  ▾

Continue monthly reporting on 4 key process measures in short form with access to graphs

# Drills, Simulations, and Team Communications

Creating, Implementing and Sustaining a Change in Culture

September 25, 2017

**Angela Rodriguez, Perinatal Coordinator**  
**Jude Duval, Director of Maternal Fetal Medicine**

# BACKGROUND\*

- There is a growing body of literature that demonstrates the efficacy of medical simulation
- While simulation can be used to address knowledge gaps in the identification and treatment of preeclampsia, its greatest value lies in its potential to help teams “put it all together.”

\*all information taken directly from: CMQCC/California Department of Public Health PREECLAMPSIA CARE GUIDELINES AND CMQCC PREECLAMPSIA TOOLKIT CDPH-MCAH, Approved: 12/20/13. “THE ROLE OF MEDICAL SIMULATION ”  
Mark Meyer, MD, Kaiser Permanente, San Diego

# BACKGROUND (cont.)\*

- Whether conducted in a dedicated simulation lab or in real patient care areas (in-situ simulation), inter-professional team training allows for:
  - Testing of new policies and procedures
  - Demonstration of skills in a more realistic environment
  - Identification of systems issues and the ability to test new systems
  - Instruction in techniques to improve communication and
  - coordination of treatment teams, e.g., human factors, etc.

\*all information taken directly from: CMQCC/California Department of Public Health PREECLAMPSIA CARE GUIDELINES AND CMQCC PREECLAMPSIA TOOLKIT CDPH-MCAH, Approved: 12/20/13. "THE ROLE OF MEDICAL SIMULATION", Mark Meyer, MD, Kaiser Permanente, San Diego



# BACKGROUND (cont.)\*

- It is important to recognize that medical simulation represents a spectrum of tools that spans from low fidelity drills to high fidelity, inter-professional, interdisciplinary team simulations.
- Effective simulation programs must be designed with clear learning objectives and tailored to available resources and instructor expertise.
- Simulation scenarios do not require extensive resources to be effective.

\*all information taken directly from: CMQCC/California Department of Public Health PREECLAMPSIA CARE GUIDELINES AND CMQCC PREECLAMPSIA TOOLKIT CDPH-MCAH, Approved: 12/20/13. "THE ROLE OF MEDICAL SIMULATION", Mark Meyer, MD, Kaiser Permanente, San Diego

# Benefits of Drill, Stimulation and Team communications:

- Build reliable and predictable systems
- Reduce variability; standardize processes
- Create systems and teams that anticipate and mitigate error that may lead to harm

# Benefits of Drill, Stimulation and Team communications (cont.):

- By simulating clinical situations, teams can learn and practice the required interventions in a safe environment
- This can potentially improve patient outcome when these situations actually occur on the labor unit.
- Simulation can also identify individual and team weaknesses

Ref: Daniels K, Lipman S, et al Use of simulation based team training for obstetric crises in resident education. *Simul Healthc.* 2008;3(3):154.

# Benefits of Drill, Stimulation and Team communications (cont.):

- Observations of many providers performing the same simulation can reveal the most common mistakes, allowing for development of appropriate and efficient curriculum for future training

Ref.Maslovitz S, et al. Recurrent obstetric management mistakes identified by simulation. Obstet Gynecol. 2007;109(6):1295.

# Planning



## ECLAMPSIA SIMULATION SCENARIO OVERVIEW

### SCENARIO OVERVIEW

Name of Scenario:

**Eclampsia**

Target Trainees:

**MDs, RNs, CNMs, PAs**

Anticipated Duration:

**10 min**

### PATIENT DESCRIPTION:

41 yo G1 PO at 38 weeks comes to triage complaining of headache. Patient is in a gown, sitting on a bed, no monitors attached, holding head. Blood Pressure 140/90, reassuring fetal status, 4 cm dilated. Patient seizes during initial evaluation.

### HISTORY:

Prenatal care has been uncomplicated. BP elevations during the last 2 visits.

**Medical** - healthy

**Surgical** - none

**Social** – non-contributory

### BASELINE LAB VALUES:

N/A

### LEARNING OBJECTIVES

#### COGNITIVE:

Patient assessment (relevant history, symptoms, fetal well being, Vital Signs, preeclampsia labs)

Emergency recognition

Eclampsia management (awareness of appropriate medication administration with correct dose/route/timing)

Assessment of fetal well being

Delivery plan formulation

#### TECHNICAL:

Patient positioning

Oxygen request and administration

#### BEHAVIORAL:

SBAR communication

Demonstrates leadership and followership

Calls for appropriate assistance

Uses closed loop communication

**ROOM CONFIGURATION:**

Evaluation Unit

**EQUIPMENT:**

- Exam table or Labor bed
- IV pole, IV tubing, IV bag
- Opsites
- Covered needles
- Magnesium sulfate premixed bag
- Magnesium sulfate 1 gm 50 % ampoule
- Syringes with labels for Valium, Ativan, Phenytoin
- Lab tubes for CBC, chem., lft, uric acid, type and screen
- Foley
- Oxygen tank
- Oxygen facemask
- Pulse oximeter
- Blood pressure cuff

**MANIKIN/  
TASK TRAINER PREPARATIONS:**

- Pregnancy pillow
- Seizure activity for 2-4 minutes
- Postictal state for the remainder

**PRESETS:**

Control of vital signs monitor and fetal heart rate monitor (NOELLE monitor preset)

**SIMULATOR:**

A standardized patient actor

**PATIENT MONITOR:**

Display of simulated maternal vital signs and fetal heart rate monitoring (NOELLE)

**EQUIPMENT SET UP:**

Routine NOELLE monitors set up

**MISCELLANEOUS:**

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**CHART CONTENTS:**

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**DEMONSTRATION ITEMS NEEDED IN  
DEBRIEFING ROOM:**

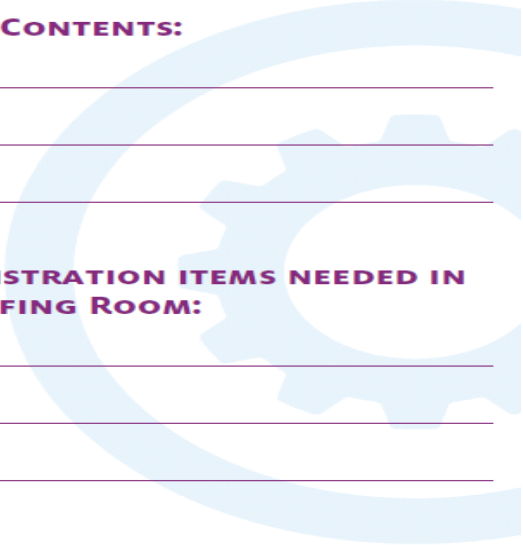
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## SCENARIO LOGISTICS

### EXPECTED INTERVENTIONS:

Initial problem –oriented history acquisition  
Fetal heart rate monitoring placement  
Request for VS, IV, Foley, labs  
Request for Help  
Lateral positioning  
Oxygen administration  
Request for magnesium sulfate administration with dose/route/ time of bolus and maintenance  
Delivery plan formulation

### LIKELY PROGRESSION:

Seizure until administration of magnesium sulfate  
Postictal state with fetal heart rate deceleration for 5 minutes  
Maternal stabilization with progression to delivery

### EXPECTED ENDPOINT:

Stable maternal status  
Vaginal delivery for fetus

### DISTRACTERS:

Offer to administer 6 gm concentrated magnesium sulfate (1 gm vial, 50 %) IV by confederate (inexperienced RN)

### ADDITIONAL/OPTIONAL CHALLENGES:

Questioning delivery plan in anticipation of bradycardia and unstable or stable maternal condition by confederate (inexperienced RN)

### VIDEOTAPE GUIDELINES

(Priorities to capture on videotape)

### CONFEDERATE ROLES

#### Inexperienced RN:

- Calls in RN for help in evaluation of a triage patient
- Asks to explain every step – why, what, how much, over how long if information is not volunteered by RN/MD
- Offers undiluted magnesium sulfate IV (show the vial) before getting premixed bag
- Asks for exact IV, IM magnesium dosing/route/ timing if not offered
- Asks about delivery plan in anticipation of continuing bradycardia and stable versus unstable maternal signs

### TRAINEE ROLES

Labor and delivery Evaluation Unit Nurse  
Delivering provider (MD, PA, CNM)







## 1 ECLAMPSIA DRILL CLINICAL SCENARIO

### PART 1

A 33y.o. G1P0 presents to the Labor and Delivery unit at 38 weeks gestation with a complaint of decreased fetal movement. She is placed on a monitor and noted to have regular contractions with a reactive fetal heart rate and no decelerations. Her BP is 150/96. She complains of a headache and seeing flashing lights. She is noted to be 4/C/O. She is admitted to Labor and Delivery.

#### Patient seizes.

- ① What is the most likely differential diagnosis?
- ② What do you want to do?
- ③ Who do you want to call?
- ④ If participant does not call for agent, ask: What would you give this patient?
- ⑤ What is the dose?
- Ⓐ If they don't answer 4-6 mg, ask: What is the text-book dose?
- ⑥ Hand participant bag of 1L LR + 40 gm MGSO<sub>4</sub>, 1L LR, syringes of magnesium. How do you want me to give it to the patient?
- ⑦ How fast should you give the magnesium bolus?

#### Say, "The magnesium bolus has completed"

- ⑧ If the patient were still seizing after magnesium bolus, what would you do next?
- ⑨ What is the dose of repeat magnesium sulfate?
- ⑩ How fast would you give it?
- ⑪ If the patient continues to seize after second dose of magnesium, what would you do next?
- ⑫ What is the dose of that agent?

#### Patient has stopped seizing.

- ⑬ What is your next step?
- ⑭ Fetal heart rate is in the 60's – what is your plan?
- ⑮ If delivery plan is not part of the answer, ask: What is your current delivery plan?
- ⑯ Fetal heart rate returns to baseline after 5 minutes, what is your management plan?
- ⑰ Fetal heart rate continues to be in the 60's 10 min after seizure. Mom is awake, alert, and with stable vital signs. What is your management plan?
- Ⓐ What diagnosis are you concerned about with this persistent bradycardia?





## 1 ECLAMPSIA DRILL CLINICAL SCENARIO

### PART 2

The patient has a vaginal delivery of male infant with Apgars 8 and 9.

- 1 Describe plan for postpartum seizure prophylaxis.

You are called by the nurse 2 hours post delivery because she is unresponsive with shallow respirations.

- 2 What is the most likely diagnosis?
- 3 What would you do?
- 4 What dosage of calcium gluconate would you give?

Adapted and used with permission from Montefiore Medical Center, 2014.



# Reviewing the Team's Performance\*

- Debrief
  - information exchange session designed to improve team performance and effectiveness through lessons learned and reinforcement of positive behaviors

\*all information taken directly from: [AHRQTeamSTEPPSPocketGuide\\_BriefsandDebriefs.pdf](#)

# Reviewing the Team's Performance\* (cont.)

The team should address the following questions during a debrief:

- † Was communication clear?
- † Were roles and responsibilities understood?
- † Was situation awareness maintained?
- † Was workload distribution equitable?
- † Was task assistance requested or offered?
- † Were errors made or avoided?
- † Were resources available?
- † What went well?
- † What should improve?

\*all information taken directly from: AHRQTeamSTEPSPocketGuide\_BriefsandDebriefs.pdf

# Notes from Face to Face

# Barriers

- Scheduling
  - Providers may have limited availability d/t other responsibilities (i.e.: private practice)
  - Hard to predict factors such as high census, high acuity on the unit
- Buy-in
  - Some people remain resistant despite education
  - Should there be a mandate?
    - From the facility (tied to privileging)?
    - From the State (as was done in the Hemorrhage project)?

# Opportunities

- Learn from successful Programs
  - Schedule multiple sessions, same scenario on varying days of the week
  - Pad schedules on the day of the drill to get as many people involved as possible...schedule creatively
- Culture of Safety
  - Everyone wants what's best for their patients
  - Better outcomes, good saves, less lawsuits

# Sustainability

- Incorporate various types of drills (i.e.: Neonatal Resuscitation, Hemorrhage, Code Pink, Shoulder Dystocia), including hypertensive crisis, into your culture
- Keep Binders with Drill Materials on the Unit, so they can be easily accessible and utilized on slow days
- Use Tools to make things easier
  - Plans, Checklists, Scenarios available on ILPQC Website
- If all else fails make them mandatory
  - Skills days
  - Credentialing



# Here's to better Outcomes!

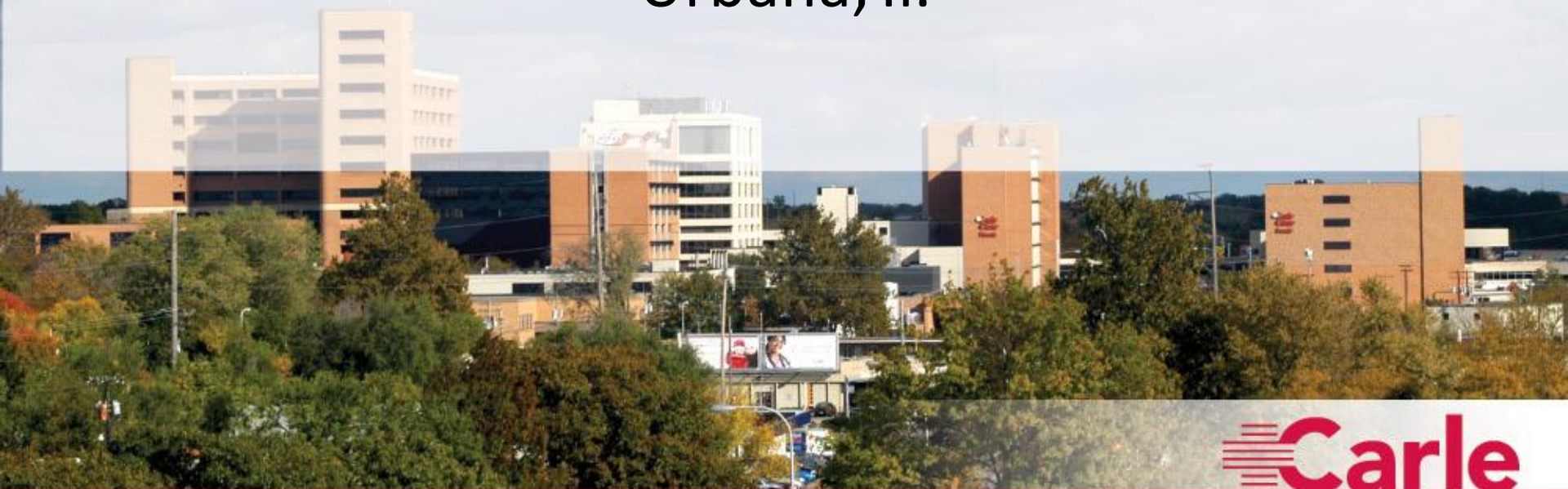
“Be the change that you wish to see in the world.”  
— **Mahatma Gandhi**





# Carle Foundation Hospital

Urbana, Il.



# Perinatal Care at Carle

- Labor & Delivery:
  - 7 Labor and delivery suites, 5 Triage rooms and 2 OR suites.
- High Risk Antepartum:
  - 9 Antepartum beds
- Post-partum Unit:
  - 26 private rooms
- Nursery:
  - 16 cribs, spaced per code
  - Overflow for NICU, 6 Level II beds
- NICU:
  - 28 beds, 25 Level III
- NICU Step-Down:
  - 14 Level II cribs

# The Carle Hypertension Project Team

**Jamie Fulfer, MD**

Physician Champion



**Ralph Kehl, MD**

Maternal Fetal Medicine Physician



**Melissa Tate, APN, MFM**

Advance Practice Champion

**Pam Unger, MSN,**

Maternal/Child Director

Project Team Lead



**Chantel Ellis, MSN, RNC**

Manager-Labor and Delivery/High Risk  
Antepartum

**Ashley Lingafelter, BSN, RNC**

Supervisor-Labor and Delivery/High Risk  
Antepartum



**Jenn McBride, MSN, RNC**

OB Quality Outcomes Coordinator

# SIMULATIONS

Multidisciplinary

All providers, nursing, Anesthesiologists, CRNA's

Quarterly with changing focus

OB Hemorrhage, Hypertensive Emergency, Shoulder Dystocia, Emergent OR

Mandatory- key leadership investment at all levels

# Simulation Debriefs

- Required with each group
- Explore what went well and opportunities to improve
- Evaluates process, efficiencies and potential need for other participants
- Gains perspective from each 'role'

# Sustaining Change

## Debriefs

- Changes made to simulations and/or practice based on findings from debriefs
  - Example:
    - Conversations with pharmacy about medication access et “multi-dosing’ vials
    - Role clarity changes between who does what in an vaginal delivery vs C/S
- Evaluation of Tools
  - Is the EMR set up well/easy to access?
  - Does the order set need revision?
- Other disciplines, equipment etc identified for future debrief or practice needs... in your organization, have you identified others you did not initially consider to include?

# Summary and Next Steps

## Sustaining Success

- Essential to maintain and sustain simulations
  - Benefit of intentional time together far outweighs ‘inconvenience’ or effect on budget for NPC hours
  - Allows for continuous improvement to EMR
  - Solidifies communication within the team as well as with key departments

## Where do we go next?

- Include simulation that involves the Emergency dept as point of entry for the HTN patient
- Include our critical care teams as potential location to ‘receive’ the delivered severe HTN or as additional resources for CODE management
- Ongoing communication
  - Share successes and opportunities



# *Mothers and Newborns Affected by Opioids (MNO) Initiative*



- Input and support from IDPH NAS Advisory Committee and AIM (Maternal Opioid Patient Safety Bundle)
- ILPQC Workgroup meets 3rd Monday of month from 1-2pm
- Review of literature by topic area (Aug-Oct) to develop group expertise and shared knowledge
- ILPQC Clinical Leads meeting with other State PQC leaders to develop draft Smart AIM, process, outcome, and balancing measures
- ILPQC invited to participate in collaborative of State PQCs to develop common measures and implementation resources for AIM maternal opioid bundle

# *Immediate Postpartum LARC*



- 2 year Pritzker Community Health Initiative Grant for an Immediate Postpartum LARC Initiative
- Assist Illinois birthing hospitals in setting up Immediate Postpartum LARC programs/ systems to provide patients access to Intrauterine Devices (IUDs) and/or Nexplanon (hormonal implants) before they are discharged from the hospital after giving birth

# Next Steps to Meet Initiative Goals



- Culture change in all units – how do you get there?
  - Post visual reminders
  - Educate *all* providers/nurses on protocols
  - Apply implementation checklist
  - Share your data: providers, staff, leadership
- Sustainability across all units
  - System changes build in optimal care: Every provider, every nurse, every unit, every patient, every time

# 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 a monthly 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
- Submit Severe Maternal HTN Data Form (by 9/30 for Aug), Implementation Checklist and AIM Quarterly Measures (by 10/15 for Q3-July, Aug, Sept, October\*)
- Email [info@ilpqc.org](mailto:info@ilpqc.org) with any questions!

# *Resources*



- Preeclampsia Foundation: Joan Donnelly's Story- Postpartum Preeclampsia video [here](#).

## 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

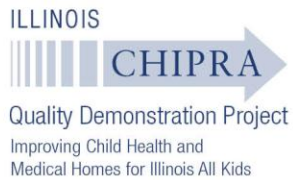


# Contact

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- Visit us at [www.ilpqc.org](http://www.ilpqc.org)



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**IDPH**