



# OB Teams Call: Maternal Hypertension Initiative

January 22, 2018

12:30 – 1:30 PM

# Overview



- Updates & Annual Conference Review
- HTN - Finishing Strong
- HTN - Sustainability
- Guest Speaker
- Next Steps



# ILPQC 5<sup>TH</sup> ANNUAL CONFERENCE

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



- 400 Attendees!
- 44 Posters with 9 Abstract of Excellence Awards
- 53 Quality Improvement Award Winners
- 1,261 Diapers collected

# ILPQC Severe HTN Quality Improvement Award Winners



## GOLD

- HSHS St. John's Hospital
- NorthShore University HealthSystem  
Evanston Hospital
- Northwestern Memorial Hospital
- Loyola University Medical Center
- Rush University Medical Center
- Edward Hospital
- Advocate Lutheran General Hospital
- AMITA Health Alexian Brothers Women  
and Children's Hospital
- Memorial Hospital Belleville
- Westlake Hospital
- Rush Copley Medical Center
- Mount Sinai Hospital
- Northwestern Medicine Central DuPage  
Hospital
- Presence Saint Frances Hospital
- Advocate Sherman Hospital
- Memorial Hospital of Carbondale
- Advocate Illinois Masonic Medical Center
- NorthShore University HealthSystem  
Highland Park Hospital
- FHN Memorial Hospital
- Genesis Medical Center- Silvis
- Heartland Regional Medical Center
- Memorial Medical Center
- St. Bernard Hospital
- St. Margaret's Hospital
- Northwestern Medicine Kishwaukee  
Hospital
- University of Illinois Hospital

# ILPQC Severe HTN Quality Improvement Award Winners (cont.)



- AMITA Health Adventist Medical Center Hinsdale
- AMITA Health Adventist Medical Center Bolingbrook
- Little Company of Mary Hospital
- Advocate BroMenn Medical Center
- SSM St. Mary's Hospital- St. Louis
- Centegra Hospital- Huntley
- AMITA Health Adventist Medical Center GlenOaks

## SILVER

- University of Chicago Medicine Comer Children's Hospital
- Jackson Park Hospital
- Abraham Lincoln Memorial Hospital
- Palos Hospital

- West Suburban Medical Center
- AMITA Health Adventist Medical Center La Grange
- Northwestern Medicine Delnor Hospital

## BRONZE

- Gibson Area Hospital
- Centegra Hospital McHenry
- Presence Saint Joseph Medical Center
- Advocate Christ Medical Center
- McDonough District Hospital
- Presence Saint Mary and Elizabeth Medical Center
- HSHS St. Mary's Hospital

# ILPQC OB Posters

## Abstracts of Excellence



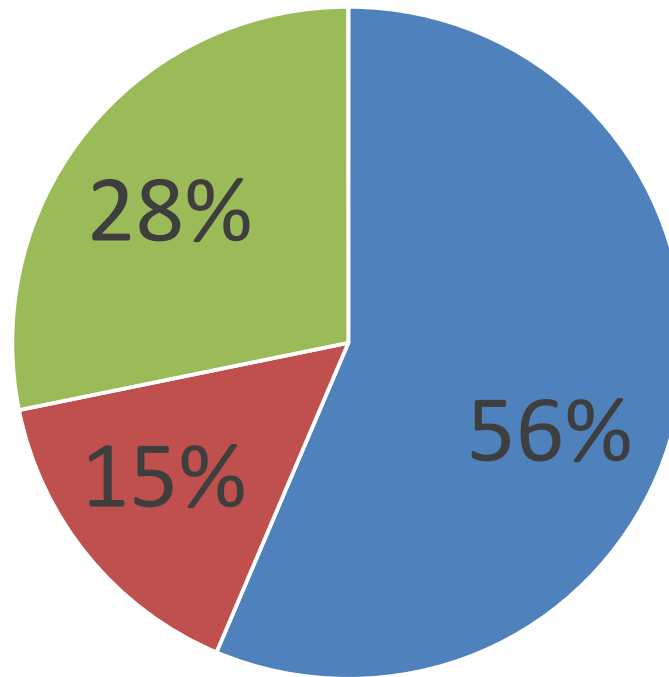
- **Advocate Illinois Masonic Medical Center** - Opioid Medication Use Reduction (Best Implementation Plan)
- **Northwestern Memorial Hospital** - Severe Maternal Hypertension Initiative in a Level III Academic Center with a High Birth Volume- (Best Use of Data)
- **Northwest Community Healthcare** - Teachback and Roadmap: Bridging the Gap to Discharge
- **Northwestern Medicine Central DuPage Hospital** - Improving Recognition and Treatment of Severe Sepsis in Obstetric Patients at NM CDH
- **Northwestern Medicine Delnor Hospital** - Utilizing Innovative Quality Structures to Decrease Cesarean Sections
- **University of Illinois Hospital & Health Science System** - Breaking the Silence of Hypertensive Disorders in Pregnancy

# FINISHING STRONG



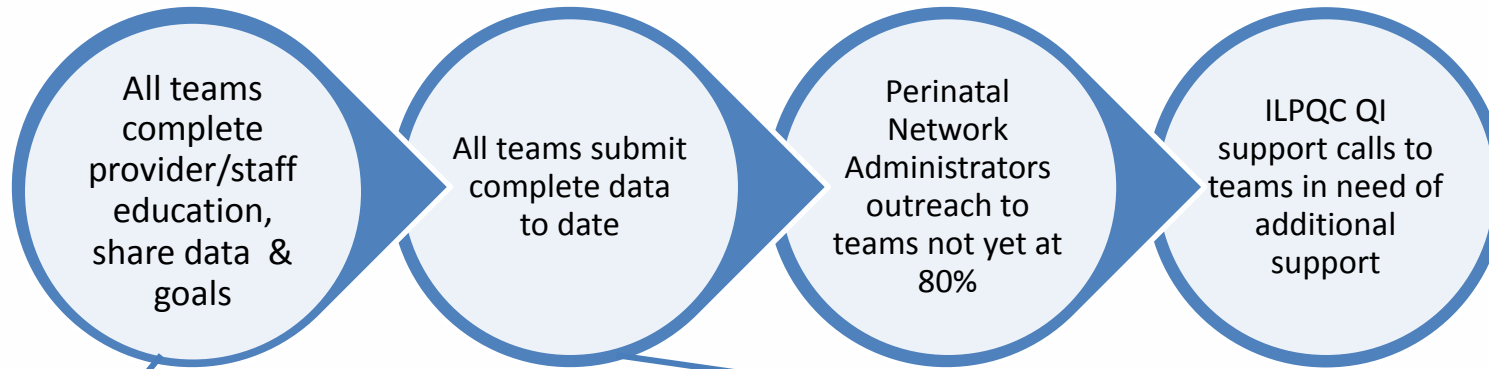
# Where are our Teams in their Maternal HTN Initiative Journey?

- Working to achieve QI goals
- Goals achieved, developing sustainability plan
- Goals achieved, implementing sustainability plan



*ILPQC Team Survey, 2017*

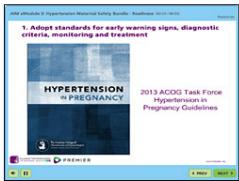
# Working Together to Cross the Finish Line



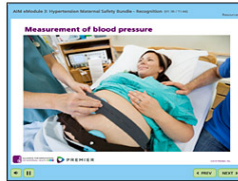
AIM eModule 3: Hypertension in Pregnancy Maternal Safety Bundle - Introduction



AIM eModule 3: Hypertension in Pregnancy Maternal Safety Bundle - Readiness



AIM eModule 3: Hypertension in Pregnancy Maternal Safety Bundle - Recognition



AIM eModule 3: Hypertension in Pregnancy Maternal Safety Bundle - Response



AIM eModule 3: Hypertension in Pregnancy Maternal Safety Bundle - Reporting



Quarterly	Monthly
<ul style="list-style-type: none"> <li>✓ Implementation Checklist</li> <li>✓ AIM Quarterly Measures</li> </ul>	<ul style="list-style-type: none"> <li>✓ Severe Maternal Hypertension Form</li> </ul>

# Support for Teams to Complete Education

- Resources to facilitate all providers and nurses completing education (click to access resources online)
  - [AIM emodules](#) – 5 modules, 5-20 mins. each with comprehensive quiz and completion certificate
  - [AIM Hypertension Webcast](#) – 10 minute webcast with Drs. Martin, Shields, and Druzin
  - [ILPQC Grand Rounds Slide Set](#) – Comprehensive initiatives slide set for use in grand rounds/ education

# Checklist to Complete Initiative – Available for Download NOW!



- Submit data through December 2017 by Feb 15, 2018 in REDCap
  - ILPQC Severe Hypertension Data Form
  - ILPQC AIM Quarterly Measures
  - ILPQC Severe HTN Implementation Checklist
- All providers and nurses complete education
- Review your time to treatment data with your team
- Develop sustainability plan (draft provided)
- Continue data collection for compliance monitoring, HTN Compliance Form in REDcap available in March

# Support for Teams to Finish Strong



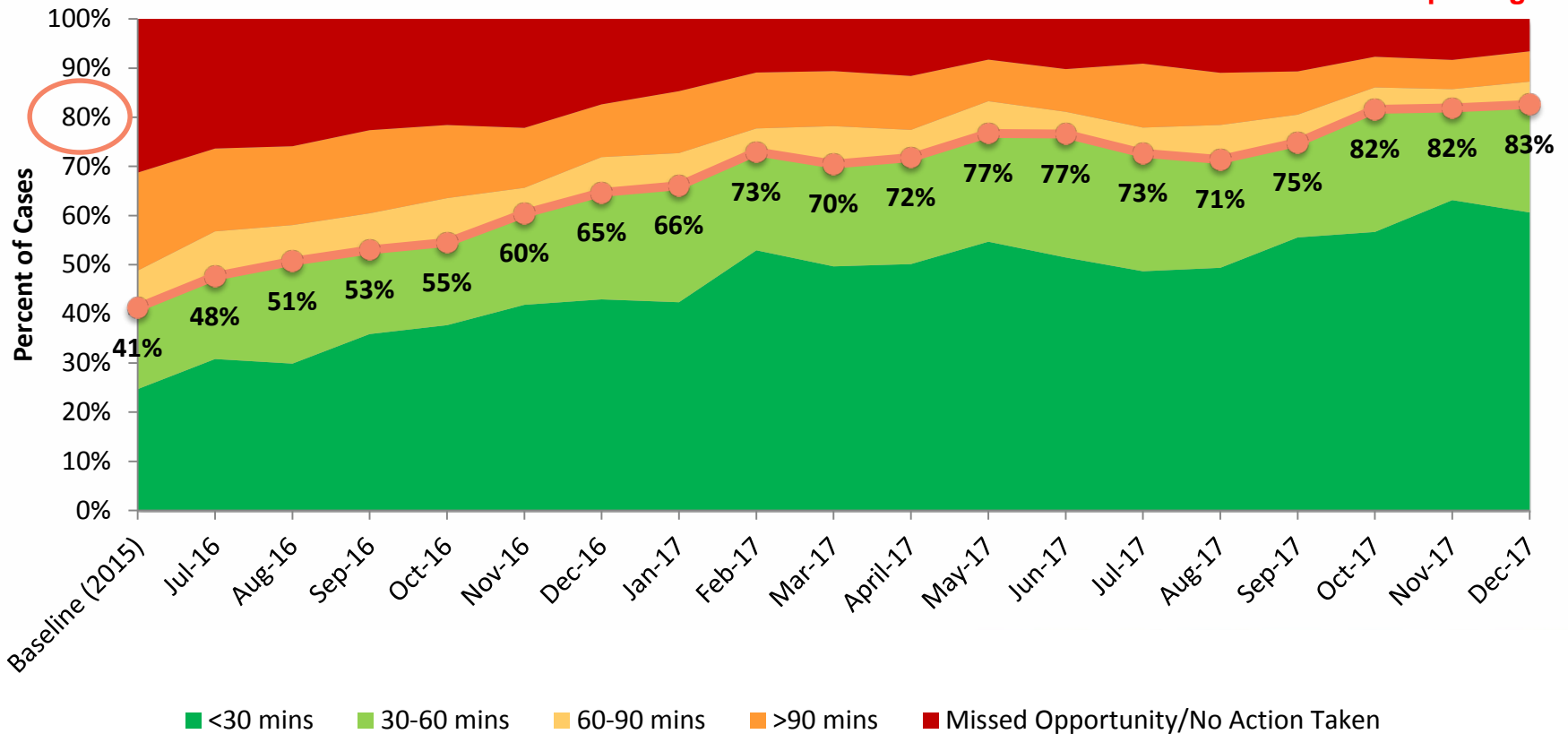
- ILPQC will reach out to teams with data missing in quarter 3 2017 including monthly and quarterly data to discuss strategies for data completion
- Perinatal Network Administrator or ILPQC will connect with teams still working towards the 80% time to treatment goal
- All teams (1) submitting all data through December 2017 by February 15, 2018 and (2) meeting or exceeding the 80% time to treatment goal by December 2018 will receive a certificate of QI achievement and a letter to their hospital leadership acknowledging their achievements

# 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**

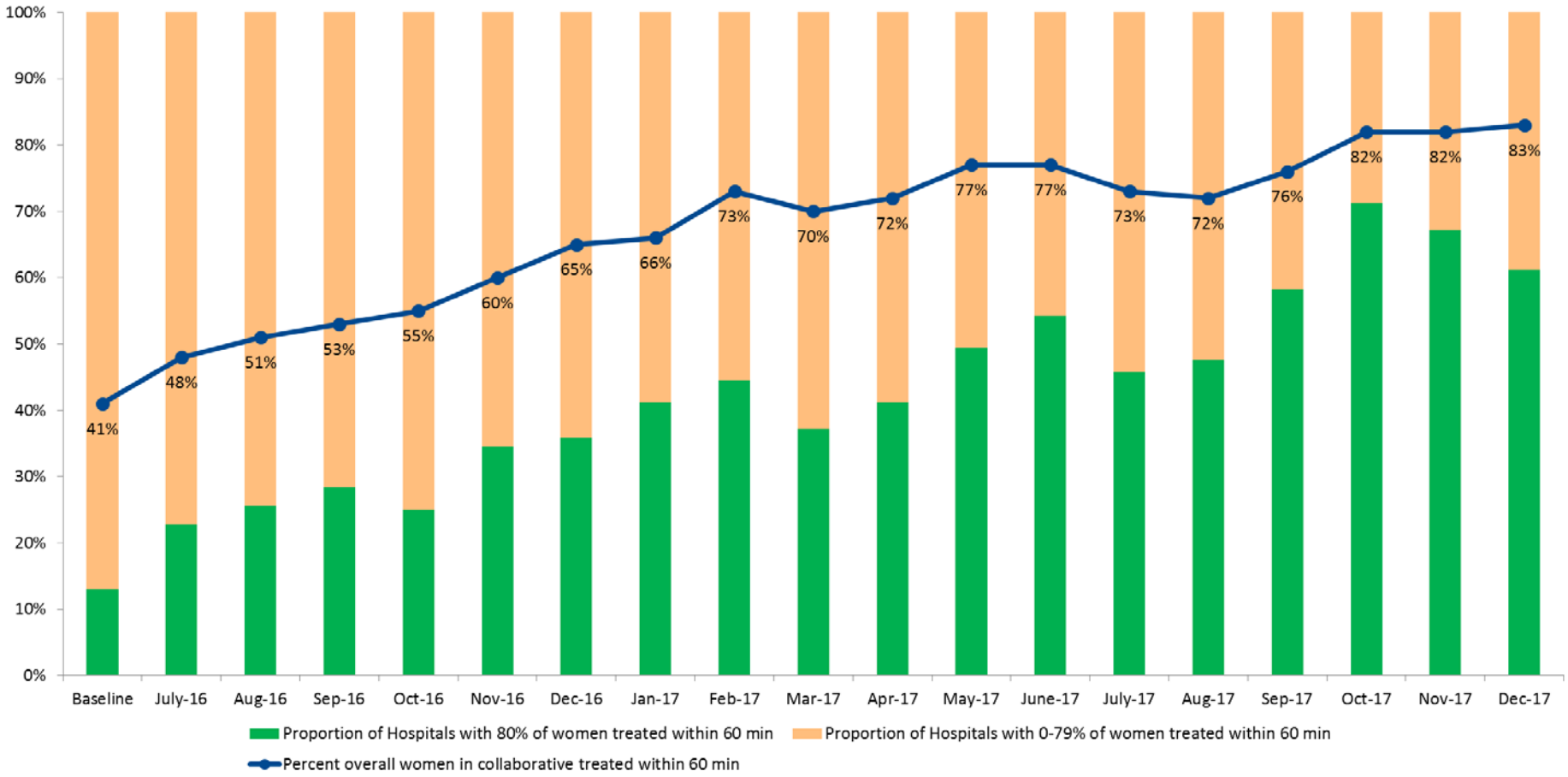
**\*November: 61 Teams Reporting**  
**December: 50 Teams Reporting\***



# Maternal Hypertension Data: Time to Treatment



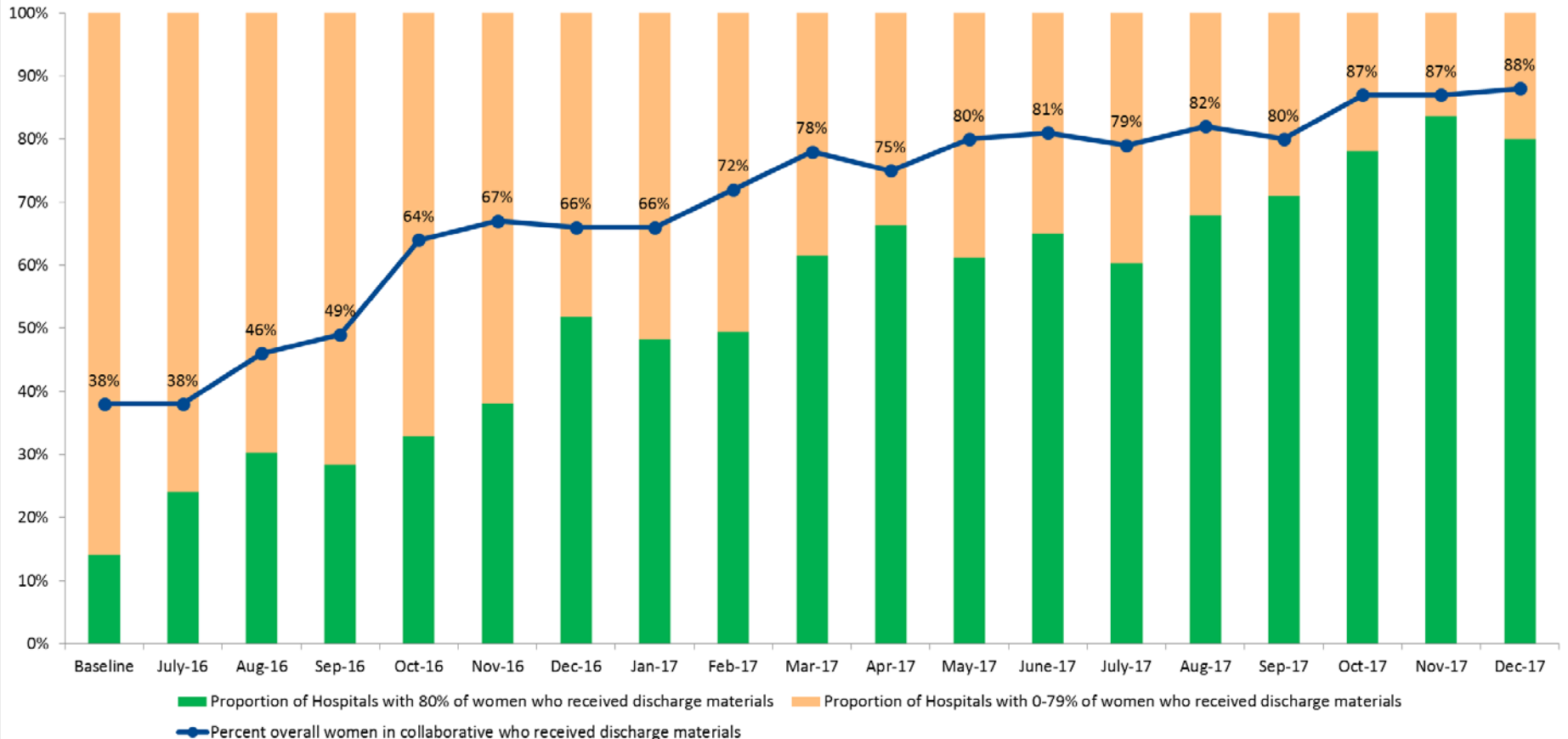
**ILPQC: Maternal Hypertension Initiative**  
**Percent of Women with New Onset Severe Hypertension Treated Within 60 Minutes and Proportion of Hospitals in Collaborative Treating Women Within 60 Minutes**  
**All Hospitals, 2016-2017**



# Maternal Hypertension Data: Patient Education



**ILPQC: Maternal Hypertension Initiative**  
**Percent of Women with New Onset Severe Hypertension Who Received Discharge Education Materials and**  
**Proportion of Hospitals in Collaborative Giving Discharge Education to Women**  
**All Hospitals, 2016-2017**

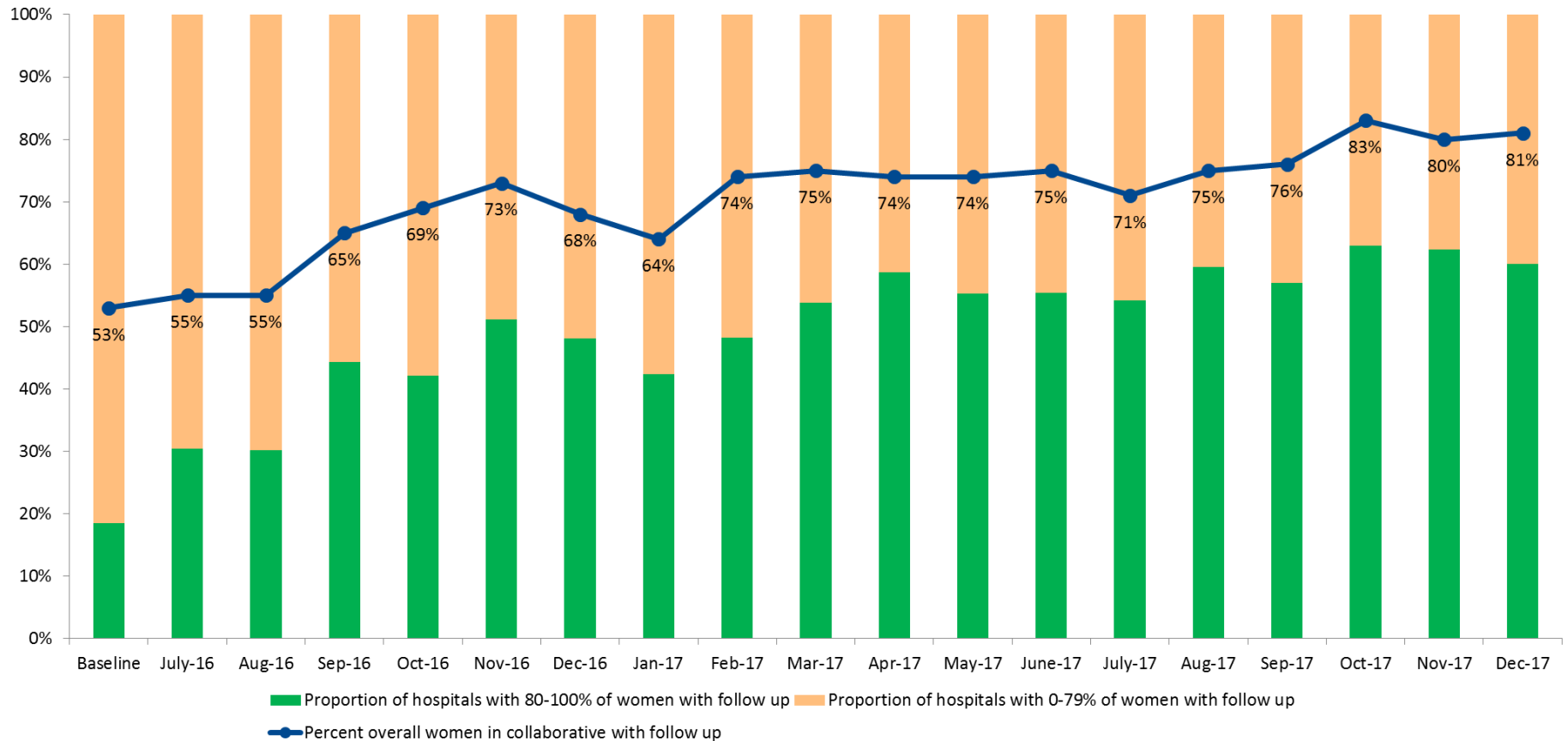




# Maternal Hypertension Data: Patient Follow-up



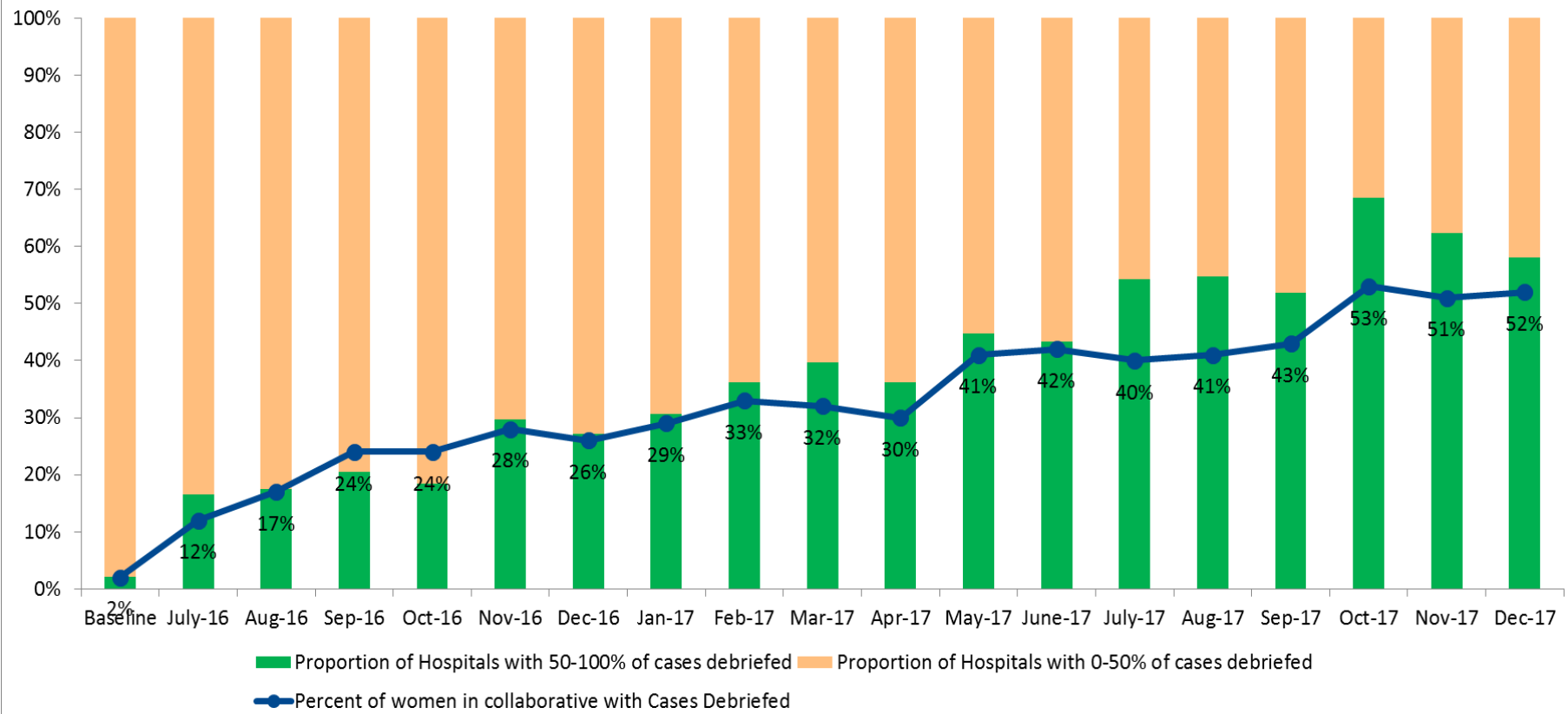
**ILPQC: Maternal Hypertension Initiative**  
**Percent of Women with New Onset Severe Hypertension Where Follow-up Appointments were Scheduled within 10 Days and Proportion of Hospitals in Collaborative Where Follow-Up Appointments were Scheduled within 10 Days All Hospitals, 2016-2017**



# Maternal Hypertension Data: Debrief



**ILPQC: Maternal Hypertension Initiative**  
**Percent of Women with New Onset Severe Hypertension with Cases Debriefed and**  
**Proportion of Hospitals in Collaborative with Cases Debrief**  
**All Hospitals, 2016-2017**



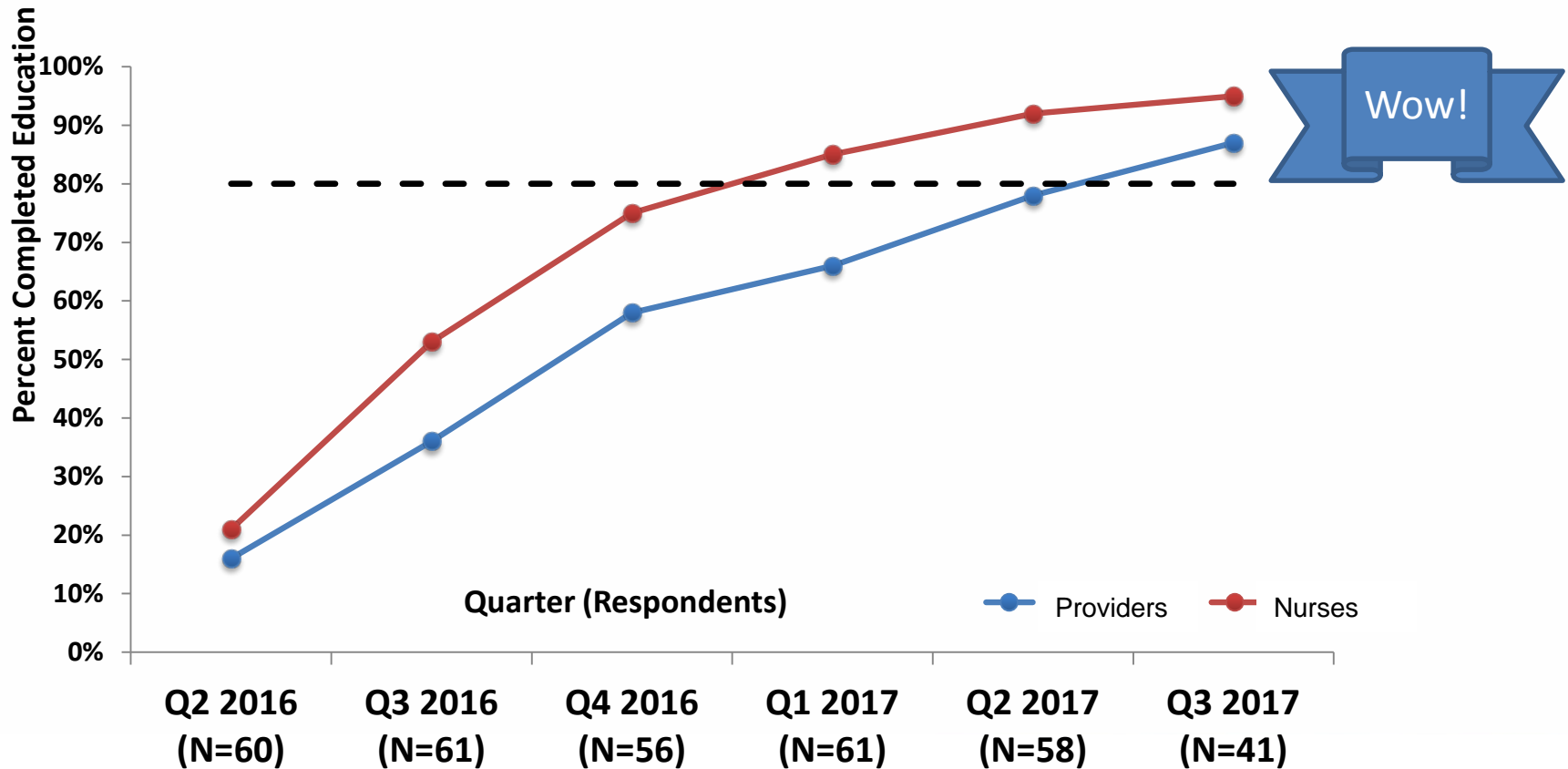
# Severe Hypertension Data Entry Status



	Total Records	# Teams with Data
Baseline (2015)	1644	90
July	599	79
August	662	86
September	575	88
October	519	77
November	574	85
December	576	81
January	581	85
February	523	83
March	565	79
April	535	79
May	634	87
June	575	84
July	651	84
August	721	86
September	652	81
October	688	75
November	512	61
December	347	50
<b>Overall</b>	<b>13795</b>	<b>106</b>

# AIM Quarterly Measures: Provider & Nurse Education

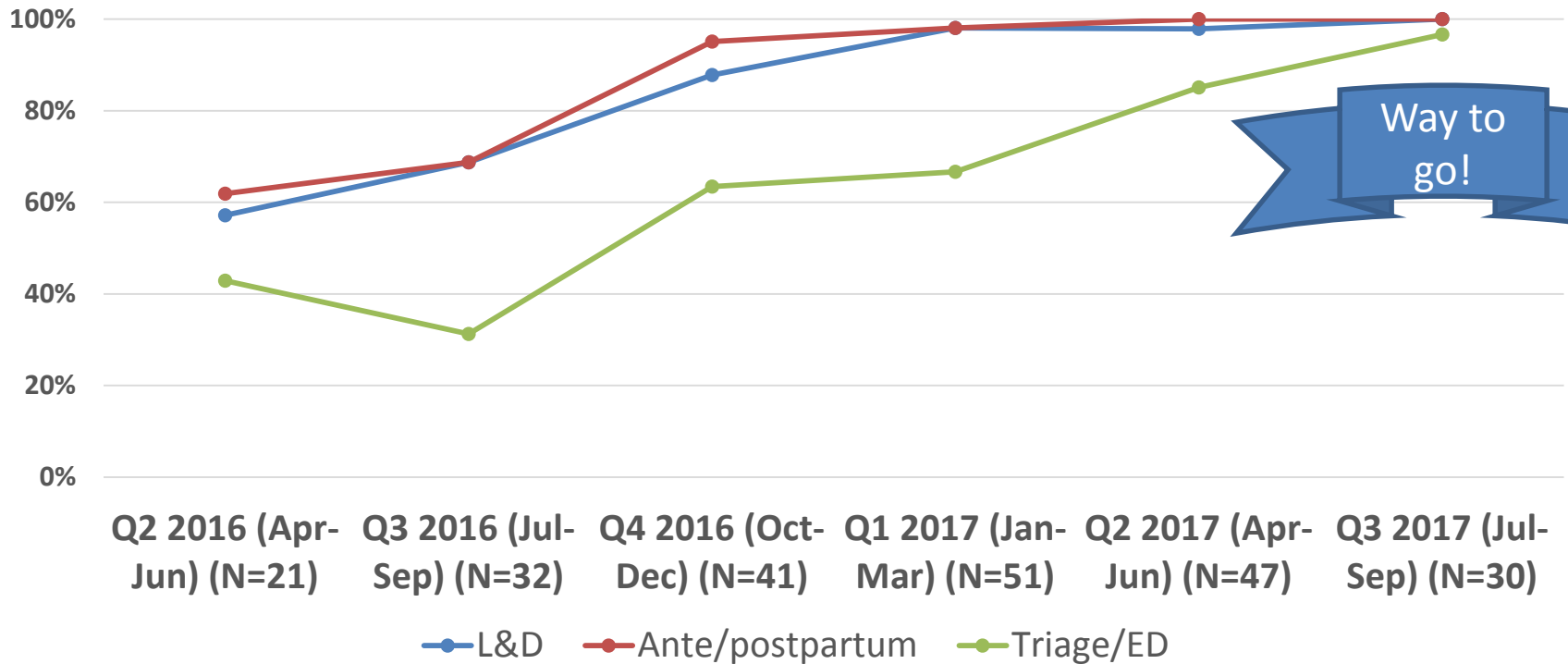
**Cululative percent of OB providers and nurses completed (within the last 2 years) implementation education on the Severe HTN/Preeclampsia bundle elements and unit-standard protocol**



# Implementation Checklist: Standard Policies / Protocols Across Units



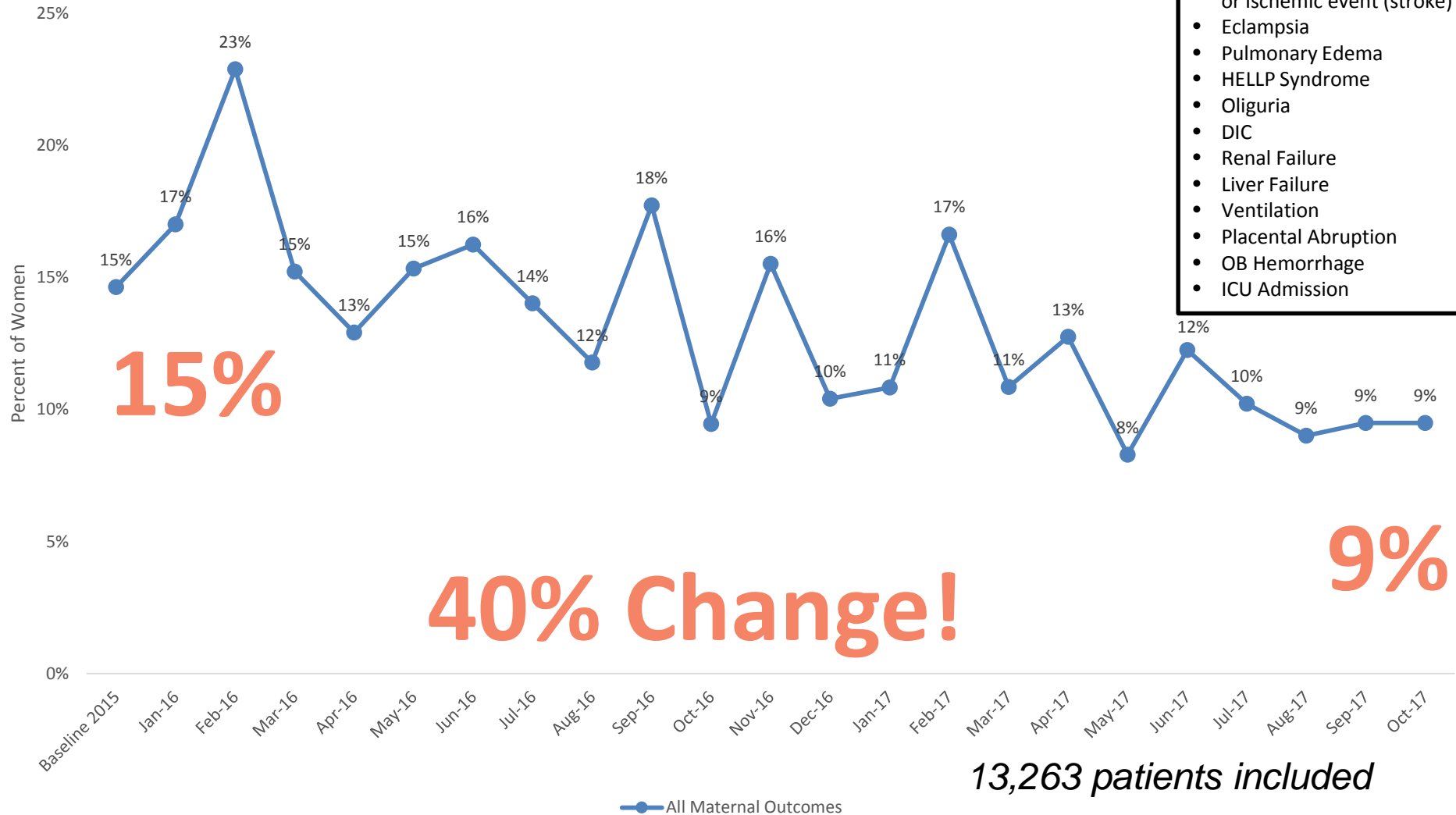
Percent of hospitals with standard protocols for early warning signs, updated diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)



# Maternal Hypertension Outcome Data: Severe Maternal Morbidity



ILQPC: Women with New Onset HTN with Severe Maternal Morbidity  
All Hospitals, 2016-2017



- Severe Maternal Morbidity Diagnoses:**
- Intracranial Hemorrhage or Ischemic event (stroke)
  - Eclampsia
  - Pulmonary Edema
  - HELLP Syndrome
  - Oliguria
  - DIC
  - Renal Failure
  - Liver Failure
  - Ventilation
  - Placental Abruption
  - OB Hemorrhage
  - ICU Admission

# SUSTAINABILITY

# Develop Your Sustainability Plan





# Developing a sustainability plan – Template available for download now!



- Who will enter compliance data into REDCap?
- Will you continue to track additional data on internal forms?
- When will you meet with your team to
  - Monitor compliance via ILPQC Data System Reports?
  - Develop a plan and implement PDSA cycles if compliance on measures starts slipping?

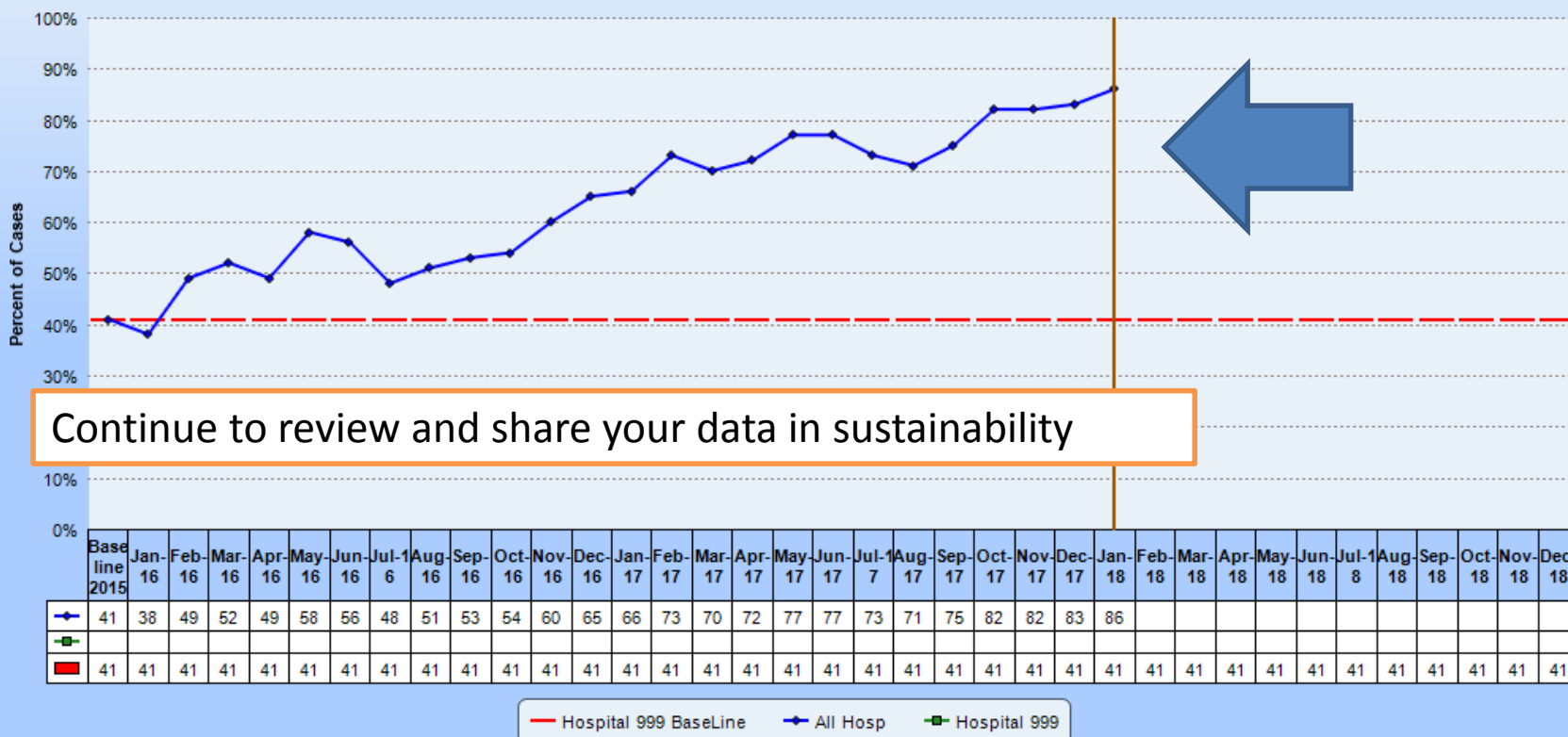
# Support for Teams to Sustain the Improvements



- Submit your sustainability plan to your perinatal network administrator
- Discuss challenges and strategies with hospitals in your network at your perinatal network meetings
- ILPQC Team Calls on HTN Sustainability in January, March, June, September and end of year 2018
- **QI Topic Call on Sustainability Plans with Centegra on February 21 at 12pm 1-877-860-3058; 850 207 6731#**

# Compliance Data Run Chart in REDCap

ILPQC: Maternal Hypertension Initiative  
 Percent of Cases with New Onset Severe Hypertension Treated within 60 Minutes  
 Hospital 999 & Select Comparisons, 2016 - 2018



Continue to review and share your data in sustainability

# Education Resources for Teams

- New hires should complete the AIM e-modules / AIM webcast
- Request Grand Rounds at [info@ilpqc.org](mailto:info@ilpqc.org)
- Incorporate HTN education into ongoing unit education: drills / simulations / e-modules
- Post protocols
- Continue active “debrief” = “how did we do on Time to Treatment?”

# Strategies for Sustaining Success

- ✓ **Know Your Champions** – nursing leaders, providers, quality
- ✓ **Transparency and Accountability** – monthly calls/meetings, distribute outcomes/metrics by facility
- ✓ **Physician Collaboration** – system and facility level engagement
- ✓ **Standardized Education** – new hire orientation, annual review
- ✓ **Standardized High Risk Scenario** – simulation/drills
- ✓ **Share Learnings** – case reviews, “good catches” and near misses
- ✓ **Utilize Tools and Technology** – laminated algorithms, electronic health record alerts and reminders



# Compliance Monitoring in REDCap



- Time to treatment  
severe HTN < 60 minutes
- Magnesium provided
- Early follow up for BP  
check within 7-10 days
- Patient discharge  
education

# HTN Compliance Data Form in REDCap



## Maternal Severe HTN Compliance Form

Assign record to a Data Access Group?

Adding new Record ID 4

Record ID	4
Hospital ID	<input type="text"/>
Postpartum	<input type="radio"/> Yes <input type="radio"/> No
GA at maternal event	
Weeks	<input type="text"/>
Days	<input type="text"/>
Maternal Race/Ethnicity	<input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Hispanic <input type="checkbox"/> Asian <input type="checkbox"/> Other
Diagnosis	<input type="radio"/> Chronic HTN <input type="radio"/> Gestational HTN <input type="radio"/> Preeclampsia <input type="radio"/> Superimposed Preeclampsia <input type="radio"/> Postpartum Preeclampsia <input type="radio"/> Other
Date of Maternal severe HTN (BP systolic $\geq$ 160 and/or diastolic $\geq$ 110)	<input type="text"/> <input type="button" value="Today"/> M-D-Y
Blood Pressure at initiation of antihypertensive treatment:	
Systolic:	<input type="text"/>
Diastolic:	<input type="text"/>

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"/> $\geq$ 60 mins <input type="radio"/> No action taken / Missed opportunity
Was Magnesium Sulfate administered?	<input type="radio"/> Yes <input type="radio"/> No
GA at delivery	
Weeks	<input type="text"/>
Days	<input type="text"/>
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
Adverse Maternal Outcome	<input type="checkbox"/> OB Hemorrhage with transfusion of $\geq$ 4 units of blood products <input type="checkbox"/> Intracranial Hemorrhage or Ischemic event <input type="checkbox"/> Pulmonary Edema <input type="checkbox"/> ICU Admission <input type="checkbox"/> HELLP Syndrome <input type="checkbox"/> Oliguria <input type="checkbox"/> Eclampsia <input type="checkbox"/> DIC <input type="checkbox"/> Renal failure <input type="checkbox"/> Liver failure <input type="checkbox"/> Ventilation <input type="checkbox"/> Placental Abruptio <input type="checkbox"/> Other <input type="checkbox"/> None
Form Status	
Complete?	<input type="button" value="Incomplete"/>

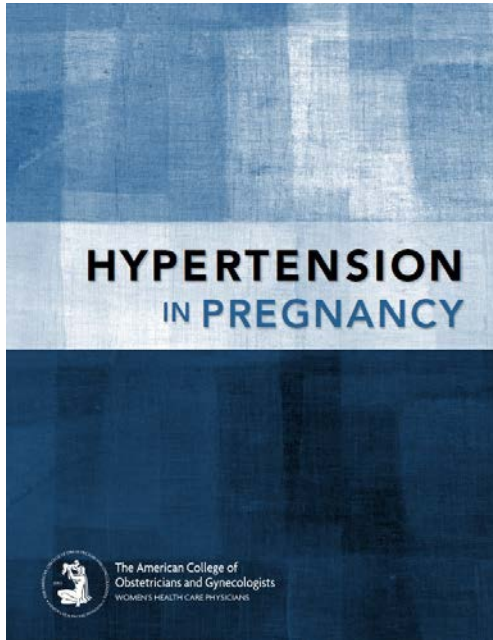
# Support for Teams for Compliance Monitoring



- Compliance monitoring form and reports in REDCap
- ILPQC QI Support Calls quarterly to teams falling out of compliance
- Letter to chair/hospital administrator about ACOG Guidelines if provider/staff buy-in is an issue to develop escalation procedures



# Magnesium Compliance Monitoring



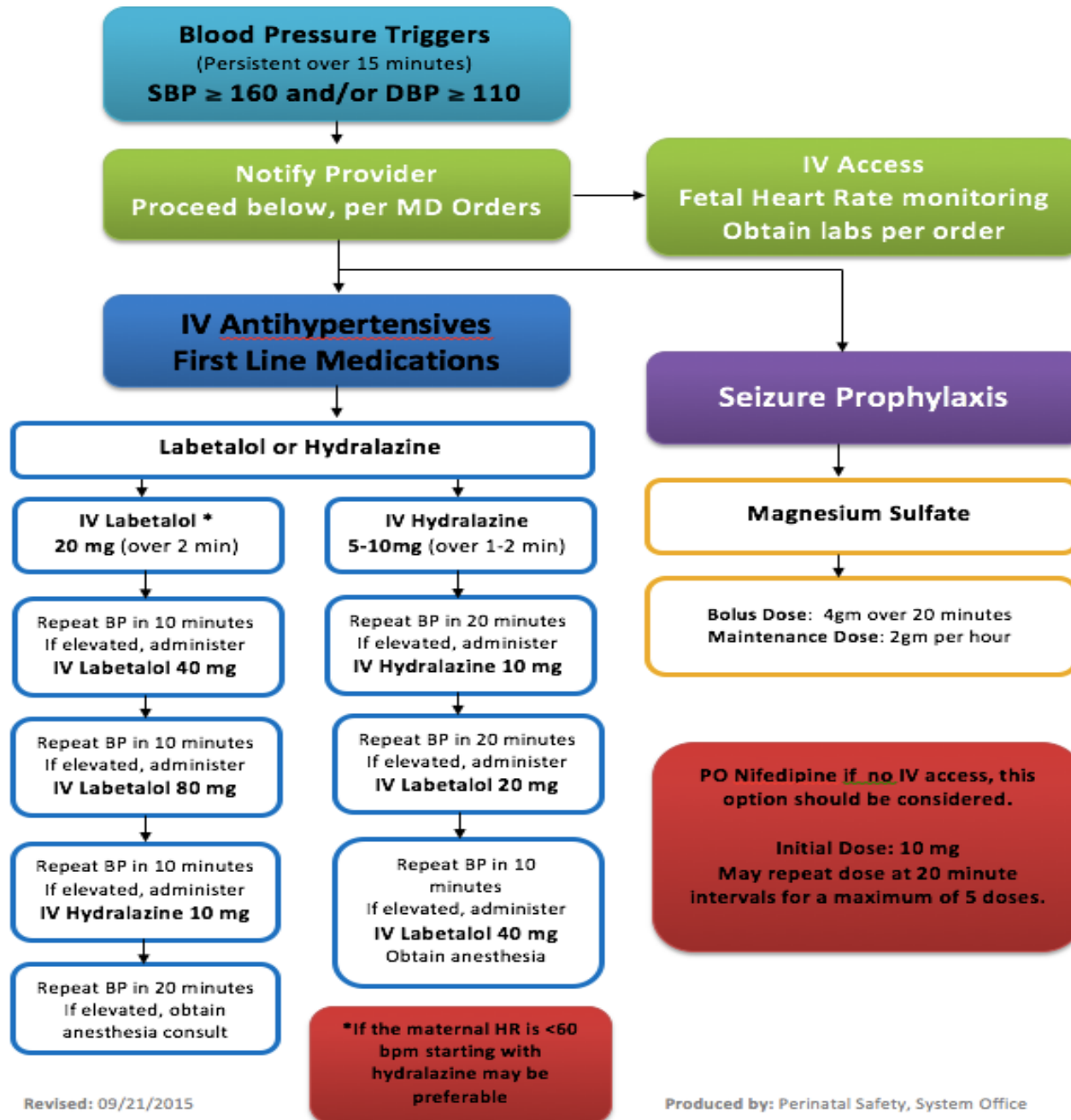
- Review your magnesium compliance data and missed opportunities
- Run a PDSA cycle if not at goal
- **ACOG Executive Summary on Hypertension In Pregnancy, Nov 2013: “Proteinuria is not a requirement to diagnose preeclampsia with new onset severe hypertension and a sign/symptom of end organ dysfunction.”**

# Discussion: Improving compliance with Mag administration

- What has worked at your hospital?
- Best practices?

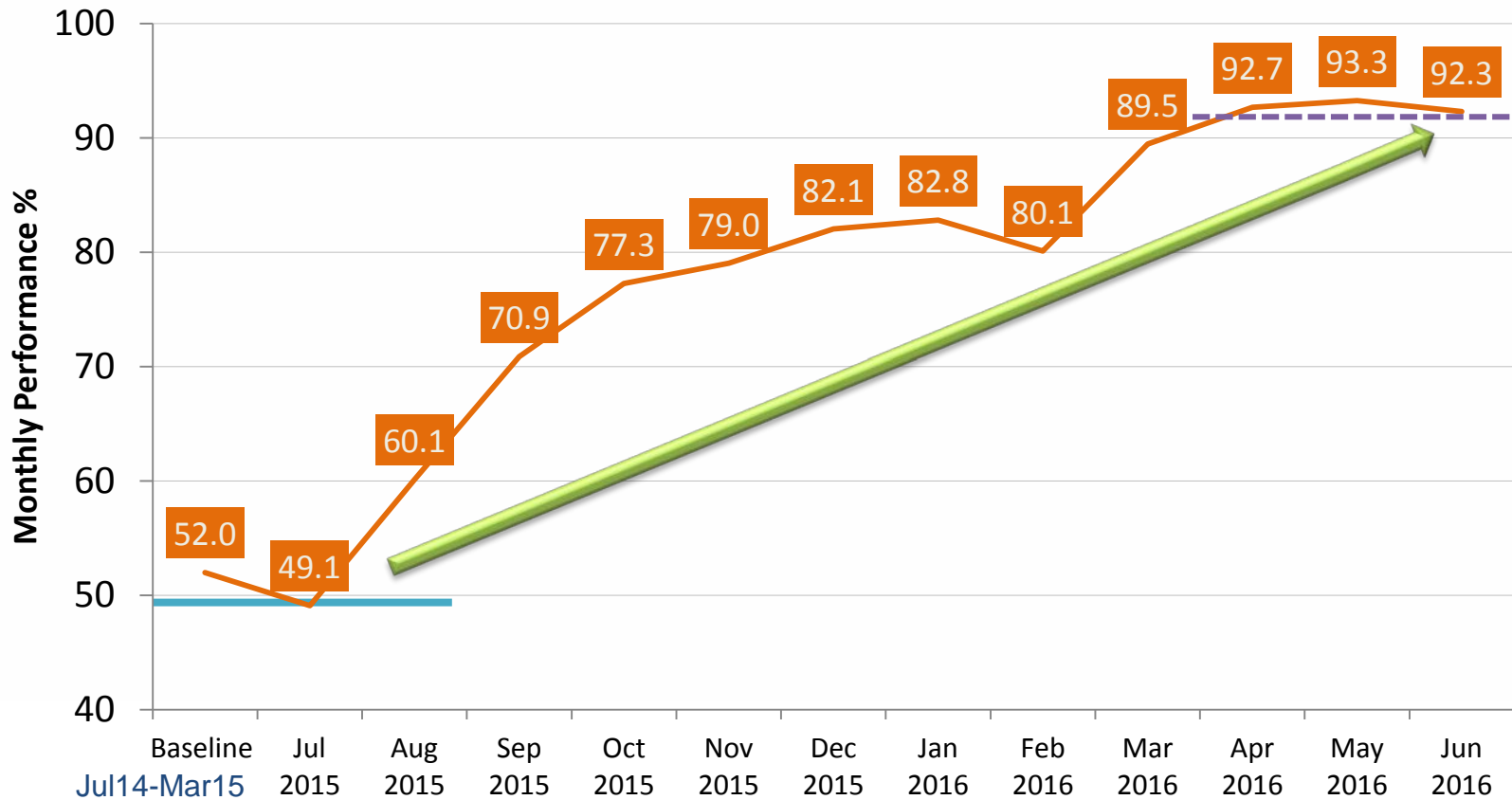
# Severe Hypertension in Pregnancy Treatment Algorithm

## Antepartum, Intrapartum and Postpartum



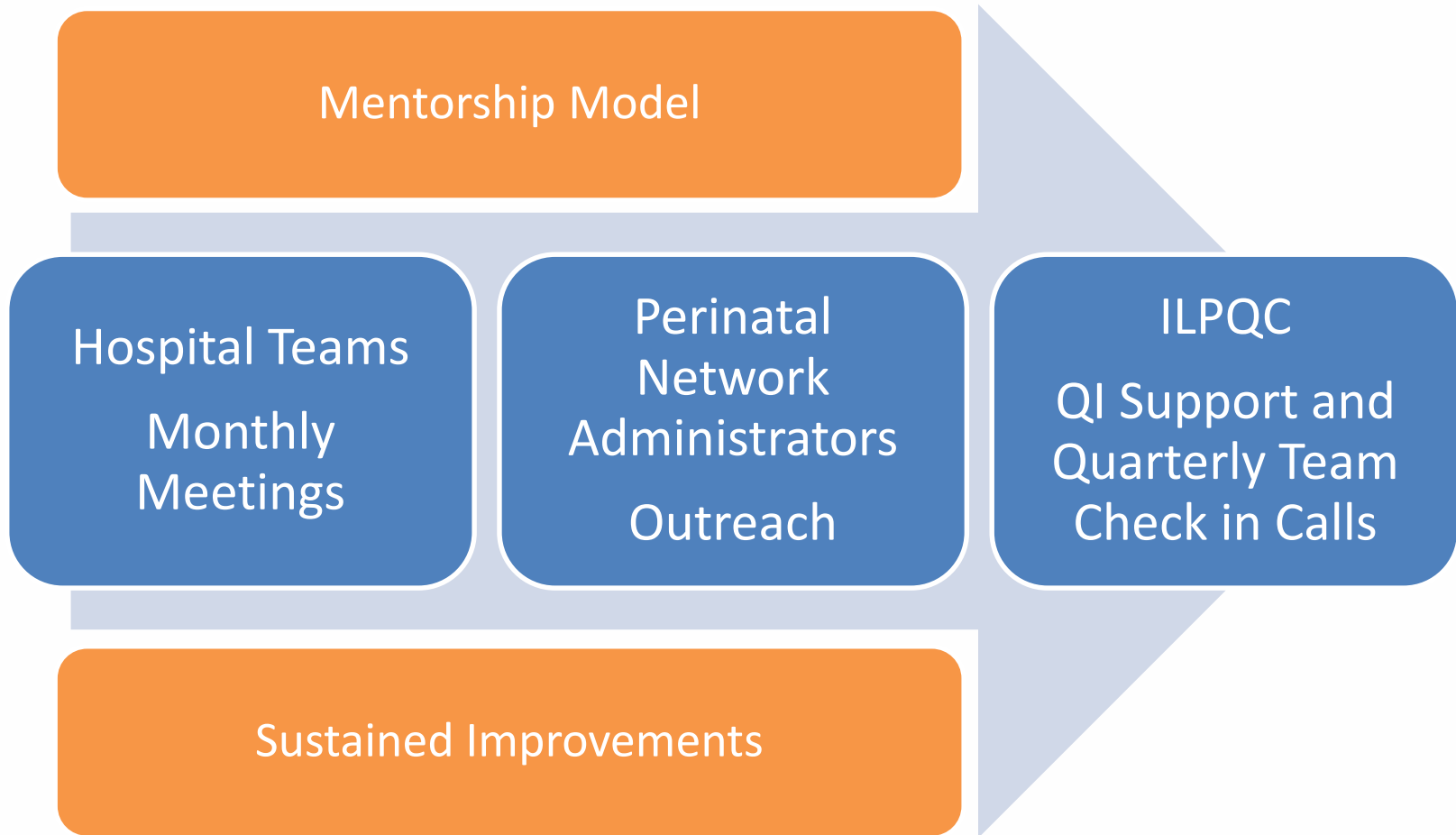
# Preeclampsia Bundle Compliance

1. Treat elevated BP
2. Give magnesium sulfate
3. Early PP follow-up



PREECLAMPSIA

# Compliance Monitoring



Cynthia Sawyer, MSN, CNS, RNC-OB, CLE  
Perinatal Clinical Nurse Specialist  
PIH Health Hospital – Whittier, California

**GUEST SPEAKER**

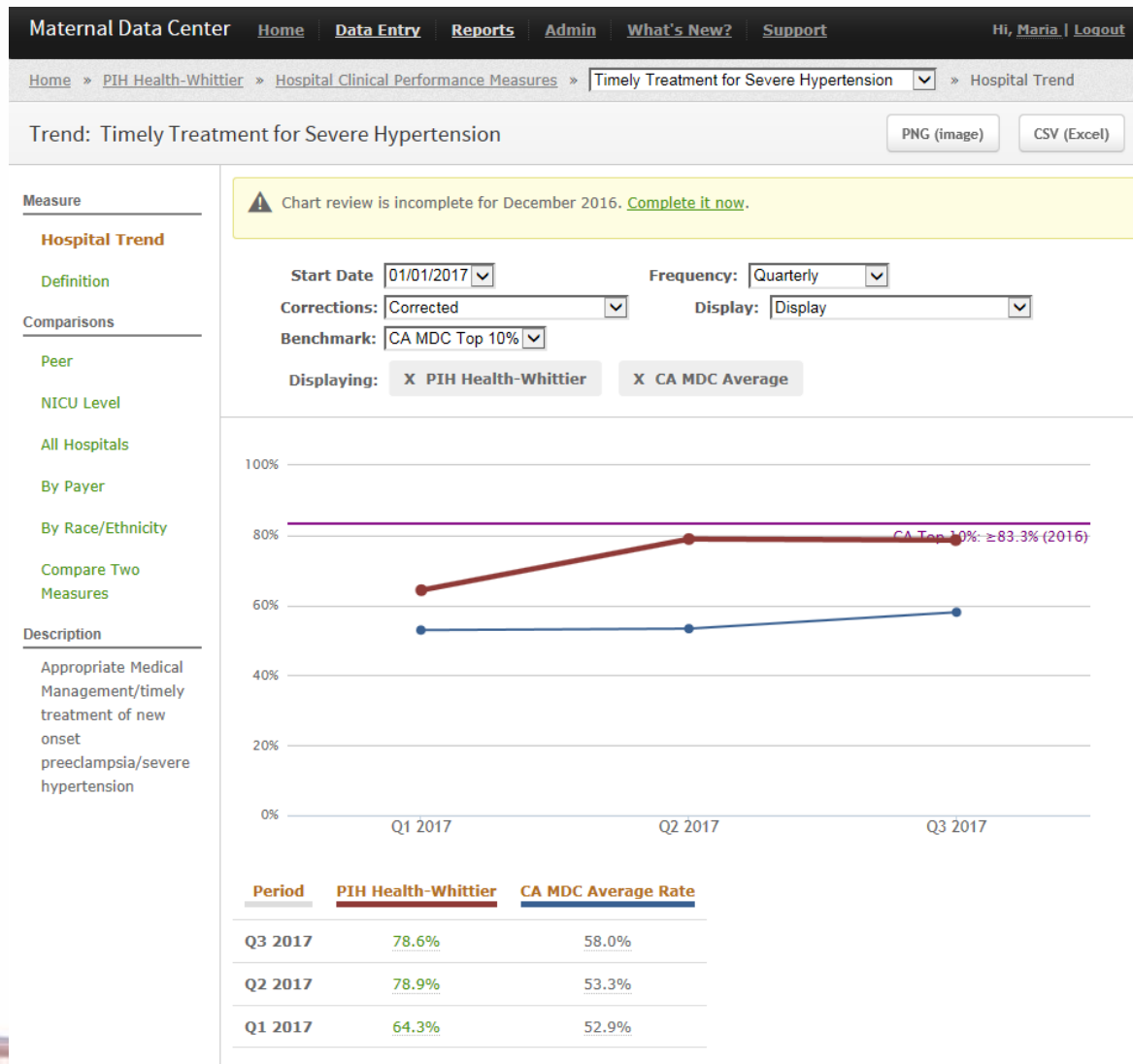
# PIH HEALTH HOSPITAL - WHITTIER



- 547 Beds
- Serve L.A., Orange County, San Gabriel Valley
- Level II
- 32-Bed L & D / MN Unit
- 1800 Deliveries - FY 2017



# CMQCC Timely Treatment for Severe Hypertension-Q3 2017





# Action Plan



- Developed Severe Hypertensive Order Set per OB Committee consensus.
- Revised Magnesium (Mg) Policy to reflect current evidence-based practices to align with CMQCC recommendations
- Educated nursing personnel on preeclampsia with mild and severe features
- Implemented a hypertensive crisis and eclampsia simulation program for Labor and Delivery and Maternal-Newborn
- Staff performed return demonstration of Severe Hypertensive Crisis algorithm, evidence-based eclampsia interventions, and magnesium bolus
- Modified Preeclampsia with Severe Features Debriefing Tool from CMQCC and Miller Children's Hospital and educated Charge Nurses on use
- Modified Mg medication boxes to reflect CMQCC recommendations
- Collaborated with ED educator to disseminate ED treatment algorithm to ED physicians and staff
- Perinatologist educated healthcare providers on new protocols

# Tools for the Staff

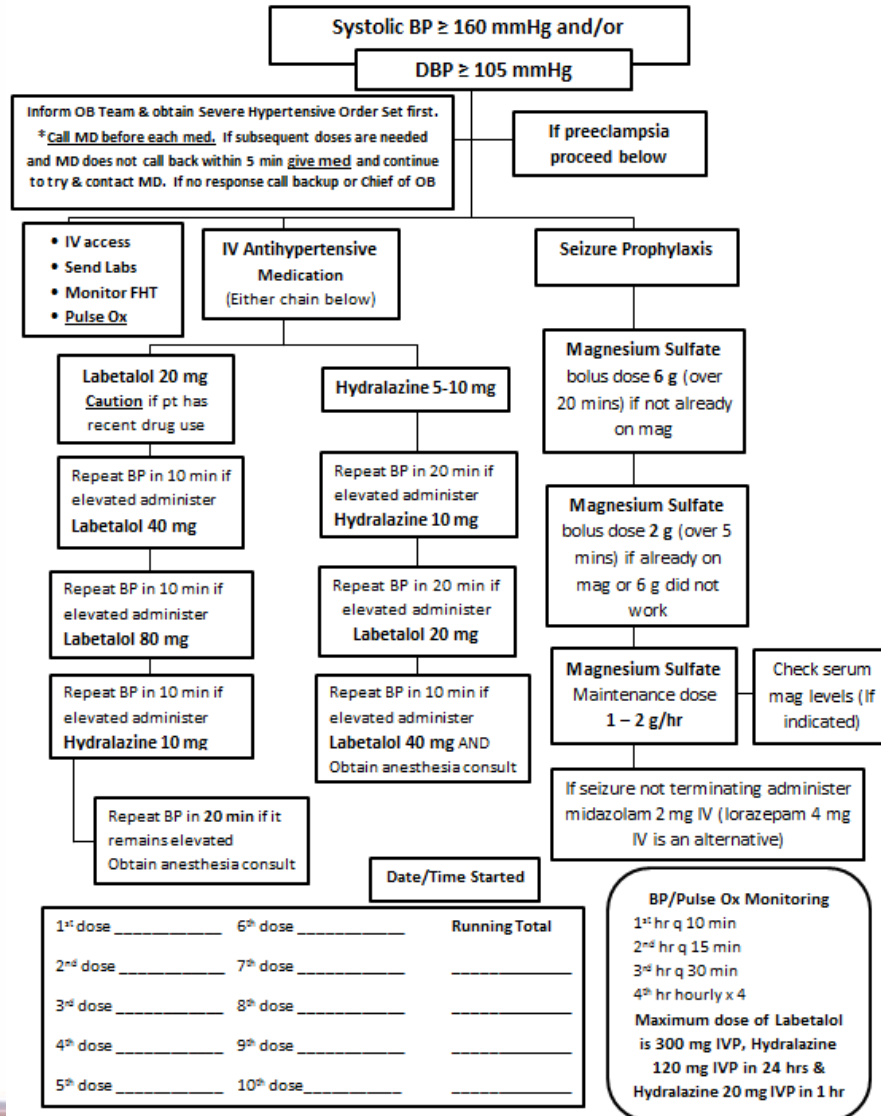
## Treatment for Severe Preeclampsia



See reverse side  
for eclampsia  
management

# Tools Designed by Staff

## Treatment for Severe Preeclampsia



**Severe Hypertension Order Set for Intrapartum or Postpartum [6 orders of 25 are selected]**

Blood Pressure (BP) threshold: systolic blood pressure (SBP) GREATER THAN or EQUAL TO 160 mmHg or diastolic blood pressure (DBP) GREATER THAN or EQUAL TO 105 mmHg

Order	Instructions
<input type="checkbox"/> <b>Blood Pressure</b>	recheck in 15 minutes. If SBP GREATER THAN or EQUAL TO 160 mmHg or DBP GREATER THAN or EQUAL TO 105 mmHg, administer initial...
<input checked="" type="checkbox"/> <b>Pulse Oximetry</b>	Continuous until 6 hours after last dose of antihypertensive medication given.

Consider maximum dosages: Labetalol max cumulative dose is 300 mg in 24 hours. Hydralazine max total dose is 20 mg in one hour and 120 mg in 24 hours.

**Medications - First Line Management**

Order	Dose	Route	Frequency	PRN	PRN Reason	Special Instructions
<b>Option 1 - 4 item(s)</b>						
<input type="checkbox"/> <b>labetalol Injection</b>	20	IV	One Time	<input type="checkbox"/>		Initial dose. Give over 2 minutes. Recheck BP in 10 minutes. If SBP is LESS THAN 160 mmHg and DBP is LESS...
<input type="checkbox"/> <b>labetalol Injection</b>	40	IV	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Second Dose, give 10 minutes after initial dose. Give over 2 minutes. Recheck BP in 10 minutes. If SBP is LESS...
<input type="checkbox"/> <b>labetalol Injection</b>	80	IV	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Third Dose, give 10 minutes after 2nd dose. Give over 2 minutes. Recheck BP in 10 minutes. If SBP is LESS THAN...
<input type="checkbox"/> <b>hydrALAZINE Injection</b>	10	IV	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Give 10 minutes after labetalol 80 mg. Give over 2 minutes. NOTIFY ANESTHESIOLOGIST and recheck BP in 20...
<b>Option 2 - 4 item(s)</b>						
<input type="checkbox"/> <b>hydrALAZINE Injection</b>	5	IV	One Time	<input type="checkbox"/>		Initial dose. Give over 2 minutes. Recheck BP in 20 minutes. If SBP is LESS THAN 160 mmHg and DBP is LESS...
<input type="checkbox"/> <b>hydrALAZINE Injection</b>	10	IV	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Second dose, give 20 minutes after initial dose. Give over 2 minutes. Recheck BP in 20 minutes. If SBP is LESS...
<input type="checkbox"/> <b>labetalol Injection</b>	20	IV	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Give 20 minutes after hydralazine 10 mg. Give over 2 minutes. Recheck BP in 10 minutes...
<input type="checkbox"/> <b>labetalol Injection</b>	40	IV	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Give 10 minutes after labetalol 20 mg. Give over 2 minutes. NOTIFY ANESTHESIOLOGIST and recheck BP in 10...

**Medications - Additional Management**

Order	Dose	Route	Frequency	PRN	PRN Reason	Additional Instructions
<b>Nifedipine - 3 item(s)</b>						
<input type="checkbox"/> <b>NIFEdipine</b>	10	oral	One Time	<input type="checkbox"/>		Initial dose. Recheck BP in 20 minutes. If SBP is LESS...
<input type="checkbox"/> <b>NIFEdipine</b>	20	oral	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Second dose, give 20 minutes after initial dose. Recheck BP in 20 minutes. If SBP is LESS THAN 160 mmHg and...
<input type="checkbox"/> <b>NIFEdipine</b>	20	oral	One Time	<input checked="" type="checkbox"/>	If SBP is still GREATER THAN or...	Third dose, give 20 minutes after second dose. Recheck BP in 20 minutes. If SBP is LESS THAN 160 mmHg and...
<b>Other Injections - 3 item(s)</b>						
<input type="checkbox"/> <b>hydrALAZINE Injection</b>	10	IV	One Time	<input type="checkbox"/>		Give over 2 minutes. Notify Anesthesiologist and recheck BP in 20 minutes. If SBP is still GREATER THAN or...
<input type="checkbox"/> <b>labetalol Injection</b>	40	IV	One Time	<input type="checkbox"/>		Give over 2 minutes. Notify Anesthesiologist and recheck BP in 10 minutes. If SBP is still GREATER THAN or...
<input type="checkbox"/> <b>labetalol Injection</b>	80	IV	One Time	<input type="checkbox"/>		Give over 2 minutes. Notify Anesthesiologist and recheck BP in 10 minutes. If SBP is still GREATER THAN or...

**Miscellaneous Orders**

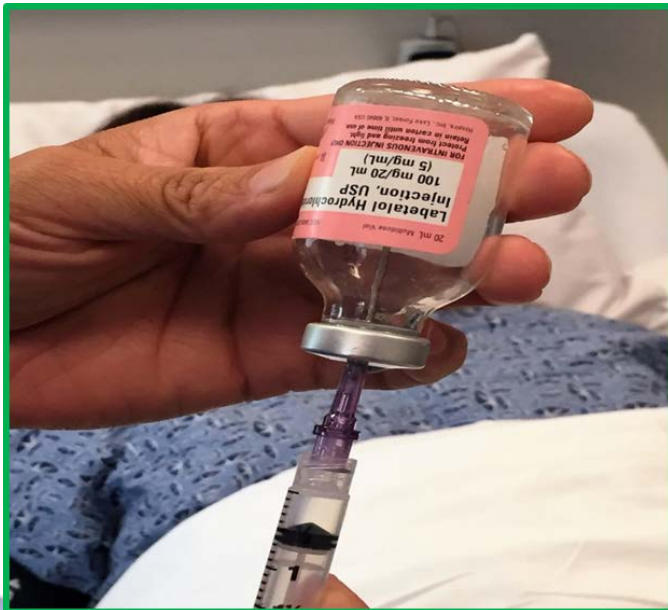
Order	Consult Type	Instructions
<b>Other Injections - 9 item(s)</b>		
<input type="checkbox"/> <b>Consult Physician</b>	maternal fetal medicine	
<input type="checkbox"/> <b>Consult Physician</b>	internal medicine	
<input type="checkbox"/> <b>Consult Physician</b>	anesthesia	
<input type="checkbox"/> <b>Consult Physician</b>	intensivist	
<input checked="" type="checkbox"/> <b>Social Work Consult</b>		
<input checked="" type="checkbox"/> <b>Miscellaneous Nursing</b>		Severe Hypertension. Once SBP is LESS THAN 160 mmHg and DBP is LESS THAN 105 mmHg, monitor BP every 10 minutes for one hour, every...
<input checked="" type="checkbox"/> <b>Miscellaneous Nursing</b>		Severe Hypertension. BP target NOT to be LESS THAN 140/90 mmHg as it will decrease fetal perfusion.
<input checked="" type="checkbox"/> <b>Miscellaneous Nursing</b>		Severe Hypertension. Observe diabetic patients closely as Labetalol can mask signs and symptoms of hypoglycemia.
<input checked="" type="checkbox"/> <b>Notify MD</b>		Once BP has achieved a threshold below parameters but then again exceeds the parameters, Notify Physician and ANTICIPATE REVERTING...

## Preeclampsia with Severe Features Debriefing Form



Person completing form:		Date & time:
Patient's MedEx Sticker		Print team names present:
Time of first B/P $\geq 160$ or 105	Time:	Patient location <small>(check all that apply)</small> <input type="checkbox"/> Triage <input type="checkbox"/> NST <input type="checkbox"/> L&D <input type="checkbox"/> M-N <input type="checkbox"/> ED
Time of second confirming B/P	Time:	Done in 15 minutes? <input type="checkbox"/> Yes <input type="checkbox"/> No
Order set initiated	<input type="checkbox"/> Yes <input type="checkbox"/> No	If no, why not?
Antihypertensive given within 60 minutes of confirming B/P	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Medications given: <small>(check all that apply)</small> <input type="checkbox"/> Labetalol <input type="checkbox"/> IV <input type="checkbox"/> PO <input type="checkbox"/> Hydralazine <input type="checkbox"/> IV <input type="checkbox"/> PO <input type="checkbox"/> Nifedipine		Why was there a delay?
Magnesium Sulfate: Loading dose: <input type="checkbox"/> 4g <input type="checkbox"/> 6g Maintenance: <input type="checkbox"/> 1g <input type="checkbox"/> 2g		Steroids given < 34 weeks? <input type="checkbox"/> Yes <input type="checkbox"/> No
What went well?		What needs improvement?
<input type="checkbox"/> Communication <input type="checkbox"/> Teamwork <input type="checkbox"/> Leadership <input type="checkbox"/> Other		<input type="checkbox"/> Communication <input type="checkbox"/> Teamwork <input type="checkbox"/> Leadership <input type="checkbox"/> Other
Opportunities for improvement:		Successes:
Outcome: <small>(if unknown leave blank)</small> <input type="checkbox"/> Delivery: <input type="checkbox"/> C/S <input type="checkbox"/> VD    or <input type="checkbox"/> Continued hospitalization: <input type="checkbox"/> 24-48 hrs <input type="checkbox"/> > 48 hrs		
Please give form to Director		Midas completed: <input type="checkbox"/> Yes <input type="checkbox"/> No

# Simulations



# Collaborated with ED Educator

## Evaluation and Treatment of Antepartum and Postpartum Preeclampsia and Eclampsia in the Emergency Department

**1st Line Anti-Hypertensive Treatment:** Labetalol & Hydralazine\*  
Target BP: 140-160/90-100 (BP<140/90 = decreased fetal perfusion)  
See CMQCC Preeclampsia Toolkit for "Antihypertensives in Preeclampsia" for 2nd line therapy

### Magnesium

## TREATMENT

#### **LABELTALOL as Primary Anti-Hypertensive**

- Administer Labetalol 20 mg IV
- Repeat BP in 10 min
  - If BP threshold is still exceeded, administer Labetalol 40 mg IV
  - If SBP<160 and DBP<100, continue to monitor closely
- Repeat BP in 10 min
  - If BP threshold is still exceeded, administer Labetalol 80 mg IV
  - If SBP<160 and DBP<100, continue to monitor closely
- Repeat BP in 10 min
  - If BP threshold is still exceeded, administer Hydralazine 10 mg IV
  - If SBP<160 and DBP<100, continue to monitor closely
- Repeat BP in 20 min; if BP threshold is still exceeded, obtain emergent consultation from maternal-fetal medicine, internal medicine, anesthesiology, or critical care
- Once target BP achieved, monitor BP q10 min for 1 hour, q 15 min for 2nd hour

#### **HYDRALAZINE as Primary Anti-Hypertensive**

- Administer Hydralazine 5 or 10 mg IV
- Repeat BP in 20 min
  - If BP threshold is still exceeded, administer Hydralazine 10 mg IV
  - If SBP<160 and DBP<100, continue to monitor closely
- Repeat BP in 20 min
  - If BP threshold is still exceeded, administer Labetalol 20 mg IV
  - If SBP<160 and DBP<100, continue to monitor closely
- Repeat BP in 10 min
  - If BP threshold is still exceeded, administer Labetalol 40 mg IV and obtain emergent consultation from maternal-fetal medicine, internal medicine, anesthesiology, or critical care
  - If SBP<160 and DBP<100, continue to monitor closely
- Once target BP achieved, monitor BP q10 min for 1 hour, q 15 min for 2nd hour

#### Initial Treatment

- Loading Dose: 4-6 gm over 15-20 min
- Maintenance 1-2 gm/hr
- Close observation for signs of toxicity
  - Disappearance of deep tendon reflexes
  - Decreased RR, shallow respirations, shortness of breath
  - Heart block, chest pain
  - Pulmonary edema

#### If Patient Seizes While on Magnesium:

- Secure airway and maintain oxygenation
- Give 2nd loading dose of 2 gm Magnesium over 5 min
- If patient seizes after 2nd magnesium bolus, consider the following:
  - Midazolam 1-2 mg IV; may repeat in 5-10 min **OR**
  - Lorazepam 2 mg IV-may repeat **OR**
  - Diazepam 5-10 mg IV. May repeat q15 min to max of 30 mg
  - Phenytoin 1 g IV over 20 min

#### Seizures Resolve

- Maintain airway and oxygenation
- Monitor VS, cardiac rhythm/ECG for signs of medication toxicity
- Consider brain imaging for:
  - Head trauma
  - Focal seizure
  - Focal neurologic findings
  - Other neurologic diagnosis is suspected

# Sustainability



- Review of debriefings with nursing leadership
- Continued simulations
- Education at staff meetings, case studies, and huddles
- Posting of compliance on staff bulletin board



# NEXT STEPS

# HTN Next Steps & Key Takeaways



- Periodic call schedule going forward (still at 12:30pm):  
March, June, September, year end
- Enter ALL data by Feb 15 & develop sustainability plan and submit to PNA
- Ongoing data collection for compliance monitoring,  
HTN Compliance REDCap Data Form available in March
- Teams will be contacted to provide team talks on sustainability plan implementation for future calls
- Please contact [info@ilpqc.org](mailto:info@ilpqc.org) if you are willing to be a mentor hospital to other HTN teams

# MNO Wave 1 Calls – if you are participating



- Essential feedback from Wave 1 Teams will be solicited at the following call(s) in February and March. Attendance is highly encouraged:
  - 3<sup>rd</sup> Monday of the Month (MNO Neonatal Work Group) – open to all teams
    - February 19 @ 1PM
    - March 19 @ 1PM
  - 4<sup>th</sup> Monday of the Month (MNO OB Teams Calls)
    - February 26 @ 12:30PM (no HTN)
    - March 26 @ 12:30PM (1<sup>st</sup> hour = HTN; 2<sup>nd</sup> hour = MNO)

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

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