**Identification and Treatment Protocol**

**Are we only checking manual BPs on patients that are noted to have a BP greater than 140/90?**

Ausculatory (Manual) blood pressure (BP) measurement is the most accurate. AHA recommends that Oscillometric (automated devices) are validated with Mercury Sphygmomanometer for each patient. CMQCC highly recommended manual BP measurement with BP > 140/90 and absolutely with severe range pressures. At the very least, if a hospital chooses to use the automated BP route, then they should check it against a manual BP to make sure that it is within +- 5 mmHg of the auto BP. If not, use a manual BP device. Your hospital can decide how to implement these in your protocol for the identification of severe range blood pressures. In the CMQCC Preeclampsia Initiative, most hospitals opted to be consistent and use manual devices.

**Did hospitals in California generally monitor patients on cardiac monitors when they are giving labetalol (or hydralazine) IV push?**

No, it is not required for patients receiving IV Labetalol (or hydralazine) to be on cardiac monitors. There is no data to support cardiac monitoring for the OB population unless they have cardiac disease.

**Is it the expectation that if any person needs treatment with IV antihypertensive meds, these patients all need magnesium sulfate?**

ACOG guidelines state that magnesium sulfate should be used for pts with all preeclampsia with severe features. Please follow the magnesium sulfate protocol on the Eclampsia, Hypertensive Emergency (in Pregnancy), and Postpartum Preeclampsia Checklists. Magnesium sulfate is the first line seizure prophylaxis, unless contraindicated.

**What position should the patient be in when obtaining a blood pressure?**

ACOG indicates the optimal measurement of blood pressure is obtained when the patient is seated with their legs uncrossed and their feet on the floor. The blood pressure cuff should be positioned so the middle of the cuff is on the upper arm and level with the right atrium/midpoint of the sternum.

**I feel the treatment "line in the sand" is 20 weeks estimated gestational age but I can't really find a firm recommendation. Could you clarify that for me?**

Any pregnant or postpartum patient with severe range blood pressures should be treated regardless of gestational age.

**What is the postpartum period for identification and treatment of severe range blood pressures?**

The postpartum period is defined as 6 weeks postpartum.

**What is the guidance on use of Nifedipine in acute lowering of severe range blood pressure?**

ACOG Committee Opinion 623 page 3 addresses use oral Nifedipine immediate release.

**After the first elevated BP, when should a confirmatory BP be taken?**

ACOG District II New York’s Safe Motherhood Initiative Hypertensive Emergency Checklist (Tab 5 of IL HTN Binder) states that two severe blood pressure values obtained 15-60 minutes apart indicates initiation of treatment algorithm.

**Inclusion Criteria**

**Which patients do we include for this initiative?**

Include patients that meet the following criteria:

* Pregnant/postpartum (6 weeks) with sustained (>15 mins) elevated systolic BP ≥160 and/OR diastolic BP ≥110(105)
* Any inpatient location (L&D, triage, ED, antepartum, postpartum)
* Include patients with chronic/gestational HTN

**Do we include patients with chronic or gestational hypertension if they did not have pre-eclampsia or eclampsia?**

Yes, if they meet criteria of sustained severe range blood pressure.

**What about the patient that is on hypertensive medications at home before they come in?**

These patients are included if they have a sustained severe range blood pressure.

**What about patients that do not have a problem with initial BP but it happens later in their stay?**

These patients are included if they have a sustained severe range blood pressure.

**On the issue of who to include, if a patient has a solitary BP that is elevated, they should not be included?**

There are two scenarios at play here:

1. A patient has one elevated blood pressure and the BP is either not re-checked or the patient is repositioned to their side – this patient should be included and entered as “No Action Taken” in REDCap for the time to treatment question.
2. A patient has one elevated blood pressure. The blood pressure is re-checked following the accurate blood pressure protocol/guidelines and is no longer in the severe range – do not include this patient in the data collection.

**If you complete the data form on a hypertensive event, do you complete another data form if the patient has another event during their stay?**

No, only one data form is filled out per patient PER visit - so it's only the first sustained severe range blood pressure.

**When entering data, we noticed when a patient is transferred to a tertiary care center before delivery we are unable to enter the data accurately because of unknown data of Gestational Age at delivery, complications/outcomes, and discharge management.**

*For patients who are transferred out*, enter data into REDCap on any patients that meet criteria before they were transferred. F/U with the receiving hospital to which the patient was transferred in order to obtain patient outcomes (diagnosis at discharge, patient education, follow-up appointments).

*For patients who are transferred in*, enter data into REDCap ONLY on patients that meet the above requirements at their facility. If a patient has already been started on medications for elevated BP prior to arriving at your facility, do not complete a data form. Some networks have implemented effective solutions in which the hospital that receives the transferred patient fills out the discharge outcomes on patients with new onset severe hypertension identified before transfer and sends that form to the transferring hospital.

**If a patient is transferred into our facility for elevated bps and is treated at another facility then we don't count them, but once at our facility the patient has two severe range blood pressures that we treat, do we count them? Or if it is our transfer team and the patient has two severe range pressures in the ambulance that we treat, do we count them?**

We ask for the transferring hospital to enter data into REDCap on any patients that meet criteria before they were transferred and then F/U with the receiving hospital to which the patient was transferred in order to obtain patient outcomes (diagnosis at discharge, patient education, follow-up appointments).

**If the transferring hospital is not participating in this initiative would that patient just be disregarded completely for data collection?**

No, include the patient and include all the information available. Thanks.

**If you discover you did miss a severe HTN patient, can you submit into REDCAP when you find that patient?**

Yes, you can entered missed cases when they are discovered, just be sure to enter them under the right date so they show up properly in your reports.

**What if we identify a patient that has severe range blood pressures in error (e.g. after initial measurement the nurse measures the patient’s arm and finds a larger cuff was needed and then retakes and finds that blood pressure was within normal limits. Should we enter these patients into the data system?**

No, you identified and corrected an error and would not enter this patient into REDCap.

**Missed Opportunities**

**How are the "missed opportunity" patients being tracked? Without reviewing every patient's chart, how are you finding these missed patients?**

This is our collective challenge! These patients are critical to identify early and throughout the initiative to ensure that we accurately understand our opportunities for improvement and demonstrate improvement over time. We will continue to engage teams in a discussion of tips and tricks. Hospitals are using key word searches of their EMR to gauge missed opportunities. One approach is explore ways to review electronic records for all patients with recorded blood pressures of ≥160 or ≥110(105) – this will help identify missed opportunities that may not have had an adverse outcome. Another way to identify some of these cases is to review eperinet data for patients with severe morbidities then pull their records to identify if severe range blood pressures were a part of the case history.

**Do you also document as missed opportunity if patient is repositioned and BP dropped?**

Yes, since repositioning the patient and retaking the BP is not part of the accurate blood procurement protocol/guidelines, you would document this patient as a missed opportunity, as well as all patients who do not receive treatment as directed by identification and treatment protocols/guidelines. This would be entered as “No Action Taken” in REDCap for the time to treatment question.

**Is a missed opportunity blood pressure not retaken within 15 min.? What if repeated blood pressure is done at 20 min. or 2 min. after severe range one?**

Any patient with severe range blood pressure and either (1) blood pressure measurement was not repeated or with repeated blood pressure and no treatment is included.

**Date Use Agreements**

**Do we have to have the DUA completed before we can enter data into REDCap?**

No, you can enter REDCap data at any time. The DUA is to allow ILPQC to share the deidentified data with the national AIM initiative for national comparisons.

**Data Form and Collection**

**Is ED/Triage considered inpatient?**

Yes, ED/Triage is included for this initiative.

**Which medications count as HTN treatment?**

Measure the time to treatment for any patient that meets the inclusion criteria and is treated with Labetalol, Hydralazine, or Nifedipine. Do **NOT** measure time to treatment for Magnesium Sulfate – it is not an anti-hypertensive agent.

**In the REDCap data form for postpartum patients, it still requires an entry for gestational age at the time of the event. What should we enter as they are no longer pregnant?**

Please leave this field blank. The REDCap data system will give you an error that you can click to ignore and complete/save the record.

**What do we enter for gestational age at delivery if the patient is sent home before delivery?**

Please leave this field blank – only fill out GA at delivery if the patient delivers during

**How do we handle repeat patients?**

* 1st hospitalization
  + Patient meets criteria: fill out data form
  + Patient does not meet criteria: do not fill out data form
* 2nd hospitalization (and all subsequent hospitalization)
  + Patient meets criteria: fill out a data form – every new hospitalization should be counted!
  + Patient does not meet criteria: do not fill out data form

**Where/how will we get the AIM Quarterly Data Form for different quarters?**

The AIM Quarterly Data Form is in REDCap. The data form is separate from the HTN data form and is called “ILPQC AIM Quarterly Measures”. You will select which quarter of data on the data form, it's the same form for every quarter. ILPQC will send reminder emails for each quarter of data entry.

**On the data form, there is data for the administration of antenatal steroids, but only for < 34 weeks. Recently ACOG recommended ANS for >34 weeks, but less than 37 weeks. Is it OK if we add that data as additional information?**

For reporting in REDCap, please record ANS administration for patients <34 weeks only. If you’d like to track ANS use for patients ≥34 weeks to <37 weeks, please track it separately on your form to ensure this data is consistently entered across sites.

**Is there a way to document patients with chronic hypertension that have been on an antihypertensive prior to admission to the hospital and then have an event and need IV meds and go home on same meds as pre hospitalization. Is there a way to identify these types of patients?**

On the data form there is the option to select the patient's diagnosis including chronic HTN and superimposed preeclampsia. You can select as many diagnoses that a patient has.

**If you don't have 5 patients per month, should we still enter data into REDCap monthly?**

Yes, you should enter all data! The minimum of 5 patients is for baseline data. We just want hospitals to have some data in the baseline time period to track progress going forward.

**As a wave 2 hospital, we have entered Oct-Dec 2015 baseline data. Are we also collecting and entering retrospective data for April & May 2016?**

As a Wave 2 team your monthly data collection starts in June. June data is due July 15.

**Which audit tool should be used for the baseline data?**

You will use the same maternal HTN data form for the whole initiative, including baseline data collection

**Should include both the bedside data and the outcomes chart abstraction for the baseline?**

Yes, all data should be entered for baseline patients.

**What is the definition of liver failure?**

CMQCC used the standard criteria of: development of coagulopathy, INR > 1.5 and any degree of mental alteration (encephalopathy) in a patient without any pre-existing liver disease.

**What counts as ‘other’ for adverse maternal/neo outcomes?**

The primary adverse maternal and neonatal outcomes are the ones listed on the data form. The ‘other’ field allows hospitals to record any other adverse outcomes. For adverse maternal outcomes, please reference the AIM ICD-10 codes for Severe Maternal Morbidity.

**Patient Discharge Education and Follow Up**

**For the discharge education, is documentation of any education acceptable or does it need to be in any specific format?**

Your hospital can decide what to use for patient education at discharge.

**Is instructing the patient to schedule an appointment at discharge a “yes” response to process measure (P2) discharge management on the data form?**

For the measure of appropriate education and follow up, the appointment should be scheduled within 10 days at discharge (<72 hours if discharged on meds). Instructing the patient to schedule an appointment would therefore be a "no" response on the severe hypertension data form as the appointment was not actually scheduled at discharge.

**When does the clock start to measure if a follow-up appointment was made for within 10 days of discharge for all women with severe hypertension and with in 3 days for women discharged on medication?**

Begin counting when the woman is discharged.

**If a woman is discharged on the weekend, a follow-up appointment can’t be scheduled as most clinics are closed. What should we do in this case?**

Some hospitals are scheduling follow-up appointments before clinics close on Friday if they know a patient is going to be discharged over the weekend.

**What constitutes a follow-up appointment?**

ACOG indicates a follow-up appointment should be consistent with care provided in the hospital. The follow-up visit should be with provider or nurse in a clinic, hospital, or home care setting.

**Other**

**Where do I get the slides?**

The slides are available for download during the OB Teams Call in the upper left hand corner of the screen and will be posted to the ILPQC website after the call. Slides are available on both of the following pages of the ILPQC website: <http://ilpqc.org/?q=Hypertension> OR <http://ilpqc.org/OB-hospital-calls>

**Where can I find questions related to educational topics for use in staff education?**

The best resources to find information on clinical topics are the monthly team calls (specifically the sections on clinical education) and the IL Comprehensive Slide Set. Additionally, AIM has created fantastic eModules, which are short 10-15 minute videos with test questions at the end. You can access the AIM eModules here (of particular interest to this initiative is eModule 3: Hypertension in Pregnancy): <http://www.safehealthcareforeverywoman.org/aim-resources.php>