# Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>Morgan Barnes</td>
</tr>
<tr>
<td>Video</td>
<td></td>
</tr>
<tr>
<td>Blood Pressure Training Preliminary Data and Implementation Discussion</td>
<td>Tiffany Knauf, MA</td>
</tr>
<tr>
<td>Quarterly Report Summary</td>
<td>Morgan Barnes</td>
</tr>
<tr>
<td>QI 101- Improvement Science</td>
<td>Dr. Alicia Belay, PhD</td>
</tr>
<tr>
<td>PRAMS COVID Data ND/SD</td>
<td>Ramona Danielson and Katelyn Strasser, MPH, RN</td>
</tr>
<tr>
<td>Talking to Patients about COVID Vaccine</td>
<td>Kiamya Philson</td>
</tr>
<tr>
<td>Altru BP at Home Program, Steps to Implementation</td>
<td>Melissa Gilmore, RN, BSN</td>
</tr>
<tr>
<td>CMQCC Hypertension Disorders of Pregnancy Toolkit Update</td>
<td>Ashley Briggs, MD FACOG</td>
</tr>
<tr>
<td></td>
<td>Collette Lessard, MD FACOG</td>
</tr>
<tr>
<td>TNRG- topic</td>
<td>Stephanie DeCoteau</td>
</tr>
<tr>
<td>Next Initiative: Survey Results</td>
<td>Morgan Barnes</td>
</tr>
</tbody>
</table>

Storyboards
Sanford Bismarck
Altru Grand Forks
Jamestown Regional Medical Center
Sanford Sioux Falls
Brookings Health System
Sanford Fargo
Allsyon Felix- Video

- https://www.youtube.com/watch?v=xmIcTyi38kg
Blood Pressure Protocol Training

- Training developed in 2016 by Pat Spier and Barb Rice (BlueCross BlueShield)
- Created in conjunction with the ND Million Hearts Program, and in collaboration with the ND Department of Health.
- Over 2,400 medical and allied health professionals have attended.
- Evaluations indicate that over 92% of attendees were taking blood inaccurately and WILL make a change to their process.
- Converted to a recorded training in 2020 (pre-pandemic) - but is now able to be offered virtually.
Blood Pressure Protocol Training

Objectives:
1. Identify prevalence of Hypertension in ND
2. Explain why accuracy in measurement of blood pressure is critical
3. Identify lifestyle recommendations to lower blood pressure
4. Recommend tools for education, workflows & review approved community-based protocol
5. Demonstrate proper sizing of BP cuffs and demonstrate proper technique for taking blood pressure in an ambulatory setting
6. Discuss alternate blood pressure measurement sites
Blood Pressure Protocol Training

Competencies

1. Patient is seated with back supported.
2. Patient’s legs are not crossed.
3. Patient’s arm is bare – and cuff is not placed over clothing.
4. Patient and nurse are not talking immediately before or during blood pressure screening.
5. Patient was able to sit for 1 to 5 minutes prior to blood pressure screening.
6. If blood pressure was elevated:
   1. Patient and nurse discussed any factors that could falsely elevate blood pressure, such as, coffee, exercise, or smoking in the last 30 minutes.
   2. Patient is allowed to rest, and blood pressure is retaken 1-5 minutes after initial elevated reading.
Pilot Training Data: (May/December 2021)

Total Attended: 320 – across 11 locations

- Did the training **CHANGE** how they take a BP?
  - 82% of attendees indicated they will **MAKE A CHANGE** due to the knowledge gained during the training.
  - Specifically, they listed:
    - Cuff size
    - Patient positioning
    - Not talking to patient during BP
    - Cuff over clothing
    - Ensuring empty bladder
Barriers/Constraints to BP Accuracy

- #1 Barrier: Time Constraints
  - Solutions?

- #2 Barrier: Resource Availability
  - Solutions?

- #3 Barrier: Work Flow
  - Solutions?
Blood Pressure Protocol Training

Upcoming Virtual Training Dates:
1. Monday, February 14 at noon to 1pm CST
2. Thursday, February 17 at noon to 1pm CST
3. Thursday, February 24 at noon to 1pm CST

- 1 free ND Board of Nursing CE will be supplied.
- Participants are asked to complete a pre-test, post-test and evaluation.
- Registration is **REQUIRED**.
- **Goal**: all staff implementing the NSDPQC program attend.
Blood Pressure Protocol Training

Next Steps:
1. One point person from your facility to send training advertisement and registration link.
2. I will send updated lists for your facility to ensure all staff are registered and attend.
Blood Pressure Protocol Training

Any Questions?

Tiffany R. Knauf, MA
Health Systems/Hypertension Coordinator
North Dakota Department of Health
701.328.2333
tknauf@nd.gov
Quarterly Report
Summary
Quarterly Report: Staff Trained

**Q1 Percentage of Staff Trained**

- **Increase**: 3
- **Decrease**: 1
- **No Change**: 0

**Q1 Did You Reach NSDPQC Goal: % Staff Trained?**

- **Yes**: 4
- **No**: 0
Quarterly Report: Blood Pressure Compliance

Q1 Blood Pressure Compliance

<table>
<thead>
<tr>
<th>Reported Trends</th>
<th>Number of Reporting Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td>1</td>
</tr>
<tr>
<td>Decrease</td>
<td>1</td>
</tr>
<tr>
<td>No Change</td>
<td>3</td>
</tr>
</tbody>
</table>

Q1 Did You Reach NSDPQC Goal: Blood Pressure Compliance?

<table>
<thead>
<tr>
<th>Reported Answers</th>
<th>Number of Reporting Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
</tr>
</tbody>
</table>
Quarterly Report: Deliveries with Proper Follow Up

Q1 Deliveries with Follow Up

- Increase: 3
- Decrease: 1
- No Change: 0

Q1 Did You Reach NSDPQC Goal: Deliveries with Follow Up?

- Yes: 2
- No: 1
Quarterly Report: Education

Q1 Education Criteria

- Increase: 3 facilities
- Decrease: 1 facility
- No Change: 0 facilities

Q1 Did You Reach the NSDPQC Goal: Education?

- Yes: 4 facilities
- No: 1 facility
Quarterly Report: Barriers

- Short staffed, extra shifts and burnout
- Staff availability for screening compliance
- Turn over/ Influx of new staff needing BP training
- Time constraints
- Determining defined parameters/criteria for patient follow up
Quarterly Report: SUCCESSES!

- 81% of staff trained! (Includes new nurse in training)
- 68% of staff trained, plans for more to attend in February
- 100% of December patients with hypertensive disorders had follow up scheduled at clinic 1 week post discharge!
- Increased provider buy-in for proper follow up
- Nurses are using knowledge from BP Protocol Training
- Plans in place to standardize protocols, order sets, review education materials and warning sign sheets
An NSDPQC Improvement Moment: Aims, Changes, and Measurement

Alicia Belay, MPH, PHD
Assistant Director, Health Equity Office NDDoH
CHOOSING AN AIM

- This is like your ‘north star’, leading you.
- A good aim is FAST:
  - Frequently discussed
  - Ambitious
  - Specific
  - Transparent
AIM STATEMENT

What:
State the focus of the effort

How good?
Declare a numerical goal for outcomes (ambitious but achievable)

By When?
Specify the timeframe

For whom?
Name the customer or population of focus. Primary persons to receive benefit.

Where?
Define the process

What is the scope? What are the boundaries?
Why Aims Matter: the tale of the noisy hospital

Initial Aim: Improve percent of patients reporting room is quiet at night

Eventual Aim: Improve percent of patients reporting they got 6+ hours of sleep from 30% to 60% by March 31, 2017.
CHOOSING AN AIM

- If your niece was delivering at our institution, what would you want to be different?
- What process would need to be different to have been outcomes?
- If you waved a magic wand to make outcomes better, what one or two things would look different?
- What is the system designed to produce for moms now?
What kind of change do we choose?

- Something innovative? (no, ‘steal shamelessly, share seamlessly’. Don’t reinvent the wheel.)
- Focus on fundamental change versus just reacting to the problem
Reactive vs Fundamental change

Reactive:

Fundamental:
Process redesign, altering approach to be more person-centered, standardization, hardwiring changes, changing boundaries of the system.
Reactive vs Fundamental change

Will it be long term impact?

Is it sustainable?

How will this make things better for patients and their families?

Do we understand what causes led to the issue in the first place?

Have we understood from those being ‘trained’ what barriers might be?
MEASURING THE CHANGE
Measurement

Understand measurement for improvement (vs. for research or judgement)

Be sure to measure enough time points

Be on the alert: is this normal variation or improvement?

Don’t just weigh the cow
# Measurement Types

<table>
<thead>
<tr>
<th>Voice of...?</th>
<th>Measures</th>
<th>Key point</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td><strong>Patient/family</strong></td>
<td><strong>How is system performing?</strong></td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td><strong>Workings of the system</strong></td>
<td><strong>Are the steps in the process performing as planned?</strong></td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td><strong>Workings of systems outside of the intended change</strong></td>
<td><strong>Impact of a change from different directions/dimensions</strong></td>
</tr>
</tbody>
</table>

**Recommendation:** include all of these in your initiative!
# Measurement Example

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Process</th>
<th>Balancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>% women treated for hypertension in 60 minutes or less</td>
<td>Average time in waiting room</td>
<td>Patient satisfaction</td>
</tr>
<tr>
<td>% of women attending follow up appointment for hypertension</td>
<td>% providers who took training of treatment for hypertension</td>
<td>Staff satisfaction</td>
</tr>
<tr>
<td>% of women receiving correct treatment after identification of hypertension</td>
<td>% of women who were provided education on follow-up care for hypertension</td>
<td>Impact on treatment for non-hypertension patients</td>
</tr>
</tbody>
</table>
Elements of A Run Chart

- Measure: Pounds of Red Bag Waste
- Elements of A Run Chart
- Time

Graph shows fluctuation over time with a median line.
Cycle Time Results for 1, 2, and 3

Unit 1

Cycle Time (min)

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Change Made

Unit 2

Cycle Time (min)

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Change Made

Unit 3

Cycle Time (min)

Age Before Change Age After Change
Change Made

Cycle time...
Thank you for not being too busy to improve!
ND PRAMS 2020
Supplement: Experiences with COVID-19

Grace Njau, Director
Special Projects and Health Analytics, NDDoH

Ramona Danielson, Assistant Professor
NDSU Dept. of Public Health
COVID-19 Experiences Supplement

- Questions added during 2020 data collection cycle
- Data from women responding to survey Nov. and Dec. 2020, N=142
- Had their babies in Sept. 2020 or later
- First confirmed case of COVID-19 in ND was Mar. 11, 2020
Prenatal care – type of appt

• 75% - only in-person prenatal care appointments

• Reasons for not having virtual visits:
  • 86% - preferred seeing their provider in person
  • 17% - virtual appts with their provider were not available
  • Small proportions of women did not have enough cellular data or minutes (3%) or lacked reliable internet (2%)

• 23% - combo of in-person and virtual visits

• 2% - no prenatal care
Prenatal care – Reasons for canceled or delayed prenatal care appts

• 10% - self-isolate due to possible COVID-19 exposure/infection
• 7% - afraid of being exposed to COVID-19
• 7% - provider’s office was closed or had reduced hours
• 4% - problems finding care for their children or other family members
COVID-19 experiences while pregnant – prevention activities

Activities women always or sometimes did to avoid getting infected by COVID-19 during pregnancy

<table>
<thead>
<tr>
<th>Activity</th>
<th>Always</th>
<th>Sometimes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover coughs</td>
<td>95%</td>
<td>3%</td>
</tr>
<tr>
<td>Wash hands</td>
<td>90%</td>
<td>6%</td>
</tr>
<tr>
<td>Use sanitizer</td>
<td>75%</td>
<td>21%</td>
</tr>
<tr>
<td>Wear mask</td>
<td>74%</td>
<td>19%</td>
</tr>
<tr>
<td>Short outings</td>
<td>66%</td>
<td>24%</td>
</tr>
<tr>
<td>Limit outings</td>
<td>56%</td>
<td>33%</td>
</tr>
<tr>
<td>Avoid groups</td>
<td>52%</td>
<td>36%</td>
</tr>
<tr>
<td>Stay 6 ft away</td>
<td>51%</td>
<td>39%</td>
</tr>
<tr>
<td>Avoid visits</td>
<td>49%</td>
<td>34%</td>
</tr>
</tbody>
</table>

- Cover coughs
- Wash hands
- Use sanitizer
- Wear mask
- Short outings
- Limit outings
- Avoid groups
- Stay 6 ft away
- Avoid visits

Always
Sometimes
COVID-19 experiences while pregnant

- Responsibilities/job prevented them from staying home: 65%
- Other people did not practice social distancing when went out: 64%
- Someone in HH had job that required close contact: 61%
- Found it hard to wear a mask (breathing, claustrophobia): 34%
- Had trouble getting hand sanitizer/soap for their household: 24%
- Had trouble getting disinfectant to clean their home: 22%
- Had been told they had COVID-19 by a HCP: 14%
- Someone in HH was told by HCP they had COVID-19: 13%
- Had trouble getting or making masks or cloth face coverings: 8%
Experiences in the hospital – support person in delivery room

- 92% - husband or partner with them in the delivery room
- 5% - some other family or friend
- <1% - not allowed a support person by the hospital
- <1% - another support person
  - Some said they were alone; other responses included photographer, mother and partner, mother and the father of her baby
- None said they had a doula
Experiences in the hospital – after delivery

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given info about how to protect baby from COVID-19 at home</td>
<td>48%</td>
</tr>
<tr>
<td>Wore a mask when other people came into hospital room</td>
<td>44%</td>
</tr>
<tr>
<td>Given info about how to protect baby during breastfeeding</td>
<td>40%</td>
</tr>
<tr>
<td>Work mask while breastfeeding</td>
<td>15%</td>
</tr>
<tr>
<td>Wore mask while alone caring for baby in room</td>
<td>14%</td>
</tr>
<tr>
<td>Baby was tested for COVID-19 in the hospital</td>
<td>8%</td>
</tr>
<tr>
<td>Had trouble getting visit from lactation specialist</td>
<td>2%</td>
</tr>
<tr>
<td>Was separated from baby to protect the baby from COVID-19</td>
<td>2%</td>
</tr>
<tr>
<td>Pumped breast milk to avoid getting baby infected</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note: Bars in green are breastfeeding-related experiences
Impact of COVID-19 pandemic on baby’s routine health care

• 5% - baby’s well visits or checkups were canceled or delayed
• 4% - baby’s immunizations were postponed
• <1% - baby’s well visits or checkups were changed from in-person visits to virtual appointments (video or telephone)
Postpartum appointments among women

- In-person appts only, 81%
- Virtual appts only (video or phone), 1%
- Both in-person and virtual appts, 9%
- No postpartum visits for themselves, 9%
Stressors due to the COVID-19 pandemic

• Mental Health
  • 46% said they felt more anxious than usual
  • 29% felt more depressed than usual
• Interpersonal
  • 20% said they and their husband or partner had more verbal arguments or conflicts than usual
  • 3% said their husband or partner was more physically, sexually, or emotionally aggressive towards them
Stressors due to the COVID-19 pandemic

- **Financial**
  - 28% said they or a member of their household received unemployment benefits
  - 26% lost their job or had a cut in work hours or pay
  - 22% had other members of their household that lost their jobs or had a cut in work hours or pay
  - 16% had problems paying the rent, mortgage, or other bills

- **Basic Needs**
  - 31% had to spend more time than usual taking care of children or other family members
  - 21% said loss of childcare or school closures made it difficult to manage all of their responsibilities
  - 10% worried whether their food would run out before they got money to buy more
  - 8% had to move or relocate
  - 2% became homeless
Insights from COVID-19 testing/birth outcomes data

- Research Q: Did infants born to pregnant people in ND with a positive COVID-19 test during pregnancy from Apr. – Dec. 2020 have worse birth outcomes than infants born to pregnant people without a record of a positive COVID-19 test during pregnancy?
- 8,747 birth records from Apr.-Dec. 2020 merged with NDDoH COVID-19 testing data
- 311 ND women (about 3.5% of birth records) had a positive COVID-19 test record while pregnant in these 9 months
- Used propensity score matching to control for demographic and health-related characteristics that could potentially influence likelihood of exposure to COVID-19 or that could impact birth outcomes
Infants born to ND women who had a positive COVID-19 test during pregnancy from Apr. – Dec. 2020 did not have significantly different birth outcomes than infants born to ND women without a record of a positive COVID-19 test during pregnancy in the same period.

Table 1. Infant Birth Outcomes for North Dakota Women With a Positive COVID-19 Test During Pregnancy and the Matched Cohort of Women Without a Positive COVID-19 Test During Pregnancy Between Apr. and Dec. 2020

<table>
<thead>
<tr>
<th>Infant Birth Outcomes</th>
<th>Cases (N=311)</th>
<th>Matched Controls (N=311)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low birthweight</td>
<td>6.1% (19)</td>
<td>7.1% (22)</td>
<td>.63</td>
</tr>
<tr>
<td>Preterm birth</td>
<td>10.3% (32)</td>
<td>10.9% (34)</td>
<td>.79</td>
</tr>
<tr>
<td>Infant stayed in NICU</td>
<td>9.7% (30)</td>
<td>10.6% (33)</td>
<td>.69</td>
</tr>
<tr>
<td>Infant placed on ventilation</td>
<td>8.0% (25)</td>
<td>6.4% (20)</td>
<td>.44</td>
</tr>
<tr>
<td>Infant had 5-min APGAR &lt;7</td>
<td>3.9% (12)</td>
<td>4.2% (13)</td>
<td>.84</td>
</tr>
<tr>
<td>Delivery by Cesarean section</td>
<td>28.9% (90)</td>
<td>28.9% (90)</td>
<td>.99</td>
</tr>
</tbody>
</table>
Key Takeaways

- Most prenatal care visits happened in-person
- Women were more likely to always engage in hygiene-related prevention measures than physical distancing measures
- 2/3 of women had responsibilities/job that prevented them from staying home
- 14% of women were told by a HCP during their pregnancy they had COVID-19
- Nearly all women had a support person in the hospital delivery room; a small proportion of women were separated from their baby to protect the baby from COVID-19 (2%)
- Less than half used COVID-19 safety measures while in their hospital room
- 5% of well visits were canceled/delayed and 4% of immunizations were postponed
- 9% of women did not have a postpartum visit
- 46% felt more anxious than usual and 29% felt more depressed than usual
- More interpersonal conflicts (20%) with 3% saying aggression happened more
- Due to the pandemic, 26% lost a job or had a cut in pay (22% for household member), and 28% in household that received unemployment; 10% had food insecurity, 8% had to move, and 2% became homeless
Thank you!

Grace N. Njau, Director
Special Projects and Health Analytics
North Dakota Department of Health
600 E Blvd Ave, Dept 301
Bismarck, ND 58505-0200
Email: prams@nd.gov | Office: 701.328.3209
http://www.ndhealth.gov/prams
South Dakota PRAMS Data

Katelyn Strasser, MPH, RN
MCH Epidemiologist, Office of Child and Family Services
SDDoH
South Dakota Pregnancy Risk Assessment Monitoring System

Katelyn Strasser, MPH, RN
Maternal Child Health Epidemiologist
South Dakota Department of Health
Purpose of CDC PRAMS

• To assess maternal attitudes and behaviors before, during and after pregnancy
• To provide data for guidance on DOH programs and services, MCH Block Grant performance measures, and to support policies.

Previous and Current Studies

• 2014 & 2016 PRAMS-like Surveys
PRAMS Topics

- Preconception care
- Preconception health
- Pregnancy intentions and birth control use
- Nutrition and maternal weight
- Medical risk factors
- Prenatal care
- Flu vaccinations
- Oral health
- Abuse
- Tobacco use
- Alcohol use
- Drug use
- Breastfeeding
- Infant health
- Infant safe sleep
- Postpartum health and birth control use
- Adverse Childhood Experiences (ACEs)
- Health insurance
- Household income
During the COVID-19 pandemic, which types of prenatal care appointments did you attend?

- In-person only: 69.1%
- Virtual only*: 1.3%
- In-person and virtual: 27.2%
- Did not have PNC: 2.4%

* Too few cases to meet precision standard, interpret with caution
What are the reasons that you did not attend virtual appointments for prenatal care?

- Preferred seeing provider in person: 84.10%
- Lack of availability: 18.9%
- Other reason: 9.2%
- Lack of cellular data or minutes: 4.6%
- Lack of internet or unreliable*: 4.3%
- Lack of telephone: 3.8%
- Lack of computer or device: 3.7%
- Lack of private space: 2.1%

* Too few cases to meet precision standard, interpret with caution
Were any of your prenatal care appointments canceled or delayed during the COVID-19 pandemic due to the following reasons?

- Office closed: 15.5%
- COVID infection: 10.8%
- Afraid of COVID: 8.7%
- No childcare: 7.4%
- Transportation: 2.9%
- Lost insurance*: 1.8%

* Too few cases to meet precision standard, interpret with caution
Behaviors *always* practiced during pregnancy to avoid COVID-19

- **Cover Coughs**: 91.3%
- **Wash Hands**: 82.6%
- **Use Sanitizer**: 72.6%
- **Wore Mask**: 64.9%
- **Short Outings**: 63.7%
- **Limit Outings**: 55.3%
- **6 ft away**: 51.5%
- **Avoid Groups**: 49.3%
- **Avoid Visits**: 48.1%
Experiences during pregnancy

- Others didn't social distance: 69.3%
- Others in household had contact with people: 62.3%
- Can't stay home because of job or responsibilities: 53.9%
- Hard to wear mask: 28.4%
- Trouble getting disinfectant: 26.0%
- Trouble getting sanitizer or soap: 24.3%
- Trouble getting a mask: 8.6%
- Someone in household told they had COVID: 8.5%
- Mom told she had COVID: 7.0%
Who was with you in the hospital delivery room as a support person during your labor and delivery? Check all that apply.

- Husband or partner: 85.4%
- Other family or friend: 13.1%
- No support person allowed*: 1.8%
- Doula*: 1.5%
- Other*: 0.9%

* Too few cases to meet precision standard, interpret with caution
In what ways did the COVID-19 pandemic affect your baby’s routine health care?

- Postponed immunizations: 8.3%
- Checkups canceled: 6.6%
- Checkups changed to virtual: 4.4%
During the COVID-19 pandemic, which types of postpartum appointments did you attend for yourself?

- In-person only: 82.1%
- Did not have a postpartum visit: 9.1%
- In-person and virtual: 6.6%
- Virtual only*: 2.2%

* Too few cases to meet precision standard, interpret with caution
Experiences due to the COVID-19 pandemic

- Anxiety: 53.0%
- More time caring for children or family: 30.4%
- Depression: 26.4%
- Lost job or pay: 23.2%
- Problems paying bills: 22.4%
- Increase in verbal arguments: 18.9%
- Difficulties due to a loss of childcare: 18.0%
- Food insecurity: 17.9%
- Others lost job or pay: 16.2%
- Received unemployment: 15.6%
- Had to move: 6.8%
- Increase in physical, sexual, & emotional aggression: 4.7%
- Became homeless: 2.3%
Trends in SD PRAMS data from 2017-2020
The percentage of mothers who smoked three months before pregnancy has *decreased* over time.
The percentage of mothers who used e-cigarettes or other electronic nicotine products in the last two years has increased over time.
Mothers who drank alcohol the last 3 months of pregnancy has increased over time.
The percentage of mothers who used any illicit drugs in the month before pregnancy has *increased* over time.
Illicit drug use during pregnancy has *increased* over time
Drug Use During Pregnancy Questions
Percent Drug Use Before Pregnancy

- Over-the-counter pain relievers (aspirin, Tylenol, etc.)
  - 2018: 69.0%
  - 2019: 71.8%
- Prescription pain relievers (hydrocodone, oxycodone, etc.)
  - 2018: 3.3%
  - 2019: 3.1%
- Adderall, Ritalin, or another stimulant
  - 2018: 1.9%
  - 2019: 2.0%
- Marijuana or hash
  - 2018: 8.1%
  - 2019: 6.9%
- Amphetamines (speed, crystal meth, ice, etc.)
  - 2018: 1.5%
  - 2019: 1.7%
- Any illicit drugs
  - 2018: 8.6%
  - 2019: 8.5%
Percent Drug Use During Pregnancy

- Over-the-counter pain relievers (aspirin, Tylenol, etc.): 65.4% (2019) vs. 67.2% (2018)
- Prescription pain relievers (hydrocodone, oxycodone, etc.): 3.5% (2019) vs. 3.2% (2018)
- Marijuana or hash: 4.9% (2019) vs. 4.2% (2018)
- Amphetamines (speed, crystal meth, ice, etc.): 1.6% (2019) vs. 1.4% (2018)
- Any illicit drugs: 5.1% (2019) vs. 5.3% (2018)
North Dakota Vaccine Hesitancy by Cultural Group
Kiamya Philson, Health Equity Immunization Coordinator
ND PERSONS OF COLOR BY COUNTY

Source: 2020 ND Compass
https://www.ndcompass.org/demographics/key-measures.php?km=race#0-6980-g
Cass County (Fargo) - 19.0% of population persons of color
Grand Forks County (Grand Forks) - 19.7% of population persons of color
Burleigh County (Bismarck) - 14.3% of population persons of color
Ward County (Minot) - 20.4% of population persons of color
Williams County (Williston) - 24.9% of population persons of color

Ethnic Groups
• Somali
• Ethiopian
• West African
• South Sudanese
• Nepali
• Kurdish
• Liberian
• Hispanic
PRIMARY HESITANCIES

- Fertility/Pregnancy/Breast Feeding
  - Female fertility, male libido, baby’s health
- Government Mistrust
  - Vaccine development timeline, changing protocols
- Social media spread of misinformation
  - Overseas reports, Whatsapp, Facebook
- Community Testimonies
  - Reinfection, Less severe infection, natural remedies
How can we help people make a decision about this vaccine?
• The boosters provide the highest level of protection.
• If enough people are vaccinated, we can prevent 100,000 deaths or more.
• Almost all doctors who have been offered the vaccine have taken it.
• The speed of the vaccines’ development was a result of cutting red tape and bureaucracy, not cutting corners or bypassing any safety precautions.
• The phase 3 trials for the three authorized vaccines enrolled tens of thousands of people, and none were hospitalized or died.
• Take control of your health
Have you gotten your COVID vaccine, yet?

EASE APPROACH

- Elicit the main concern
- Acknowledge the concern w/o judgement
- Share your commitment to health and safety
- Explain what the science says about that concern
COLLABORATION OPPORTUNITIES

- Train the Trainer
- Pop-up events
- Panel discussions
- Non-COVID Community Interaction
QUESTIONS?
CMQCC Hypertension Disorders of Pregnancy Toolkit Update

Ashley Briggs, MD
FACOG
Sanford Health
Summary of Changes from Improving Health Care Response to Preeclampsia (2013)

- Expanded scope to address all hypertensive disorders of pregnancy (HDP)
- Alignment with ACOG definition of severe hypertension with explanation for consideration of treatment at lower “borderline” values
- Low-dose aspirin for prevention of preeclampsia
- Long term follow up after HDP
Maternal Hypertension in the U.S., 1993-2014

Hypertensive disorders of pregnancy

- Gestational hypertension
- Preeclampsia
- Eclampsia
- Chronic hypertension

Source: National Inpatient Sample, CDC
https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-complications-data.htm
North Dakota MMRC 2008-2017

30 deaths
½ were MVA, 3 were suicides, 1 was homicide
3 most frequent medical causes of death: CVD, thromboembolic events and brain aneurysm
*not one cause was from HTN, hemorrhage or sepsis
-54 patients had preeclampsia related stroke
-2 patients with systolic blood pressures between 155 and 160
-4 patients who had diastolic blood pressure’s between 105 and 110
-These 6 patients or 11% would not have been considered for treatment under the current guidelines (treat BP >160/110)
-It is possible that treatment of these patients may have prevented them from suffering a devastating hemorrhagic stroke
-The theoretical risk of inducing severe hypotension has not been reported to any great extent. This data emphasizes the fact that severe range blood pressures will often fluctuate and that stroke can occur at borderline severe ranges of 155 systolic and/or 105 diastolic, meriting consideration of antihypertensive treatment in these cases.
Borderline Severe-Range Blood Pressure Recommendations

- Physician notification of borderline severe BPs
- Physician evaluation of the patient
- Continuous electronic fetal monitoring
- Inpatient observation for a minimum of 24-48 hours
- Vital signs and symptom assessment every 2 hours for a minimum of 24 hours
- Serial assessment of serum labs at least daily for 2 days

*Refer to Toolkit Section: Borderline Severe-range Blood Pressures: A Clinical Conundrum
Blood Pressure Control

- The objectives of treating severe hypertension are to prevent congestive heart failure, myocardial ischemia, renal injury or failure, and ischemic or hemorrhagic stroke.
- Controlling BP is the optimal intervention to prevent deaths due to stroke in women with preeclampsia.
- Target BP: 130-150/80-100mmHg
  - Once BP threshold is achieved:
    - Q10 min for 1hr
    - Q15 min for 1hr
    - Q30 min for 1hr
    - Q1hr for 4 hrs
Magnesium Sulfate

- Magnesium sulfate is NOT an antihypertensive medication
  - Primary effect is via CNS depression
  - Improves blood flow to CNS via small vessel vasodilation
- Magnesium sulfate for seizure prophylaxis is indicated for:
  - Preeclampsia with severe features and severe gestational hypertension
  - ALL cases of severe (>160mmHg/>110mmHg), sustained (lasting 15 minutes or more) hypertension regardless of classification
Magnesium Sulfate

- The rate of seizures in preeclampsia with severe features without magnesium sulfate prophylaxis is four times higher than in those without severe features (4 in 200 versus 1 in 200)
- In asymptomatic cases, 129 women need to be treated to prevent one case of eclampsia
- In symptomatic cases, 36 women need to be treated to prevent one case of eclampsia (severe headache, blurred vision, photophobia, hyperreflexia, epigastric pain)
- Patients with a high BMI (especially greater than 35) that the antepartum level of magnesium may remain subtherapeutic
- For women requiring cesarean delivery (before onset of labor), the infusion should ideally begin before surgery and continue during surgery, as well as for 24 hours afterwards
Magnesium Sulfate

- In the setting of severe preeclampsia, magnesium sulfate should be administered upon diagnosis, continued intraoperatively and until 24 hours after birth.

- For women with preeclampsia undergoing cesarean delivery, the continued intraoperative administration of parenteral magnesium sulfate to prevent eclampsia is recommended.
  - Quality of evidence: Moderate
  - Strength of recommendation: Strong

- For women with severe preeclampsia, the administration of intrapartum-postpartum magnesium sulfate to prevent eclampsia is recommended.
  - Quality of evidence: High
  - Strength of recommendation: Strong

Risk Factors for Preeclampsia

Gestational Hypertension and Preeclampsia, ACOG Practice Bulletin #222, 2020

- Nulliparity
- Multifetal gestations
- Chronic hypertension
- Pregestational diabetes
- Gestational diabetes
- Systemic lupus erythematosus
- Preeclampsia in a previous pregnancy
- Pre-pregnancy BMI > 30
- Antiphospholipid antibody syndrome
- Maternal age 35+ years
- Kidney disease
- Thrombophilia
- Assisted reproductive technology
- Obstructive sleep apnea
<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Risk Factors</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High†</td>
<td>• History of preeclampsia, especially when accompanied by an adverse outcome</td>
<td>Recommend low-dose aspirin if the patient has one or more of these high-risk factors</td>
</tr>
<tr>
<td></td>
<td>• Multifetal gestation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Chronic hypertension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Type 1 or 2 diabetes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Renal disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Autoimmune disease (ie, systemic lupus erythematosus, the antiphospholipid syndrome)</td>
<td></td>
</tr>
<tr>
<td>Moderate†</td>
<td>• Nulliparity</td>
<td>Consider low-dose aspirin if the patient has more than one of these moderate-risk factors§</td>
</tr>
<tr>
<td></td>
<td>• Obesity (body mass index greater than 30)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Family history of preeclampsia (mother or sister)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sociodemographic characteristics (African American race, low socioeconomic status)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Age 35 years or older</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Personal history factors (eg, low birth weight or small for gestational age, previous adverse pregnancy outcome, more than 10-year pregnancy interval)</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>• Previous uncomplicated full-term delivery</td>
<td>Do not recommend low-dose aspirin</td>
</tr>
</tbody>
</table>

*Includes only risk factors that can be obtained from the patient’s medical history. Clinical measures, such as uterine artery Doppler ultrasonography, are not included.

†Single risk factors that are consistently associated with the greatest risk of preeclampsia. The preeclampsia incidence rate would be approximately 8% or more in a pregnant woman with one or more of these risk factors.

§A combination of multiple moderate-risk factors may be used by clinicians to identify women at high risk of preeclampsia. These risk factors are independently associated with moderate risk of preeclampsia, some more consistently than others.

§Moderate-risk factors vary in their association with increased risk of preeclampsia.

Example of EMR use for ASA risk factors:

ASA risk factors:
Patients with any of the following risk factors should receive 81mg aspirin daily in pregnancy:
{abbASAriskfactors:51164}

Patients with two of the following risk factors should receive 81mg aspirin daily in pregnancy:
{abbASAriskfactors2:51165}

Need for 81mg aspirin for preeclampsia prophylaxis? {Yes:37782}

- History of preeclampsia
- Chronic hypertension
- Multifetal gestation
- Type 1 or 2 diabetes
- Renal disease
- Autoimmune disease (e.g., SLE, antiphospholipid syndrome)
- None

ASA risk factors:
Patients with any of the following risk factors should receive 81mg aspirin daily in pregnancy:
{abbASAriskfactors:51164}

Patients with two of the following risk factors should receive 81mg aspirin daily in pregnancy:
{abbASAriskfactors2:51165}

Need for 81mg aspirin for preeclampsia prophylaxis? {Yes:37782}

- Nulliparity
- BMI >= 30
- Family history of preeclampsia in first degree relative
- African American race
- Low socioeconomic status
- Age 35 or older
- Personal history factors (low birth weight or SGA, previous adverse pregnancy outcomes, >10 year pregnancy interval)
- None
Low Dose Aspirin

- **Preeclampsia MOA:** imbalance in prostacyclin and thromboxane $A_2$ metabolism
- **Aspirin inhibits thromboxane $A_2$ at lower doses**
  - Anti-inflammatory, anti-angiogenesis, anti-platelet
- **81mg/day prophylaxis recommended for women at high risk of preeclampsia**
  - Initiated between 12-28 weeks gestation
  - (optimally before 16 weeks)
  - Should be continued daily until delivery (research has shown it is most effective at bedtime)
- **When to stop low-dose aspirin**
  - Discontinued at 36 weeks because of the possible bleeding risks associated with delivery
  - Because most preeclampsia occurs after 36 weeks, that the aspirin may be beneficial to continue through delivery, into the postpartum period
Low Dose Aspirin

- 2017 the United States Preventative Services Task Force (USPSTF) found low dose aspirin (LDA) (60-150 mg) in women at increased risk for preeclampsia reduced their risk for:
  - preeclampsia (24%)
  - preterm birth (14%)
  - intrauterine fetal growth restriction (IUGR) (20%)

- LDA should be avoided in patients with aspirin allergies or prior adverse effects of its use, those with aspirin-sensitive asthma, or gastrointestinal bleeding

- Risks associated with taking prenatal aspirin
  - No increase in infant loss, growth problems, or cognition harm to the baby
  - No statistically significant impact on risk of placental abruptions, postpartum hemorrhage (bleeding), or miscarriage to the mother
  - No differences in developmental outcomes of the infants up to age 18 months
Ask About Aspirin
It may delay or prevent the onset of preeclampsia

If you have any of these risk factors
- History of preeclampsia
- Pregnant with more than one baby
- High blood pressure
- Diabetes
- Kidney disease
- Autoimmune disorders

Talk to your care provider about taking prenatal aspirin

Start taking 81mg aspirin between 12-16 weeks of your pregnancy daily at bedtime

To learn more, visit preeclampsia.org/aspirin

Copyright © 2019 Preeclampsia Foundation. All Rights Reserved.

Preeclampsia Foundation
https://www.preeclampsia.org/aspirin
Information available in English and Spanish
Overview

- Review of safe ways to coordinate care with Emergency Departments and transfer of care from rural facilities
- Postpartum follow-up - appropriate timing
- Debriefings
CMQCC Toolkit Updates

- Joint Commission’s publication for “Standards for Maternal Safety” - Aug 2019
  - Purpose is to help facilities reduce the likelihood of harm related to maternal severe hypertension/preeclampsia
- CMQCC’s Toolkit updates guidelines on best practices for hypertensive disorders
  - Organized using the 4R principles to align with the AIM national maternal safety bundles
    - Readiness
    - Recognition
    - Response
    - Reporting
3. Provide role-specific education to all staff and providers who treat pregnant/postpartum patients about the hospital’s evidence-based HDP procedure. At a minimum, education occurs at orientation, whenever changes to the procedure occur, or every two years. Note: The emergency department is often where patients with symptoms or signs of severe hypertension present for care after delivery. For this reason, education should be provided to staff and providers in emergency departments regardless of the hospital’s ability to provide labor and delivery services.

Relevant resources from Toolkit:

- Section: Focus on Delayed Postpartum Preeclampsia and Eclampsia in the Emergency Department on page 60
- Appendix B: Suspected Preeclampsia Algorithm on page 178
- Appendix D: Preeclampsia Screening Tools on page 192
- Appendix E: Acute Treatment Algorithm on page 195
- Appendix L: FAQs for Timely Treatment for Acute-Onset Severe Hypertension during Pregnancy and the Postpartum Period on page 223
- HDP Toolkit Education Slide Set
**Readiness - Emergency Department**

**Box 2: Diagnostic Criteria for Preeclampsia (ACOG)**

**Blood pressure**
- Systolic blood pressure of 140 mm Hg or more or diastolic blood pressure of 90 mm Hg or more on two occasions at least 4 hours apart after 20 weeks of gestation in a woman with a previously normal blood pressure.
- Systolic blood pressure of 160 mm Hg or more or diastolic blood pressure of 110 mm Hg or more (Severe hypertension can be confirmed within a short interval (minutes) to facilitate timely antihypertensive therapy).

**AND**

**Proteinuria**
- 300 mg or more per 24-hour urine collection (or this amount extrapolated from a timed collection) or
- Protein/creatinine ratio of 0.3 or more or
- Dipstick reading of 2+ (used only if other quantitative methods not available).

In the absence of proteinuria, new-onset hypertension with the new-onset of any of the following:
- Thrombocytopenia: Platelet count less than 100 x 10^9/L
- Renal insufficiency: Serum creatinine concentrations greater than 1.1 mg/dL or a doubling of the serum creatinine concentration in the absence of other renal disease
- Impaired liver function: Elevated blood concentrations of liver transaminases to twice normal concentration
- Pulmonary edema
- New onset headache unresponsive to medication and not accounted for by alternative diagnoses or visual symptoms.

**Box 3: Preeclampsia with Severe Features**

- Systolic blood pressure of 160 mm Hg or more, or diastolic blood pressure of 110 mm Hg or more on two occasions at least 4 hours apart (unless antihypertensive therapy is initiated before this time)
- Thrombocytopenia (platelet count less than 100 x 10^9/L)
- Impaired liver function that is not accounted for by alternative diagnoses and as indicated by abnormally elevated blood concentrations of liver enzymes (to more than twice the upper limit normal concentrations), or by severe persistent right upper quadrant or epigastric pain unresponsive to medications
- Renal insufficiency (serum creatinine concentration more than 1.1 mg/dL or a doubling of the serum creatinine concentration in the absence of other renal disease)
- Pulmonary edema
- New-onset headache unresponsive to medication and not accounted for by alternative diagnoses
- Visual disturbances

Note from HDP Task Force about Box 2: Diagnostic Criteria for Preeclampsia

If the patient has been diagnosed with gestational hypertension or preeclampsia, and meets the BLOOD PRESSURE diagnostic criteria for severe hypertension (≥ 160/110 mm Hg confirmed) she immediately meets the treatment criteria for preeclampsia with severe features.

Do not wait to treat the hypertensive emergency!

Continue to assess for and confirm additional criteria for preeclampsia diagnosis after or concurrent with antihypertensive administration.
Readiness - Emergency Department

- HDP is one of leading causes of maternal morbidity and mortality
- There has been an overall decrease in frequency of eclampsia, however, the frequency of postpartum and delayed eclampsia has increased
  - Makes it more common for these patients to present to the ED
- Obstetric consultation is warranted in every case of preeclampsia
- All clinicians working in the ED should be knowledgeable of, and comfortable with, initial management
  - Need a high index of suspicion for HDP
  - Most patients presenting will have no history of preeclampsia
  - Education to ED personnel on varying presentations, diagnoses and treatment of HDP is critical for rapid identification and triage
Readiness - Emergency Department

- Information and resources to ensure that HDP can be recognized at the first signs of disease progression
- Most important first step →
  - Identify whether they are or have been pregnant in the last six weeks
    - Triage assessments of females in ED should always include the question of current or recent pregnancy
  - If yes → assess immediately
- Education to ED staff (nurses, CNAs, physicians, etc)
  - The critical (“trigger”) BP in pregnancy and postpartum is > 160 mmHg systolic or > 110 mmHg diastolic
  - these are lower values than used for hypertensive emergencies in non-obstetric patients
Readiness - Emergency Department

- Pregnant or recently postpartum women with elevated BP, neurologic symptoms or other signs/symptoms preeclampsia can deteriorate rapidly
  - The emergency physician and OB physician should be notified immediately
- Do not overlook other neurologic causes of seizure
- Neuroimaging must be performed if clinically indicated
  - Whether pregnant or postpartum
  - Stroke should be part of differential when presenting with neurologic symptoms
    - Seizures in 1st or early 2nd trimester, or well into the postpartum period, warrant full eval for conditions other than preeclampsia
    - Neuro deficits may be associated with cerebral vasoconstriction syndrome
      - Aka postpartum angiopathy or PRES (posterior reversible encephalopathy syndrome)
- Discuss best practice/workflow for your individual facility with your Emergency Department staff
  - Discuss as an interdepartmental team
  - Develop workflows together
Readiness - Emergency Department

- Important Statistics/Reminders
  - Up to 26% of eclamptic seizures occur beyond 48 hours, and as late as 4-6 weeks after delivery
  - Most eclamptic seizures occur within the first 7 days of delivery
  - As may as 78% of these postpartum patients have no previous diagnosis of hypertensive disease with the antecedent pregnancy
  - 50% of women with gestational hypertension will develop preeclampsia*
  - The clinical presentation of delayed postpartum preeclampsia may be atypical
    - Most common complaint (69%) is headache
    - Most headaches in a recently pregnant patient will likely be isolated but should promptly investigation into possibility of postpartum preeclampsia
Readiness - Emergency Department

- Focus of management by ED personnel
  - Maternal resuscitation
  - Blood pressure management with first line agents
    - Labetalol, nifedipine or hydralazine
  - Seizure prophylaxis with magnesium sulfate
    - MgSO4 is drug of choice for eclampsia in pregnancy and postpartum
  - If cardiac arrest occurs in pregnant or postpartum patient on MgSO4 for preeclampsia or eclampsia
    - Remember to give calcium chloride or gluconate in addition to standard ACLS protocols (p126)
  - These patients are at risk for pulmonary edema and cardiomyopathy
    - If low O2 sat, SOB, or dyspnea → BNP, EKG, CXR, echo, diuresis
  - **Treatment with first-line agents should be expeditious and occur as soon as possible within 30-60 minutes of confirmed severe hypertension to reduce the risk of maternal stroke**
ED triage protocols must identify patients who are currently pregnant or have delivered in the previous 6 weeks. If the patient’s medical records are not available, then ED personnel should directly question the patient, family, Emergency Medical Services (EMS), etc., who may be able to provide the medical history. This information must then be clearly communicated to the treatment team.

Prenatal education for pregnant persons should cover the importance of alerting the ED team at triage of any recent pregnancy or childbirth (within the last 6 weeks) and postpartum medical concerns.

Women’s concerns should be evaluated carefully, especially if she presents to the ED in the postpartum period, when they are often taken less seriously.

Among women who died from pregnancy-related causes, two-thirds received care in an ED at some time in the prenatal or postpartum period, with nearly 40% having more than two visits to the ED.²
Tell us if you are pregnant or have been pregnant within the past 6 weeks.

Come to the front of the line if you have:

- Persistent headache
- Visual change (floaters, spots)
- History of preeclampsia
- Shortness of breath
- History of high blood pressure
- Chest pain
- Heavy bleeding
- Weakness
- Severe abdominal pain
- Confusion
- Seizures
- Fevers or chills
- Swelling in hands or face
Safe Transfer of Care

- Reach out to your local referral centers and rural facilities to provide education to their staff and physicians
- Help them develop a workflow/system to ensure rapid and safe transfer to your facility when indicated
- They should be able to initiate treatment with first line agents and magnesium sulfate
  - Create a working team of nurses, physicians/APPs, pharmacy staff to ensure facilities have the meds readily available and are comfortable w/treatment/administration
Table 1. First line agents for acute-onset severe hypertension in pregnancy and postpartum

In the presence of sinus bradycardia or a history of asthma, hydralazine or nifedipine are preferred as initial agents. If maternal HR >110, labetalol is preferred.

<table>
<thead>
<tr>
<th>Medication Agents</th>
<th>Labetalol IV&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Hydralazine IV&lt;sup&gt;b,c&lt;/sup&gt;</th>
<th>Nifedipine (Immediate release)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route</td>
<td>IV</td>
<td>IV</td>
<td>PO</td>
</tr>
<tr>
<td>Initial therapy</td>
<td>20 mg</td>
<td>5-10 mg</td>
<td>10 mg</td>
</tr>
<tr>
<td>Onset&lt;sup&gt;1–6&lt;/sup&gt;</td>
<td>2-5 minutes</td>
<td>5-20 minutes</td>
<td>5-20 minutes</td>
</tr>
<tr>
<td>Peak&lt;sup&gt;1–6&lt;/sup&gt;</td>
<td>5 minutes</td>
<td>15-30 minutes</td>
<td>30-60 minutes</td>
</tr>
<tr>
<td>Max dose&lt;sup&gt;1,2&lt;/sup&gt; (Before switching agents)</td>
<td>140 mg</td>
<td>20 mg</td>
<td>50 mg</td>
</tr>
<tr>
<td>Mechanism of action</td>
<td>• Combined α and β-blocking agent</td>
<td>Arteriolar dilator</td>
<td>• Calcium channel blocker</td>
</tr>
<tr>
<td></td>
<td>• Arteriolar dilator</td>
<td></td>
<td>• Arterial smooth muscle dilator</td>
</tr>
<tr>
<td></td>
<td>• Decreases heart rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Side effects</td>
<td>• Use with caution in patients with known asthma</td>
<td>• Tachycardia, headache&lt;sup&gt;e&lt;/sup&gt;</td>
<td>• Reflex tachycardia</td>
</tr>
<tr>
<td></td>
<td>• Flushing, light headedness, palpitations and scalp tingling</td>
<td>• Upper abdominal pain (rare)</td>
<td>• Headache</td>
</tr>
<tr>
<td></td>
<td>• Safe for use after cocaine and amphetamine use (including methamphetamine)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>• Flushing</td>
<td>• Flushing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nausea&lt;sup&gt;c&lt;/sup&gt;</td>
<td>• Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Vomiting</td>
</tr>
</tbody>
</table>


Improving Health Care Response to Hypertensive Disorders of Pregnancy, a CMQCC Quality Improvement Project.

**Note regarding medication kit**

Oral labetalol is not recommended for acute hypertensive emergencies and thus should be used only if nifedipine is not available in a patient without IV access. Appropriate dosing: PO, initial therapy 100 mg BID, onset 20 minutes – 2 hours, peak 1-4 hours.
Postpartum Follow Up Timing

- Patients treated with antihypertensive meds during hospitalization should have a follow-up appointment within 3-7 days of discharge
  - Severe preeclampsia patients may need follow-up within 2-5 days of discharge

- All other patients diagnosed with hypertension, but not treated with antihypertensives should be seen for follow-up within 7-14 days of discharge
Debriefing

“To provide the best possible outcomes for women and newborns, it is imperative for facilities that provide maternity care to establish a systems’ learning culture dedicated to perinatal quality, safety, and a performance improvement”
Debriefing

- Debriefs and multidisciplinary reviews are key components of the Standards for Maternal Safety by TJC & recommended by ACOG
  - Provide foundational learning about improvement activities
  - Creates a highly-reliable clinical team
  - Maintains a culture of safety
- Debriefs should happen after the event when possible
  - Allows team to reflect and problem-solve in real time
  - Keep simple
  - Should become a routine part of activities on the unit
Debriefing

- **Goal**
  - To formally assess the overall care the team provided
  - Review the care system
  - Review for potential gaps and identify deficits
  - Improve care for the next patient

- Debriefs and case reviews are standard mechanisms for reviewing events at birth facilities to facilitate learning and drive improvement
  - Safe, non-punitive exercise

- Implement system learnings from these debriefs/reviews
Debriefings – Just Do It

- Simple activity but is a key piece in establishing long term improvement in patient care and safety

- “best practice” but difficult for many units to embrace

- Limit them to 5-10 mins

- Debriefings on complicated cases that cannot be covered in 5-10 mins can be followed up at a later time with a multidisciplinary case review
Components of a rapid (5-10 minute) debrief (aka ‘Hot Debrief’)

- “What went well?”
- “What could have gone better?”
- “What needs to be followed up on later and by whom?”
Example:
In a routine scheduled cesarean, the obstetrician is having difficulty delivering the head through the hysterotomy and requests a Kiwi vacuum. Nursing staff open the cabinet to retrieve a vacuum and there are none. The nurse quickly calls out to the nurses station and another nurse is able to grab one from a labor room and bring it in the OR. The baby is born 90 seconds after the vacuum was requested with Apgars of 5 and 9.

“What went well?”
- teamwork from nursing staff on the floor to help find the necessary instrument

“What could have gone better?”
- Having the OR stocked with the necessary equipment. Ensuring that all supplies are restocked after use. If the physician was anticipating a difficult delivery she or he could have asked to have a vacuum pulled and ready

“What needs to be followed up on later and by whom?”
- Discussing w/ surgical techs and nursing staff about a process to ensure that supplies are always restocked
Multidisciplinary Review of SMM Events

- Review of Severe Maternal Morbidity (SMM) Events
- TJC requires birth facilities to review cases of HDP & services for process improvement
- Recommend expanding the types of cases reviewed to include those that meet the definition of SMM by AIM/ACOG coding
  - Transfusion of 4 or more units of blood
  - Admission of pregnant or postpartum woman to ICU
  - Eclampsia or severe HELLP syndrome or stroke
  - Cases requiring multiple intensive resources or with challenging clinical scenarios
  - Cases where practices fell below the standard or care or revealed gaps
- Obstetric leaders may want to consider reviewing all SMM cases
- Consider establishing a local Perinatal Patient Safety Program
References

- ACOG
- CMQCC’s Toolkit 2021 - Improving Health Care Response to Hypertensive Disorders of Pregnancy
  - https://www.cmqcc.org/resources-tool-kits/toolkits
Guidance on Working with Native Americans in Health Care

Stephanie DeCoteau
Research Associate, Symposium Director
Tribal Nations Research Group
Guidance on working with Native Americans in Health Care

Stephanie DeCoteau, MSW
Research Associate/Symposium Director
Mollie Lilley, Community Outreach
Tribal Nations Research Group
Understanding Native Americans

• About ¾ of Native Americans (3 million) live near urban areas; about ¼ live in non-urban areas, including reservations.

• Only the small percent of American Indians who are affiliated with registered tribes receive treaty-granted health care benefits; at times this lack of access to health care can lead to frustration.

• In the AI/AN culture, there is historical mistrust of mainstream institutions due to centuries of abuses such as broken treaties, forced boarding schools, forced relocations, forced sterilization, policies banning traditional practices.

• Acknowledging this history is an important step in building trust with your patient and their family.

• While it is important to have a basic knowledge and respect for this culture, remember that all, some, or none of these beliefs may be associated with each patient and their family. There is variability between tribes in their health care seeking and health promotion behaviors.

Native American History with medicine

• Native Americans have their own history in relation to health and medicine. Native American healing traditions vary by tribe, often reaching back thousands of years. There seems to be a consensus among most tribes that health is “an expression of the spirit and a continual process of staying strong spiritually, mentally, and physically.”

• Mourning Dove of the Salish tribe, the first female Native American author to publish a book, wrote, “Everything on the earth has a purpose, every disease an herb to cure it, and every person a mission. This is the Indian theory of existence.” This idea this is reflects the holistic view of medicine that is taught throughout many modern U.S. medical schools and even originates centuries ago with Hippocrates (the father of the Hippocratic Oath) [3].

• Many herbs used by Native Americans have provided derivatives for many modern medications. One statistic says that “more than 120 drugs prescribed by physicians today were first made from plant extracts, and 75 percent of these were derived from examining plants used in traditional indigenous medicine”

• Whether the modern field of medicine recognizes it or not, Native Americans are intricately intertwined into the history of medicine.

http://www.thedifferentialdx.com/native-american-history-a-tale-of-medicine/
The 3 C’s working with Native American Patients & Clients

• **Context** - Understanding the story
  
  • Many different Tribes with different histories can be overwhelming
  
  • Key is to understanding the general history of the relationship between Tribes and US; often this is where the trauma and distrust response you may see in patients comes from.
  
  • Understand that there are many levels of acculturation among Native people- some are very involved in their traditional ways and some have never experienced it. But because of common histories there may be common traumas, behaviors, beliefs passed down about institutions, health care, education, etc.

The 3 C’s working with Native American Patients & Clients

• **Comfort**- Building It
  • People before paperwork – get to know your client, even if it’s just a short conversation, make connections
  • Give a little information about yourself, will help clients open up about themselves
  • Show interest in who they are as a person- maybe you’ve traveled to their home community or know someone from that way – connection is important in Indian communities

The 3 C’s working with Native American Patients & Clients

• **Communication** - Tools and Techniques for Indigenous relationship building
  - Build rapport and alliance – you’re not here to take info and leave, but to learn together about the patient and what can be done to help or improve their health
  - Show a genuine interest, sincerity when asking questions

TIPS when engaging with Native American patients

• Eye Contact
• Don’t rush for answers
• Don’t assume the patient understands, Not asking questions doesn’t mean they understand everything
• Fear and mistrust may be present but not acknowledged or understood
• Be aware of personal space
• Take time to explain, share information
• Acknowledge and incorporate traditional medicines into their treatment plan

Tell me and I’ll forget. Show me and I may not remember. Involve me and I’ll understand.
-Native American Proverb-
Questions?

Tribal Nations Research Group
PO Box 1906
Belcourt, ND 58316
www.tnrg.org
(701) 477-5526
2022 Initiative Survey Results

28 Responses

NSDPQC 2022-2023 Initiative Survey: Substance Use Disorder

- Strongly Agree
- Agree
- Neutral
- Disagree/Strongly Disagree