NICHQ National Institute for Children's Health Quality

HEALTHY start TA & SUPPORT CENTER

Change Ideas to Grow, Nurture, and Lift (CIGNAL)

For Hypertension

The Healthy Start TA & Support Center (TASC) launched a fourth CIGNAL project focused on hypertension. CIGNAL for Hypertension aimed to enhance and strengthen the capacity of Healthy Start (HS) grantees to identify and execute strategies to assure improved and equitable hypertension services for the women and birthing people they serve.

In this iteration of CIGNAL, the TASC hosted a webinar for HS grantees in partnership with Dr. Divya Mallampati, a Perinatologist and Maternal-Fetal Medicine Specialist from the Division of Fetal Medicine and Department of Obstetrics, Gynecology, and Reproductive Sciences at the University of California San Francisco. During the webinar, Dr. Mallampati shared clinical pearls about hypertension and HS grantees explored best practices and challenges associated with addressing hypertension among their communities. Several grantees shared their work around hypertension and all gathered resources and tools for testing strategies in their own communities.

Grantee-identified Best Practices for Preventing Hypertension During Pregnancy

1. Build partnerships with hospitals to **educate staff about listening to clients**.
2. Provide extensive **education on hypertension, pre-eclampsia, and overall heart health**, including for fathers.
3. Encourage birthing people to **develop a postpartum plan** that includes practices for safe sleep, breastfeeding, and hypertension prevention.
4. Educate clients about the **role of the support system** (e.g., fathers, family, friends).
5. Encourage clients to **identify someone to serve as an advocate** and join them at doctor's visits.
6. **Distribute blood pressure cuffs** at no cost to clients so they can monitor their blood pressure during pregnancy.
7. **Conduct home visits** to follow up with clients and monitor blood pressure.
8. **Develop educational materials** focused on pregnancy.
9. **Provide doula support** to pregnant and postpartum birthing people.
10. **Collaborate with community partners** who focus on hypertension and pregnancy (e.g., FQHCs, pediatricians).
11. **Provide post-birth training** for Community Health Workers (CHWs).

Grantee-identified Challenges Around Hypertension

Clinical Challenges:

1. **Labor and delivery deserts**
2. **Limited access to medical treatment** for hypertension
3. **Long waiting periods** at provider visits, which can lead providers to skip blood pressure measurement
4. **Lack of cultural competency** among health care providers
5. **Education fatigue** from clinicians, which leads to clients not being heard and an increased distrust of the health care system
6. **Lack of continuity of care** and challenges with patient follow-up

Social & Community Challenges:

1. **Lack of transportation**, which can lead to missed appointments, or in emergency situations, lmaternal and infant mortality
2. **Limited access to healthy food**
3. **Lack of knowledge and education** about hypertension and its causes.
4. **Losing contact with clients**/clients not utilizing HS staff when they are experiencing hardship
5. **Lack of cultural responsiveness** around food/diet, particularly in Black communities (i.e., culturally irrelevant healthy food pyramids)

Grantee-identified Strategies for Addressing Challenges Around Hypertension

1. **Educate HS staff** on preeclampsia and hypertension.
2. **Advocate for clients**.
3. **Encourage clients to attend their prenatal visit**s for continuous blood pressure monitoring.
4. **Engage local health care providers** (e.g., obstetricians/gynecologists) to discuss hypertension in pregnancy. Open these conversations to the community (e.g., families, birth workers) so they can ask questions and receive resources to share with their networks.
5. **Engage clinicians that represent the communities HS serves**.
6. **Create peer support groups**.
7. **Provide implicit bias training** for health care providers.

Case Study #1: Healthy Start Projects That Are Actively Addressing Hypertension in their Communities

INSTITUTE FOR POPULATION HEALTH (IPH), INC. (DETROIT, MICHIGAN)

Self-Measured Blood Pressure: A Pilot Project

Background: IPH conducted this pilot project to deliver blood pressure devices to the homes of pregnant and/or postpartum people. The goal was to collect data to assess the feasibility of blood pressure monitoring by a nurse during case management visits.

Client Recruitment:

- Received a list of pregnant and postpartum clients with hypertension from a local clinic; Michigan Infant Health Program (MIHP), the statewide home visiting program; and Priority Health Plan
- Enrolled 11 participants since October 2022

Implementation Process:

- Developed intervention workflow for the registered nurse home visit protocol
- Established definition of high blood pressure
- Distributed preeclampsia cuff kit, pressure log, and emergency plan
- Project participants reported blood preasure to providers
- Certified nurse midwife or family nurse practitioner provided telehealth services

Findings:

- Ten blood pressure monitors were distributed
- Seven of the 11 participants are on hypertensive medication and compliant
- Participants have been receptive to the home visits and demonstrated use of blood pressure device
- Stressors impacting blood pressure include lack of transportation, housing, childcare, food, etc.

Next Steps:

- Continue to recruit and engage new participants in the pilot project
- Provide quality follow-up for any blood pressure reading out of range
- Evaluate client experience with self-measured blood pressure monitoring
- Assess client understanding and improve education process around importance of blood pressure monitoring and control

Policy Recommendations:

- Present case study data to Michigan Department of Health and Human Services' Division of Maternal and Family Health. Share importance of blood pressure monitoring in the home for pregnant and postpartum people.
- Make case for policy changes in the MIHP to ensure that blood pressure is checked at all visits. Lack of blood pressure monitoring presents a missed opportunity to address racial disparities in cardiovascular disease, reduce maternal mortality, and prevent preterm delivery.

Case Study #2:
Healthy Start Projects That Are Actively Addressing Challenges Around Hypertension

Strong Beginnings Healthy Start (Grand Rapids, Michigan)
Hypertension Pilot

Background:
- Hypertensive disorders of pregnancy are the second highest cause of pregnancy-related death in Michigan. Black birthing people in Michigan are 2.8 times more likely to die from pregnancy-related causes than White birthing people.
- 1 in 2 Strong Beginnings clients have hypertension and 1 in 4 MIHP clients have hypertension.
- Clients obtain care late and in worse clinical condition due to delays in seeking and identifying care.
- Home visitors have more frequent contact with those at greater risk for hypertensive disorders and can educate and support individuals in managing their risk and treatments.
- While Medicaid will pay for in-home blood pressure cuffs for women diagnosed with hypertension, only a few places are authorized to dispense them, and many clients lack the transportation to get there.

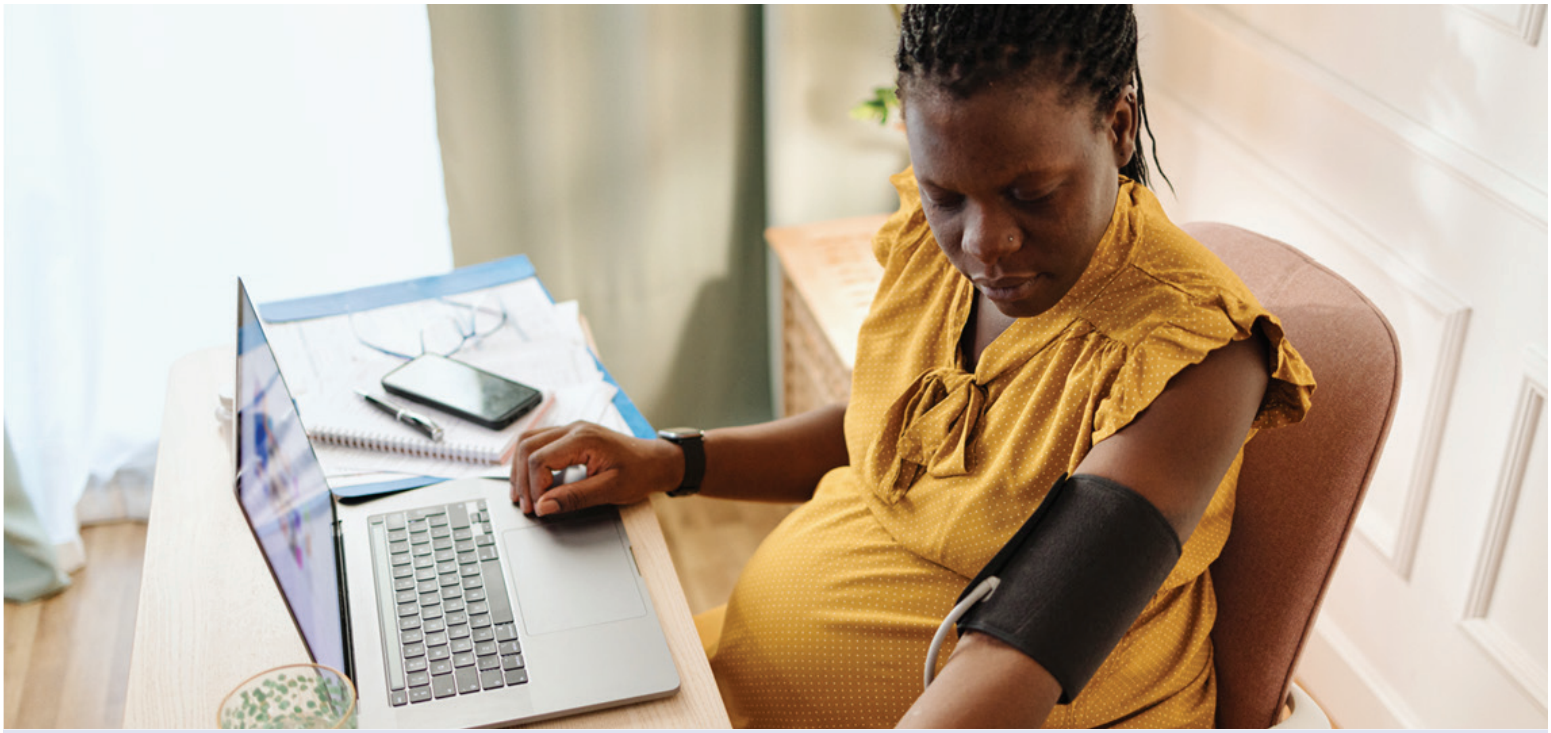
Intervention Overview:
- Trained CHWs and MIHP RNs about hypertension.
- Educated birthing individuals and their families to recognize critical symptoms, get timely care, and engage providers in potentially life-saving conversations.
- Gathered feedback from clients, CHWs, prenatal care clinicians, and health system administrators to create guidelines, educational materials, and processes.
- Developed implementation processes (e.g., workflows, roles & responsibilities, documentation methods) with home visiting providers.
- Strong Beginnings CHWs & MIHP RNs delivered intervention by working in tandem. All Strong Beginnings clients received education on hypertension and preeclampsia. High-risk clients received blood pressure cuffs, were taught to self-monitor blood pressure, and worked with RNs to develop action plans.

Data to Date:
- Client and staff surveys assessed efficacy of educational materials.
  - Client Surveys
    - 89.4% (84) clients stated they learned something from the infographic.
    - 100% (94) clients stated that they would recommend the infographic to friends or family.
    - 98.6% (73) providers stated that the infographic helped them talk about treatment options with their client.
  - Staff Surveys
    - 99% (73) providers stated they would use the handout with other clients.
    - 99% (73) providers stated that the infographic handout helped them talk about treatment options with their clients.

Factors that Made This a Successful Intervention:
- Engaged CHWs, clinicians, administrators, RNs, and others in pilot project development.
- Engaged CHWs who are reflective of the community and maintained small caseloads, which helped foster long-term trust with clients.
- Provided no-cost blood pressure cuffs and taught clients to use them in-home.
- Frequently followed up with clients on their action plans and BP logs.
- Sufficient funding ensured sustainability.
- Compensated clients for field-testing materials and giving feedback.

Challenges:
- Time and competing priorities for both clients and staff.
  - Prioritized CHW interventions and educating clients on risks of hypertension and importance of hypertension control.
- Reaching consensus among clinicians on cut-offs for hypertension.
  - Used recommendations from American College of Obstetrics and Gynecology (ACOG).
- MIHP RNs are not allowed to take BPs.
  - Used a work-around by calling BP measurement "education" and "calibrating BP cuff".
  - Advocated to change this policy.

Next Steps:
- Will meet with CHWs and MIHP RNs and review data, identify what worked or didn't, make necessary changes, and proceed with implementation as a standard intervention.
- Expand intervention to Flint and Detroit through a new grant.
- Create toolkit for use by other communities/programs.
- Continue advocating for policy change to ensure RNs can take BP during home visits and promote rescreening for hypertension.



Hypertension Resources

Hypertension Resources for Patients

- Hypertensive Disorders of Pregnancy (Million Hearts)
- Health Information about Preeclampsia (The Preeclampsia Foundation)
- High Blood Pressure (Hypertension) During Pregnancy (The Cleveland Clinic)

Hypertension Resources for Providers

- Hypertension in Pregnancy (ACOG)
- Information for Healthcare Providers (The Preeclampsia Foundation)
- Severe Hypertension in Pregnancy Bundle (Safe Motherhood Initiative)

State Initiatives and Protocols: The following are a few examples of state-based protocols to address hypertension in pregnancy. If your state is not listed below, we encourage you to search for your state perinatal quality collaborative (PQC) for protocols and guidance. A full list can be found on the CDC website.

- California Maternal Quality Care Collaborative (Hypertensive Disorders of Pregnancy Toolkit)
- Indiana Perinatal Quality Improvement Collaborative (Hypertension Toolkit)
- Ohio Maternal Safety Quality Improvement Project (Best Practices in Hypertension)
- Pregnancy Medical Home Program by Community Care of North Carolina (Management of Hypertensive Disorders of Pregnancy)
- Washington State Perinatal Care Collaborative (Post-partum Follow-up Care Schedule)

Healthy Start TA & Support Center Resources

- **Request 1:1 technical assistance** with Quality Improvement Advisor, Jane Taylor, to help your HS project further develop and test change idea strategies. To request TA, visit the EPIC website, click the "HS EPIC Center Tab" and select "Request Technical Assistance."
- **Connect with the Healthy Start TA & Support Center** at healthystart@nichq.org