

The Cuff Kit



Cuff Kit™ Connection

Monthly Technical Assistance and Peer Learning
January 18, 2023

Eleni Tsigas, CEO

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Agenda

1. Review of Program

- Project Goals
- Distribution Criteria
- Patient Education Tools and Techniques

2. Data Collection & Reporting

- Provider-Reported Data
- Patient-Reported Data

3. Special Issues

- CPT Codes

4. Highlights & Lowlights – *peer to peer learning*

- Case Review

5. Resources

- Literature Review
- Contact Information

...plus time for Q&A



Congratulations on being selected to participate in the Cuff Kit™ Project with MHA

4,364 Cuff Kits are being distributed among 31 locations to serve high risk patients in Missouri.



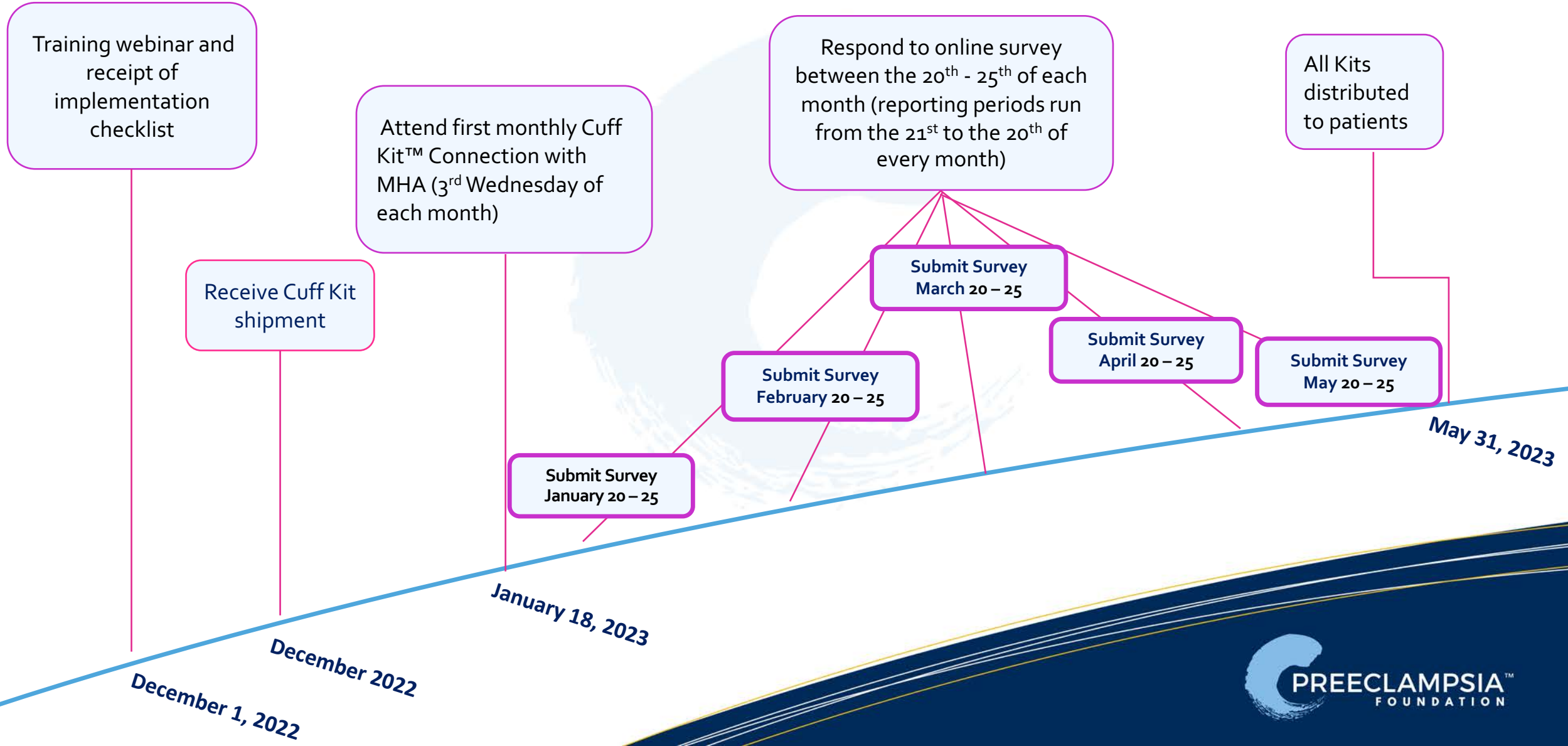
This project is supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$35,569,951 with 100 percent funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. Government. The project has received a portion of this funding from the Department of Health and Senior Services, Office of Rural Health and Primary Care to expand efforts to address health disparities caused by COVID-19.



Project Goals

- **Empower patients** to recognize and report signs and symptoms
- Educate patients and families on **accurate self-measured blood pressure (SMBP)**
- Support reduction of noted **disparities** and COVID-19 effects
- Support **outpatient monitoring and management** of blood pressure
- **Collect data** to demonstrate efficacy and cost effectiveness
 - Diagnosis and management processes
 - Prenatal and postpartum care
 - Payor coverage

Program Implementation Timeline



Criteria for Provider Participation

The Cuff Kit



- ✓Willing and able to prioritize **distribution to high-risk patients**
- ✓Provide complete Cuff Kit contents; **actively educate patients** on correct usage of BP cuffs and measurement tracking
- ✓Telehealth capabilities; identified process for quickly **responding to concerning readings** reported by patients
- ✓Report distribution and patient level utilization **data monthly**

Distribution to Patients

- **WHO: At-risk and vulnerable pregnant and postpartum women**
 - Chronic hypertension
 - History of preeclampsia and/or eclampsia
 - Obesity
 - Advanced maternal age (35+)
 - Autoimmune disorders and other medical comorbidities
 - Racial/ethnicity (Black, Native American) and/or rural location
 - Potentially affected by Social Determinants of Health
- **WHEN:** Any of three pregnancy trimesters (preferably 20+ weeks) or at discharge following birth of baby

Patient Education

- **Review Contents:** Welcome Letter, Signs and Symptoms, Participant postcard, Wristband, Logs, Monitor, and Cuff
- **Demonstrate** how to take proper blood pressure
- Review mechanisms for how to **record/log** patient BP*
- Have **patient demonstrate** proper use
- Use **“teach back”** to ensure understanding of all contents and their uses
- All materials in **English** and **Spanish**

* Take/send a picture of your log; bring paper copy with you to appointment

** Show results on app; email or text results

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The Cuff Kit



Research Data Sources

- Patient reports via text-based surveys
- Provider reports with patient-specific (not identifiable) information
- Administrative data using CPT code

Researchers from Harvard University and University of Chicago Booth School of Business, along with Preeclampsia Foundation and Missouri Hospital Association will be analyzing this information to address economic issues, utility of SMBP and impact on outcomes, and patient preferences.

Your role is critical!

Provider Online Monthly Survey

Thank you for your participation in Phase II of the Cuff Kit Program. Please record information about distribution of the cuff kits at your site.

If you have any questions, please contact the Preeclampsia Foundation by emailing carrie.macmillan@preeclampsia.org.

Site & Provider Information

Provider Identifier (NPI)

Test123

Name

New Tester

Contact Phone Number

(999) 999-9999

Distribution and Utilization

Please indicate the reporting period(s)

JAN 2023

Please select all that apply.

How many Cuff Kits did you distribute during this reporting period?

10

How many Cuff Kits do you still have to be distributed?

20

What challenges, if any, have you had implementing this program or any other feedback?

Expand

If none, please leave this field blank.

During this reporting period, how many patients were up to 4-6 weeks postpartum?

3

These are the patients you will report on in the next section.

Are you a research partner?

Yes No

reset

Submit

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Provider Identifier (NPI)

Name

Contact Phone Number

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Please indicate the reporting period(s)

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How many Cuff Kits did you distribute during this reporting period?

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Yes No

reset

Provider Online Monthly Survey

PREECLAMPSIA FOUNDATION

Individual Patient Reporting

Please complete the form below. Once you click 'submit' you will have the option to add additional patients if you are reporting on more than one patient. If you have any questions, please contact the Preeclampsia Foundation by emailing carrie.macmillan@preeclampsia.org.

Demographics

Patient Identifier
e.g. NPI-9999 8 characters remaining

Age at Delivery, years

Race / Ethnicity
 White Black Native Hawaiian or Pacific Islander Native American Asian Hispanic
Please select all that apply

Individual Risk Assessment

Which of the following HDP risk factors did the patient have?

- None
- Chronic HTN
- Previous History of HDP
- Obesity (BMI \geq 30)
- Primigravida (First Pregnancy)
- Multiparous (Twins, Triplets, etc)
- Autoimmune Disorder(s)
- Postpartum Preeclampsia
- Other


Please select all that apply.

Which of the following Social Determinants of Health may be risk factors for this patient?

- None
- Socioeconomic Status
- Education
- Environmental Factors
- Housing Stability
- Employment/Work
- Social/Emotional Health
- Culture/Language
- Healthcare Access
- Transportation
- Personal Safety
- Rural


Please select all that apply.

Provider Online Monthly Survey

Pregnancy Information	
Date of Delivery	<input type="text"/>  Today M-D-Y
Blood Pressure at the Delivery Admission	<input type="text"/> SBP / <input type="text"/> DBP mmHg
What was this patient's pregnancy outcome?	<input type="checkbox"/> Live Birth <input type="checkbox"/> Stillbirth <input type="checkbox"/> Delivery < 37 weeks <input type="checkbox"/> Delivery < 34 weeks <input type="checkbox"/> Maternal Death <input type="checkbox"/> Diagnosis of HDP <input type="checkbox"/> Postpartum HTN <input type="checkbox"/> Severe Maternal Morbidity
Was the patient readmitted after delivery as a result of hypertension?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown reset
Was the patient taking aspirin during this pregnancy?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown reset
Was the patient on anti-hypertension medication before starting the Cuff Kit Program?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown reset

Provider Online Monthly Survey

Cuff Kit Utilization

Date of Cuff Kit delivery to this patient?  Today M-D-Y

Gestational Age (at time of Cuff Kit distribution)

Were the patient's BP values transmitted electronically via Bluetooth technology on the Cuff Kits? Yes No Unknown [reset](#)

Did the Cuff Kit improve your ability to assess the patient's BP? Yes No Unknown [reset](#)

Was the patient prescribed medication for hypertension at least in part due to SMBP readings from the Cuff Kit? Yes No Unknown [reset](#)

OPTIONAL: Were there any anecdotal stories or outcomes that you feel relates to the use of Cuff Kit for this individual patient?

[Expand](#)

Provider Online Monthly Survey

[Close survey](#)


Missing Participants: Please Continue to Add Participant IDs

To add additional IDs please click the button below. The number of participant IDs should match the number of patients who were 4-6 weeks postpartum.


If you have any questions, please contact the Preeclampsia Foundation by emailing carrie.macmillan@preeclampsia.org.

1 instance of this survey has been recorded

[↻ Click Here to Enter Another Participant ID](#)

 **Survey Queue** [🔗 Get link to my survey queue](#)

Listed below is your survey queue, which lists any other surveys that you have not yet completed. To begin the next survey, click the 'Begin survey' button next to the title.

Status	Survey Title
 Completed	Participant - #1 <div data-bbox="1149 1222 1658 1260">+ Click Here to Enter Another Participant ID</div> <div data-bbox="2226 1215 2430 1253">✎ Edit response</div>

Provider Online Monthly Survey

[Close survey](#)

Thank you for entering all of your IDs.

This form is now complete and you can exit by selecting close survey above.

If you have any questions, please contact the Preeclampsia Foundation by emailing carrie.macmillan@preeclampsia.org.

3 instances of this survey have been recorded

[↻ Click Here to Enter Another Participant ID](#)

☰ Survey Queue [🔗 Get link to my survey queue](#)

Listed below is your survey queue, which lists any other surveys that you have not yet completed. To begin the next survey, click the 'Begin survey' button next to the title.

Status	Survey Title	
✔ Completed	Participant - #1: NPI-001	✎ Edit response
✔ Completed	Participant - #2: NPI-002	✎ Edit response
✔ Completed	Participant - #3: NPI-003	✎ Edit response

[+ Click Here to Enter Another Participant ID](#)

Reporting Monthly Data via REDCap

2023

*Survey will be sent to the Project and Data Lead emails

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
Reporting reminder email					Survey link will be sent out	
22	23	24	25	26	27	28
		Final reminder email	Surveys will be turned in by providers			
29	30	31				

*Monthly submission of inventory/distribution data is required by all providers.

Patient Participation Survey

- Providers **encourage the patients** to enroll in a text-based survey; information on the site-specific postcard.
- Patients will **text a specific code** to receive a reminder to take BP and will **receive survey questions monthly**.
- **Incentives** include \$25 electronic gift card for the first 3-minute survey and a \$5 electronic gift card for the following monthly surveys. Patients will also be entered in a \$500 monthly drawing.



Postcard

SIGN UP

Receive a **\$25 electronic gift card** for a 3 minute survey

Eligible for **\$500 gift card** - every month a new winner



THE UNIVERSITY OF
CHICAGO



The Cuffkit™ Project Survey

Text **MAMA1** to **888-482-7986** to register and consent for our survey and Cuffkit™ reminders

Consent Information



Msg frequency may vary. Reply STOP. to cancel, HELP for help. Msg&data rates may apply. Terms: slk.io/WGqt

Patient Survey #1

Thanks for subscribing to THE CUFFKIT PROJECT SURVEY. By subscribing, you agree to receive a survey, reminders and a \$25 gift card for survey completion.

1. Choose your language
 - a. English
 - b. Español
2. Did you receive a CuffKit™ from your healthcare provider?
 - a. Yes
 - b. No
3. Are you currently receiving pre-natal care?
 - a. Yes
 - b. No
4. What is your age?
 - a. Under 19
 - b. 20-24
 - c. 25-29
 - d. 30-34
 - e. 35-39
5. What is your race?
 - a. White
 - b. Black or African American
 - c. American Indian or Native Alaskan
 - d. Asian
 - e. Native Hawaiian or Other Pacific Islander
6. How much control have you had regarding decisions about your pregnancy?
 - a. None at all
 - b. A little
 - c. A moderate amount
 - d. A lot
 - e. A great deal
7. To what extent do you agree or disagree with the following statement:
"During my pregnancy, I have been treated well by my health care providers."
 - a. Strongly disagree
 - b. Disagree
 - c. Somewhat Disagree
 - d. Somewhat agree
 - e. Agree
 - f. Strongly agree

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Required Patient CPT Codes



More
info
here

All patients receiving a Cuff Kit™ must have the **99473 CPT code** entered in the EHR. Administrative data will be pulled for analysis based on the use of this CPT code.

CPT code 99474 can also be used.



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FOUNDATION
www.preeclampsia.org

Resources

Literature and current studies

- **Not a lot of evidence on the causal impact of SMBPs in the US healthcare system**
- **However some studies have found:**
 - Women diagnosed with a gestational hypertension disorder were admitted to the prenatal ward less when given an at-home BP monitoring device (Lanssens, et al, 2018)
 - Nearly 92% of the women enrolled in a text-based monitoring reported BP cuff program reported a single blood pressure reading compared to only 44% who were not in the program (Hirshberg, 2018).
 - SMBPs helped boost feelings of empowerment, lower anxiety, and would lower health sector costs overall (Yeh et al, 2022)
- **A recent study in the U.K. measured the effect of at-home blood pressure monitoring during pregnancy and failed to find the benefit of SMBP for pregnancy outcomes among British pregnant women (Chappell et al. 2022, Tucker et al. 2022).**
 - However, there are vast differences between the U.K. and U.S. A ProPublica article points out that the two countries had similar rates of maternal mortality in 1950 – but the National Health Service (NHS) lowered its maternal mortality rate dramatically relative to the U.S. through standardization and outreach.

Contact Information

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Cuff Kit™ Connection with

Cuff Kit™ Connection

meetings will be held on the
3rd Wednesday of each month
at **3 PM CT**.

All **Project and Data Leads** are
encouraged to attend and
invite anyone connected to the
program from their location.

January 18, 2023

February 15, 2023

March 15, 2023

April 19, 2023

May 17, 2023



Group Discussion

Q & A

Contact us at cuffkit@preeclampsia.org
or (321) 421-6957 for more information

