



Hypertension in the Time of Telemedicine: Self-Measured Blood Pressure Monitoring

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Learning Objectives



- Review Esperanza's Hypertension Control Strategy
- Covid-19 Impact
- Share home blood pressure monitoring workflow and resources



The mission of Esperanza Health Centers is to deliver **health** and **hope** for Chicago's underserved communities.

Our values

Caring: Bringing compassion, respect and understanding to all those we serve

Quality: Striving for excellence and innovation in every aspect of our work

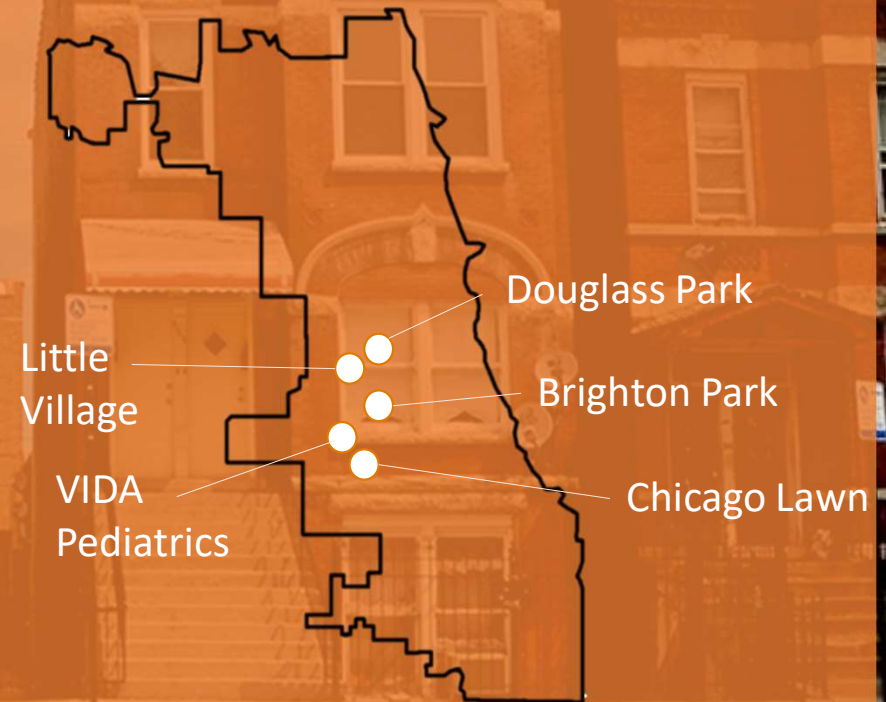
Family: Building a shared sense of community where every person feels welcome and at home

Who We Are



Started in **2004** in the predominantly **Latinx neighborhoods** of Pilsen & Little Village with just **2 providers**, Esperanza today is a **Federally Qualified Health Center** that has

- **290+** employees across **5 sites**
- Over **45,000+** patients & **100,000+** encounters in 2020
- COVID19 testing and mass vaccination
- Integrated medical and behavioral health services
- Specialty care: OBGYN, Psychiatry & Endocrinology
- Robust telehealth and in-person services
- **2019 Million Hearts® Hypertension Control Champion**





CDPH & Esperanza Positivity Rate Comparison

This graph displays the 7 day rolling average of the positivity rate for Esperanza and Chicago (based on [City of Chicago data portal](#)). Both rates are based on the test order date. Due to testing turnaround time, this data excludes the last 7 days of testing.

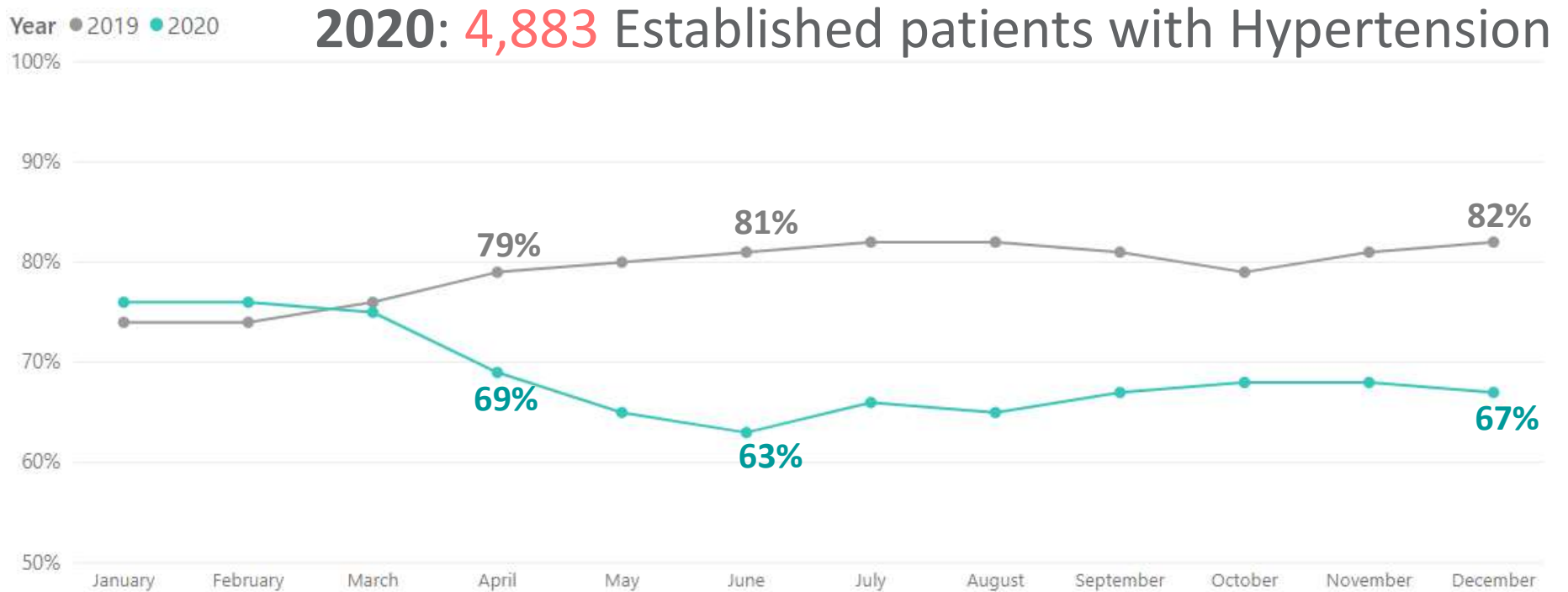
7 Day Rolling Average - Positivity Rate by Test

● CDPH 7 Day Rolling Avg - % Positive ● Esperanza 7 Day Rolling Avg - % Positive



**Started Testing
March 2020**

COVID-19 Impact on Hypertension Control



Why Self-Measured Blood Pressure?



Patients report **not having blood pressure monitors** at home

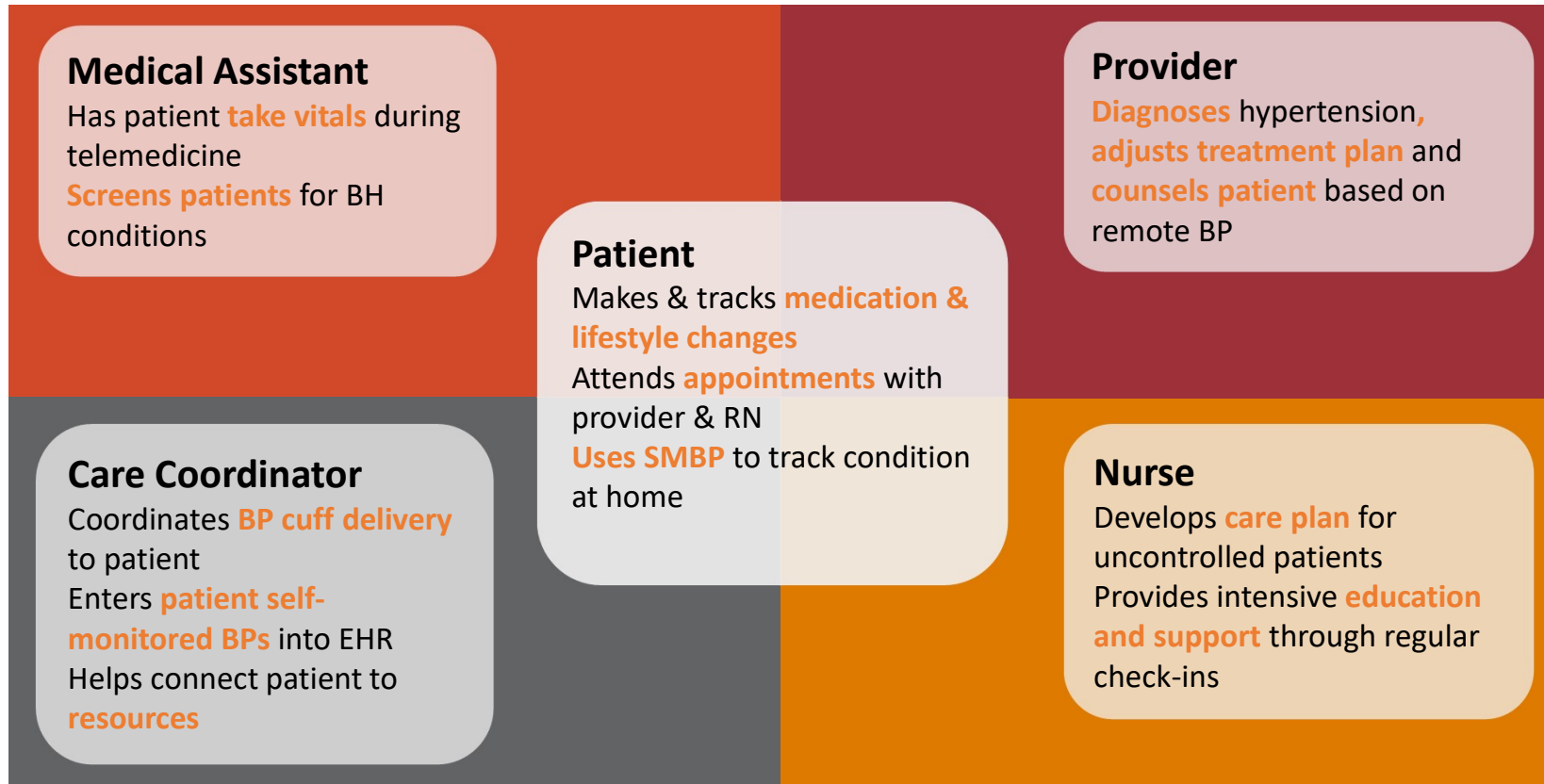


SMBP **enhances the telehealth experience** for patients & care teams



Regular access to BP data **empowers patients** and **improves engagement**

Our Hypertension Control Strategy



Home Blood Pressure Monitoring



1. Getting BP devices to patients

- How are you going to get BP devices to patients?
- How will you identify patients that need BP devices?
- What BP devices should you distribute?

2. Obtaining BP readings

- What does your SMBP workflow look like and who is involved?
- How will you obtain BP readings from your patients?
- What training and support is required?

3. Documenting BP readings

- Who will document BP readings in patient's chart?
- Where will BP readings be documented in Athena?
- How does it fit with SMBP workflow?

4. Measuring Change

- How will we know that a change is an improvement?
- What process measures are important to ensure workflow is going as planned and that you're on track in your efforts to improve?
- What balancing measures are important to see if improving HTN control is causing new problems in other parts of the system?

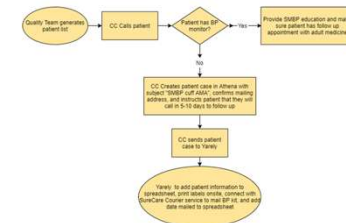
Our Approach



- Partnership with WSU, [AMA](#), and AHA
- Identified patients for BP distribution & SMBP using EHR
- Created workflow designed around the care team & leveraged EHR
- Trained care coordinators on SMBP education, workflow, & EHR documentation
- Piloting [Sphygmo App](#) with one care team and a small group of patients
- Tracking progress using data from EHR to monitor workflow and make changes based on feedback from teams

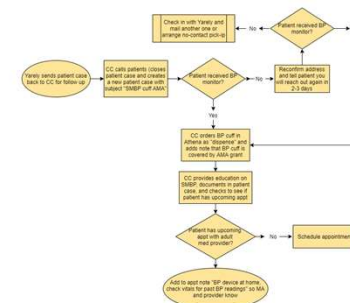
Initial Call and BP Kit Mailing

Ask patient if they have a BP monitor and mail out to those that don't have it



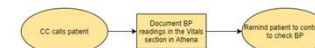
2nd call

CC calls patient 5-10 days after BP kit sent to patient. Ensures patient received BP kit and provides SMBP education



3rd call

CC calls patient the day before appointment and obtains BP reading



Our Hypertension Control Strategy

Call 1

- Asks if patient has BP monitor
- If patient doesn't, offers BP monitor, confirms pickup or delivery and address
- If patient does, provides education & schedules follow-up

Call 2

- Ensures patient received device
- Provides education on how to use device, SMBP, and hypertension
- Reviews BP log with patient
- Ensures patient has follow-up appointment scheduled

Call 3

- Documents BPs in EHR taken the week prior to appointment
- Reminds patient about appointment and importance of SMBP
- Alerts provider if needed

SMBP Call 1: Enrollment



- Can use script
- Offer BP monitor to patient if they do not have one
- Explain program to patient
- Confirm address and phone number
- Send case to Lead CC to enter order

Subject	Centene Grant BP Monitor
Priority	<input type="checkbox"/> This task is urgent
Case Description	CC met with Pt in reference to BP monitor. Pt requested delivery by Surecare Pharmacy. CC confirmed current home address on file with Pt. CC informed Pt that CC will contact her in about 5-10 days to follow up. Pt verbalized understanding.

Blood Pressure monitor ordered and sent to provider to sign. Please contact patient, provide HTN education, tutorial on how to utilize BP monitor, and schedule follow-up appointment with pcp. BP monitor will be mailed to patient's home. ([pin to top](#))

SMBP Call 2: Scheduling & Education



- Confirm patient has received BP monitor
- Provide education on how to use BP monitor and how to take BP correctly
- Schedule patient for appointment (Appt Note: Remote BP Monitoring)
- Let patient know to keep log of BPs and that CC will follow up before appt

Patient received BP monitor. Previous self-management plans reviewed. CC went over BP monitor instructions and let patient know that CC will be f/u with patient to check on BP monitoring. CC provided patient with HTN education. Patient was encouraged to stay physically active throughout the week and to manage daily eating habits. Patient was encouraged to annotate in BP log provided with BP cuff. CC will outreach to patient once again in the next month prior to appt. with pcp. Patient verbalized understanding. Patient is scheduled for f/u with pcp on 6/21/21. Patient was encouraged to contact CC with any questions or concerns.

CC spoke with pt regarding cholesterol education. CC went over myplate, portion measurements and explained what foods need to be avoided: red and processed meats, less eating out, reducing carb intake such as bread, rice, tortillas and pasta. CC went over DASH diet and encouraged to eat more fish, nuts, veggies and increase water. CC also encouraged pt to exercise 30 min every day. CC spoke on how to use blood pressure machine patient already knows how to use machine. Pt verbalized understanding. Pt has been scheduled for appt with Veronica G for May 13 2021 ([pin to top](#))

Patient Performs SMBP

Patients should take two sets of BP measurements, twice a day

- One set of readings in the AM, and one set of readings in the PM
- Each set consists of two measurements performed one minute apart
- Optimally done for seven days leading up to the appointment

Tip: provide patients with clear instructions on when/how to share measurements back; provide guidance on BP readings that patient should contact office immediately about; use home BP log to assist with instructions

HOW TO MEASURE YOUR BLOOD PRESSURE AT HOME



Follow these steps for an accurate blood pressure reading

1 PREPARE

Avoid caffeine, cigarettes and other stimulants 30 minutes before you measure your blood pressure.

Wait at least 30 minutes after a meal.

If you're on blood pressure medication, measure your BP *before* you take your medication.

Empty your bladder beforehand.

Find a quiet space where you can sit comfortably without distraction.

2 POSITION



3 MEASURE

Rest for five minutes while in position before starting.

Take two or three measurements, one minute apart.

Keep your body relaxed and in position during measurements.

Sit quietly with no distractions during measurements—avoid conversations, TV, phones and other devices.

Record your measurements when finished.

BP Log from the AMA & AHA

SELF-MEASURED BLOOD PRESSURE: 7-DAY RECORDING LOG



Before you get started

Self-measured blood pressure (SMBP) monitoring works best when you partner with your health care professional (HCP).

- Review the technique for measuring your BP properly with your care team.
- Every year, ask your HCP's office to check that your device is working properly.
- Determine your BP monitoring plan with your HCP and fill out this section together so you know your plan.
- My BP goal is _____

For most people, measuring twice in the morning and twice in the evening for one week gives the best information about their BP.

- I will use my: right arm left arm

The first time you check your BP, check it in both arms. Use the arm with the higher reading for future measurements.

- I will call my HCP's office if I experience these symptoms:

_____ or _____
 I will also call my HCP's office if my BP is less than _____ or higher than _____.
If your BP is too high or too low, wait 5 minutes and then re-check it. If it is still too high or too low, call your HCP.

- I will send my BP log to my HCP by: phone email patient portal message mail fax

Instructions for EACH TIME you measure your BP

1. Review the "Measuring BP Accurately" graphic to ensure proper BP measurement technique.
2. Take your BP at the same time each day in the morning and the evening.
3. Record your BP readings daily using this log.
4. Fill out the Notes Section with the following:
 - Did you take your medicine?
 - Your mood (anxious, stressed, joyful, etc.)
 - Feelings (lightheaded, headache, , etc.)

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
(Date)	(Date)	(Date)	(Date)	(Date)	(Date)	(Date)
Morning ☀	Morning ☀	Morning ☀	Morning ☀	Morning ☀	Morning ☀	Morning ☀
1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE
2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE
Notes	Notes	Notes	Notes	Notes	Notes	Notes
Evening ☾	Evening ☾	Evening ☾	Evening ☾	Evening ☾	Evening ☾	Evening ☾
1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE	1 SYS DIA PULSE
2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE	2 SYS DIA PULSE
Notes	Notes	Notes	Notes	Notes	Notes	Notes



SMBP Call 3: Taking Remote BP Readings



- Call patient the day before appointment
- Document any BP readings from that week in the Vitals section
- Reinforce importance of checking BP regularly

Vitals

TABLE | GRAPH

	01-26-2021	03-26-2021	04-03-2021	04-06-2021	04-07-2021	
BP		129 / 90 Abnormal	169 / 96 Abnormal	148 / 85 Abnormal	137 / 93 Abnormal	
BMI						
Ht	165.5 cm (5 ft 5.16 in)					
O2Sat	97 % Room Air at Rest					
Pain Scale						
Pulse	80 bpm regular					
RR						
T	97.4 °F temporal artery (36.33 C)					
Wt						
HR						
Note		taken at home	taken at home	taken at home	taken at home	

SMBP Call 3: Taking Remote BP Readings



- Call patient the day before appointment

- Document any BP readings from that week in the Vitals section

- Reinforce importance of checking BP regularly

Subject

Centene BP Cuff

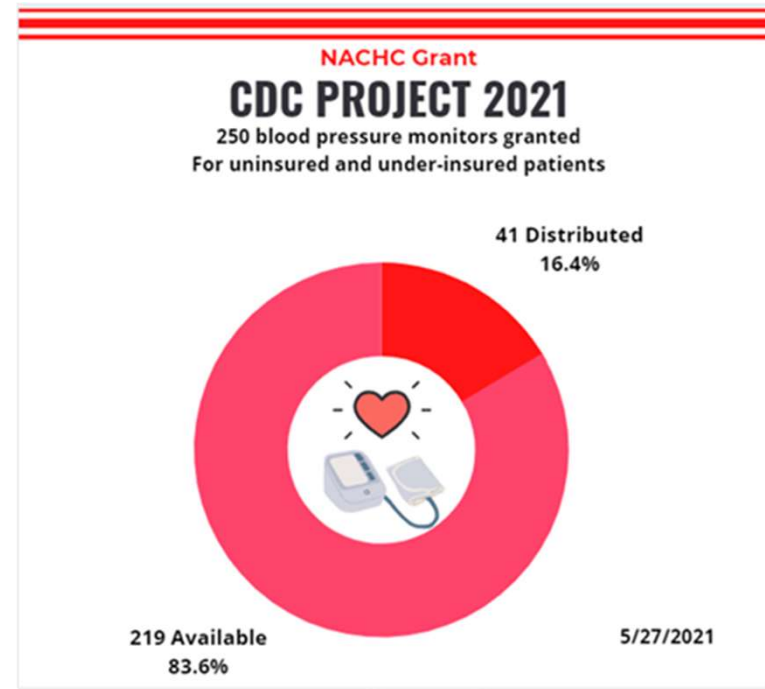
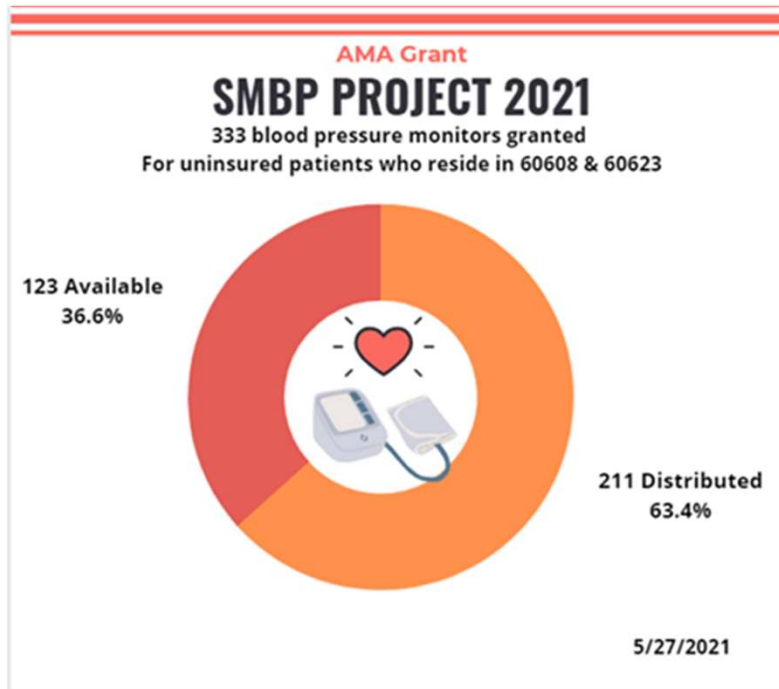
Priority

This task is urgent

Case Description

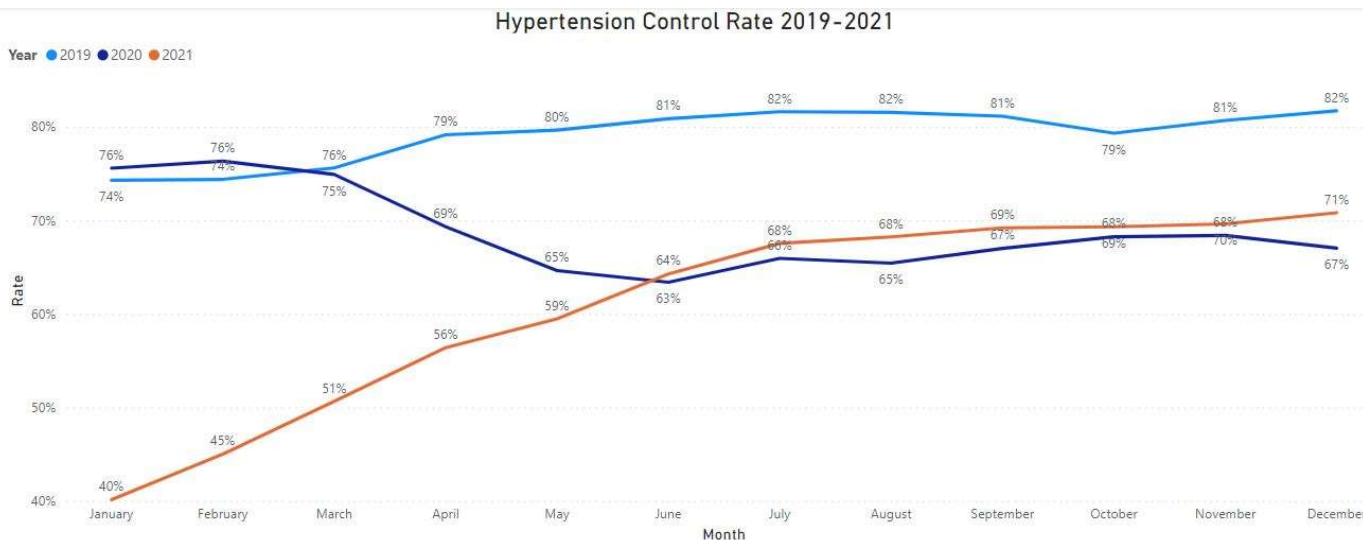
CC f/u with patient to check on BP monitoring. Previous self-management plans reviewed. Patient provided CC with BP readings over past days. Per readings, BP shown as abnormal. Patient was encouraged to stay physically active throughout the week and to manage daily eating habits. Patient was encouraged to annotate in BP log provided with BP cuff. Patient was encouraged to bring BP readings to upcoming visit with pcp and to discuss high blood pressure readings with pcp. Patient verbalized understanding. Patient is scheduled for f/u with pcp on 4/23/21. Patient was encouraged to contact CC with any questions or concerns.

Tracking progress



How are we doing now?

Hypertension Control Rate: 2019-2021



Since the program began at the end of January...

We've distributed over

500 BP monitors

and seen an

11% increase

in the percent of uninsured patients with a BP monitor order



Thank you!
Questions?

www.esperanzachicago.org

