



PREVENTING HEART ATTACKS
& STROKES EVERY DAY



SMBP

Chapa-De Indian Health

3/23/21

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WHAT WERE WE TRYING TO ACCOMPLISH?

Problem Statement

Early in the COVID-19 pandemic we recognized that a key role of ours was to protect those most at risk of developing severe complications of the disease. To do this we focused on managing the blood pressure of our patients with Hypertension remotely as much as possible.

Aim Statement

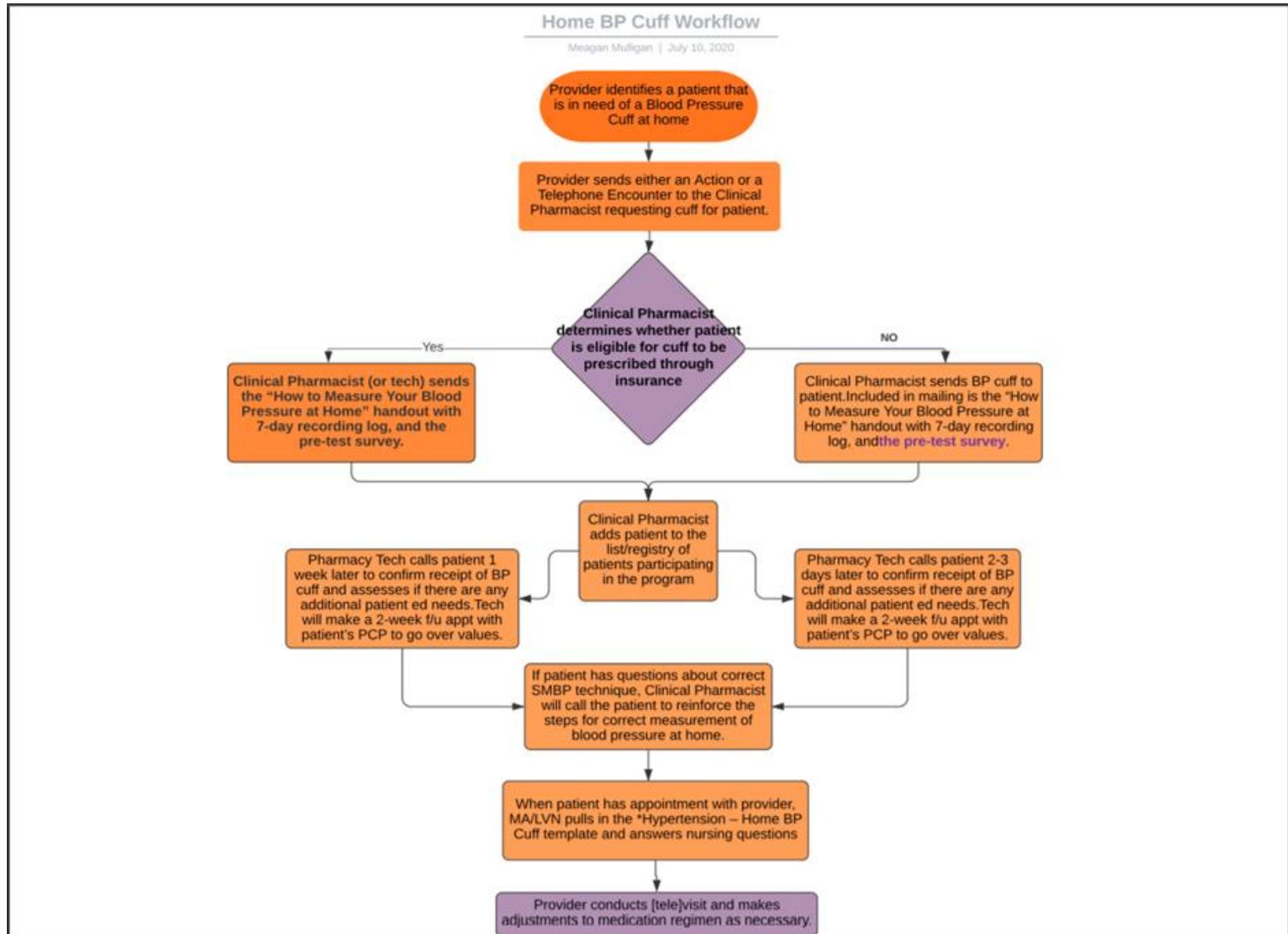
Our global aim was to maintain controlled blood pressure for all hypertensive patients and to focus on health equity related to blood pressure control for our American Indian population. We chose SMBP as the method to achieve this aim and developed several measures to gauge the development of that program. Our general aim was to achieve blood pressure control for our patients enrolled in the SMBP program at 77%, which was our baseline performance on Controlling Blood Pressure in 2019.

Health Equity Aim Statement

We aim to increase the percentage of American Indian patients in our SMBP program who have their blood pressure under control (less than 140/90) from the October baseline of 60%, to 65% by 3/31/21. This would significantly narrow the gap in blood pressure control between Native and Non-Native patients in the SMBP program.

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Our Theories for Change: How We Learned About Our Process



WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Process for Selecting Test Ideas

How We Engaged the Patient “Voice of the Customer”

- Entrance into the program was at first based on provider referral
- Each patient that was sent an SMBP monitor was contacted over the phone and given the opportunity to ask questions about how to use their monitor and how the program worked
- Each patient was encouraged to schedule a Zoom visit for follow-up, but in-person visits were available for any patient that preferred to be seen in-person

How We Engaged Leaders, Providers, and Staff

- Presentations on the program were given two different times during the project
- A staff satisfaction survey was conducted early in the project
- For several months, patients entered the program by provider referral. Later in the program providers were asked to review lists of patients who did not have their BP under control and tell us if they would prefer for any of those patients to not be sent a BP monitor and started in the program.

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Changes We Tested

What Worked and What Didn't Work

Change Idea Tested	Summary of PDSAs	Adopted, Adapted, Abandon?
Outdoor blood pressure station	Several versions of an outdoor station were tested where a patient could have a blood pressure done without coming indoors.	Abandoned. The station was not used consistently.
Tape measure with BP cuff to measure arm circumference	A small percentage of patients have an arm circumference that is too large for a standard home BP cuff. We began sending out paper tape measures and asking patients to measure their bicep circumference upon receipt of their cuff.	Adopted. Most patients have used the tape measures, and this has led to us replacing their cuffs with larger models.
Provider selection of patients for program	The first iteration of patient selection to the program involved providers self-selecting who would receive a cuff.	Adapted. We still have self-selection but now also send cuffs to patients with uncontrolled HTN without provider input.
Electronic transmission of BP measurements into EHR	We tested two different models of BP cuffs (iHealth and Omron series 7) that could electronically transfer BP measurements to our EHR (eCW).	Abandoned. We were able to do this with the Omron cuffs, but the process was complicated and teaching it patients too time intensive.
Clinical Pharmacist Involvement	Our clinical pharmacist was a key part of the program. Patients that needed more time and attention than the care teams could provide could be assisted by the Clinical Pharmacist in his HTN clinic or by a specially trained pharmacy tech.	Adopted. Many patients needed a little extra help to make the program work for them. Clinical Pharmacy was able to provide that assistance in a way that worked for patients and staff.

How Did We Know the Changes Were An Improvement?

What We Measured

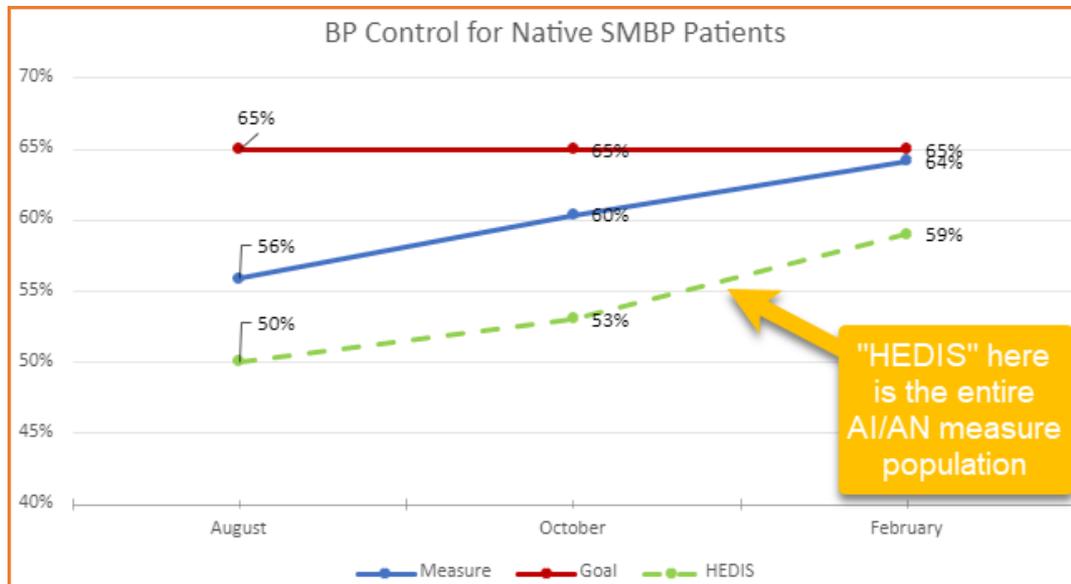
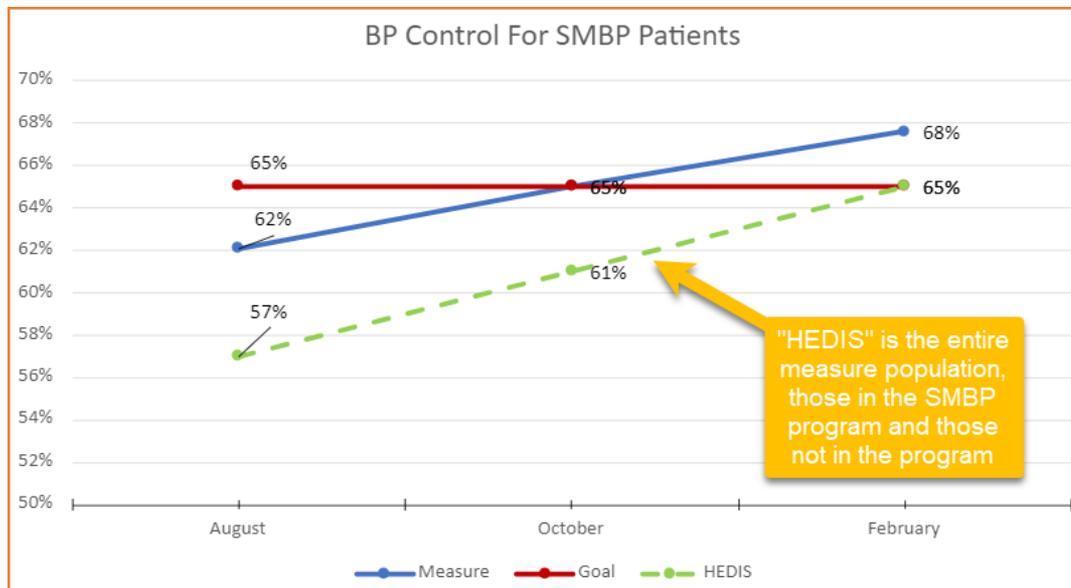
Measures Set

Measure Type/Name	Description/ Specifications	Baseline %	Target %
Outcome (Directly related to the aim):			
By 1/31/21 65% of patients enrolled in the SMBP program will have their blood pressure in control.	Denominator: all patients enrolled in the eCW program "PHASE SMBP" Numerator: those in the denominator with last BP of less than 140/90	2019 Controlling Blood Pressure: 76% (no true baseline for patients in the SMBP program)	65% (this target was chosen based on projections of where controlling BP rates would end by 12/31/20 for all patients in the measure)
By 1/31/21 65% of American Indian patients enrolled in the SMBP program will have their blood pressure in control.	Denominator: all patients enrolled in the eCW program "PHASE SMBP" and race "American Indian/Alaskan Native" Numerator: those in the denominator with last BP of less than 140/90	2019 Controlling Blood Pressure for AI/AN: 69% (no true baseline for patients in the SMBP program)	65%
Process (Steps to achieve outcome):			
By 5/31/20 we will ship 70 home blood pressure monitors to patients identified as needing one by our medical providers.	All blood pressure monitors sent to patients after a request from a provider to clinical pharmacy was made were counted.	Zero monitors	70 Monitors
By 6/15/20 virtual blood pressure appointments will be made for 45 patients who are shipped monitors.	All appointments with a patient's PCP that included the phrase "BP cuff f/u" after a cuff was received were counted	Zero patients	45 patients
By 7/1/20 at least 36 patients will have completed virtual blood pressure visits. The 36 patients will include at least one patient from the panel of each provider who is participating.	All completed appointments that fit the above description were counted.	Zero patients	36 patients
Balancing (Unintended impact/consequence):			
Staff Satisfaction with the SMBP program will remain at 70% or higher.	Denominator: number of providers who respond to the survey Numerator: number who answer "Neutral", "Somewhat agree", "Strongly Agree"	none	70%

How Did We Know the Changes Were An Improvement?

Results: Run Charts

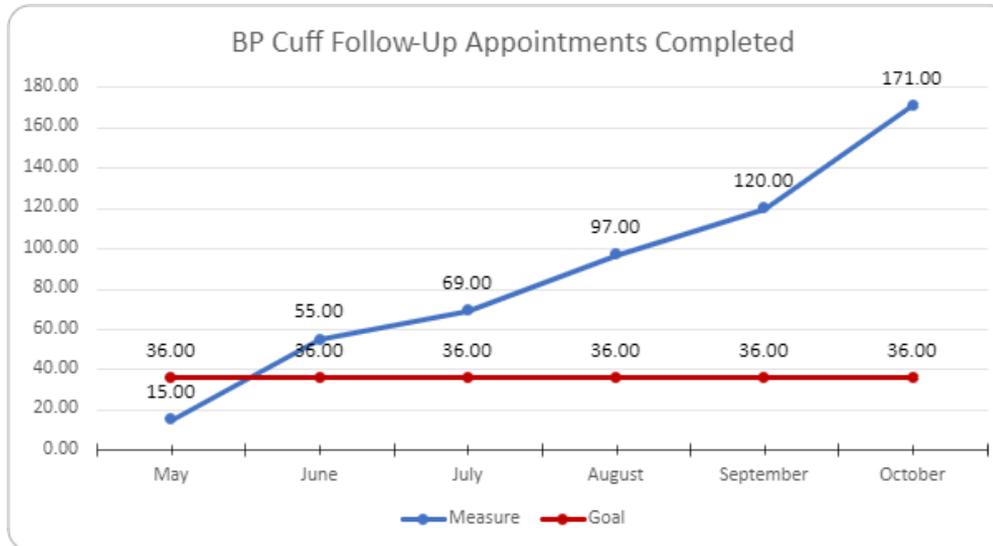
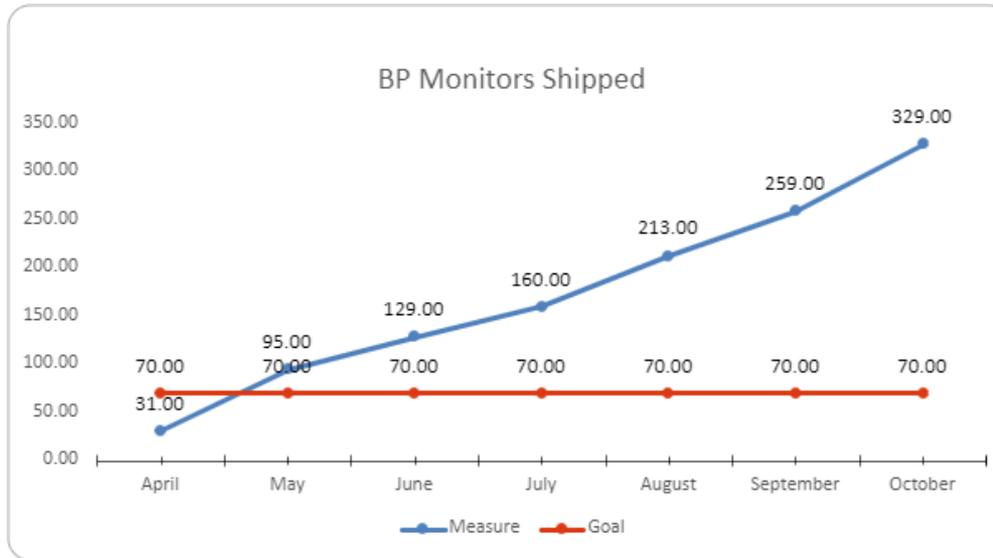
Outcome



How Did We Know the Changes Were An Improvement?

Results: Run Charts

Process



How Did We Know the Changes Were An Improvement?

Results: Run Charts

Balancing



How Did We Know the Changes Were An Improvement?

Here's What We Learned

Bright Spots/Accomplishments

- What stands out most about the work of PHASE/TC3 2019-2020 is that rapid cycle improvement processes are particularly useful during a pandemic.
- We are most proud of the ability of our team to quickly switch the focus of our project to something that we knew was critical for patient care under the circumstances created by COVID-19.
- We were surprised by how willing patients were to receive care virtually, and how much they liked it. We were also surprised by how quickly our clinical staff adjusted to providing virtual care in general and managing blood pressure remotely in particular.
- We learned that the process of change can be accelerated by a crisis. However, making those changes stick once the crisis has passed is no easier. All the work, care and consideration that goes into making changes sustainable still needs to be done and is still the most challenging aspect of the project.
- We learned that our team is flexible and willing to change when they can see a clear benefit to patient care.

How Did We Know the Changes Were An Improvement?

Here's What We Learned

Bright Spots/Accomplishments

CASE #1

- 64 year old male with PMH HTN, HLD, hx Hep C
- New patient after an ER visit for refill of antihypertensives. The ER increased his lisinopril from 20mg to 40mg. Pt had old BP cuff, reporting home values ranging 150-180 systolic.
- Referred to Phillip for both a new monitor and for HTN clinic
- Zoom flip visit about 3 weeks later – observed to take BP over zoom, 158/91, repeat 167/99. Increased HCTZ 50mg QD.
- f/u pharm visit 3 weeks later BP was: 151/90. Started on amlodipine 5mg QD.
- Follow up phone visit in 2 weeks with patient reported values readings between 125-135/80-90 mmHg.

CASE #2

- 70 year old female with PMH HTN, HLD, T2DM, osteoporosis, who historically hovered around goal for age but maybe not for DM
- Last BP measurement from 2019 was 147/70 at which point she had admitted to eating a lot of salt, so plan was to lower salt intake and recheck, then covid happened
- Patient was sent cuff as part of SMBP program
- 1st phone visit, home average was 145/73. Reviewed appropriate technique (was checking wrong), changed administration of BP meds to night-time dosing (per Hygia trial)
- 2 week followup, 18 readings, average home BPs now 135/67

How Did We Know the Changes Were An Improvement?

Here's What We Learned

The Challenge of the COVID-19 Pandemic

The most significant challenge that the COVID-19 pandemic posed was its all-encompassing nature. We had to change everything about how we provided care, almost all at once. These changes diverted many resources, but it especially took our time. This left less space for running traditional Quality Improvement projects but increased the need for rapid cycle change.

Overall Challenges

Challenge	How We Overcame/Resolution
How do you manage a patient's blood pressure when you can't bring them into the clinic?	SMBP has been proven to be effective in controlling high blood pressure. Chapa-De already had experience with SMBP, but on a small scale.
Our patients didn't have blood pressure cuffs at home.	We shipped hundreds of blood pressure cuffs directly to our patients.
Can you put a home blood pressure in the EHR?	We created processes and procedures that met standards developed during the pandemic so that home blood pressures could be used reliably for clinical decision making and be entered into our EHR.
Our American Indian patients have lower blood pressure control rates than our general population.	Using SMBP, and targeting that intervention at our American Indian patients is closing the gap in blood pressure control.

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

SPREAD

Managing the blood pressure of patients with HTN using SMBP is at least as effective as traditional methods using in office blood pressure measurement during in-person visits. The care teams who have embraced SMBP are outperforming other care teams.

SUSTAINABILITY

Participants in the SMBP program are now easy to identify within our EHR and that groups' BP control can be evaluated on a regular basis. Work remains to document the specific parts of the SMBP program that lead to success, and to create mechanisms for those practices to be taught and monitored.

THE DESIRED FUTURE

- By September 30, 2021 all providers will be using the SMBP program for patients in their panel. The SMBP program will be clearly defined, consisting of specific steps and actions, and ideal candidates for the program will be described.
 - SMBP will continue to be one of the tools that helps narrow the gap in BP control between our American Indian and Non-American Indian populations.
- Currently, not all care teams are using all the necessary steps to make SMBP successful.
- For SMBP to be successful it requires additional patient education and communication amongst members of the care team. It also requires new documentation practices that not all care teams are familiar with.
 - Our process of getting blood pressure cuffs to patients is working well.
 - In order to sustain this the Clinical Pharmacist and pharmacy tech need to be allowed time to process BP cuff orders and provide patient education on SMBP.
 - For more providers and care teams to use SMBP successfully, they will need training and coaching on the key elements of the process.
 - If we do not continue to support the program, it will go away once the pandemic is over and we will lose a tool that we have shown is effective and patient centered.
- We need care teams to be trained on SMBP and held accountable for their performance on BP control for patients of theirs in the SMBP program. We need to continue to support the Clinical Pharmacy team in their efforts to provide BP cuffs and patient education.