



PREVENTING HEART ATTACKS
& STROKES EVERY DAY



HYPERTENSION CONTROL IN THE TIME OF COVID-19

San Francisco Health Network

March 2021

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WHAT WERE WE TRYING TO ACCOMPLISH?

Problem Statement

- Blood pressure (BP) control has been a major focus for quality improvement for San Francisco Health Network primary care (PC) patients diagnosed with hypertension (HTN). Before the pandemic, our overall HTN control rates was at the 90th percentile Medicaid benchmark. Our BP control rate, including Black/African American (B/AA) patients, improved for the overall PC population from 61% to 70%. However, across SFHN primary care clinics, B/AA patients with HTN continued to have lower rates of BP control compared to the general population.
- While hypertension control rate has decreased for the entire patient population since COVID-19, B/AA continue to have disparities in blood pressure control. In December 2020, 48% of B/AA with HTN were controlled compared with 50% for the the overall population.

Aim Statement

By March 31, 2021, SFHN will improve outcomes for patients at high risk for CVD and/or cardiovascular events.

We will 1) Sustain hypertension control rate and DM A1c control rate (<9) at or above 90th percentile Medicaid benchmark; 2) Sustain the rate of BP control among B/AA patients with HTN at 67%; 3) Achieve 10% relative improvement for depression screening and follow-up for all patients; and 4) Achieve 10% relative improvement for depression screening and follow-up for B/AA patients

Health Equity Aim Statement

- By December 2020 post-pandemic, the HTN control rate for Black/African American patients was 48% compared to 50% for the general population and has continued to trend downward since then. Our health equity aim is to improve the HTN control rate for Black/African American patients and narrow the disparity gap.
- As of January 2021, the disparity gap has closed due to a continuous downward trend in our HTN control rate for the general population. **Our new aim is to achieve a 10% relative improvement rate overall and for our B/AA patients by December 2021 (January 2021 as baseline) and to keep the disparity gap closed.**

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Our Theories for Change: How We Learned About Our Process

Organizational Driver Diagram
(next slide)

Organizational Goal

Provide patient-centered, team-based care for cardiovascular and chronic disease management

AIM Statement

Improved outcomes for patients at high risk for CVD and/or cardiovascular events:

- 1) Sustain hypertension control rate and DM A1c control rate (<9) at or above 90th percentile Medicaid benchmark
- 2) Sustain the rate of BP control among B/AA patients with HTN at 67%
- 3) Achieve 10% relative improvement for depression screening and follow-up for all patients
- 4) Achieve 10% relative improvement for depression screening and follow-up for B/AA patients

PRIMARY DRIVERS

Clinical Informations Systems (Epic)

Delivery System Design/Team Based Care

Health Equity

Self Management Systems

SECONDARY DRIVERS

Rebuild, validate & optimize population health registry tools

Support clinic staff and providers to maximize use of outreach tools in Epic

Refine care model and improve collaboration within care teams

Support workflows for telehealth and remote management of chronic conditions

Strengthen and maintain interventions that address food insecurity

Rebuild and validate tools to identify, track and prioritize disparities for high-risk populations

Improve collaboration and workflows within multidisciplinary care teams related to specific interventions for B/AA patients

Provide patient tools to support home management

Engage and support patients in HTN and DM self-management

IDEAS TO TEST

- Stratification of disparity populations
- Pharmacist panel management of patients with diabetes
- Standard roles for nutritionists in HTN and DM care
- Remote team-based care
- Provider workflows for remote patient visits
- Provider guidance for remote management of DM and HTN patients
- Mailed prescriptions for patients with diabetes & uncontrolled HTN
- Patient portal (MyChart)
- COVID-19 outreach to patients with DM and uncontrolled HTN
- Food Pharmacy delivery for patients during COVID-19 Shelter in Place
- Equity dashboard to monitor disparity data
- BP home monitors for patients with uncontrolled HTN

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Process for Selecting Test Ideas

How We Engaged the Patient “Voice of the Customer”

- **Patient Interviews (October 2020)**
 - We interviewed 5 B/AA patients with hypertension to learn about their experience controlling their blood pressure, to gather feedback on existing interventions, and to get input on resources needed to better support B/AA patients with hypertension.
 - **We learned that COVID-19 has limited the resources and supports that patients have relied on pre-COVID to manage their HTN.** With less resources and supports (e.g., regular in-clinic BP checks, health and wellness classes, Food Pharmacy), patients are having a harder time controlling their BP. While the shift to telehealth has not necessarily affected how patients manage their HTN, it has impacted their engagement with their PCPs. While some patients have found telehealth to be more inconvenient and allows them to communicate with their PCP more frequently, some patients find it difficult to communicate their health concerns with their PCP via telehealth.
 - **Based on the interviews, we identified the following ideas for change:** 1) nurse chronic care visits during COVID; 2) mailed/delivered medications; 3) telehealth support for providers and patients; 4) SMBP (patient education and coaching on use of BP monitors; 5) remote HTN support group to help motivate patients track their BP

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Process for Selecting Test Ideas

How We Engaged Leaders, Providers, and Staff

- **Hypertension Equity Workgroup (January, February, and December 2020)**
 - In addition to patient interviews, we continued to engage patients through the Hypertension Equity Workgroup. The Hypertension Equity Workgroup focuses on hypertension and heart health equity in Black/African American patients and is comprised of patient advisors, providers, medical assistants, health workers, nurses, nutritionists, pharmacists, clinic analysts, Food Pharmacy coordinators, and primary care leadership. The workgroup met monthly, prior to the pandemic, and three times last year during shelter-in-place, to review hypertension data, share best practices, and develop resources together.
- **Ongoing engagement of Cardiovascular Clinical Workgroup**
 - The Cardiovascular Clinical Workgroup is a multidisciplinary team focused on improving care of cardiometabolic disorders in primary care by planning and implementing solutions to make patients and populations healthier and care more equitable. This past year, the workgroup provided input on quality improvement initiatives for hypertension including self-measured blood pressure monitoring and outreach.
- **High risk outreach weekly staff meetings**
 - Through most of 2020, primary care central team staff met weekly to ensure that outreach to high-risk populations during shelter-in-place continued. We met to troubleshoot issues, review data, and develop outreach tools
- **Engage providers in weekly data**
 - We shared data on self-measured blood pressure monitoring, hypertension and diabetes B/AA outreach, and A1c missed opportunities on a weekly basis with clinic leadership, providers, and analysts with the aim of engaging them in quality improvement efforts.

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?
HTN/DM High Risk Outreach	<ul style="list-style-type: none">• Outreach to B/AA patients comorbid for hypertension and diabetes and are 1) uncontrolled for either/both conditions and 2) have not had an A1c test or BP check in the past six months• Schedule patients for in-person clinic visit to get BP check and/or A1c test• Patient outreach on hold due to limited in-person clinic visits during December COVID surge	Adapting
HTN/DM High Risk Outreach – Depression Screening	<ul style="list-style-type: none">• Include depression screening as part of outreach to B/AA patients with HTN/DM• Outreach callers felt uncomfortable conducting depression screening over the phone	Abandon
HTN/DM High Risk Outreach – Screen for home BP monitor, food insecurity, and tobacco use	<ul style="list-style-type: none">• As part of outreach call, determine if patient has a home BP monitor and conduct screenings for food insecurity and tobacco cessation	Adopted

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?
SMBP – Documenting patient reported BP in Epic	<ul style="list-style-type: none">• Distributed home BP monitors to community clinics for patients• Built Epic elements to track distribution of home BP monitors and capture patient-reported BP vitals	Adopted
SMBP – Pre-telehealth visit calls to patients with HTN	<ul style="list-style-type: none">• Call HTN patients prior to upcoming telehealth PCP visits to gather and document home BP vitals• PCPs will have home BP vitals documented in patient's chart prior to telehealth visit	Adopted
SMBP – Health coaching on use of home BP monitors during pre-telehealth visit calls	<ul style="list-style-type: none">• Assess use of home BP monitors and offer health coaching on home BP monitor and documenting BP vitals• Currently testing this workflow to determine how long the pre-telehealth calls are taking with health coaching on home BP use	Adapting

Prioritized HTN/DM Outreach for Black/African American Patients



Purpose: To contact B/AA patients with uncontrolled hypertension and diabetes who haven't had a recent BP check or A1c lab

- *Schedule in-person visit for A1c lab and BP check*
- *Assess need for home BP monitor and/or glucometer*
- *Inform about and schedule flu vaccine*
- *Conduct screenings*
 - *Food insecurity & information about food resources*
 - *Tobacco cessation & counseling*

Staff: Americorps Members

Clinics: Completed B/AA outreach at one clinic and started B/AA outreach at a second site with more clinics to follow (*after the surge*)

How Did We Know the Changes Were An Improvement?

What We Measured

Measures Set

Measure Type/Name	Baseline #/% (Oct 2020)	Target % (June 2021)	New Baseline % (Jan 2021)	New Target % (Dec 2021)
Outcome (Directly related to the aim):				
% patients with HTN control (overall)	53%	<i>**Initial goals were to sustain BP rate, but with COVID-19, rates have continued to trend down</i>	47%	55%
% B/AA patients with HTN control	49%		47%	55%
Process (Steps to achieve outcome):				
# of outreach calls made	<i>Data presented in next slides</i>			
# of patients with PCP appointments within 6 weeks of outreach call				
%/# patients with recent A1c and/or BP w/in 8-10 weeks since outreach call				
Balancing (Unintended impact/consequence):				
# of referrals to Tobacco Quitline Coach	<i>Data presented in next slides</i>			

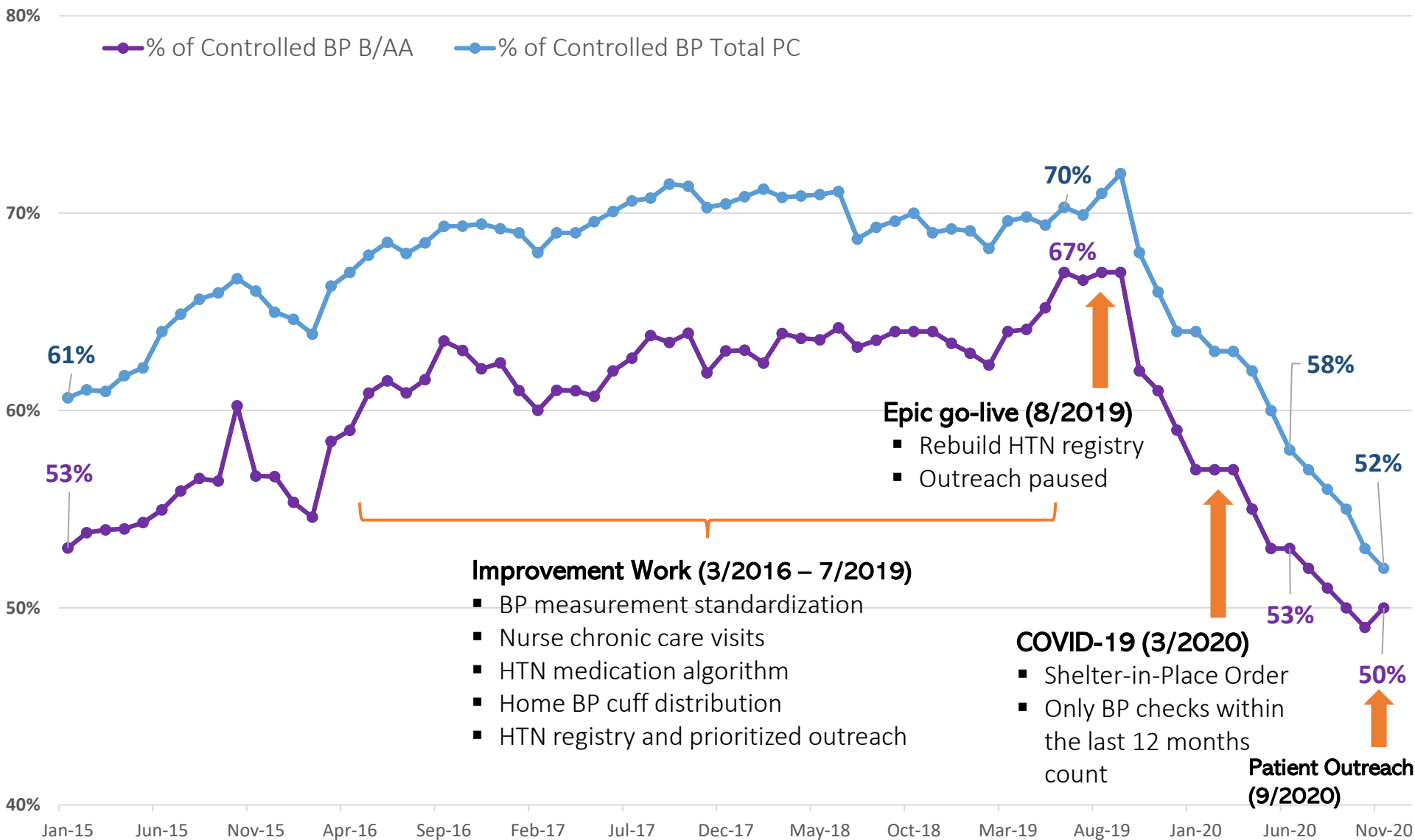
How Did We Know the Changes Were An Improvement?

Results: Run Charts

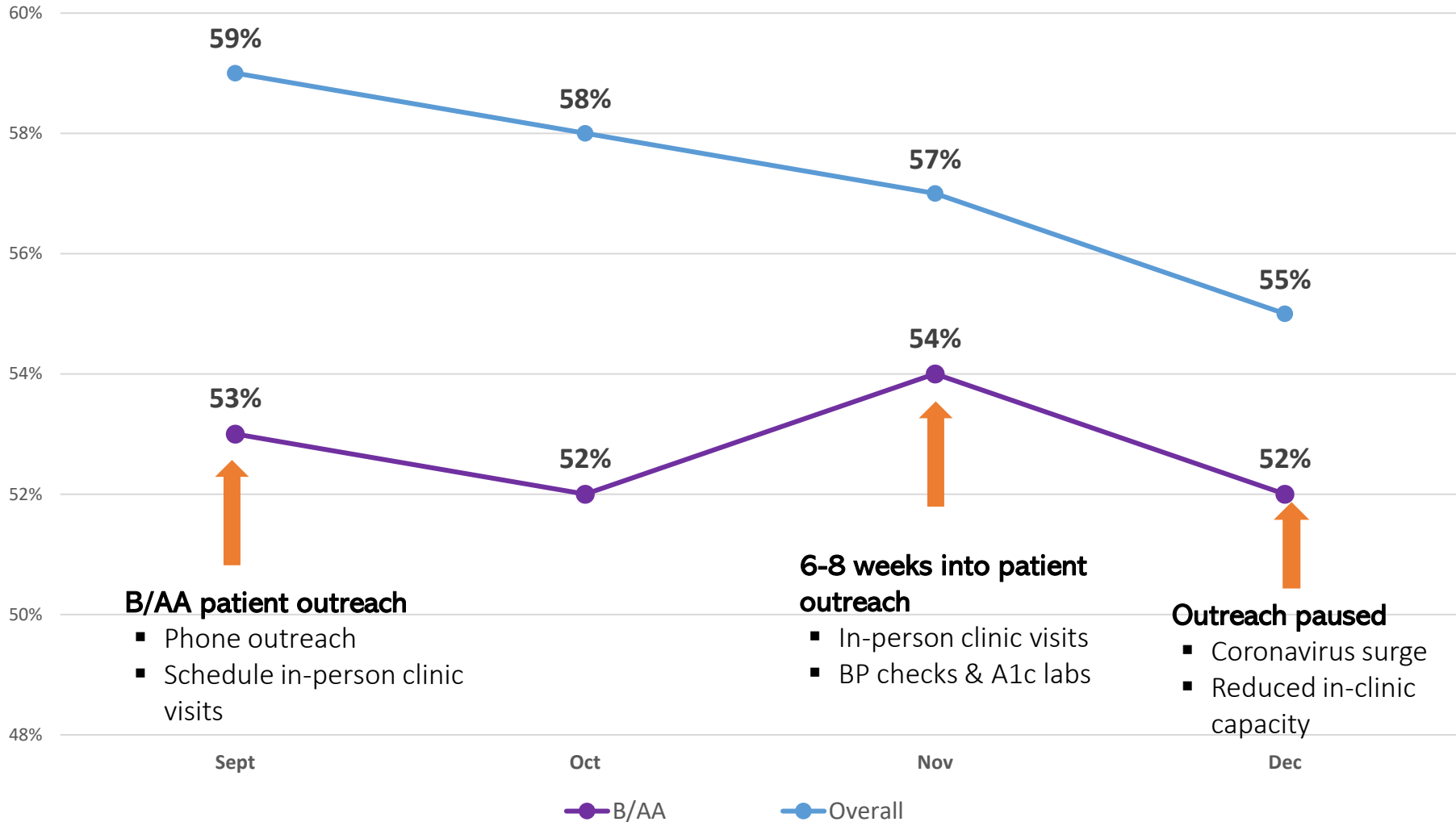
Outcome

- Overall control rate and B/AA control rate
- Overall HTN control rate with SMBP

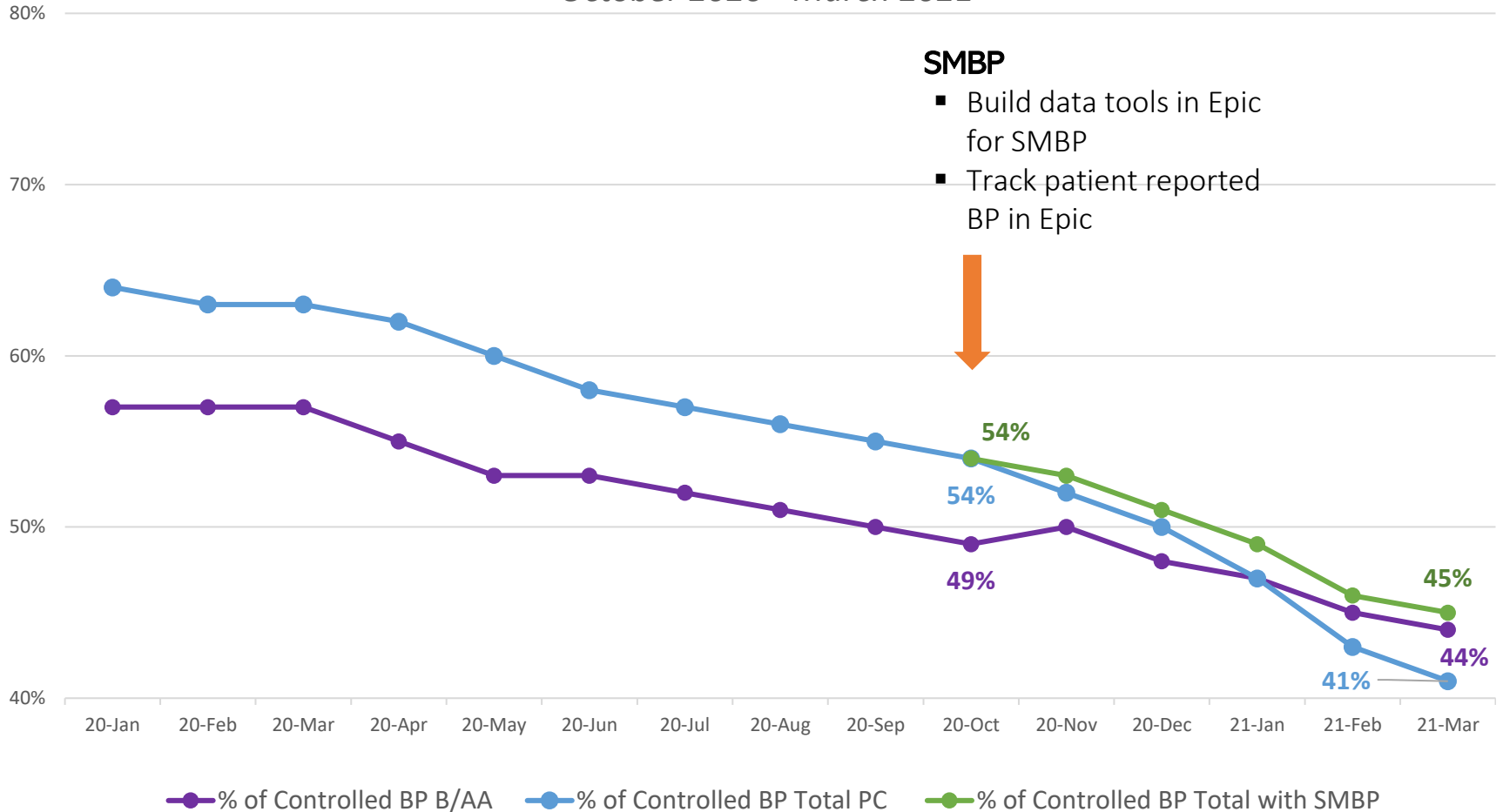
Hypertension Blood Pressure Control SFHN Primary Care



Hypertension Blood Pressure Control Richard Fine People's Clinic (Test Clinic) *September through December 2020*

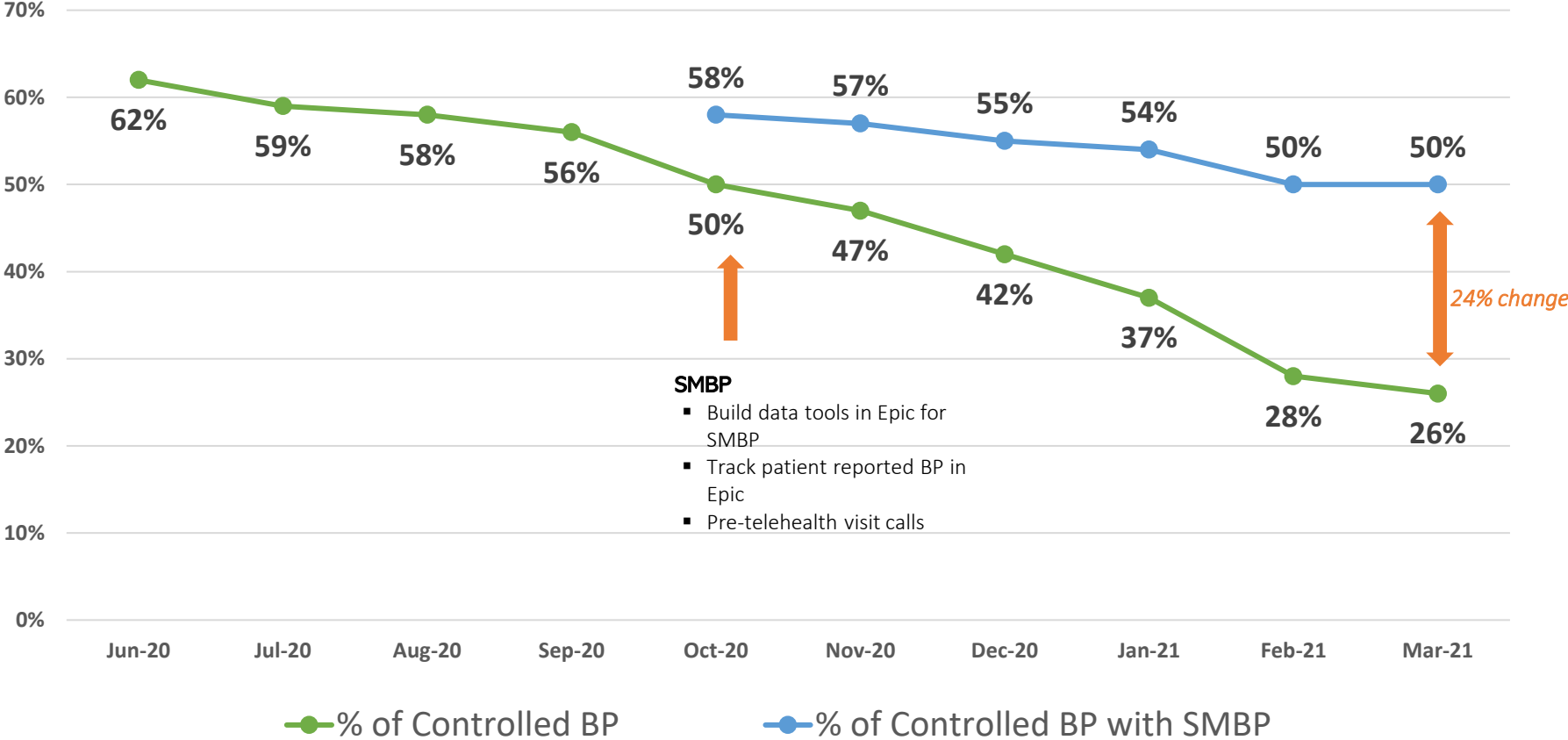


Hypertension Blood Pressure Control With Self-Measured Blood Pressure (SMBP) San Francisco Health Network *October 2020 - March 2021*



Hypertension Blood Pressure Control with Self-Measured BP (SMBP) at Ocean Park Health Center

June 2020-March 2021



How Did We Know the Changes Were An Improvement?

Results

Process

- # of outreach encounters
- # of patients with completed PCP appointments or future PCP appointment scheduled since outreach call

B/AA HTN/DM Outreach at Richard Fine People People's Clinic



Summary: Started with 69 B/AA patients in September with uncontrolled hypertension and diabetes who haven't had a recent BP check or A1c lab

- Goal was to schedule patients for follow-up PCP visit to get BP check and/or A1c lab
- More than half of patients reached have had a PCP visit or has a future PCP visit since the outreach call

	# of outreach calls made/ attempted	# of patients	# of patients who had a PCP office visit since the outreach call	# of patients with future PCP appointment scheduled
September	37	26	10	1
October	45	23	8	11
November	3	3	2	1
TOTAL	85	52	20	13

How Did We Know the Changes Were An Improvement?

Results

Balancing

- As part of B/AA HTN/DM outreach at Richard Fine People's Clinic, patients who identified as current smokers were also asked about their current smoking status and offered tobacco cessation counseling.
- 12 patients were screened for tobacco use and referred to the California Smokers Helpline.

	# of Tobacco Screenings Completed
September	8
October	4
Total	12

How Did We Know the Changes Were An Improvement?

Here's What We Learned

Bright Spots/Accomplishments

What are you most proud of?

- Ongoing engagement of clinic teams in hypertension equity work
- Prioritizing B/AA patients for patient outreach
- Increased capacity for patient outreach with Americorps members
- Developed Epic tools and new workflows to support outreach and standardize documentation (SmartPhrase, Bulk Communication)
- Developed outreach script to address multiple care gaps, including tobacco and food insecurity security
- Developed Epic tools to support SMBP allowing for providers to document patient reported BP

What did you learn about the process of change?

- Value of patient input and taking time to learn from patients' experiences

“The pandemic has made it more difficult for me to manage my blood pressure.”
~Clinic Patient

“My doctor keeps me on my toes and gets me to come in and get my BP checked.”
~Clinic Patient

How Did We Know the Changes Were An Improvement?

Here's What We Learned

The Challenge of the COVID-19 Pandemic

- During San Francisco's shelter-in-place at the start of the pandemic in 2020, our network had to limit in-person clinic visits and shift to telehealth. We had to rapidly adapt our clinic workflows to remote care.
- Because patients were not coming in for primary care clinic visits, they were not getting BP checks or A1c tests which decreased our overall HTN and diabetes control rates.
- All our clinics experienced limited staff capacity as many of our nurses and medical assistants (MEAs) were deployed to support citywide COVID-19 response. As a result of limited staff capacity, team-based care efforts and initiatives that were implemented pre-COVID were greatly reduced or affected.

Overall Challenges

Challenge	How We Overcame/Resolution
Shift to telehealth and limited in-person clinic visits	Adapt clinic workflows to remote telehealth Build Epic tools to support SMBP
Patients are not coming in for BP checks and A1c tests	Conduct patient outreach Offer patients curbside visits
Reduced MEA and nursing capacity	Engage Americorps team members

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

SPREAD & SUSTAINABILITY

Our Change Ideas	TESTING	SPREADING	SUSTAINING	NOTES & QUESTIONS What are next steps related to this change idea? Keep testing? Train more people?	Staff Responsible
Identify hypertension patients who do not have a home BP monitor		X		<ul style="list-style-type: none"> Train clinic staff to utilize Epic report to identify HTN patients who need home BP monitors 	<ul style="list-style-type: none"> Primary care central team
All HTN patients have a blood pressure monitor at home			X	<ul style="list-style-type: none"> Purchase additional home BP monitors Develop standard work and train clinic staff on documenting distribution of home BP monitor to patients 	<ul style="list-style-type: none"> Clinic staff and providers Primary care central team
Conduct pre-telehealth visit calls (MEAs virtual rooming prior to telehealth visits) and obtain/document patient-reported BP vitals	X			<ul style="list-style-type: none"> Compile promising practices and lessons learned from pilot and clinics currently doing pre-telehealth visit calls Develop standard work 	<ul style="list-style-type: none"> MEAs Health Workers Americorps team members

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

SPREAD & SUSTAINABILITY

Our Change Ideas	TESTING	SPREADING	SUSTAINING	NOTES & QUESTIONS What are next steps related to this change idea? Keep testing? Train more people?	Staff Responsible
Self-measured blood pressure is documented for every primary care provider (PCP) telehealth visit		X		<ul style="list-style-type: none"> • Share performance measures with clinic staff to help build habit (weekly data) • Develop telehealth workflows • Train clinic staff to utilize Epic reports for tracking performance measure (e.g., missed opportunity rate for telehealth visits without patient reported BP documented) 	<ul style="list-style-type: none"> • Medical Assistants (MEAs) • PCPs
Outreach to B/AA patients comorbid for diabetes and hypertension who are uncontrolled for either condition and do not have a recent A1c or BP		X		<ul style="list-style-type: none"> • Establish regular outreach to B/AA patients with uncontrolled HTN/DM and overdue for A1c test and/or BP check • Develop protocols for bringing HTN/DM patients in for clinic visit • Train MEAs to pull outreach lists and use outreach encounter in Epic 	<ul style="list-style-type: none"> • MEAs • Practice Managers • Clinic Analysts

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

THE DESIRED FUTURE

NEW SPREAD AIM STATEMENT

By December 31, 2021, our network will implement 3 key changes to our hypertension control strategy at all our primary care clinic sites to achieve our goal.

The key changes are:

- All HTN patients have a blood pressure monitor at home
 - *10% relative improvement in the percent of HTN patients with at least one self-measured blood pressure recorded*
- Self-measured blood pressure is documented for every PCP telehealth visit
 - *10% improvement in missed opportunity rate for telehealth BP since February baseline for all clinics*
- Outreach to B/AA patients with uncontrolled HTN is conducted regularly
 - *10% relative improvement in rate of B/AA patients with HTN who have not had a PCP visit in more than 6 months having an outreach encounter documented within the last 3 months*

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

THE DESIRED FUTURE

▪ What is the desired future for PHASE/TC3?

A hypertension control strategy that is well-adapted to remote care and that maximizes telehealth visits for chronic care management where...



All patients with uncontrolled HTN have BP cuffs at home



All patients with HTN have access to MyChart



All patients with uncontrolled HTN receive a pre-telehealth visit call to collect blood pressure vitals, to check-in on medications, and offer lifestyle education and health coaching

120
/
80

Blood pressure vital is recorded at all telehealth and in-person PCP visits and patients regularly document and upload BP vitals in MyChart



Care Teams conduct regular outreach to patients with uncontrolled HTN

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

THE DESIRED FUTURE

- **Why it's not happening now? What isn't currently possible?**
 - **Limited staff capacity** as many of our nurses and MEAs have been deployed for citywide COVID-19 response
 - **Limited leadership capacity** and reduced QI infrastructure due to COVID-19 restrictions
 - **Lack of synchronous, coordinated approach** to remote chronic care management

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

THE DESIRED FUTURE

- **What have you learned from your PHASE/TC3 focus this year that may serve you in achieving the desired future?**
 - Prioritizing B/AA patients for outreach helped maintain BP control while overall rates declined
 - Inclusion of patient-reported BP improved HTN control rate
 - Based on what we've learned, we want to continue to 1) Maintain efforts to provide home BP cuffs to all HTN patients who do not have one; 2) Conduct pre-telehealth visit calls; 3) Document patient-reported BP vitals in Epic; and 4) Outreach to B/AA patients with uncontrolled HTN
 - We also want to re-establish team-based care and resume RN HTN hypertension chronic care visits.
 - If we don't move forward with our solutions and take steps towards our desired future, patient access will be limited, our network will fail to adapt to remote care and we will not be able to provide high quality care. Most urgently, our health network will not be able to survive in a post-pandemic world.

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

THE DESIRED FUTURE

- **What, specifically, do you need from your leaders to support achieving the desired future?**
 - Prioritize quality improvement funds for purchasing home BP monitors
 - Advocate to payors to reimburse home monitoring devices including BP monitors
 - Dedicate resources for MyChart sign-up including staff, tablets and electronics (e.g., camera, microphone, monitors)
 - Include telehealth workflows as part of centralized onboarding and training for MEAs
 - Hold clinic leadership accountable to spotlight quality improvement initiatives for remote chronic care management
 - Prioritize team-based quality improvement for remote chronic care management by ensuring dedicated time for panel management for nurses and pharmacists and chronic care visits
 - Hire 5 FTE health workers as part of a central outreach team

Thank you!

San Francisco Health Network

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