Improving BP Control in Targeted Populations

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WHAT WERE WE TRYING TO ACCOMPLISH?

Problem Statement

The Community Health Center Network (CHCN) health centers serve many of the hardest-to-reach and highest risk patients of Alameda County. With the COVID-19 pandemic disproportionately affecting our patient populations, CHCN health centers have focused limited resources on testing, tracing, vaccination and telehealth—priorities that compete with our chronic disease management goals. In January 2020, there was an **18 percentage point difference between the rates of HTN blood pressure (BP) control within our highest-performing health centers and our lowest**. Given these internal disparities, we chose to focus our coaching and technical assistance by working in depth with the two health centers with the lowest rates of HTN BP control at baseline.

Aim Statement

Our **pandemic adjusted** aim is to **maintain the January 2020 baseline rate of blood pressure (BP) control at 61%** for patients with hypertension at **Bay Area Community Health Center**, or BACH (formerly Tri-City Health Center) and **West Oakland Health Council** (WOHC), CHCN’s health centers with the most significant QI challenges. We hope to maintain this rate through December 2020 by providing monthly intensive coaching, while continuing PHASE technical assistance for all CHCN health centers.

Health Equity Aim Statement

CHCN’s health equity aim is to effectively **stratify our data to highlight race & ethnic disparities amongst PHASE patients**. Our 2 health centers of focus chose to support **Latino** patients and prioritize them in outreach and telehealth efforts, with WOHC also focused on Black patients as well.
WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Our Theories for Change: How We Learned About Our Process

Organizational Driver Diagram

Template: Driver Diagram

**Aim**
We would like 100% of all our health centers to be able to meet or exceed the Hypertension pay for performance targets for 2020, reducing the gap between our highest performing and lowest performing health centers by 12/31/2020.

**Primary Drivers**
- Clinical & Exec Championship
  - Ability to apply QI tools & methods
    - Familiarity with IHI Model of QI
      - Workshops inc. practice opp's
      - Tailored coaching sessions
  - Access to Population Health data
  - Time to manage & do QI

**Secondary Drivers**
- CHCN Leadership
  - Buy-in of CHC Leaders
    - Regular check-ins w/ engagement
  - Standardized EHR and reports
    - Understanding of EHR & reports
    - Reports anytime by anyone
  - Protected time
    - Daily, weekly, monthly habits
    - Team and individual work

**Specific Ideas to Test or Change Concepts**
- Signed MOU
  - Check-in at Med Directors meeting
    - Tailored leadership support as needed
  - Provide trainings, forums
    - Share resources
    - Facilitate best practice sharing
      - On-site coaching
  - Move to shared EPIC system
    - Train on population health tools
    - Incorporate use QI planning/eval
  - Team develop project pitch
    - Establish logistics for meeting
    - Document roles & responsibilities
  - Check assumptions with data
    - Develop charter, TOC with team
What changes did we make that resulted in improvement?

How CHCN Engaged Leaders, Providers, and Staff

- Health Center Engagement
  - Convening PHASE forums to share best practices and progress on health equity goals
  - PHASE related trainings on topics such as MI, QI tools, and guest speakers to motivate change ideas for screening measures
  - Technical support on COVID-era workflows for telehealth visits and remote monitoring
  - CHCN partnered with Anthem BC and catalyzed them to grant our HC’s $10,000 for SMBP monitors

- Tailored support for WOHC and BACH
  - Regular coaching meetings with QI and support staff
  - Training and ongoing support in project management and PDSA tools
  - Fostered deeper engagement in PHASE offerings and TA

Process for Selecting Test Ideas

BACH adapted COVID-era ideas that worked for testing and created outdoor Wellness Clinics, where patients could safely address health maintenance items such as BP Checks

WOHC Interviewed 5 patients in November 2020, with coaches M. Minnetti / D. Armstroff and used the “Voice of the Customer” to inform change ideas
WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Process for Selecting Test Ideas

“Voice of the Customer” interviews provided insight into patients’ health goals, barriers to achieving them, feedback on how the clinic can support them, and new ideas for change.

Examples:

- Most respondents enjoy the health programs (pre-COVID) that WOHC provided and some stated that outreach calls made them feel most supported. We learned that patients want to be contacted to follow-up on how they’re doing. It was surprising to hear how the sense of community at WOHC, particularly from health education programs, was largely beneficial in patient well-being.

  - **Opportunities/Ideas for Change:** PDSA to call patients with uncontrolled HTN to encourage them to come in for a visit/appointment reminders. Continue wellness programs that are “fun” and inclusive for our patients (post-COVID).

- Most respondents continue to take their meds and eat mindfully. Some walk and move whenever they can, however they expressed safety concerns (COVID and violence related). We learned that patients know what is good for them, but doing it is another thing, especially when patients do not feel safe walking around their neighborhood. Dogs can help patients stay active and were a large motivator for one patient.

  - **Opportunities/Ideas for Change:** Possibly vouchers for exercise equipment, or encouraging of pets (mental and physical health) as for some younger patients.
## WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

### Changes We Tested

<table>
<thead>
<tr>
<th>Change Idea Tested</th>
<th>Summary of CHCN PDSAs</th>
<th>Adopted, Adapted, Abandon?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management and coaching use of QI templates for planning &amp; eval of HTN projects</td>
<td>Q1 meetings succeeded in building relationships with population health and QI staff and helping them understand the PHASE reports &amp; resources available to them. Few workflows to see because outreach calls and patient visits happened outside of meeting times with CHCN’s Pop Health Coordinator.</td>
<td>Adopted once COVID-19 hit.</td>
</tr>
<tr>
<td>Keep HC’s engaged with PHASE</td>
<td>Q2 Shift from coaching of PDCA tools &amp; methods to support of telehealth best practice sharing, procurement of SMBP monitors and funds, and keeping PHASE measures top of mind.</td>
<td>Adopted as HTN patients shelter in &amp; CHC’s focus on COVID-19.</td>
</tr>
<tr>
<td>Shift focus back to structured QI</td>
<td>Q3 &amp; Q4 Ramped up pursuit of regular meetings. Applied PDCA to outdoor BP clinic iterations and outreach calls. Introduced iteration tracker.</td>
<td>BACH Adapted/ WOHC Adapting</td>
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</tbody>
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### What Worked and What Didn’t Work

<table>
<thead>
<tr>
<th>Change Idea Tested</th>
<th>Example Health Center PDSAs</th>
<th>Adopted, Adapted, Abandon?</th>
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</thead>
<tbody>
<tr>
<td>BP cuffs for RPM</td>
<td>AHS piloted workflow and education for elderly pts Axis testing text messaging for pt reporting of data 5 clinics piloting connected devices with OCHIN Epic</td>
<td>All in process of testing and adapting</td>
</tr>
<tr>
<td>Voice of Patient</td>
<td>WOHC participated in PHASE small group coaching for pt interview process. LC interviewing African American patients with HTN on their experience with care</td>
<td>Adopt Adapted to expand to additional sites</td>
</tr>
<tr>
<td>Outdoor Wellness</td>
<td>BACH BP clinics. Now using 15 min wait after COVID vaccine to address BP TVHC wellness clinic offering comprehensive tests, screenings and resources LMC BP checks in tents</td>
<td>Adopted and adapting Adapting Adapting</td>
</tr>
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## How Did We Know the Changes Were An Improvement?

### What We Measured

<table>
<thead>
<tr>
<th>Measure Type/Name</th>
<th>Description/Specifications</th>
<th>Baseline %</th>
<th>Target %</th>
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<tbody>
<tr>
<td><strong>Outcome (Directly related to the aim):</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>BP control rate of BACH’s HTN patients</td>
<td>Prevention of decrease during COVID-19</td>
<td>61%</td>
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<tr>
<td>BP control rate of WOHC’s HTN patients</td>
<td>Prevention of decrease during COVID-19</td>
<td>61%</td>
<td>61%</td>
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<tr>
<td><strong>Process (Steps to achieve outcome):</strong></td>
<td></td>
<td></td>
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<tr>
<td>BACH - Visits to outdoor BP Clinic</td>
<td>Outreach to assure patients of safe &amp; important visit</td>
<td>Call 300 patients with 5% visit rate</td>
<td>Call 500 patients with 5% visit rate</td>
</tr>
<tr>
<td>WOHC – Patients with poorly controlled BP reached with reminder call</td>
<td>Encourage patients to come in for BP measurement and care</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td></td>
<td>Baseline 1/20</td>
<td>Current 1/21</td>
</tr>
<tr>
<td>A1c control rate for BACH’s DM patients</td>
<td>A1c&lt;9 for patients with DM age 18-75</td>
<td>63%</td>
<td>56%</td>
</tr>
<tr>
<td>A1c control rate for WOHC’s DM patients</td>
<td>A1c&lt;9 for patients with DM age 18-75</td>
<td>54%</td>
<td>44%</td>
</tr>
<tr>
<td>HTN BP control rate for CHCN clinics overall</td>
<td>Prevent decrease and monitor change compared with focus HCs</td>
<td>65%</td>
<td>45%</td>
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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

Health Disparity Outcome

Measure: Hypertension controlled blood pressure
Race Group

WOHC

-4%

BACH

-4%

+2%

Ethnicity

-4%

+2%
How Did We Know the Changes Were An Improvement?

Results: Run Charts

At WOHC, 70% of the total patients with BP out of control were reached with a reminder call about upcoming appointment July - October 2020.

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<th>% Patients whose BP was brought under control upon keeping appointment</th>
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<td>without a reminder call</td>
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<tr>
<td>57%</td>
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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

BACH and WOHC were CHCN’s only health centers of 8 who experienced a temporary increase in % of HTN patients with good BP control after COVID shelter-in-place was ordered.

“We appreciate the PDSA tools and training and have more effectively started using them with not only PHASE projects but other QI projects as well.”

- Ye Zhang, BACH Quality Management Coordinator
How Did We Know the Changes Were An Improvement?

Here’s What We Learned

Bright Spots/Accomplishments

- Partnerships with Anthem BC for $10K for SMBP Cuffs and AHA for Promotora Coaching, Cookbooks and SMBP cuffs.

CHCN Highlights and Events
- Needs Assessment of QI Training, Coaching and Reporting
- PHASE Health Equity Forum
- PHASE in the time of COVID-19 Forum
- Bright Spots Webinar – Combatting PHASE Health Stressors
- Community-Based Fitness during COVID-19
- PHASE Co-Design Session
- Motivational Interviewing Training Series
- PDSA Training Series
- Run Charts and Control Charts Training
- $50K in Hypertension Improvement Partnership incentive funds
How Did We Know the Changes Were An Improvement?

Here’s What We Learned

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<th>The Challenge of the COVID-19 Pandemic</th>
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<tr>
<td>➤ Our average A1c control rates have dipped 24% since April; BP of HTN patients dipped 13%. Our challenges will be seeing how the influx of SMBP devices impacts self-management of patient conditions and how well they engage with telehealth. WOHC was particularly understaffed and their Population Health Manager wears many hats.</td>
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<tr>
<th>Overall Challenges</th>
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<td><strong>Challenge</strong></td>
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<tr>
<td>PHASE work at CHCN’s health centers took a back seat to COVID-related efforts. Many staff vacancies.</td>
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What’s Next for PHASE/TC3?

Here’s How We Will Continue the Work

SPREAD

• Referral to CA Smoker’s Helpline for tobacco users
  • Integrated EHR referral workflow
  • Mini-incentive program to promote and raise awareness
• Food as Medicine
  • Integrated EHR assessment and “prescription” to food FARMACY
  • Community partnership to provide healthy groceries (doorstep delivery during COVID)
• SMBP Programs
  • Targeting patients with uncontrolled hypertension
  • Program elements: patient agreements, patient education/training on devices, workflows to track data

SUSTAINABILITY

• Approval for network level Population Health and QI Analyst to support health centers with coaching, training and resources
• Analyst will focus on broader set of conditions (PHASE-related, plus other chronic conditions and preventive measures)
  • Help build support for successful changes, work with teams to test in their environment and adapt what works

THE DESIRED FUTURE

• The desired future for PHASE populations is to reach HEDIS 90th percentile blood pressure control by December 31, 2022 while continuing to reduce the racial/ethnic disparities in outcomes. We aim to increase control through a) bringing at-risk patients back into care (especially as more receive the COVID-19 vaccine) b) implementing SMBP and strengthening telehealth, c) focusing on targeted programs to increase equity through providing additional data and supporting clinic led interventions.
• We were unable to reach this goal in 2020 due to multiple factors brought on by the pandemic: patients not coming in for in-person visits, lack of resources to roll out a robust SMBP program, extremely strained staff resources, and social/psychological factors contributing to poorer outcomes in patient population.
• However, we learned several lessons in 2020 that will help us reach our goals
  • Our clinics are incredibly resilient and adaptable. Patient-centered changes such as moving the majority of visits to telehealth in a matter of weeks and creativity in developing outdoor services will both help us in reaching our desired future.
  • Specifically, we need to continue outdoor and telehealth services, and continue to support patient needs by expanding programs such as food farmacies, telehealth services, and remote patient monitoring
    • This will require continued/expanded funding, policy support and technical assistance
    • Additionally, we will need leadership buy-in, community partners and support for staff who are near burn-out from events of 2020
• Without these efforts, patient outcomes will continue to deteriorate, as the effects of the pandemic on health outcomes are far from over
• The network level ask is for executives to elevate QI priorities with health center leadership, and to provide staffing and resources to support expansion of alternatives to in-person visits, SMBP programs, and programs addressing SDOH.