KAISER PERMANENTE® PHASE PREVENTING HEART ATTACKS & STROKES EVERY DAY

CCI CENTER FOR CARE INNOVATIONS

KAISER PERMANENTE® TC3 TRANSFORMING CARDIOVASCULAR CARE IN OUR COMMUNITIES

Self Blood Pressure Monitoring (SMBP)

Alameda Health System

Team Members:

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WHAT WERE WE TRYING TO ACCOMPLISH?

Problem Statement

In the wake of COVID-19, primary care clinics across the country have rapidly undertaken dramatic changes to care delivery systems by switching the majority of care to telehealth visits. There are concerns that this change will leave the same chronic medical conditions that make these patients vulnerable to COVID-19 unaddressed for prolonged periods of time. We are trying to better understand whether or not specific telehealth-oriented interventions can improve hypertension and diabetes control for our diverse patient population.

Aim Statement

AHS will promote the health of our patients with diabetes by maintaining the percentage of those with controlled blood pressure to at least 69.41%.

Health Equity Aim Statement

AHS will maintain the health of our Black/African American patients with diabetes by keeping the percentage of those with uncontrolled HbA1c (>9%) at or below 36.22%

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Our Theories for Change: How We Learned About Our Process

Organizational Driver Diagram: HTN Care

Bolded items in Driver Diagram were prioritized

Aim Statement

AHS will promote the health of its patients with Diabetes by maintaining the percentage of those with controlled hypertension to at least 69.2%

Primary Drivers (Systems Elements)

Secondary Drivers (Areas for Change/Intervention)

Blood Pressure Measurement Competency

- **Staff training/education on standardized intake protocol (including process for home BP monitoring and reporting)**
- Audits to observe in-person BP measurement and demonstrated competency of staff
- Audits of repeat BP process measure report
- Use of automated office blood pressure (AOBP) device with patient education for appropriate BP goals

Standardized and Evidence-based Treatment

- **Use of a RN standardized procedure**
- Leverage RN, PharmD, LVN providers for hypertension management
- Provider training/education regarding AHS HTN protocol for common medication side effects
- Use of intensified treatment or monitoring when patient engagement/self-management is suboptimal

Patient Engagement/ Self-management Support

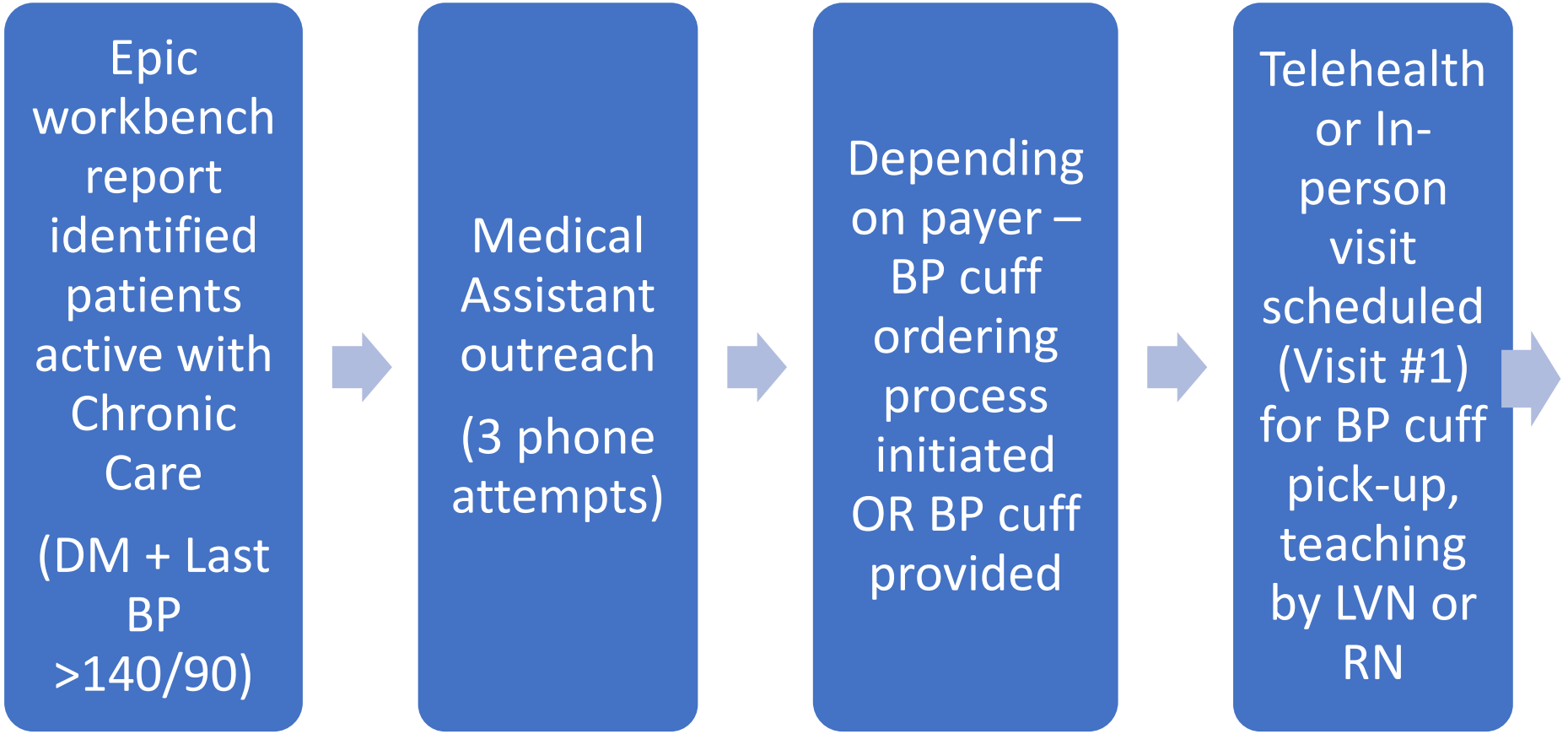
- Staff/Provider delivery of education regarding home BP process, readings, and next steps
- Use of motivational interviewing techniques/Health coaching
- Use of shared goal-setting/decision-making tool
- **Access to Chronic Care staff or other nursing staff to support patient concerns (e.g., medication, nutrition, equipment use)**

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

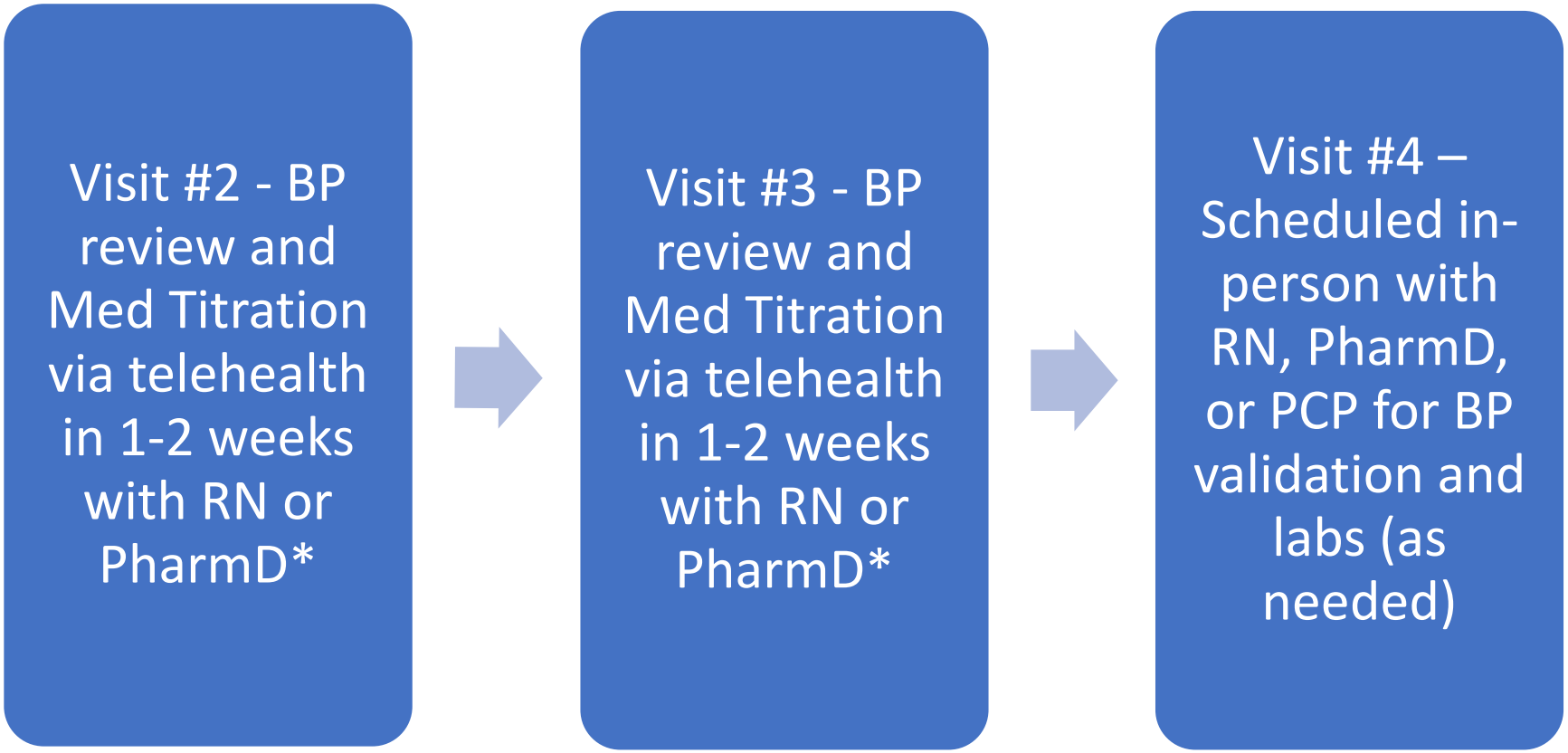
Our Theories for Change: How We Learned About Our Process

Process Flow Map: SMBP Highland Pilot

Process Map (High Level)



Process Map (High Level) Continued



* If BP >180/100 mmHg then in-person visit scheduled

WHAT CHANGES DID WE MAKE THAT RESULTED IN IMPROVEMENT?

Process for Selecting Test Ideas

How We Engaged the Patient "Voice of the Customer"

SMBP Highland Pilot – First iteration, no patient engagement prior to pilot was obtained. After first round at Highland, a random subset of patients were asked either during visits or after the pilot was completed the top factors that prevented them from attending visits 1-4 or performing SMBP

Disparity Reduction Metric (Black/AA DM control) – we had existing robust multi-disciplinary care for DM management, focus for improvement was shifted to 20 patient focus group implementation. Zoom sessions began 1/13/21, completed 4 focus group sessions.

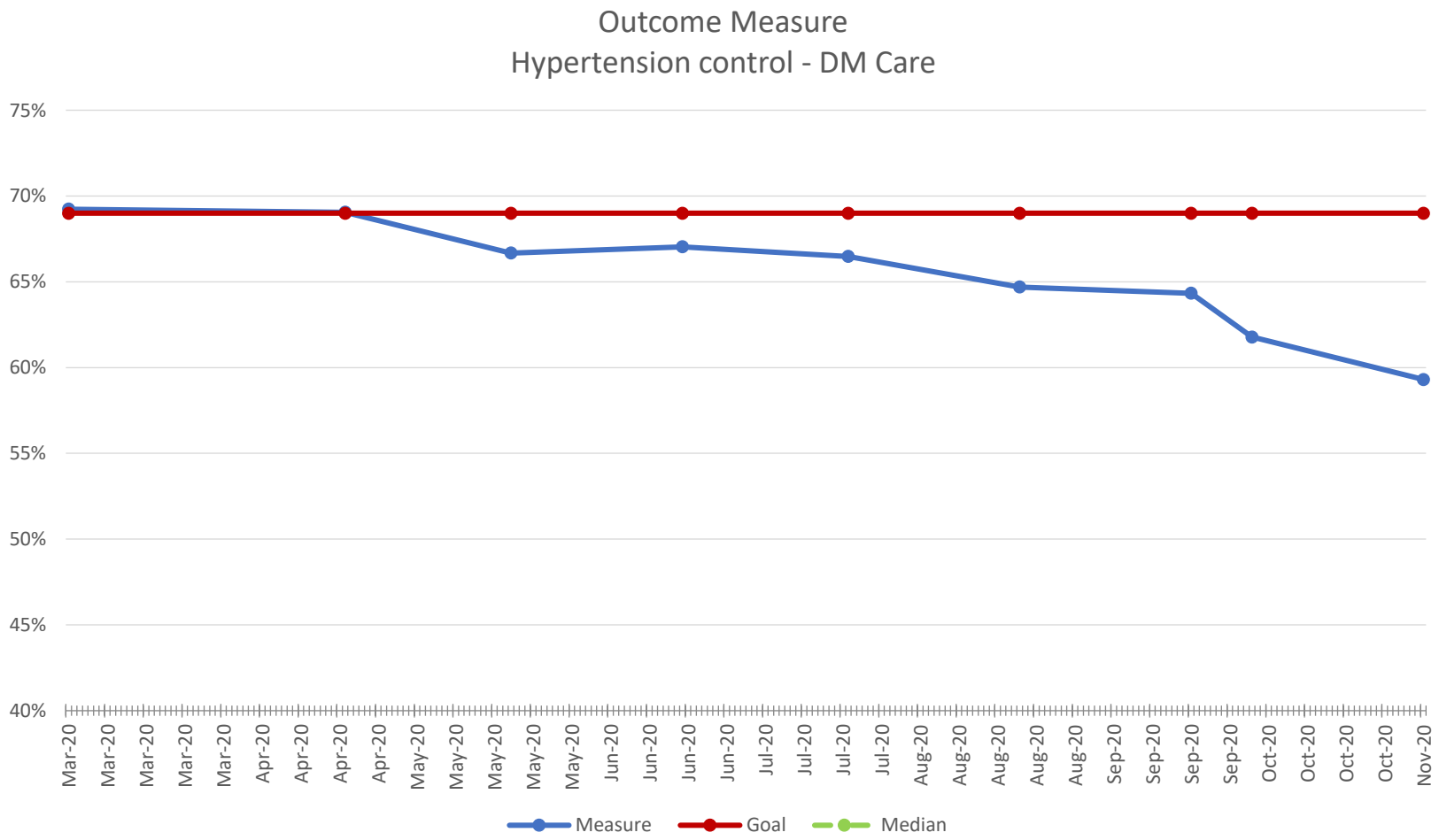
How We Engaged Leaders, Providers, and Staff

For our SMBP pilot, we included our Chronic Care team at Highland (PharmD, RN, and MA) in the design process. An attempt was made to include patient selection criteria for SMBP that overlapped with their current patient panel. Furthermore, a majority of the protocols and processes needed to be successful were already built into their current work. By creating synergy with the teams current goals, the ask to take on more SMBP was intended not to seem as "just another addition to workload," but something that supplemented the excellent HTN work being done.

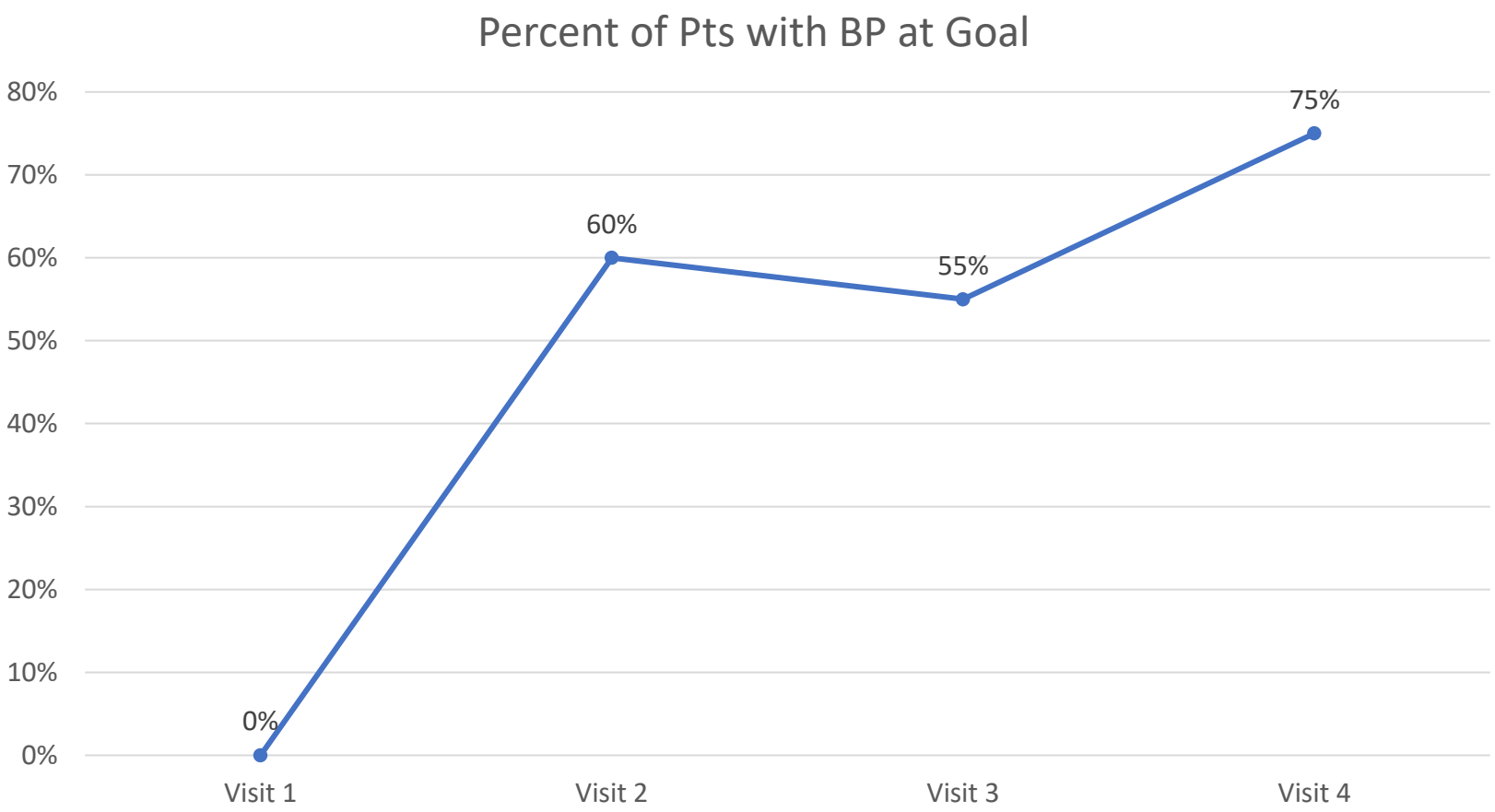
How Did We Know the Changes Were An Improvement?

Results: Run Charts

Outcome



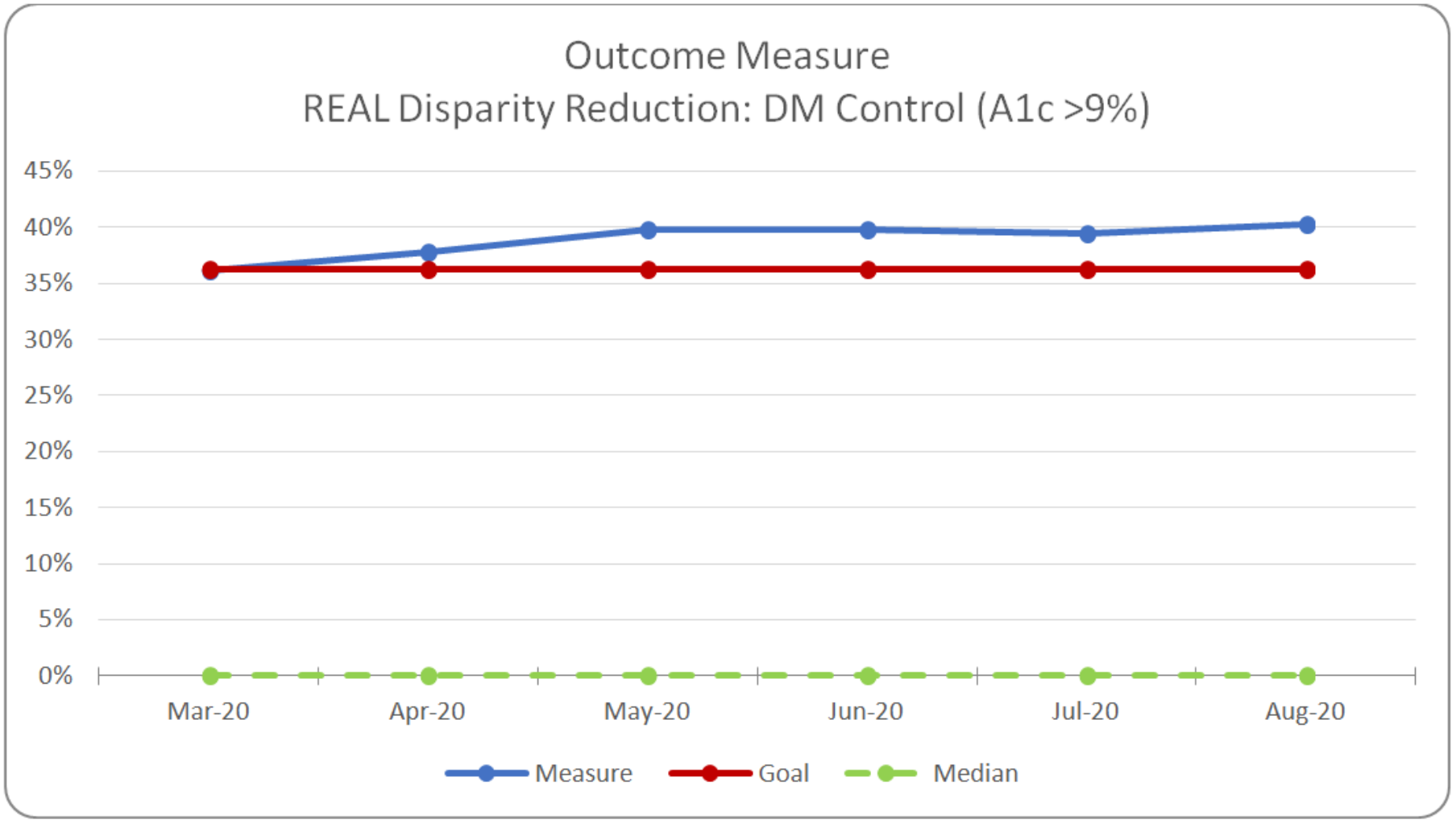
Blood Pressure Control Over Time Pilot (81 patients)



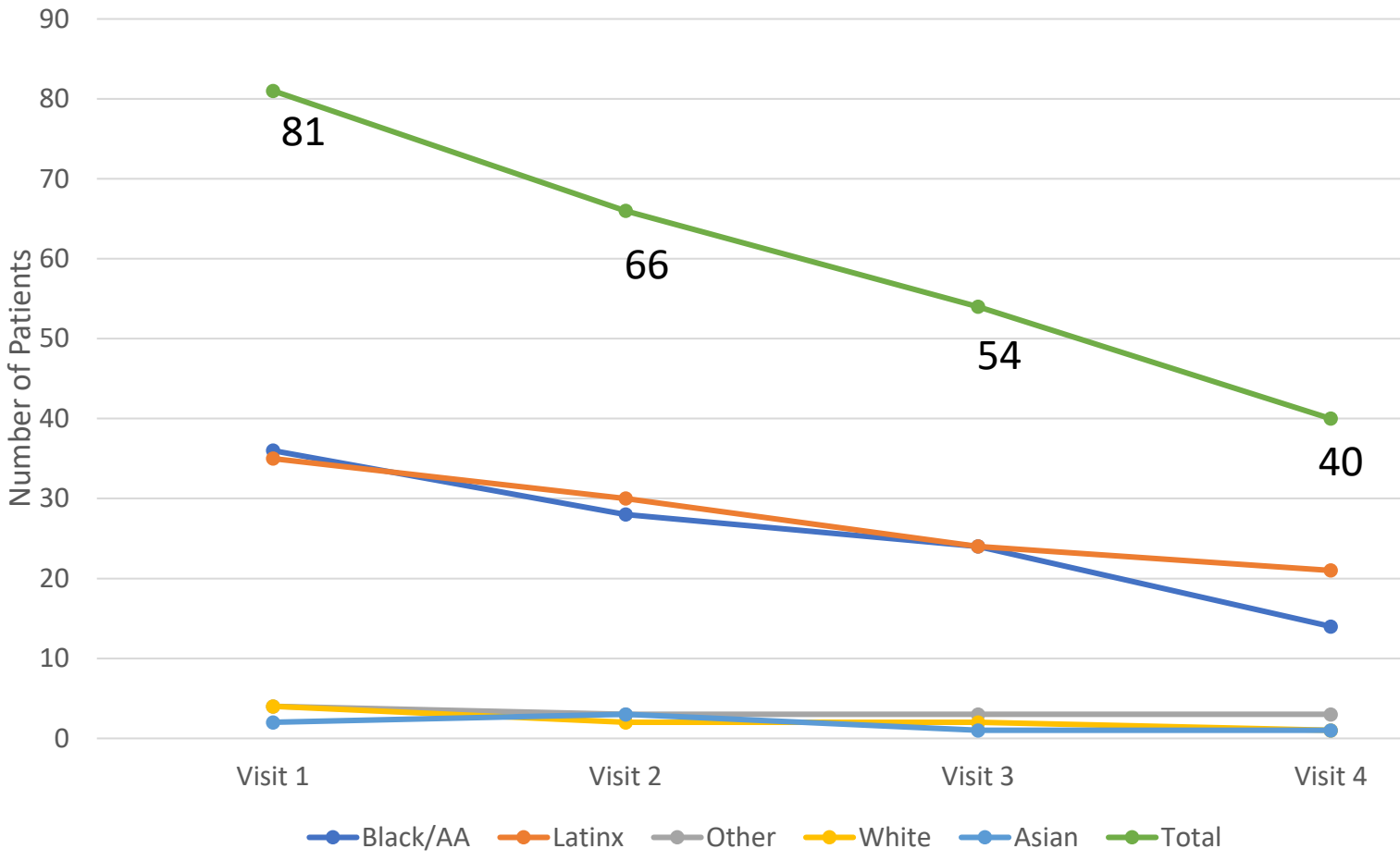
How Did We Know the Changes Were An Improvement?

Results: Run Charts

Outcome



Engagement Over Time With race/ethnicity Data



Visit Guide

Visit #1 = Obtain cuff + education

Visit #2 = Telehealth BP readings + med titration

Visit #3 = Telehealth BP readings + med titration

Visit #4 = In-person BP recheck

How Did We Know the Changes Were An Improvement?

Results: Run Charts

Process

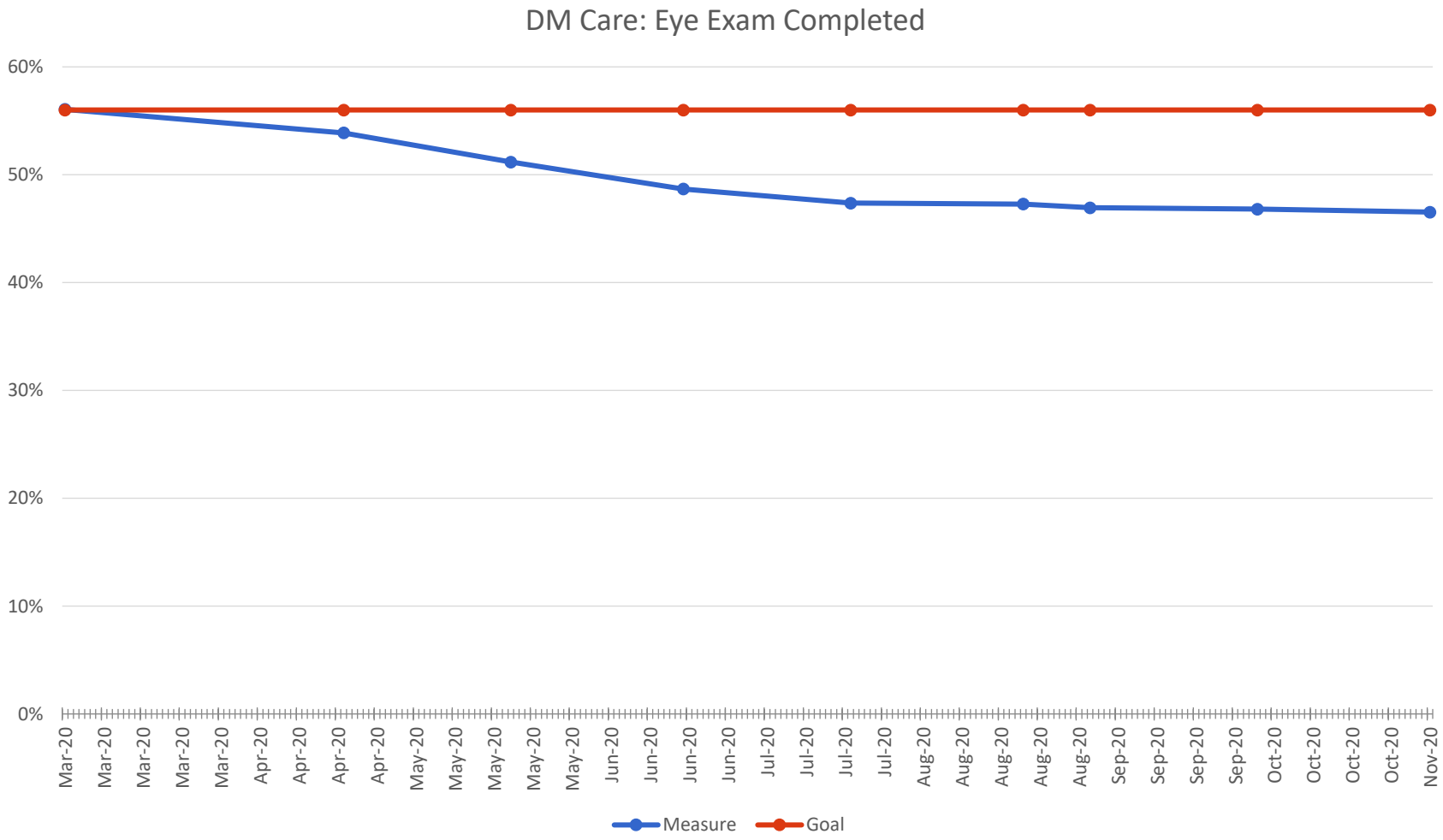
- Patients who have a home blood pressure monitoring device:
  - 81 our of 93 patients contacted were provided cuff (87.1%)

- Patients who use their home blood pressure monitoring device (as evidenced by number of at home values obtained)
  - 61 out of 81 patients with a cuff report data (74.1%)

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

- Achieved a higher rate of BP control than expected
  - Providing training and a cuff led to 60% control at Visit #2
  - This improvement based on monitoring and adherence, no med titration
- Patients grateful for devices, general experience is this type of work improves trust
- All members of the care team (MA, RN, PharmD, LVN) were responsible and successful in engaging the patient
- Re-emphasized the importance of BP review along with DM data by our chronic care staff
- Reinforced RN autonomy with BP medication titration

How Did We Know the Changes Were An Improvement?

Here's What We Learned

The Challenge of the COVID-19 Pandemic

- Long delays getting blood pressure cuffs via insurance plans
- Patients often didn't want to come in for an in-person appointment
- Chronic Care team overwhelmed with volume of telehealth for DM/HTN

Overall Challenges

Challenge	How We Overcame/Resolution
Differential effect on engagement and BP control by race/ethnicity	Focus Group pending for DM control Will continue to stratify HTN data by race for future PDSA cycles (primarily to see if reduction in in-person visit requirement improves racial disparity).
Documentation of SMBP not standardized	Tip Sheet created, planning to provide additional site-based training for providers in 2021
Improving access to SMBP	Next phase of SMBP work at Highland will include providing BP cuffs to patients while in clinic for HTN visit. No future visits will be directed as in-person unless requested by patient or provider for specific clinical reasons.

What's Next for PHASE/TC3?

Here's How We Will Continue the Work

SPREAD

Based on SMBP success at Highland a similar process was initiated for our Eastmont Wellness Center. 39 patients selected and in-process for visit 1-4. Adjustment for this PDSA cycle was the requirement for Visit #4 to be in-person based on feedback we received from patients at Highland.

Share education/training info on SMBP with RNs at all sites performing hypertension visits

SUSTAINABILITY

Provide SMBP data to payers to reduce barriers to access
Engage clinic and nursing leadership further

THE DESIRED FUTURE

- ***Every*** primary care patient with a diagnosis of hypertension has equal access and training for home blood pressure monitoring

- AHS will promote the health of our patients with diabetes by maintaining the percentage of those with controlled blood pressure.
  - Pre-COVID (3/2020) baseline = 69.2%
  - Current (1/2021) maintenance target = 56.2%

- Home BP monitoring dramatically improves blood pressure control
  - With basic teaching, ¾ of patients can report BP values through telehealth
  - Reinforces patient-centered team-based care

- Without SMBP adoptions - Dependence on in-person visits for BP management will continue
  - An unknown portion of our patients will prefer telehealth after the pandemic: Without SMBP option available, patients may choose to have their care elsewhere