

Improving Self-Reporting of At-Home Blood Pressure Measurements Using the MyChart Patient Portal



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BACKGROUND

The most recent report from the American Heart Association shows that **around 110 million or 46%** of all US adults over the age of 20 years old develop **high blood pressure**.¹

Although there are **no current statistics** on how many patients report their at-home blood pressures to their providers at office visits, anecdotally, a **large number of patients do not** bring any form of **blood pressure logs or charts** with them to their visits.

However, evidence does show that **patients who self-report blood pressure are more likely to lower their blood pressure readings** over time.²

Virani SS, Alonso A, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, et al. Heart disease and stroke statistics-2020 update: a report from the American Heart Association. Circulation 2020;141:e139-596.
Uhlrig, Katrin, et al. Self-Measured Blood Pressure Monitoring: Comparative Effectiveness. Agency for Healthcare Research and Quality (US), January 2012.

PROJECT AIM

The **goal** of this study was to provide patients with a newly accessible tool by which they could **input at-home blood pressure values** to MyChart with the hope that the increased availability allows clinicians to **better monitor and manage hypertension**.

Specific Aim:

Improve patient at-home blood pressure monitoring by 10% in the Adult and Pediatric Health Care Clinic setting within one year by implementing educational and reminder interventions to improve self-reporting of their blood pressure measurements.

PROJECT DESIGN/STRATEGY

Location: Adult and Pediatric Health Care Clinic

Strategy: The Plan Do Study Act method of quality improvement consisting of 3 PDSA cycles

Population: Recruited patients with an established diagnosis of hypertension under the care of one providing physician

Outcome Measure: Number of patients self-reporting their at-home blood pressures

CHANGES MADE (PDSA CYCLES)

PDSA 1: Physician and patient education

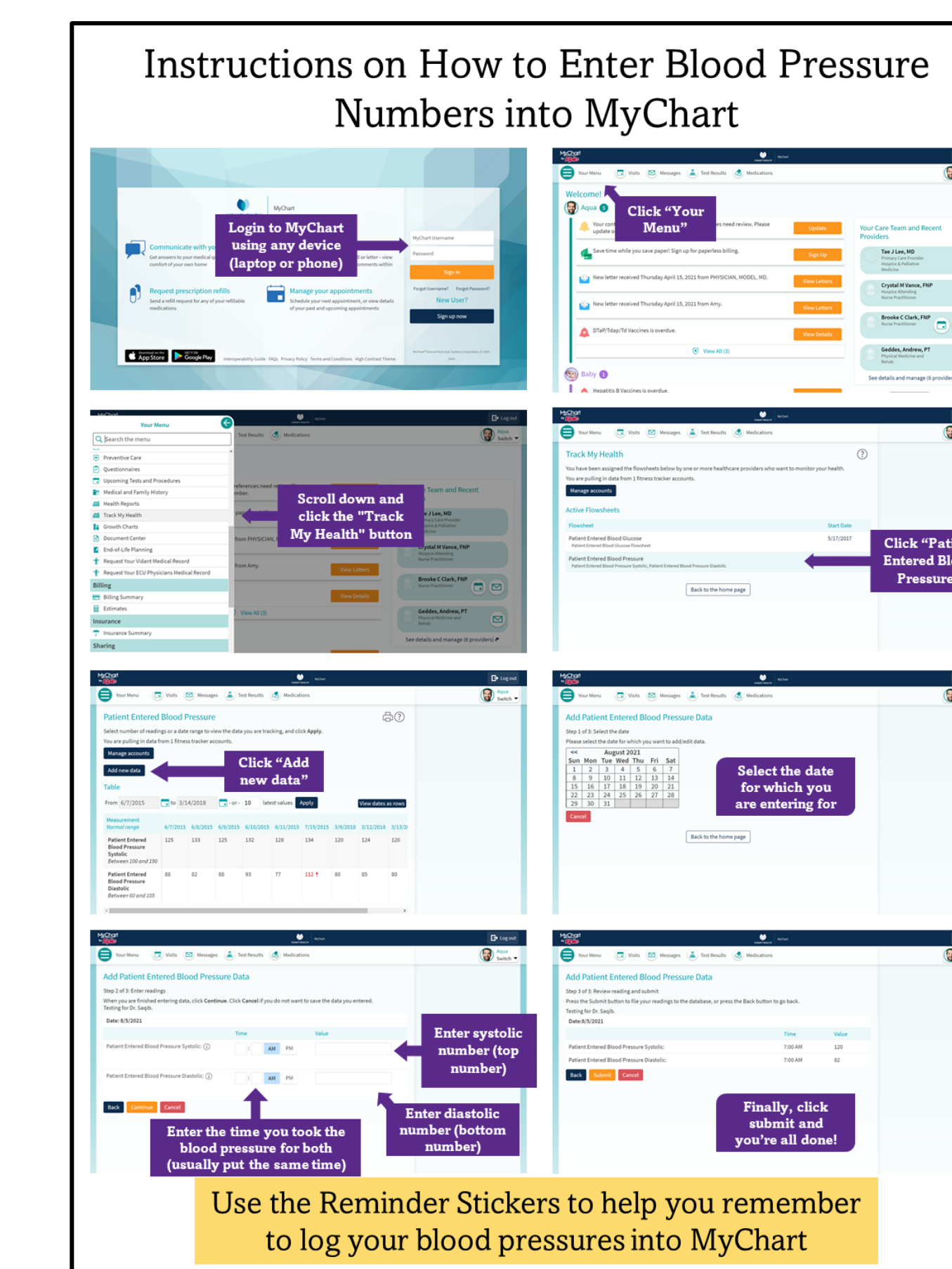
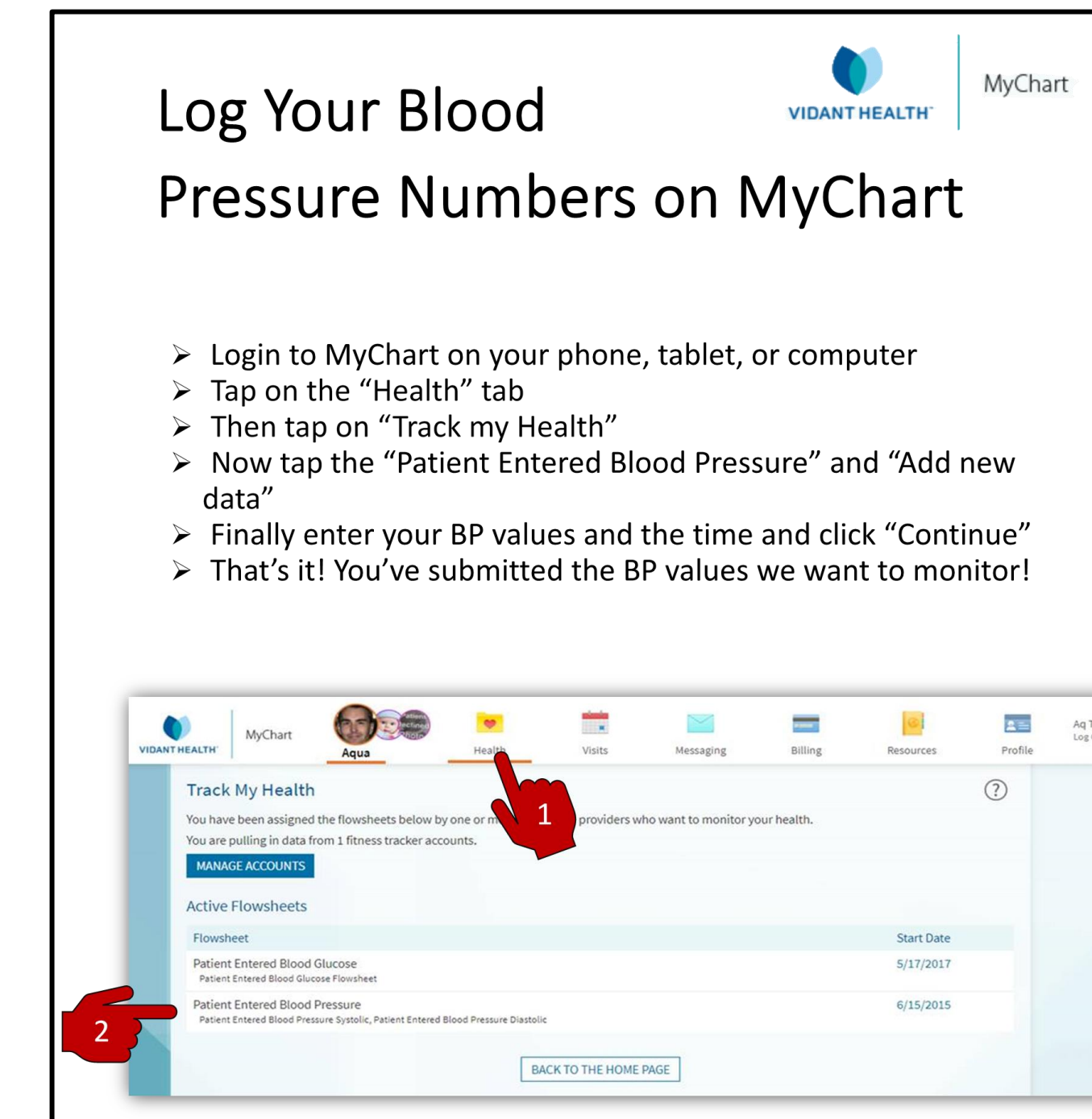
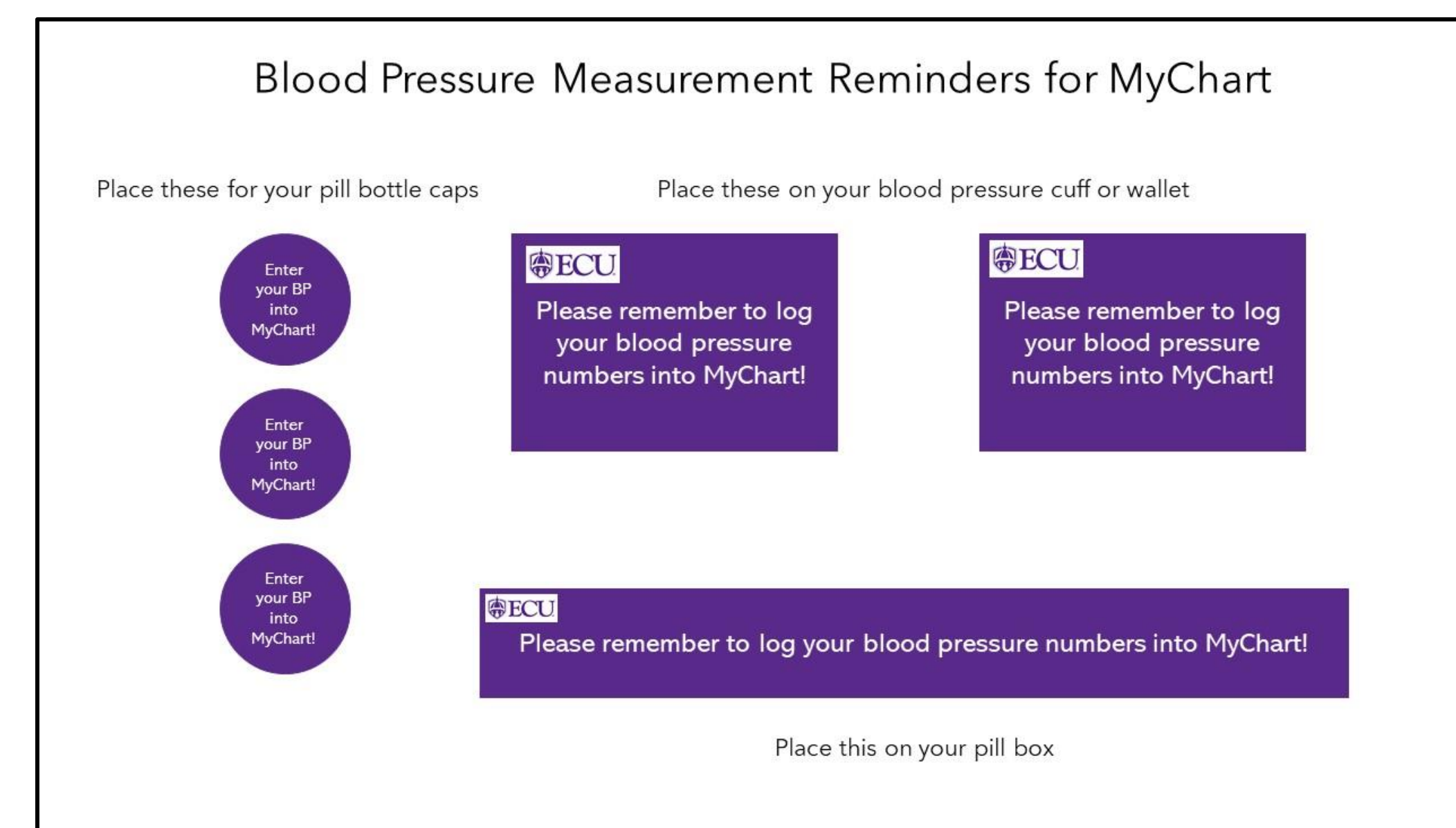
Involved educating the providing physician on the order set to allow the patient to access the MyChart blood pressure self-reporting system. Verbal instructions along with an educational flyer for the patients.

PDSA 2: Improved education for patients via telephone and MyChart

A telephone educational session done with each patient, allowing for direct feedback and troubleshooting. Additional detailed educational instructions given to each patient directly on their MyChart messaging portal.

PDSA 3: Reminder stickers and improved educational flyers

Reminder sticker sheets allowing patients to place prompts on their pill bottles and boxes, thus reinforcing through their daily routines to enter blood pressure readings. Also improved educational flyers.



LESSONS LEARNED

Patients are **enthusiastic about taking control** of their health. As healthcare professionals, we should do our best to facilitate and foster patient autonomy. This project shows that with **little effort** (PDSAs 1 and 2), we are able to have patients provide **much needed clinical data** for the outpatient setting.

Technology and the EHR system should be a powerful extension of our practice by utilizing **built-in functions to benefit patient care**. Self-reporting blood pressure was **one of several self-reporting parameters** that exists in the EHR currently.

Unique interventions can address gaps in our project. In PDSA 3, we used an interesting reminder sheet to create an **association between daily routines and our measure**.

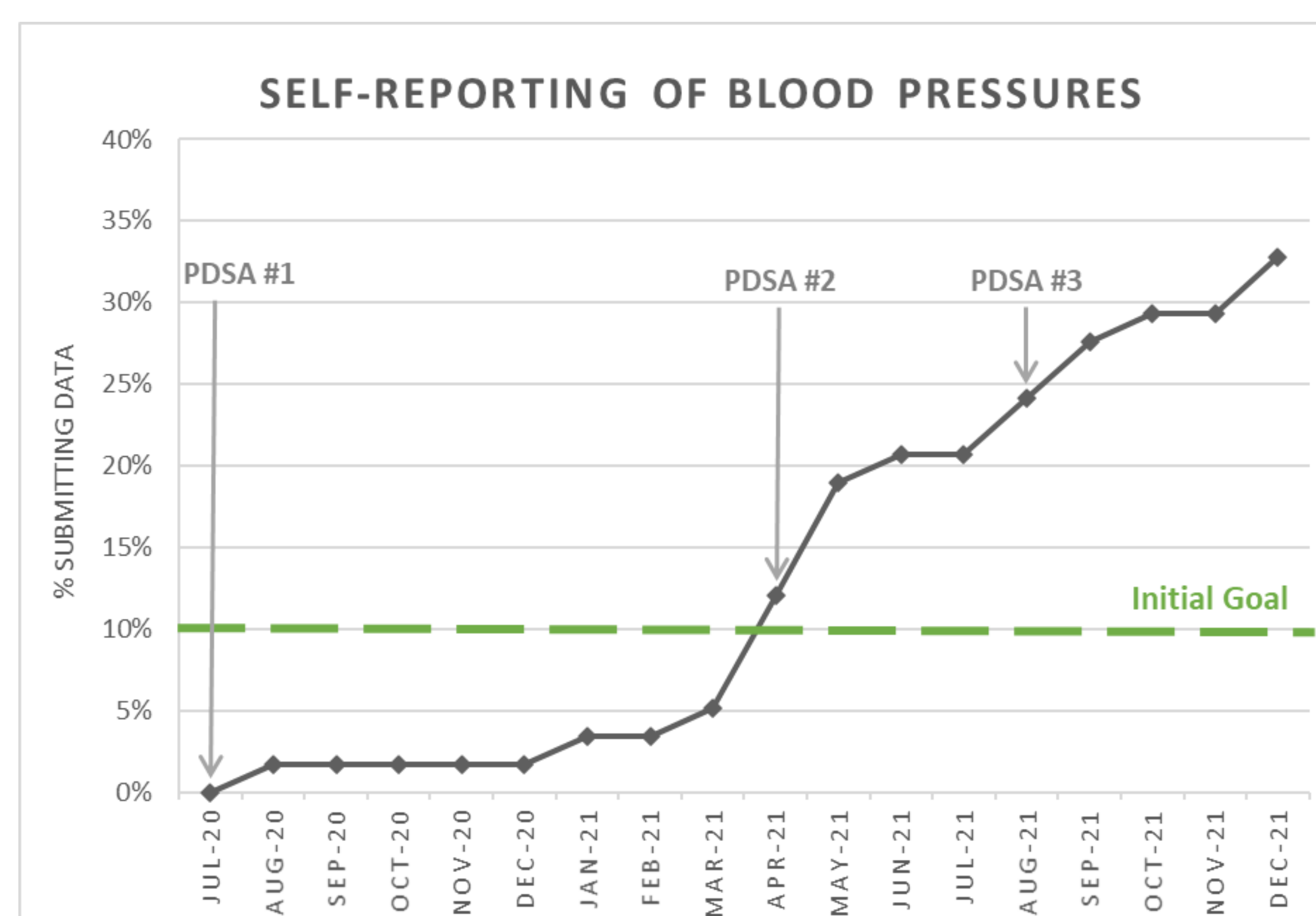
NEXT STEPS

- Increase **recruitment** and patient participation
- Continue to develop and **evolve PDSA cycles** by innovating and utilizing feedback
- Incorporate **additional measures**, such as monitoring adherence and consistency
- Consider **expanding project** to self-report other disease process such as blood glucose levels for diabetes
- Re-evaluate goals and **create new aim** and target for self-reporting

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RESULTS/OUTCOMES



| PDSA | % Reporting |
|------|-------------|
| 1 | 50% |
| 2 | 23% |
| 3 | 42% |

Total of 58 participants (6, 40, and 12 in subsequent cycles) were recruited for this study over a span of one-and-a-half years.