

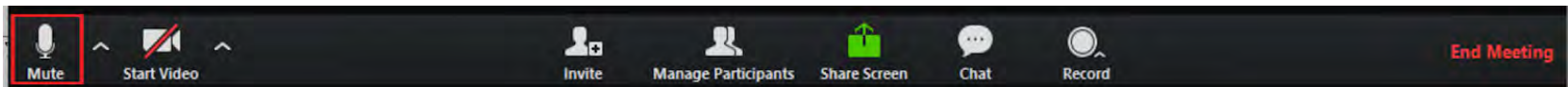


HHOI Webinar

August 5th, 2022

Welcome and Logistics

- Welcome
- Please mute yourself when not talking
- Turn on video (if able)
- Chat in your name, organization, and role



Agenda

Time	Item	Presenter
12:00 PM	Welcome and Logistics	Stephanie Kanuch, MEd
12:04 PM	Review Key Driver Diagram and SMART AIM	Aleece Caron, PhD
12:05 PM	HHOI Dashboard Data	Jordan Fiegl, MS
12:15 PM	Run Chart Interpretation	Aleece Caron, PhD
12:30 PM	Timely Followup	Shari Bolen MD, MPH
12:45 PM	Teams In Action	QI coaches QIP clinics
12:55 PM	Next Steps/Wrap Up	Stephanie Kanuch, MEd

Select Project Team Members

Case Western Reserve University at The MetroHealth System

PI: Shari Bolen,
MD, MPH



PI: Aleece Caron,
PhD



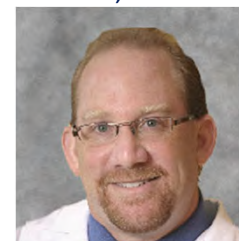
University of Cincinnati

PI: Sandra Regan,
PhD



The Ohio State University

PI: Randy Wexler,
MD, MPH



Quality Improvement Coaches

Caroline Carter,
MS, LSW, BCC

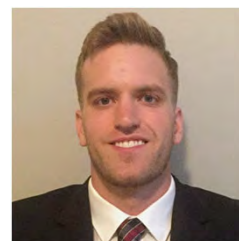


Marty Williams, MS



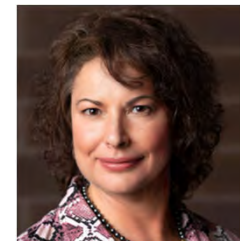
Data Scientist

Jordan Fiegl, MS



Case Western Reserve University Project Management Leads

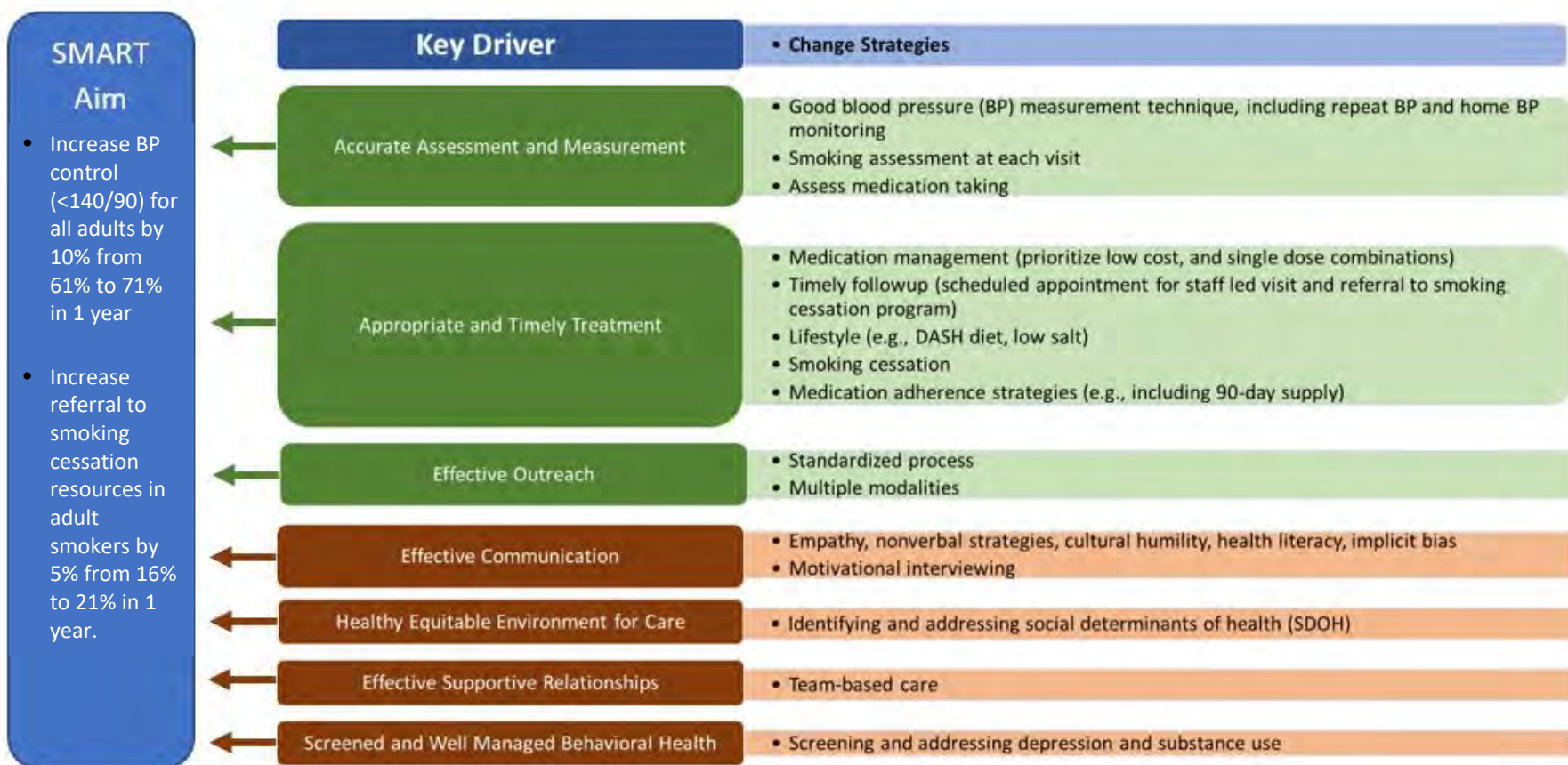
Stephanie Kanuch,
MEd



Cathy Sullivan,
MS, RD



Key Driver Diagram and SMART AIM



HHOI Data Dashboard

Jordan Fiegl, MS

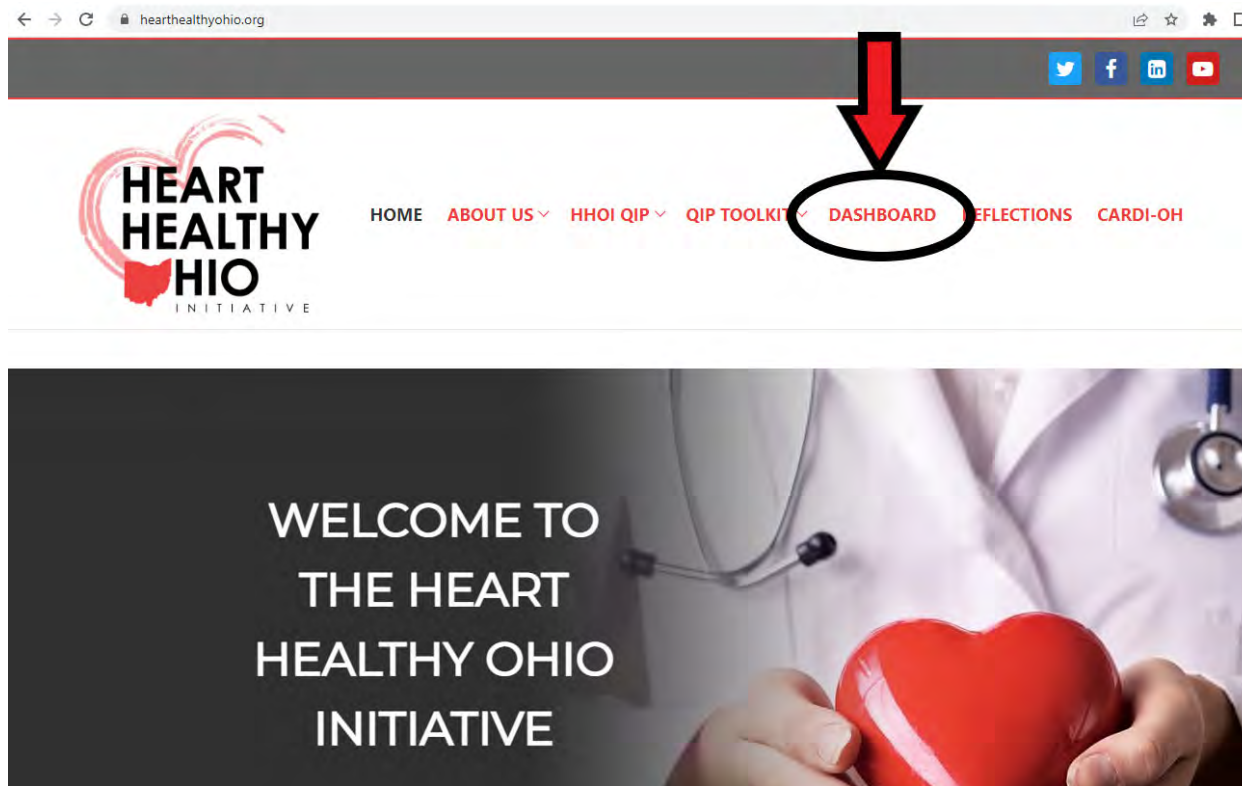
Data Scientist

The MetroHealth System



Logistics of accessing your data

- Website: <https://hearthealthyohio.org/>

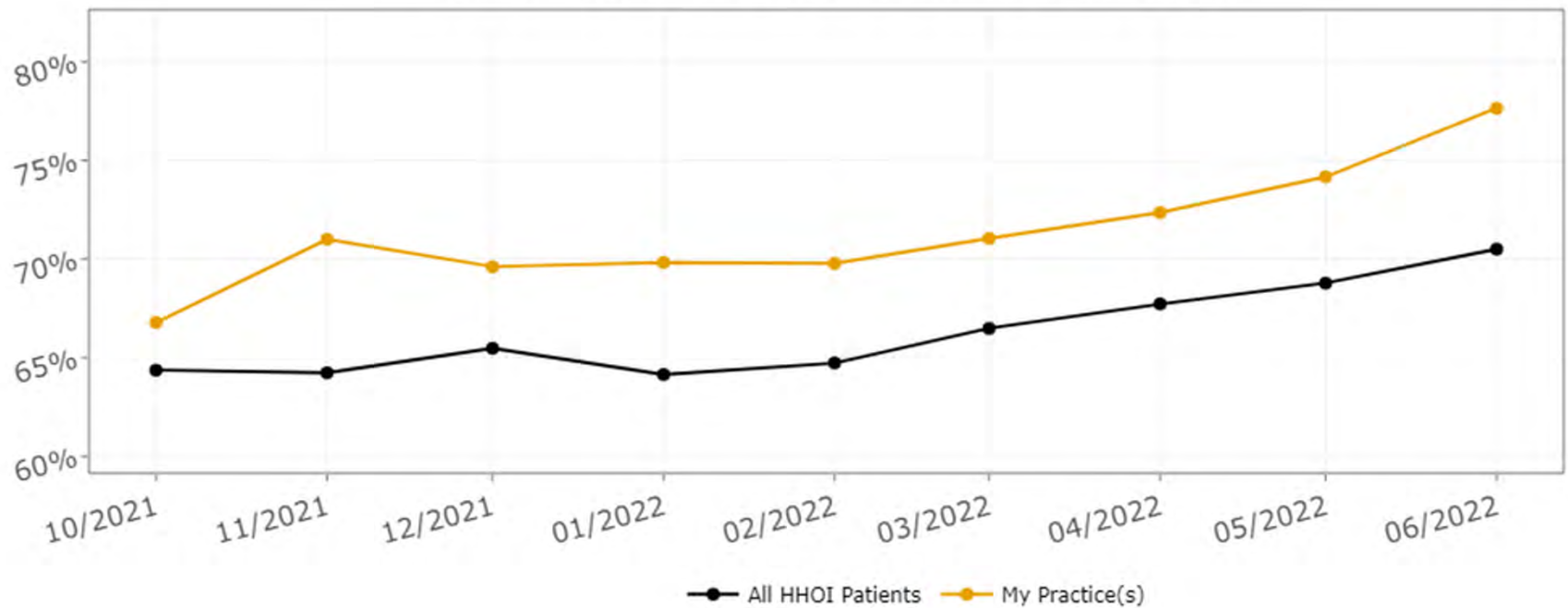


Logistics of accessing your data

- If you do not see your practice in the slides, there are several possible reasons for this:
 - Still waiting on initial submissions
 - Baseline data has been received, but waiting on subsequent submissions
 - Processing complications on our side
- Please reach out to us through email if you are unsure of which reason you are not seeing your practice!

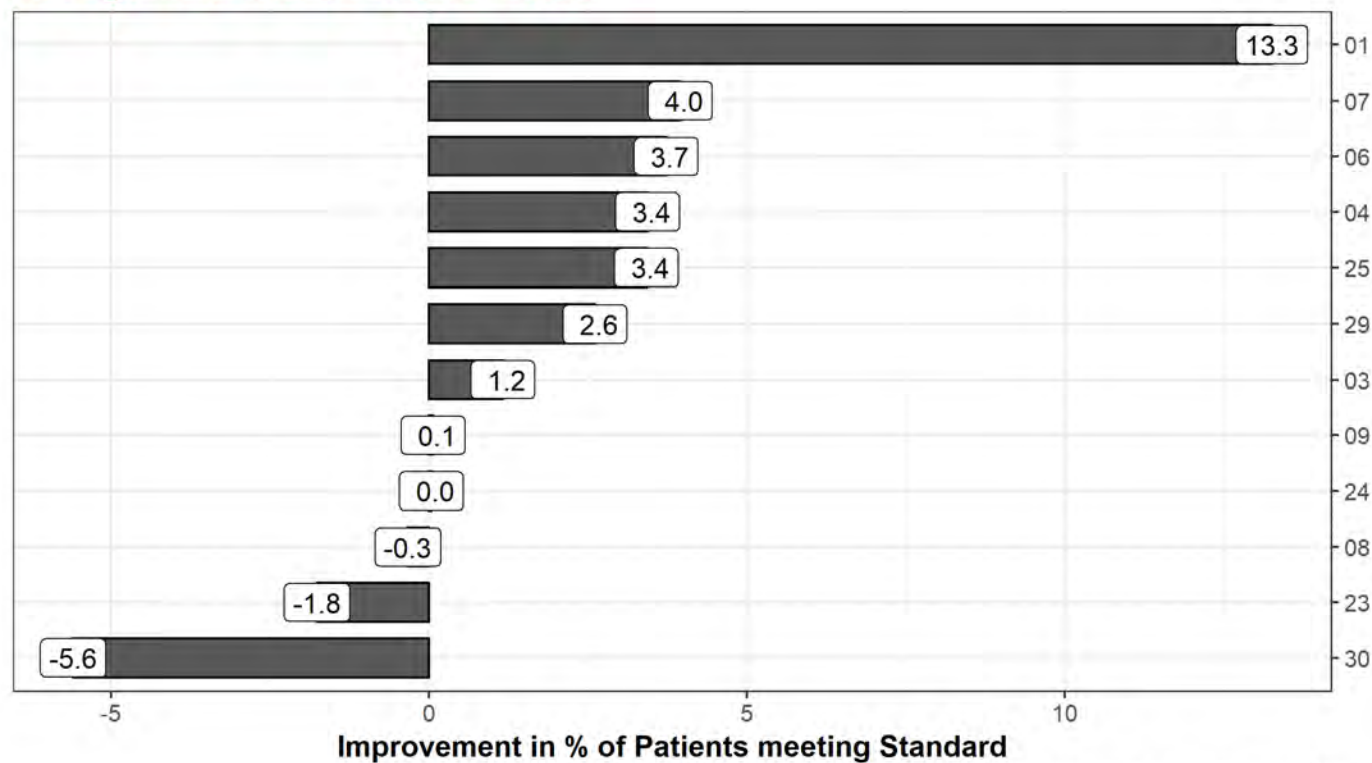
Percent of hypertensive adults with BP<140/90

My Practice(s) vs All Practices for HTN Control 140/90



Percent of hypertensive adults with BP<140/90 by practice

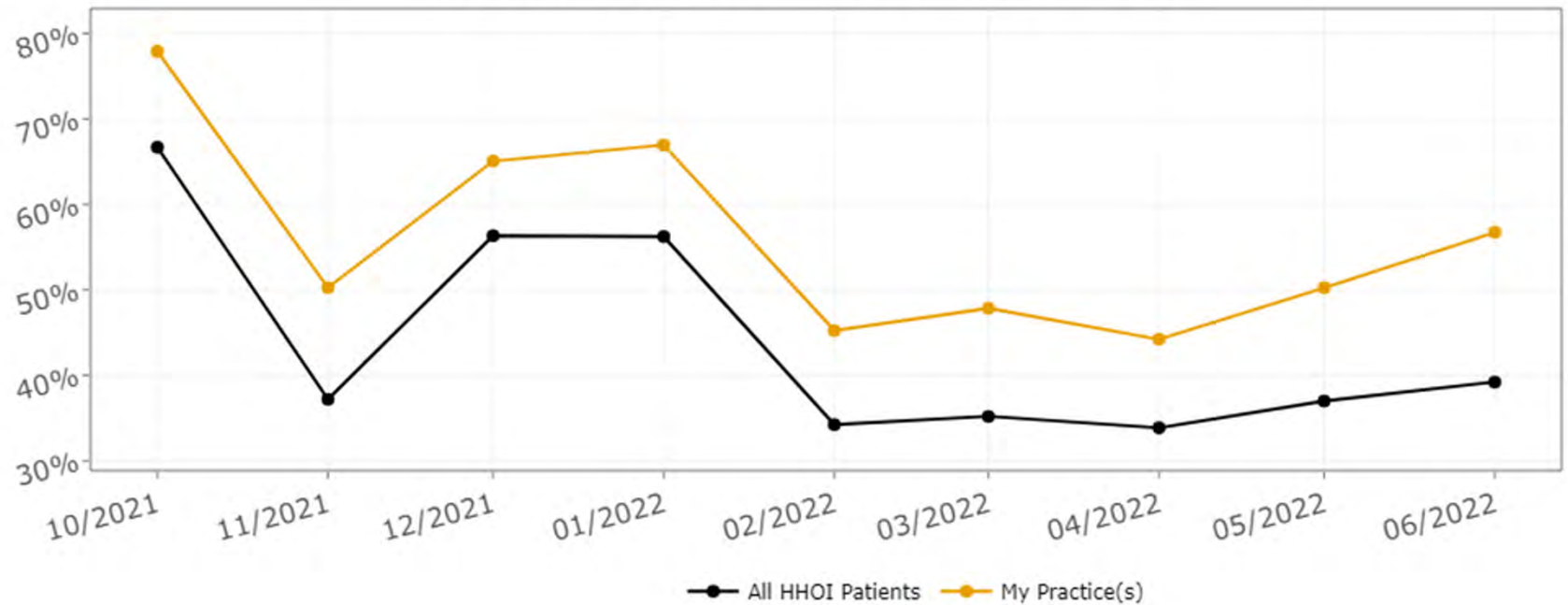
Change in % with BP below 140/90



Improvement in percentage points
Average of baseline compared to average of implementation

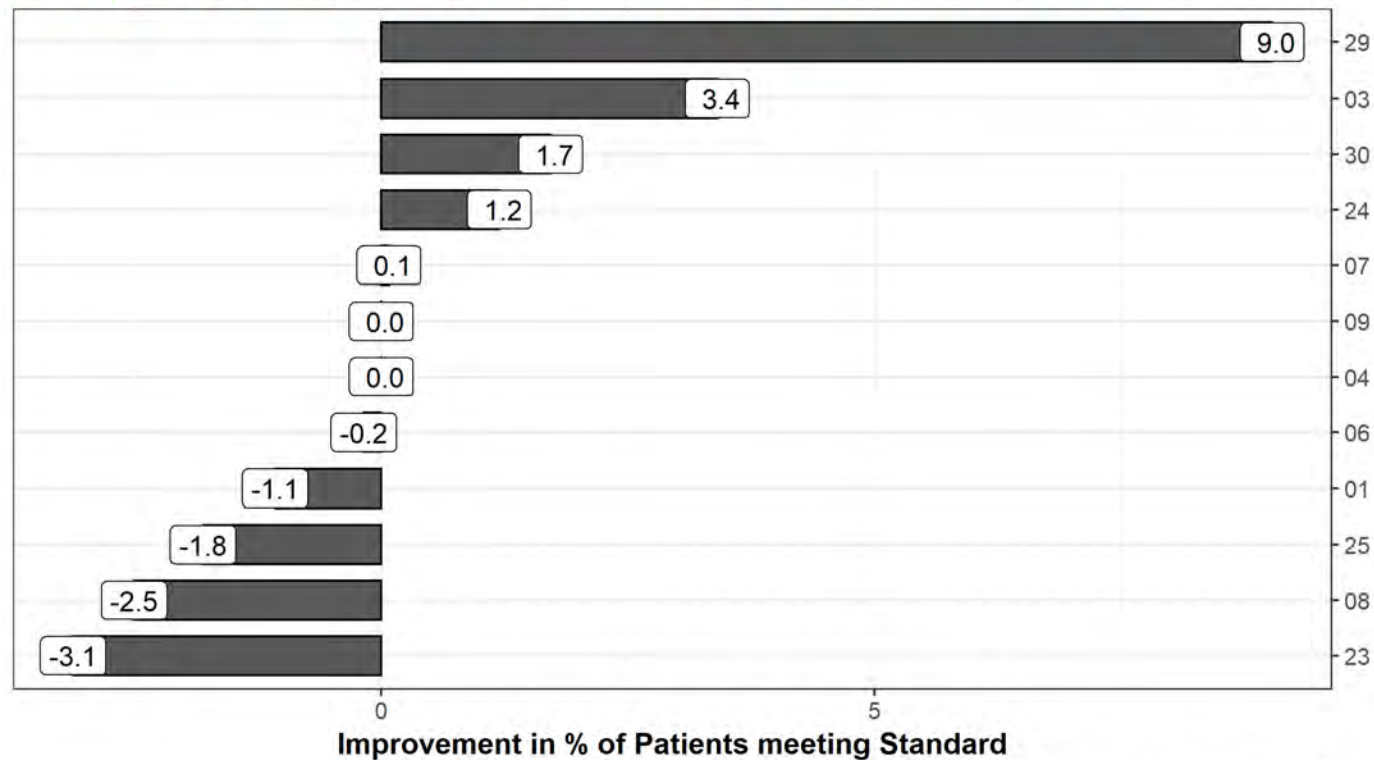
Percent of hypertensive adults with repeat BP if 1st BP elevated

My Practice(s) vs All Practices for Repeat BP Taken



Percent of hypertensive adults with repeat BP if 1st BP elevated by practice

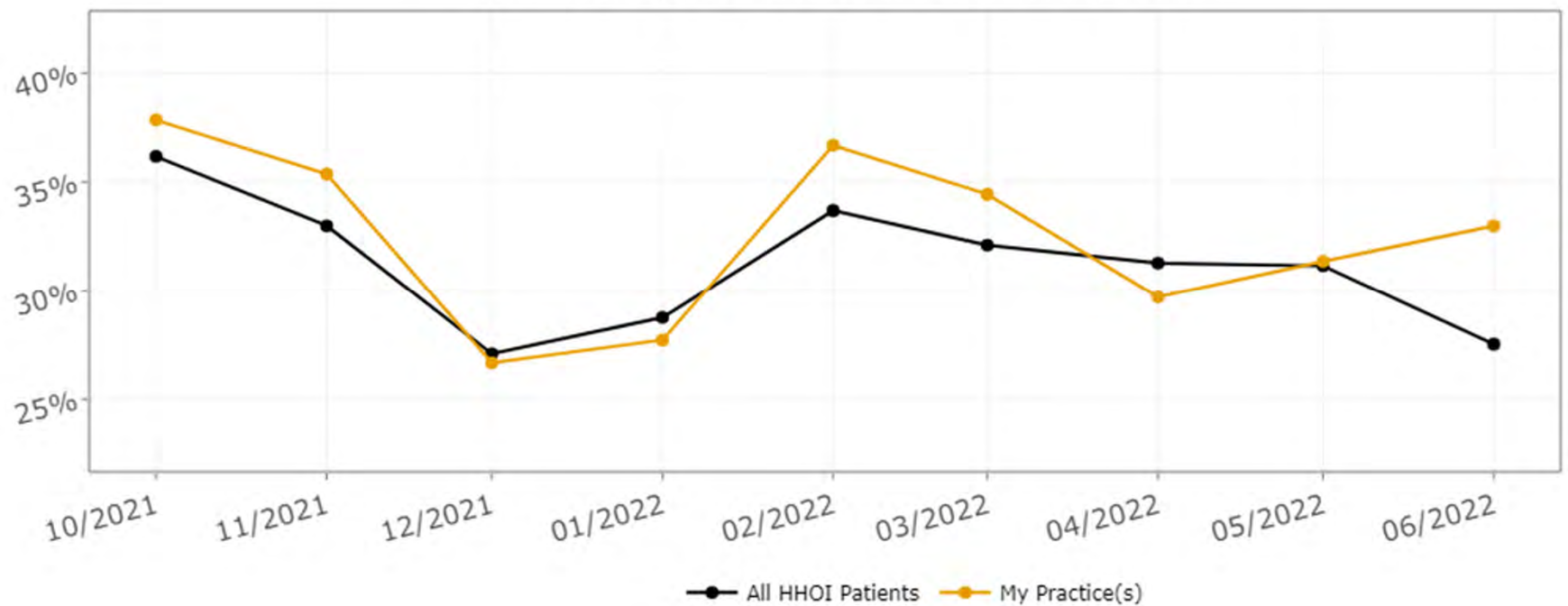
Change in % of Repeat Blood Pressure Taken after initial elevated BP



Improvement in percentage points
Average of baseline compared to average of implementation

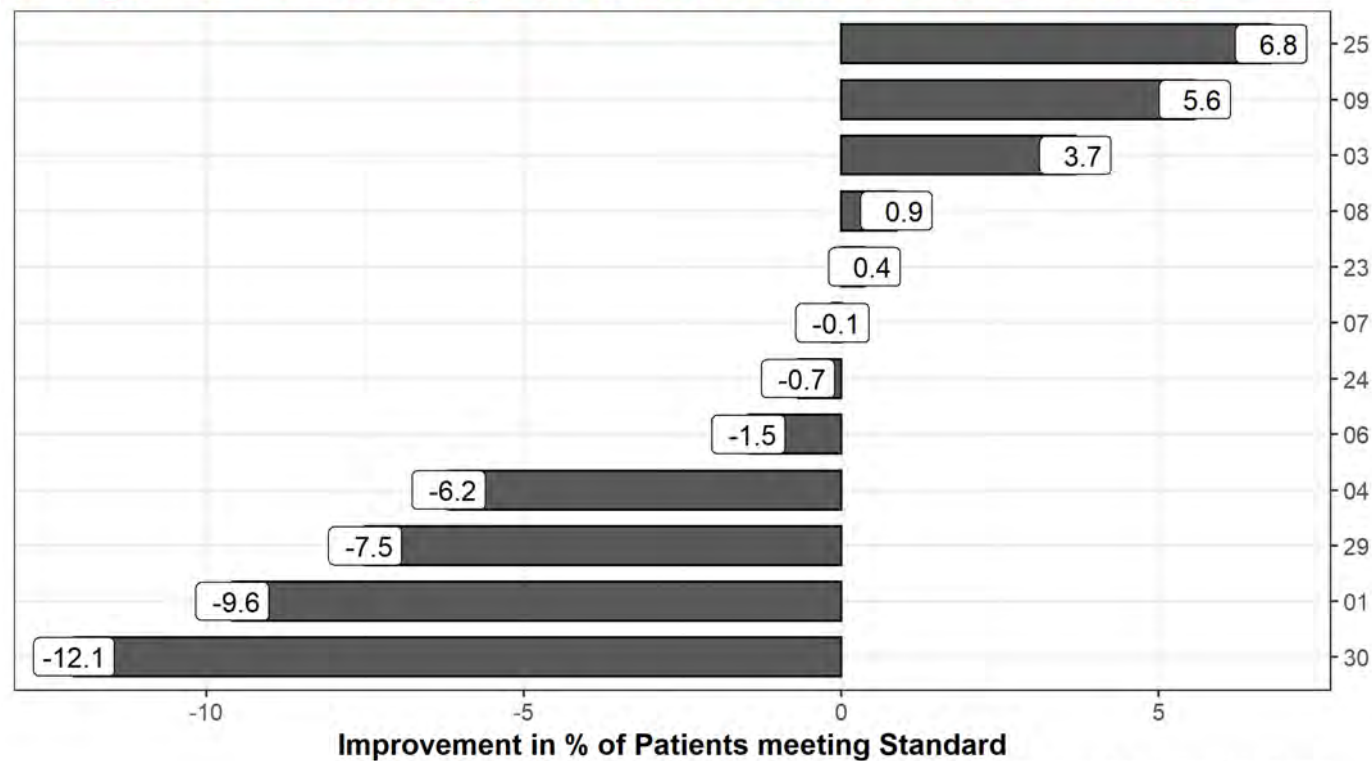
Percent of hypertensive adults with scheduled follow-up within 1 month

My Practice(s) vs All Practices for Follow-up Visit



Percent of hypertensive adults with scheduled follow-up within 1 month by practice

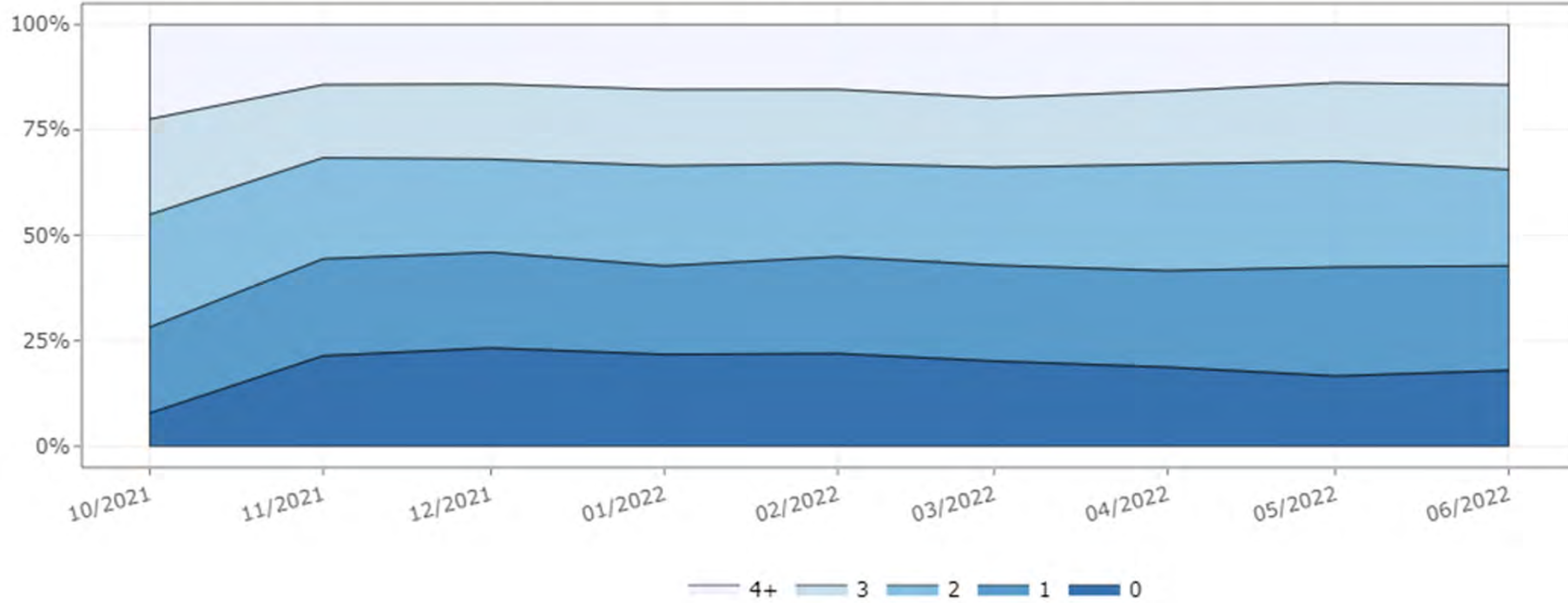
Change in % with Follow-up Visit Scheduled after elevated BP reading



Improvement in percentage points
Average of baseline compared to average of implementation

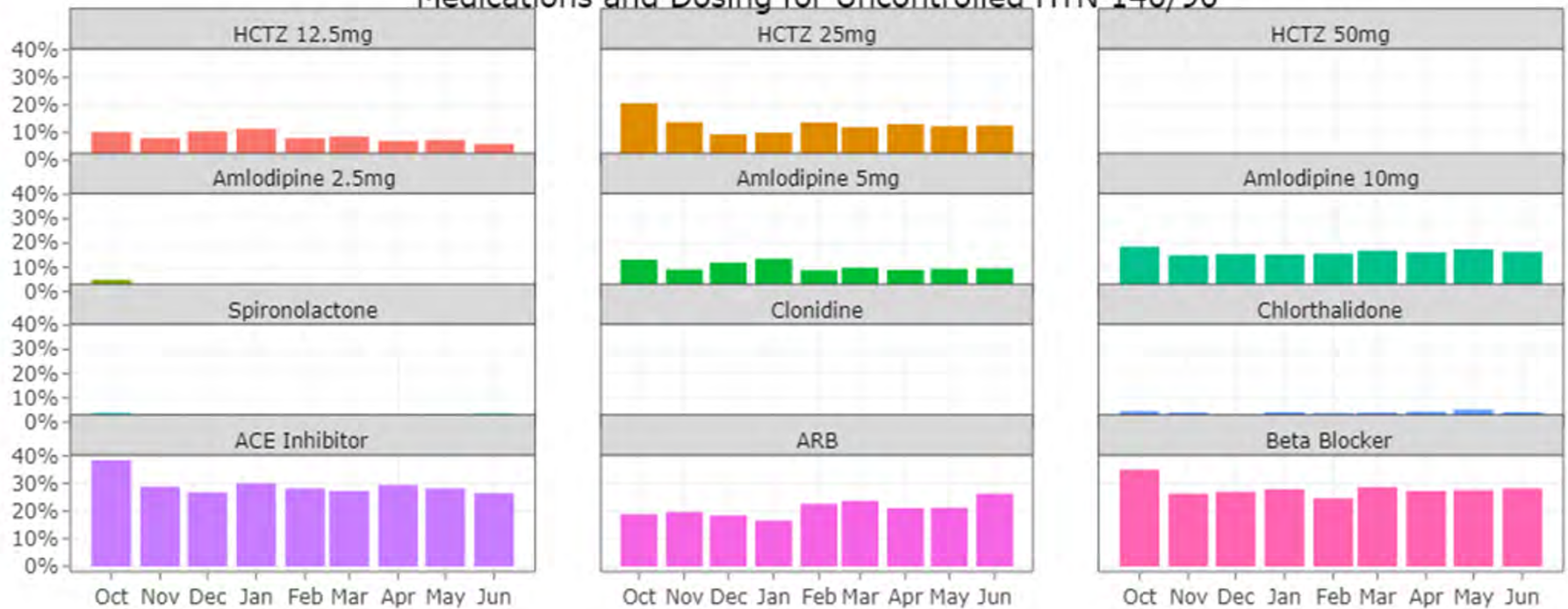
Percent of hypertensive adults with elevated BP on specific numbers of medications

Tiered Medication Intensity Breakdown for Uncontrolled HTN 140/90 for Selected Practices



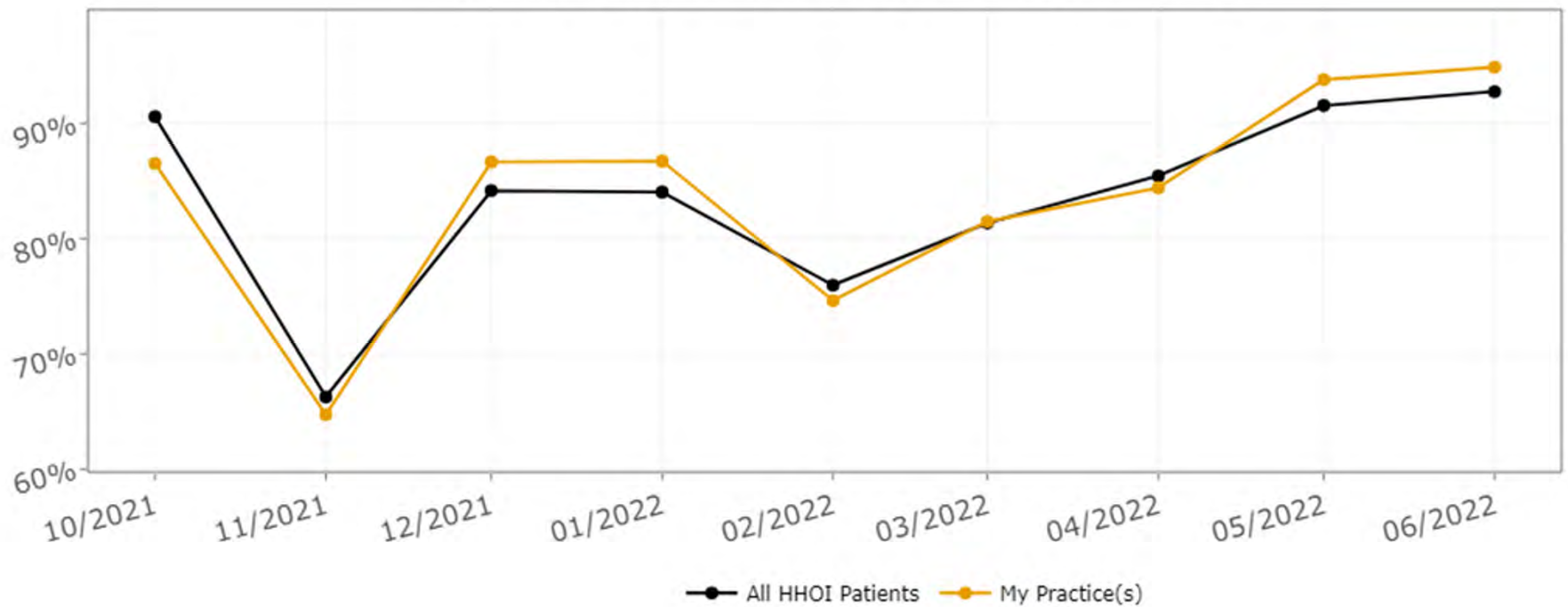
Percent of hypertensive adults with elevated BP on specific medications

Medications and Dosing for Uncontrolled HTN 140/90



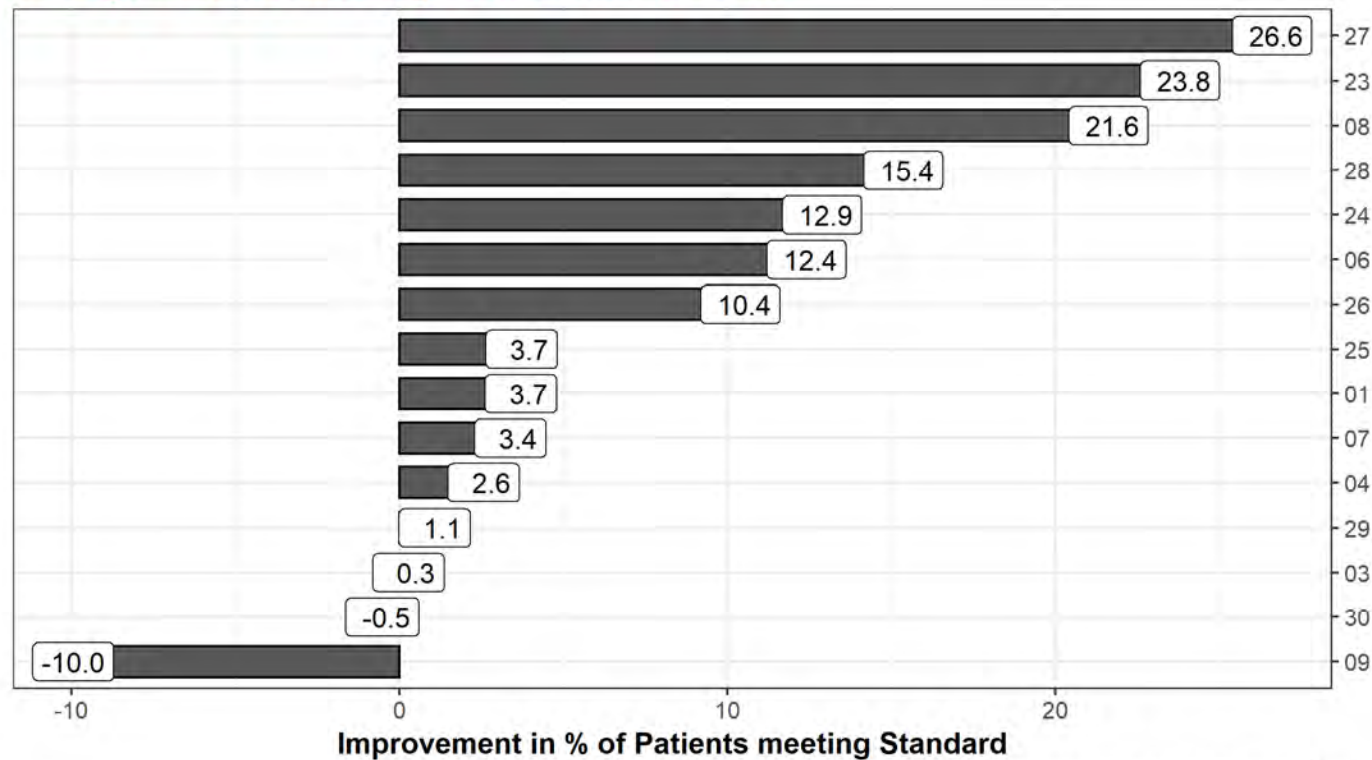
Percent of adults assessed for smoking in the last year

My Practice(s) vs All Practices for Smoking Screening



Percent of adults assessed for smoking in the last year by practice

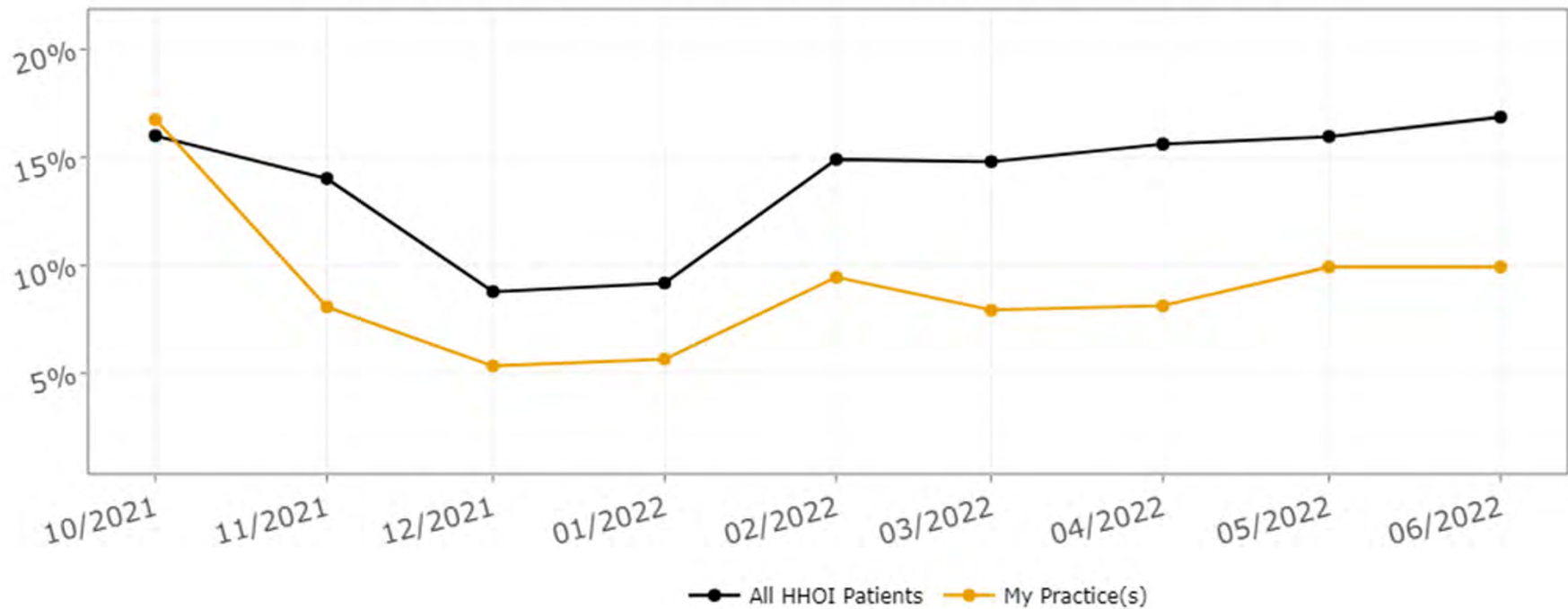
Change in % of Smoking Status Assessments



Improvement in percentage points
Average of baseline compared to average of implementation

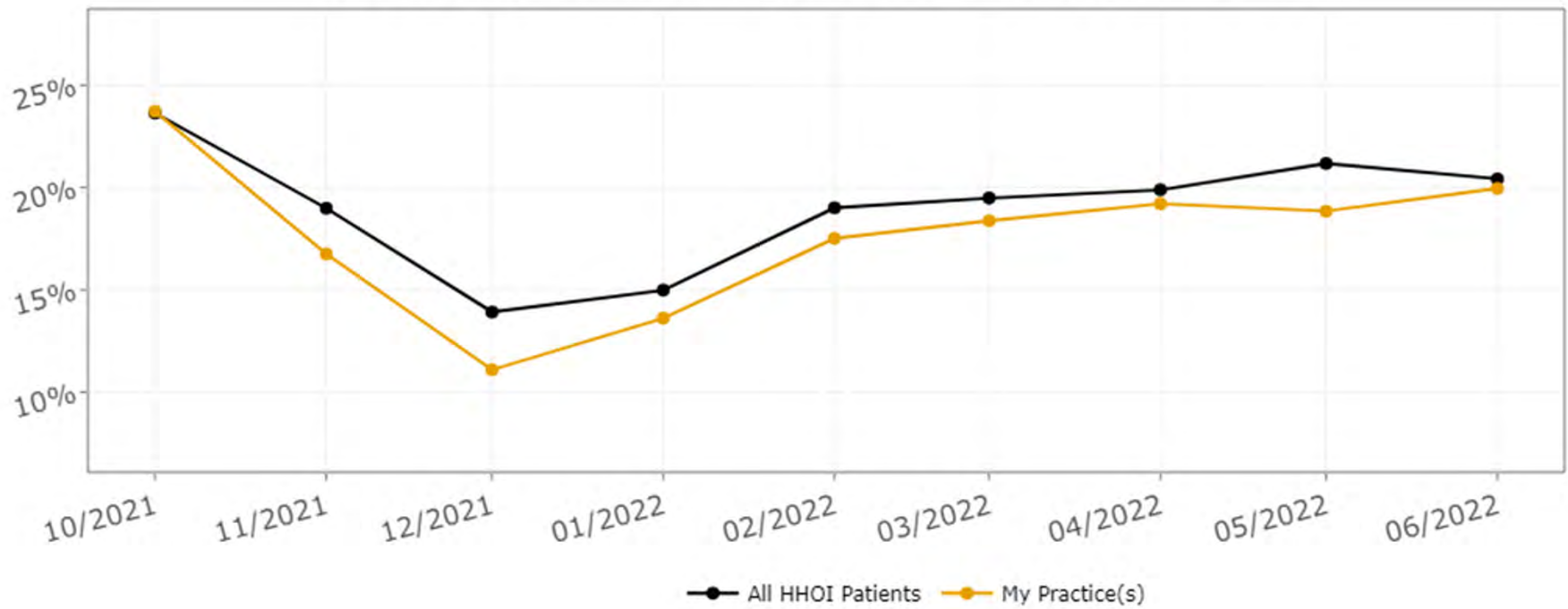
Percent of smokers connected to resources for smoking cessation

My Practice(s) vs All Practices for Connected to Cessation Resources



Percent of Smokers Prescribed a Smoking Cessation Medication

My Practice(s) vs All Practices for Prescribed Tobacco Cessation Meds



Summary

- Wonderful to see some improvements in BP control and smoking cessation assessment at several sites
- Opportunities exist for accurate BP measurement, timely followup, medication intensification, and smoking assessment along with referral/medications for smokers
- Data reporting opportunity to see improvements

Run Chart Interpretation

Aleece Caron, PhD

Associate Professor of Medicine

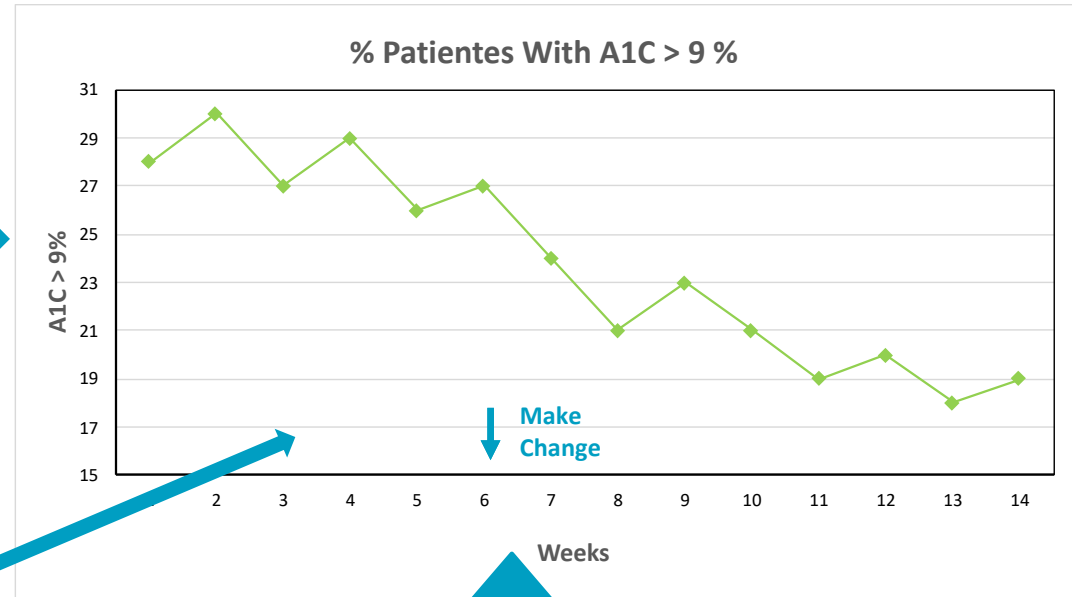
Case Western Reserve University/

The MetroHealth System



Why we use Run Charts?

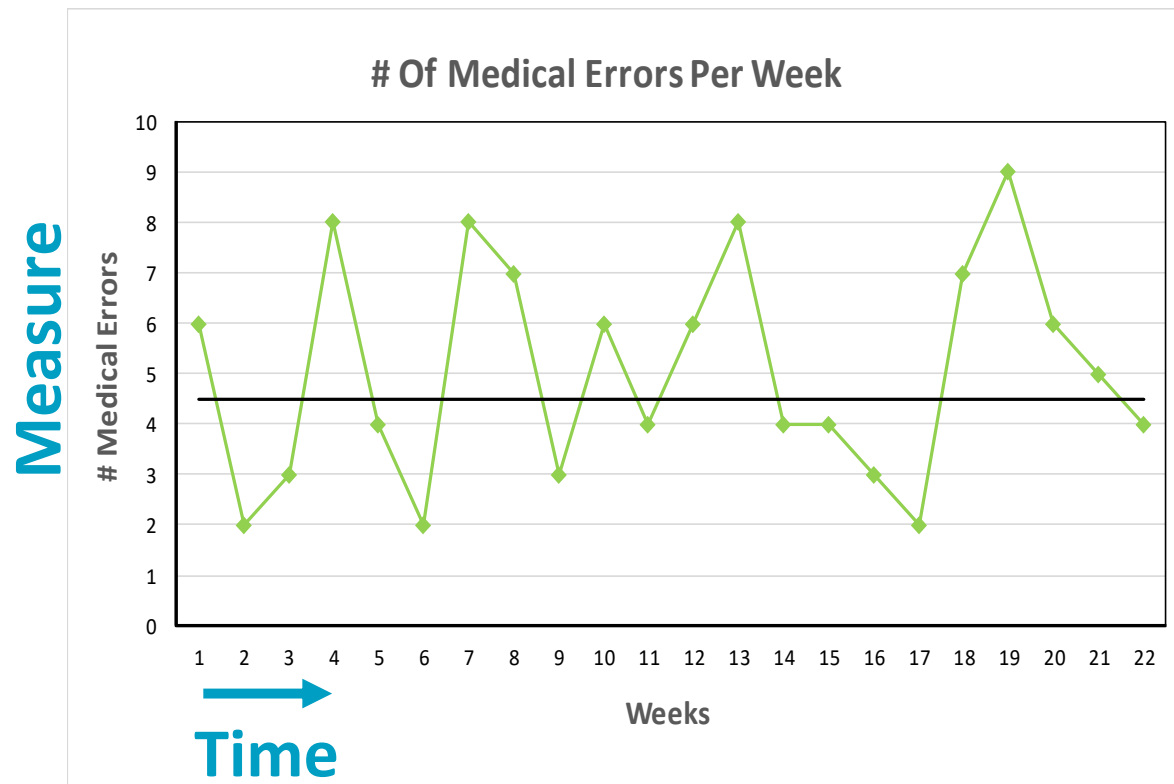
Model for Improvement



- Make process performance visible
- Determine a change has resulted in an improvement
- Determine we are holding the gain

Langley, J. et al. The Improvement Guide. Jossey-Bass Publishers, 2009.

Elements of a Run Chart



The centerline (CL) on a Run Chart is the Median



Median 4.5

\tilde{X}
(CL)

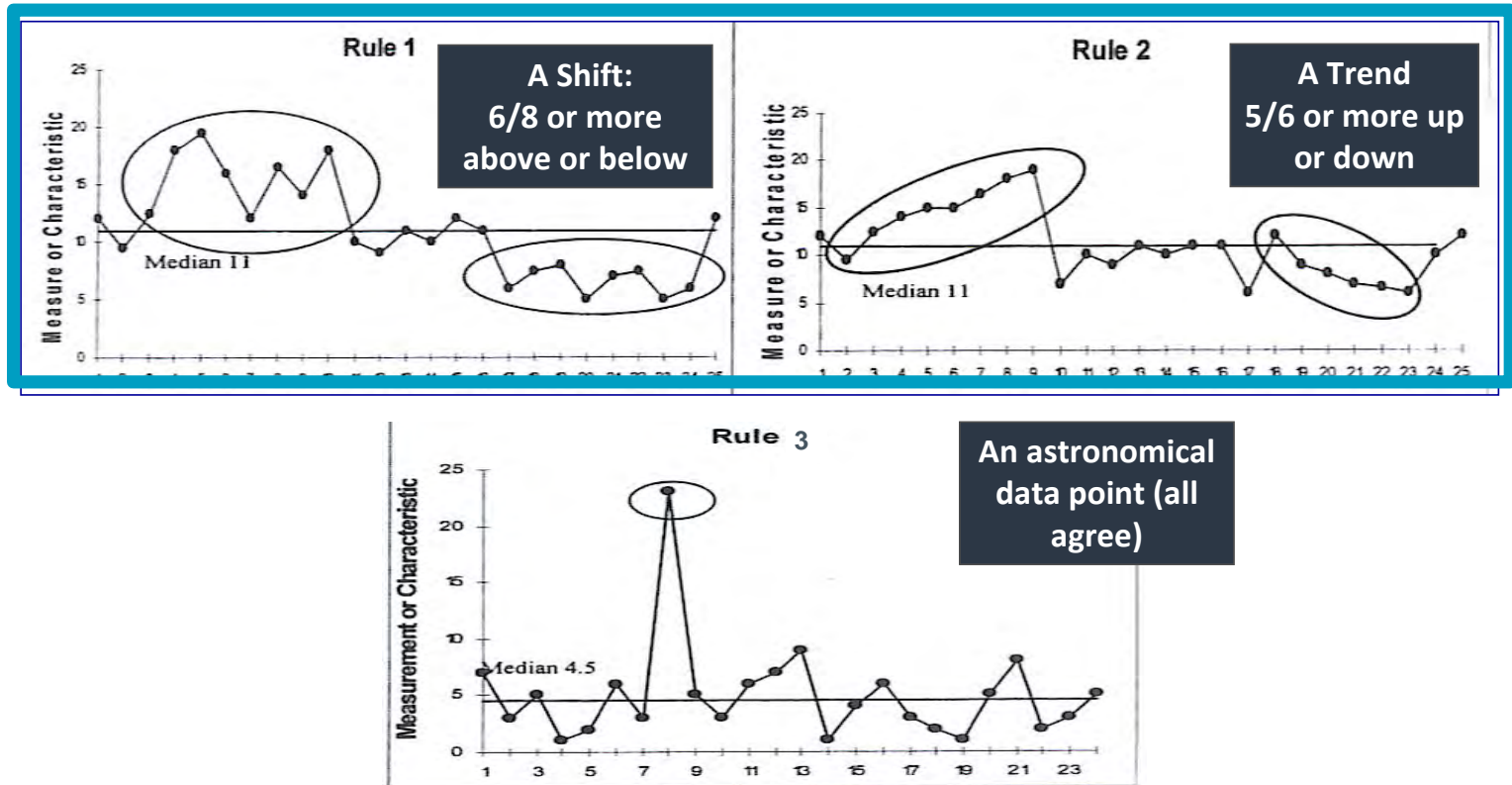
The Four Rules to Apply to a Run Chart



Four rules that indicate non-random patterns in a run chart, indicate **SIGNAL!**

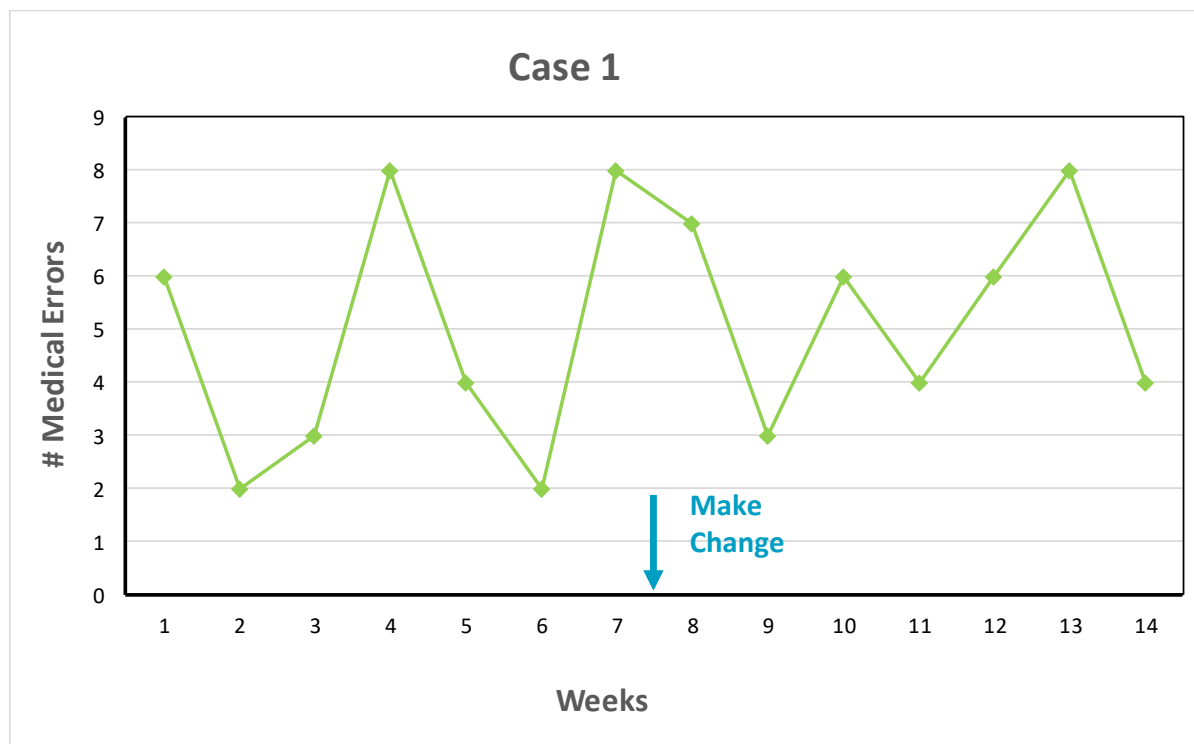
1. Shift (6 above/below, use 8 if 20+)
2. Trend (5 up/down, use 6 if 20+)
3. Astronomical data point (all agree)
4. Too many or too few runs

Run Chart Rules



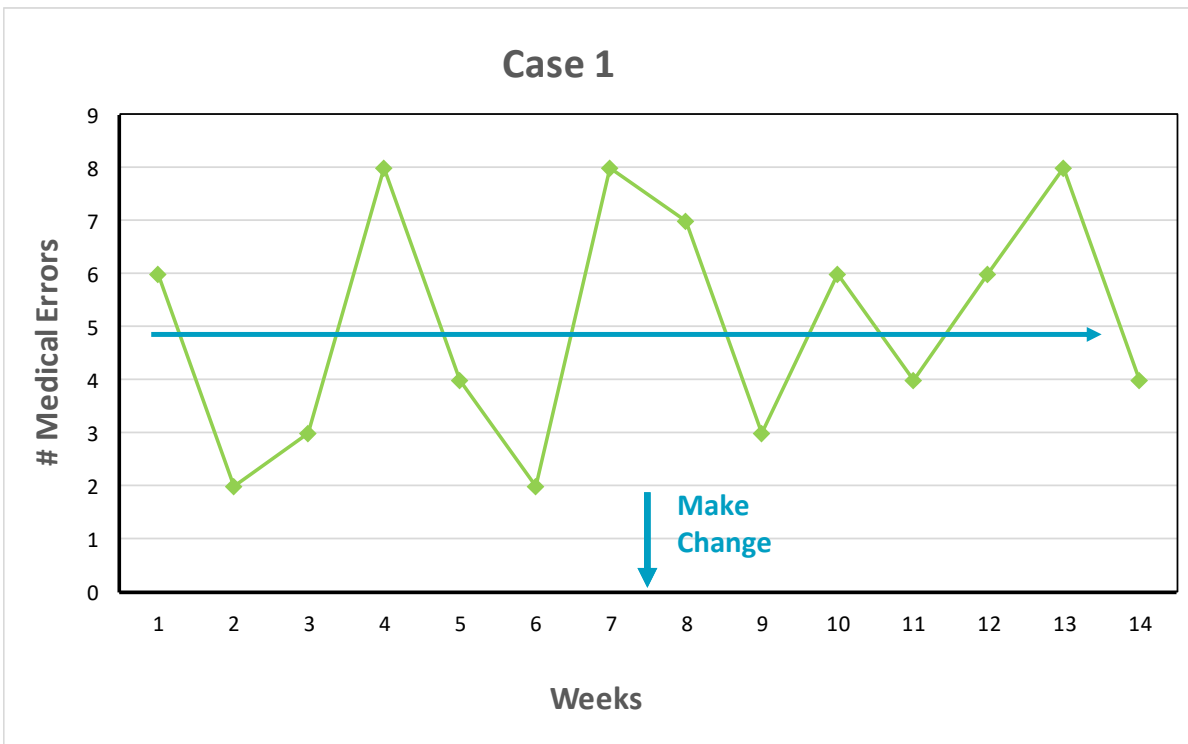
Adapted from The Data Guide by L. Provost and S. Murray, Austin, Texas, 2011, page 78

Case 1: Has There Been Meaningful Improvement?



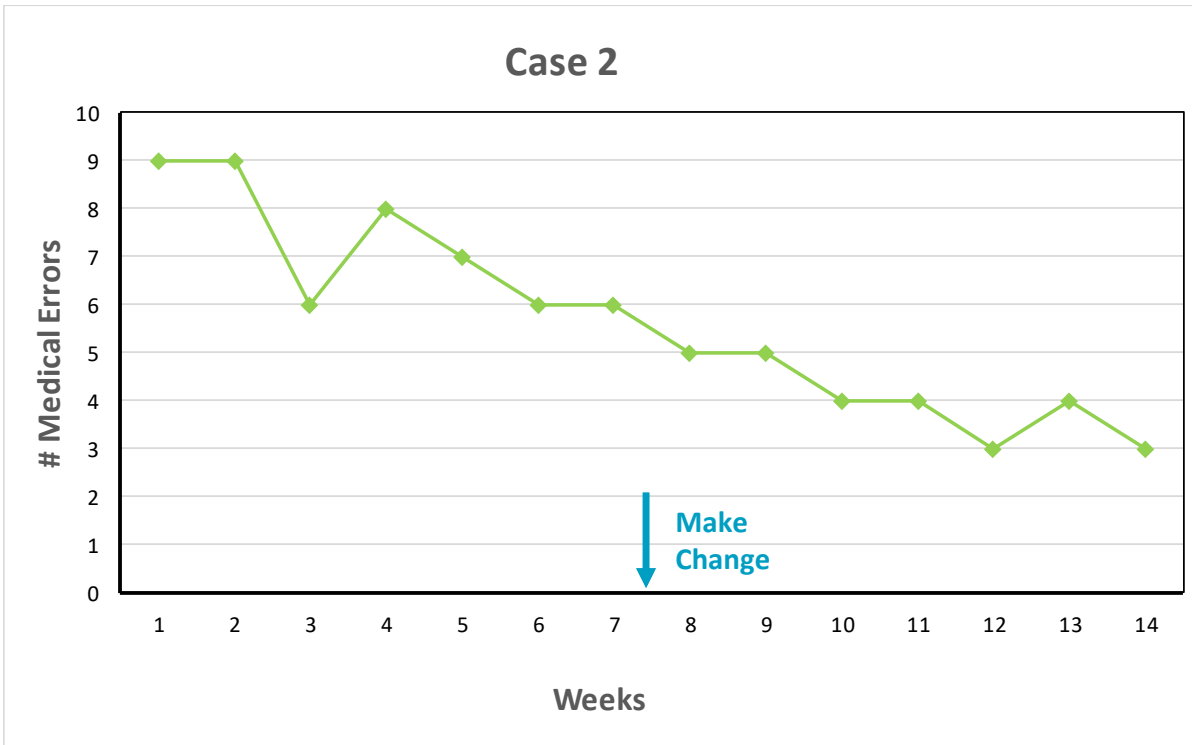
Chat in Your Answer!

Case 1: Has There Been Meaningful Improvement?



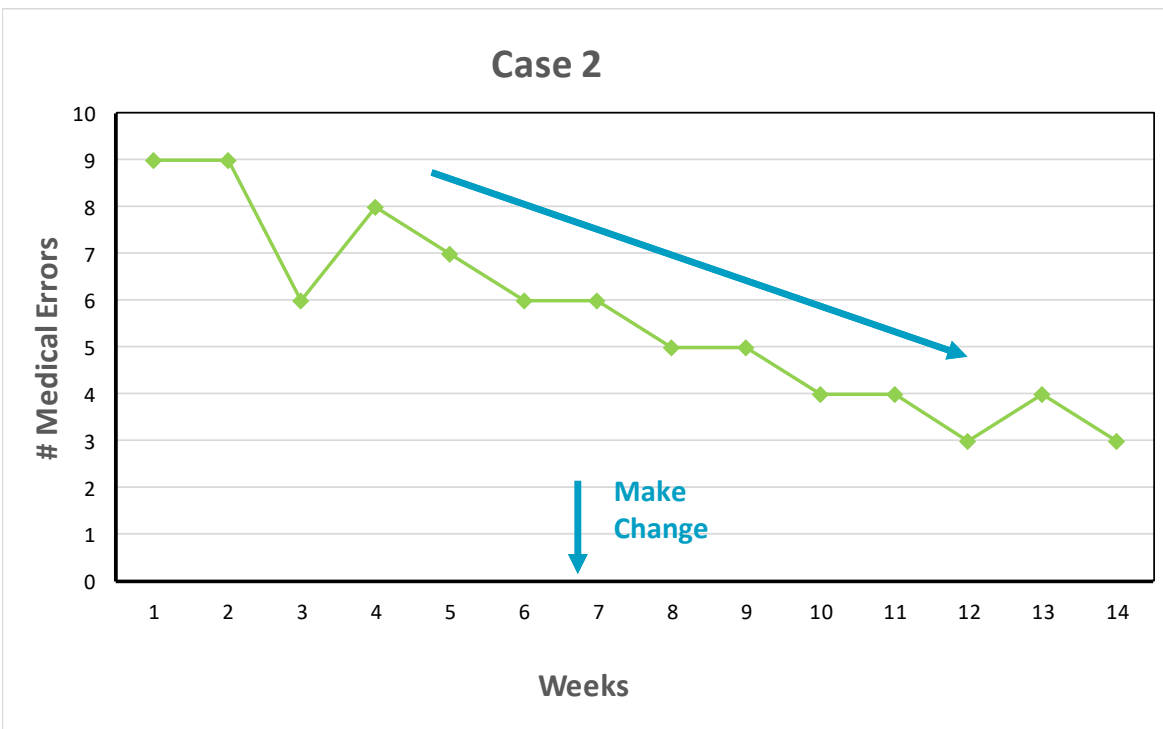
- No Improvement
- High variation
- Same results

Case 2: Has There Been Meaningful Improvement?



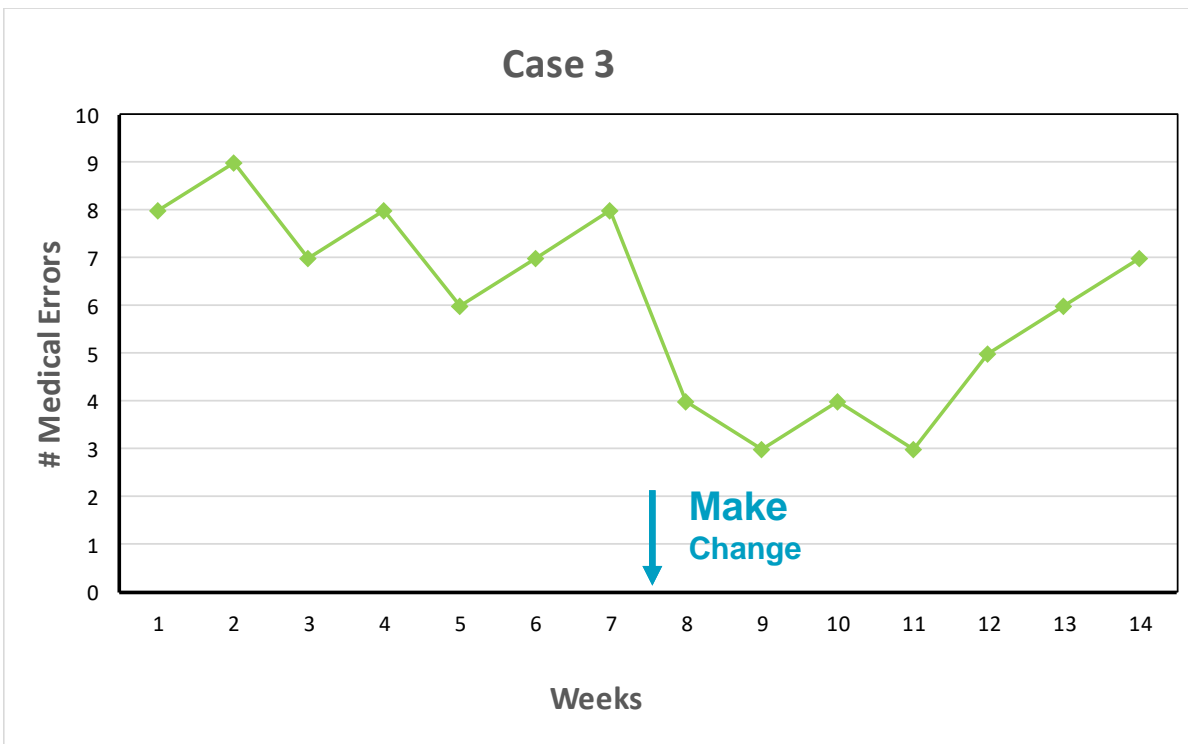
Chat in Your Answer!

Case 2: Has There Been Meaningful Improvement?



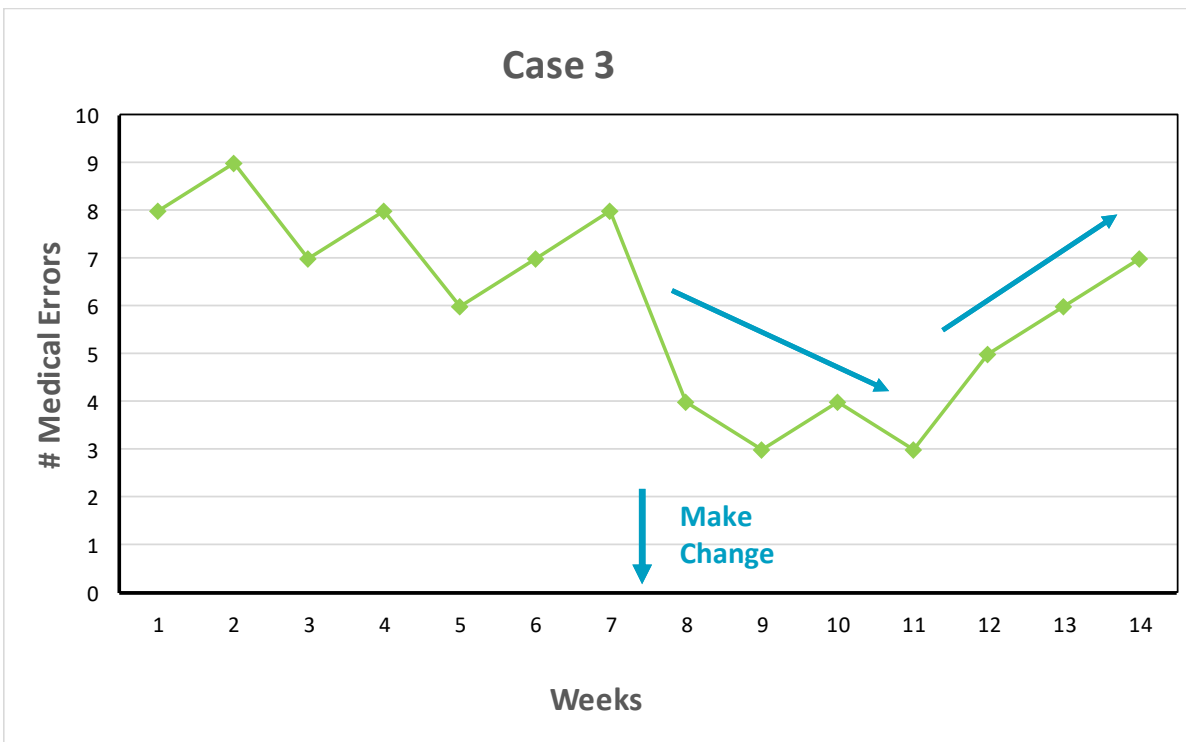
- Improvement started before change
- Trend started before change

Case 3: Has There Been Meaningful Improvement?



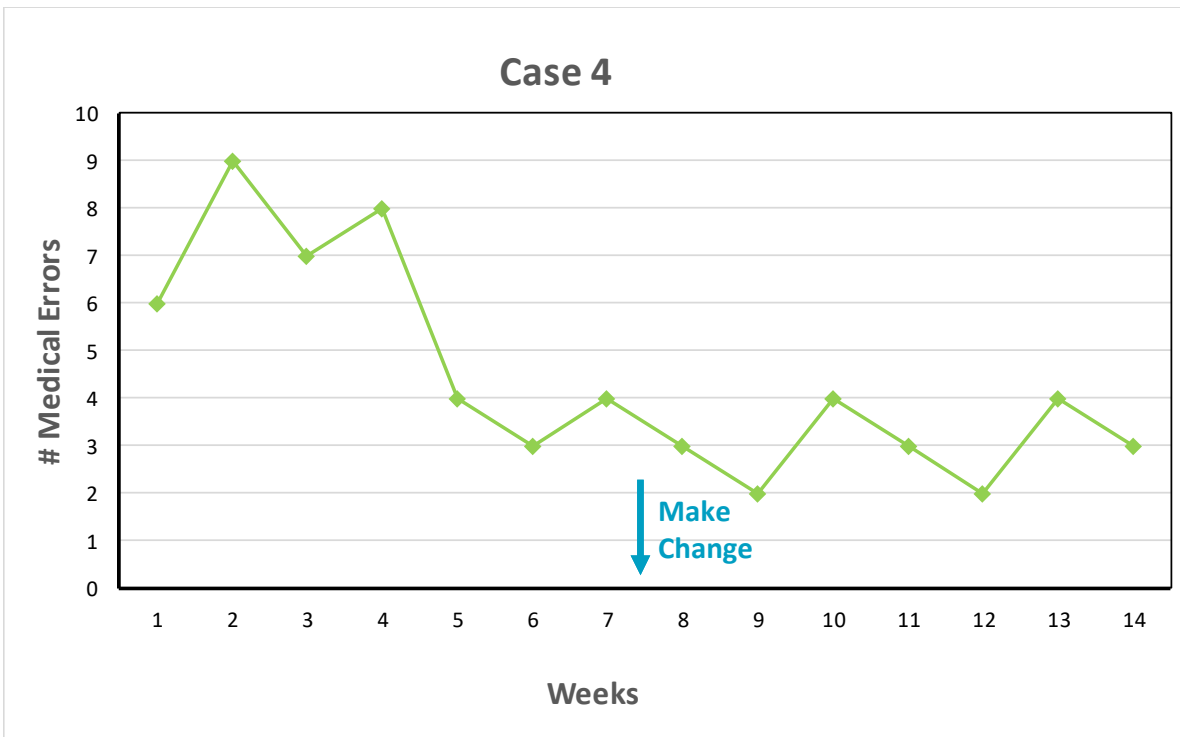
Chat in Your Answer!

Case 3: Has There Been Meaningful Improvement?



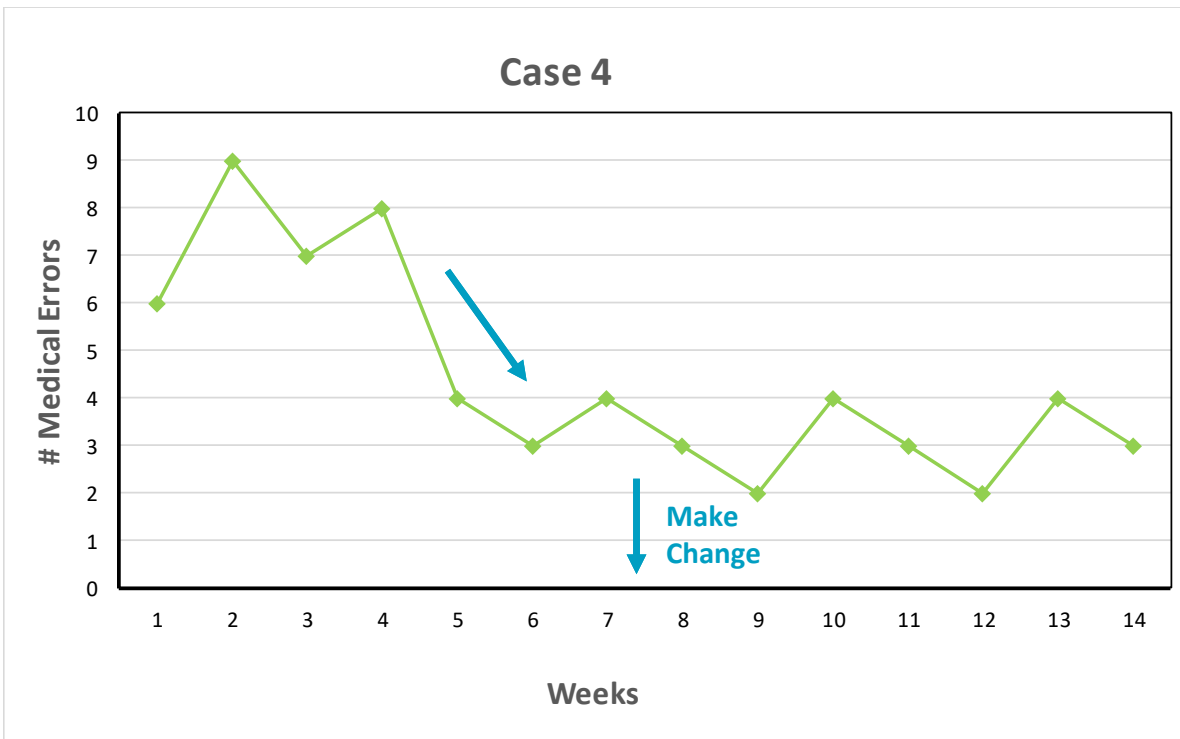
- Initial improvement
- Process went back to original behavior

Case 4: Has There Been Meaningful Improvement?



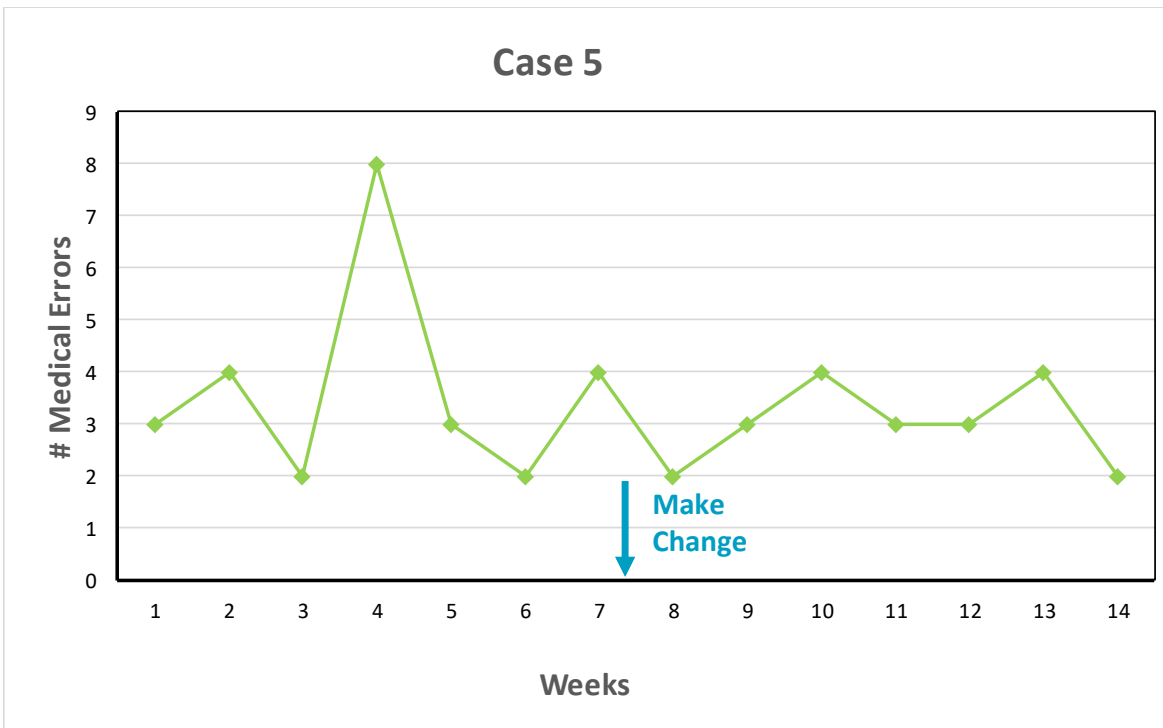
Chat in Your Answer!

Case 4: Has There Been Meaningful Improvement?



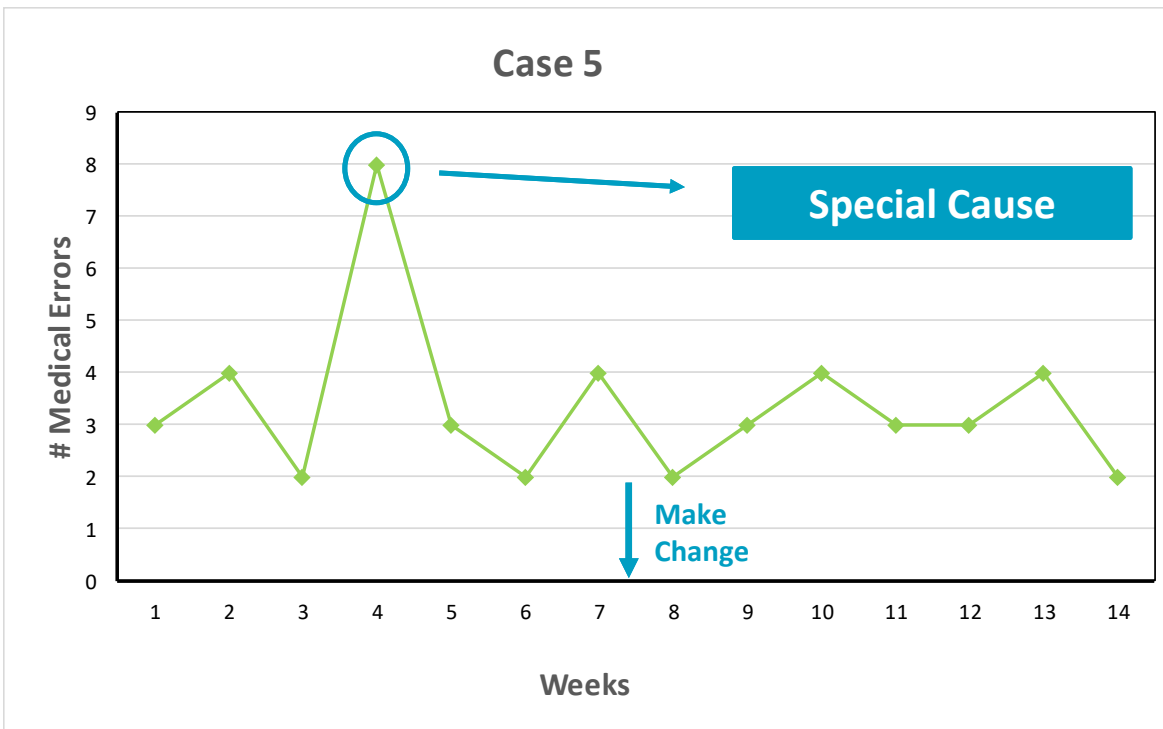
Improvement started
in week 5

Case 5: Has There Been Meaningful Improvement?



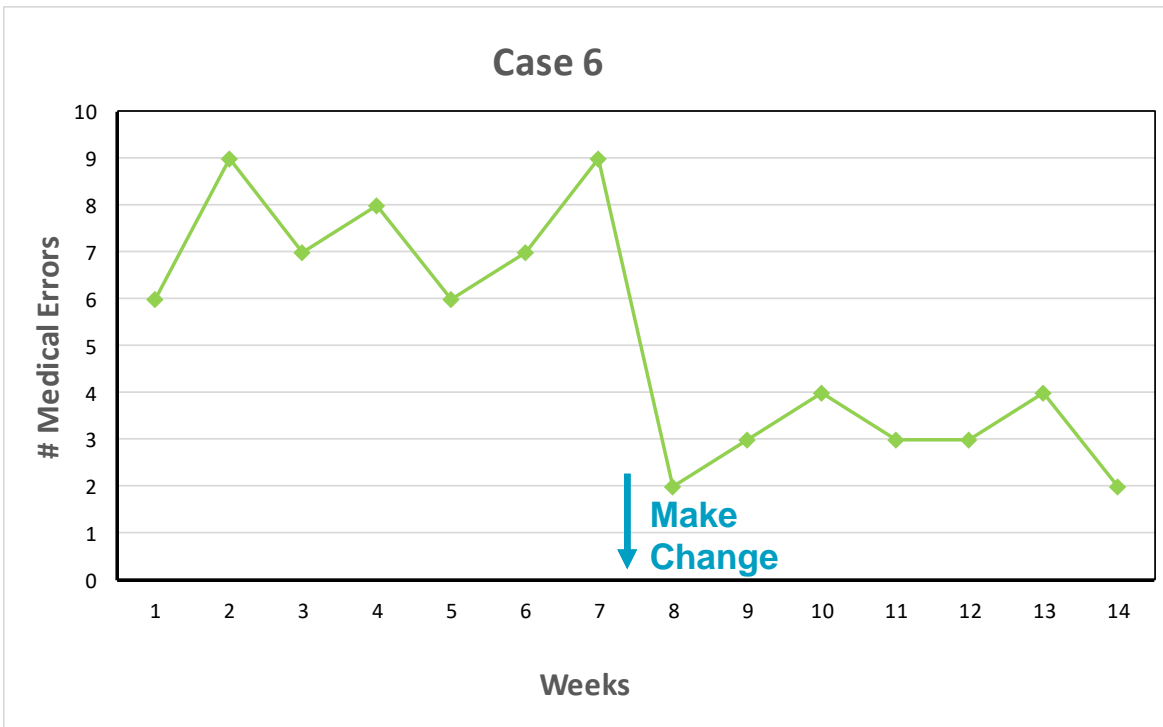
Chat in Your Answer!

Case 5: Has There Been Meaningful Improvement?



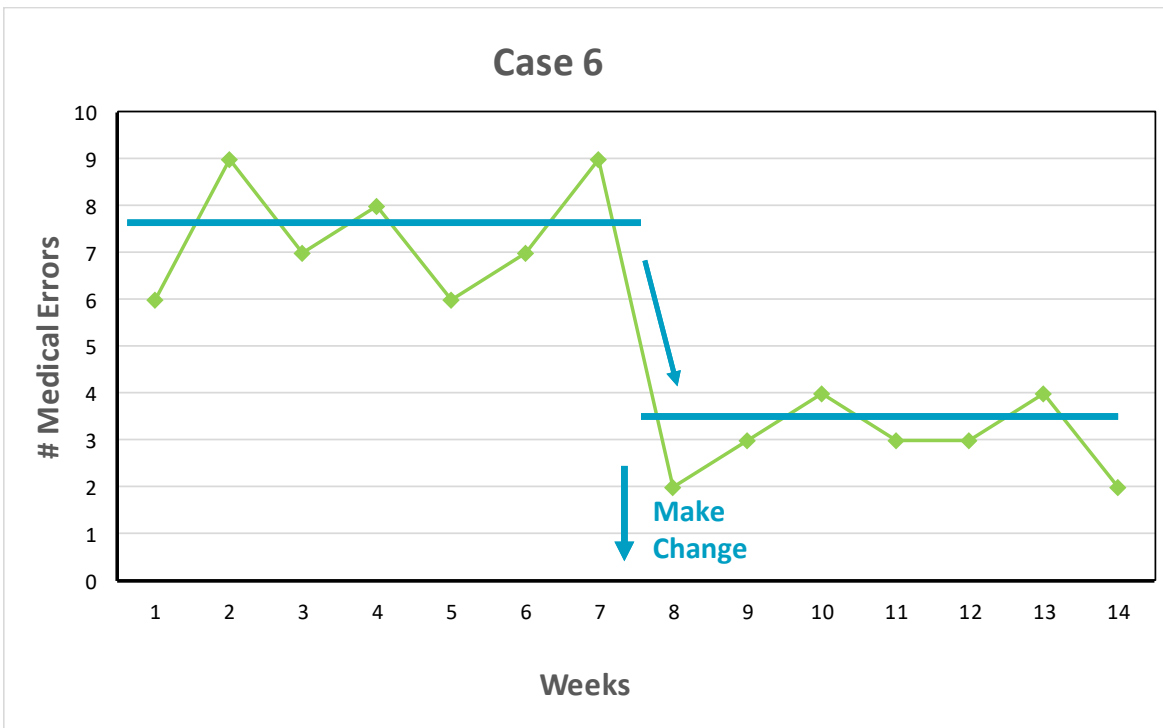
- No improvement
- Stable process

Case 6: Has There Been Meaningful Improvement?

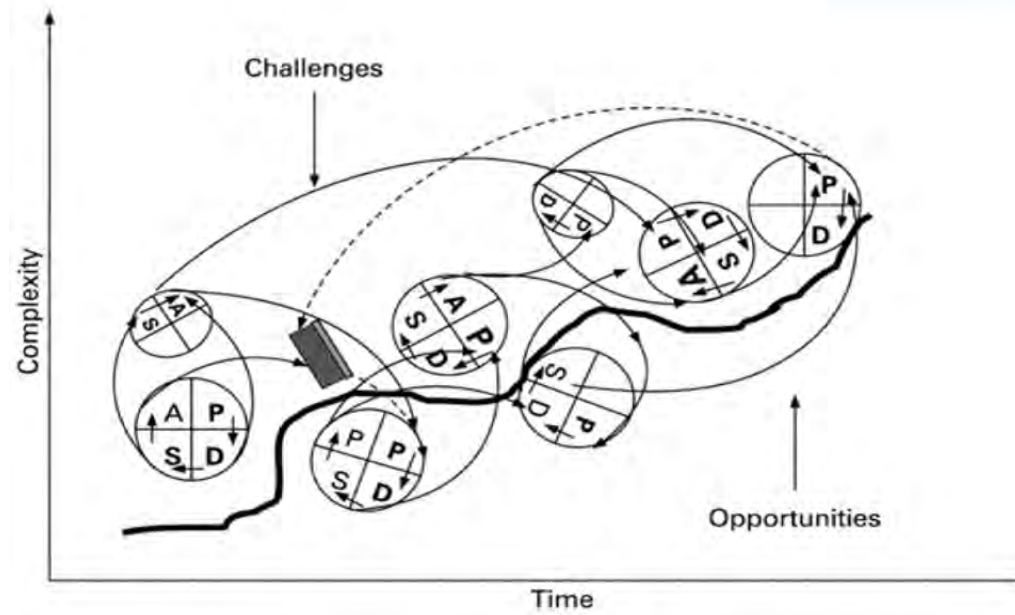


Chat in Your Answer!

Case 6: Has There Been Meaningful Improvement?



- Meaningful shift



Source: A case study of translating ACGME, to a comprehensive curriculum improvement projects as the key component requirements into reality: systems quality practice-based learning and improvement, A M Tomolo, R H Lawrence and D C Aron, *Qual Saf Health Care* 2009 18: 217-224

Standardized Office Procedures: Timely Follow-Up

Shari Bolen, MD, MPH

Professor of Medicine

Case Western Reserve University/

The MetroHealth System



Standardized Office Procedures (SOPs) and Checklists

- Assists in avoiding missed opportunities for improved health
- Minimizes disparities which may arise from implicit bias
- For this project, we encourage developing SOPs around accurate measurement, timely follow-up, and outreach for hypertension and smoking

COFFEE
COFFEE
ANOTHER COFFEE
**I LOVE CHECKING
THINGS OFF MY
TO DO LIST.**

Timely Follow-up Poll Question

What is the recommended interval for follow-up for an adult with an elevated BP reading?

1. One Month
2. Three months
3. Six months
4. Unclear
5. Don't know

Why schedule followup within 30 days?

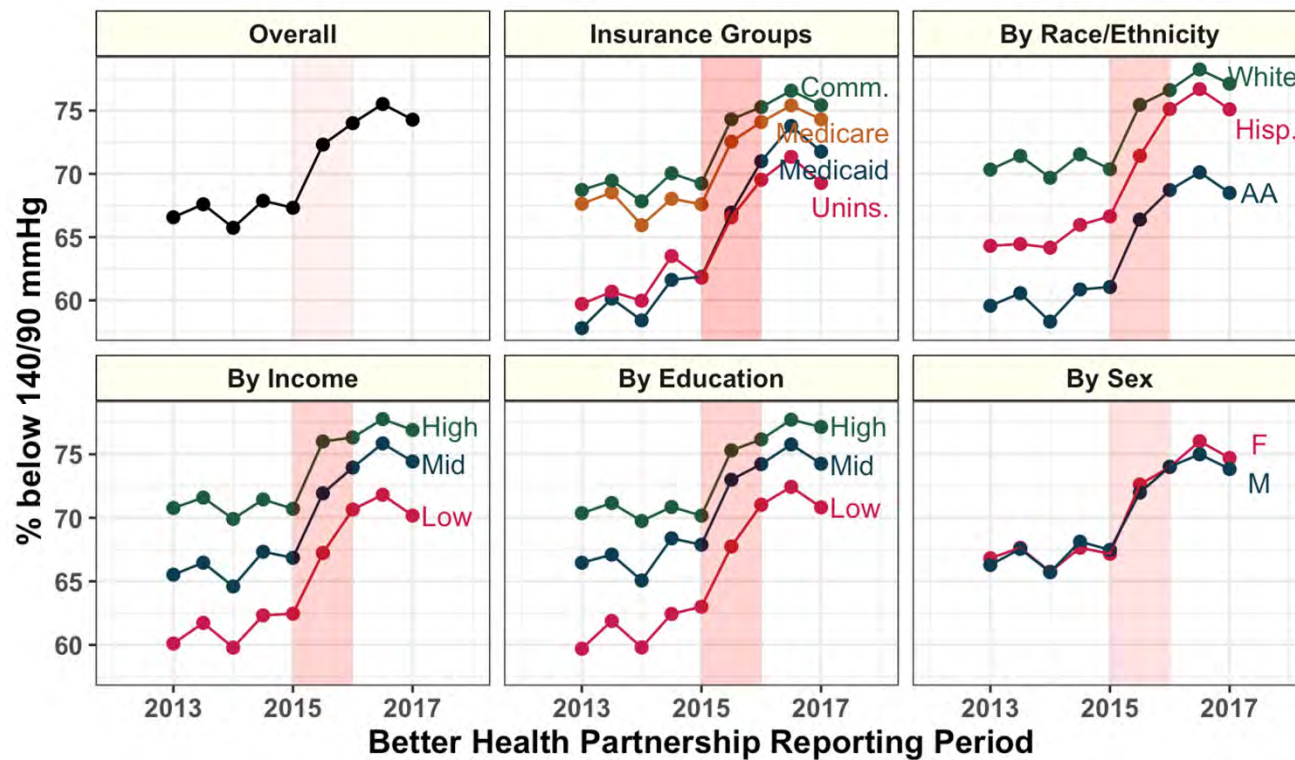
- Some literature suggests greater and quicker improvements in HTN control with more frequent follow-up
- Enhanced opportunity to engage with higher risk patients
- This should translate to improved outcomes over time
- Opportunity to also address other care gaps important for health
- Patients who smoke and are interested in quitting have expressed an interest in having followup by their providers

Modeled after the Kaiser Hypertension Improvement Program

- Accurate measurement of blood pressure (BP)
- Monthly nurse or medical assistant-led visits until BP is controlled
- Treatment algorithm which prioritizes once daily low cost effective medications
- Outreach using EHR-based registries
- Enhanced communication focused on building trusting relationships with patients

Jaffe MG, Lee GA, Young JD, Sidney S, Go AS. Improved blood pressure control associated with a large-scale hypertension program. *JAMA*. 2013 Aug 21;310(7):699-705. doi: 10.1001/jama.2013.108769. PMID: 23989679; PMCID: PMC4270203.

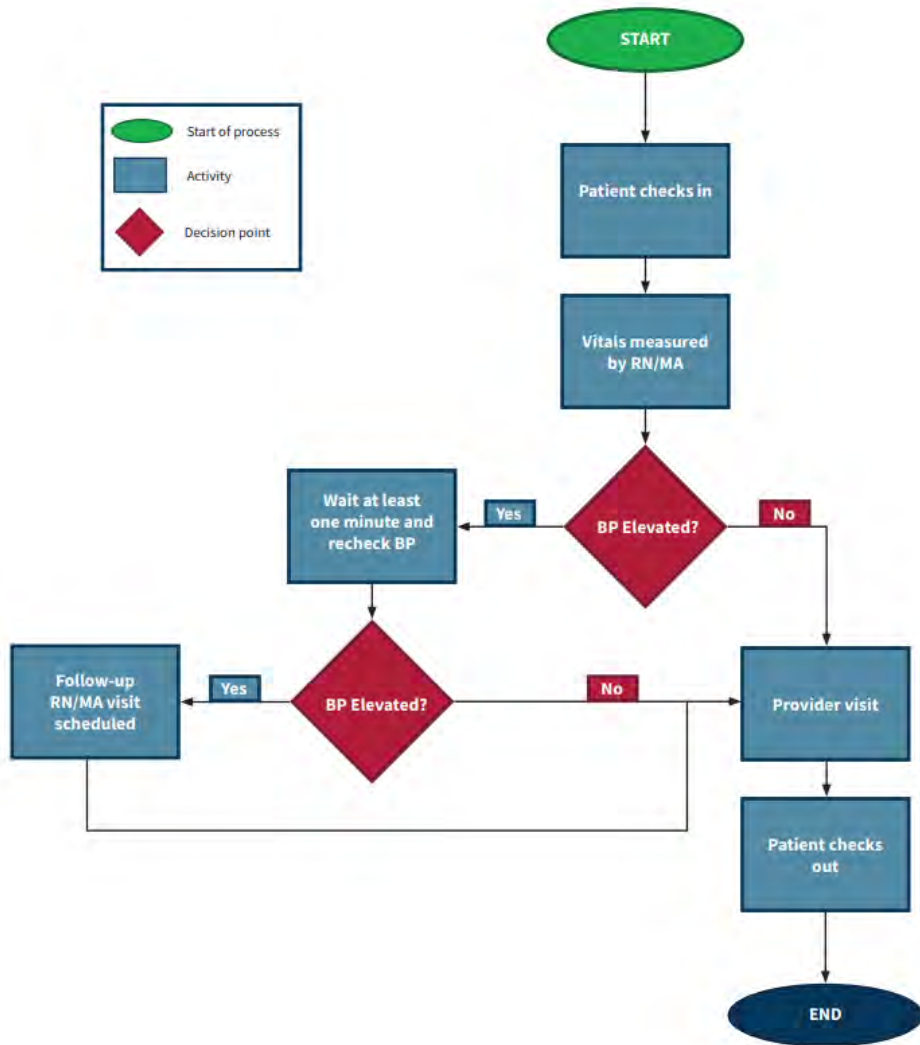
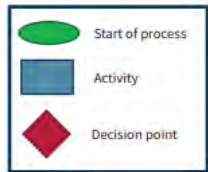
Better Health Partnership Blood Pressure Control Improvement Overall and by Subgroup



Shaded red region indicates intervention period

Bolen SD, Love TE, Einstadter D, Lever J, Lewis S, Persaud H, Fiegl J, Liu R, Ali-Matlock W, Bar-Shain D, Caron A, Misak J, Wagner T, Kauffman E, Cook L, Hebert C, White S, Kobaivanova N, Cebul R. Improving Regional Blood Pressure Control: a Positive Deviance Tiered Intensity Approach. *J Gen Intern Med.* 2021 Jun;36(6):1591-1597. doi: 10.1007/s11606-020-06480-z. Epub 2021 Jan 26. PMID: 33501526; PMCID: PMC8175516.





Example Process Map for Timely Followup of HTN

Barriers to Scheduling Timely Followup

- What barriers to scheduling timely followup do you believe will arise?
- What ideas do you have to address these barriers?

(Please unmute OR chat in your response)

QI Tool to Address Barriers: Short Form Failure Mode Effects Analysis

1. List high-level process steps

What Can Go Wrong?	High Level Process Step	How Might We Improve?
	Need for Follow Up Determined	
	Order Written	
	Scheduling Team Shares Options	
	Patient Selects Appointment Date/Time	
	Appointment Reminder(s) Sent	
	Patient Travels to Appointment	
	Patient Arrives at Follow Up Appointment	

Slide credited to Christopher R. Jordan, LLC



Short Form Failure Mode Effects Analysis

2. Known or potential types of process step failures

1. List high-level process steps

3. Known or potential methods to mitigate failures

What Can Go Wrong?

High Level Process Step

How Might We Improve?

Competing demands at the visit – unrecognized HTN Repeat BP not done	Need for Follow Up Determined	Standardize process for ensuring BP reading available for visit Staff automatically identifies patients needing repeat BP or patients that had elevated BP reading at previous visit but no HTN diagnosis
Provider forgets to write order for followup	Order Written	Have staff automatically schedule a HTN follow-up visit based on last BP
No appointment availability in <35 days with provider Patient gets telemedicine appt scheduled but no home blood pressures to share for med changes	Scheduling Team Shares Options And Provides Instructions	Establish staff-led BP visits Pend order for home BP monitor if patient does not have one Standard instructions on checking BP
	Patient Selects Appointment Date/Time	
	Appointment Reminder(s) Sent	
No transportation set up to get to clinic	Patient Travels to Appointment	Same day transportation assistance; consider telehealth visit
	Patient Arrives at Follow Up Appointment	

Slide credited to Christopher R. Jordan, LLC

Tips for Traps in Scheduling Timely Follow-up

- A. Insufficient staff time:** No time to conduct follow-up HTN visits
 - Start small, use templates, train 1-2 people and monitor
- B. Insufficient provider availability:** Thinking outside the box
 - Can support staff be trained to assist and lead a visit?
 - Asynchronous communication: Phone messages to reduce visit interruption from staff-led visits
- C. Insufficient personnel:** Start small, use templates for efficiency, workflow redesign
- D. Reluctant patients**
 - Share scripting for staff to use with patients to explain the importance of followup
- E. Patient barriers:** Social work; Payer partnerships; Phone/telemedicine options
- F. Scheduling:** May need to change scheduling templates
- G. Provider barriers (e.g., patients won't follow-up; no evidence for sooner follow-up):** Inform providers around rationale/share slides; use PDSAs to test concerns; test first with providers who are interested

Cardiovascular Visit Template

Clinic Documentation Tool for Electronic Health Records

Cardiovascular Health Clinic: _____

Follow up visit number (up to 3 visits and then back to provider): _____

1. BP Readings from Last 4 Encounters:
[BP readings automatically brought into note here]
2. BP Medication taken today: {YES/NO:400258}
3. BP Medication brought to visit: {YES/NO:400258}
4. Can name blood pressure medications: {YES/NO:400258}
5. Any recent BP medication changes: {YES/NO:400258}
6. What time is BP medication taken:
A. Is this correct: {YES/NO:400258}
7. How many missed doses in the past week of BP meds:
8. If taking a cholesterol medication, how many missed doses in the past week? _____
9. [If adherence is identified as an issue, discuss barriers to taking medications (timing, side effects, social situations, etc.) and establish an action plan.]
10. Any side effects or new symptoms since last visit: (describe)

11. Any over the counter (OTC) cold, allergy, respiratory medications: {YES/NO:400258}

Cardiovascular Visit Template Continued

12. If you have sleep apnea are you using your Continuous Positive Airway Pressure (CPAP) nightly: {YES/NO:400258}
13. Do you have a home BP monitor to check your BP: {YES/NO:400258}
[If no, pend order for home BP monitor for provider to sign]
14. If brought to clinic, was it checked to see if it is accurate: {YES/NO:400258}
A. Was it accurate: {YES/NO:400258}
15. Do you drink beer, wine, or any other form of alcohol: YES/NO:400258
A. How many drinks in the last 24 hours: _____

Tobacco follow up questions – limit to current tobacco users

[Check back in even if they were not interested in quitting at the first session]

1. Since your last visit, has there been a change in your tobacco use?
YES / NO
2. If yes, what changed?
 - Quit – congratulations; info on ongoing supports to prevent slips.
 - Cut down – congratulations;
 - Some other positive change (reduction, restricting when / where smoking)
 - Smoking more

SKIP to Q7 if you offered smoking cessation referral at the last visit

3. If still smoking, are you interested in quitting in the next month? {YES/NO:400258}
[**If last time they did not want assistance, you might say something like: "Last time we talked, you were not interested in assistance with quitting. Would you like assistance now?]
4. If yes, would you like me to connect you with someone who can assist you in quitting? {YES/NO:400258}
5. If yes to Q4, was patient referred to smoking cessation resource? {YES/NO:400258}
[Can refer to Ohio Quitline via web referral at <https://ohio.quitlogix.org/en-US/Just-Looking/Health-Professional/How-to-Refer-Patients>. The quit line will then reach out to the patient and provide counseling and nicotine replacement]
6. Tobacco cessation medications can increase your likelihood of quitting by 2-3 times. Are you interested in using medications to help quit? {YES/NO:400258}
[Assist by pending order or note to provider to order nicotine patch and gum, chantix, or wellbutrin for clinician.]

Cardiovascular Visit Template Continued

Assessment:

1. Has the blood pressure goal been met: {YES/NO/NA:400258}
2. Has the smoking goal been met: {YES/NO/NA:400258}

Plan:

Medication changes (if applicable):

Education given (especially lifestyle change such as DASH and low salt diet):

(Describe and print to After Visit Summary)

Referred to Dietitian: {YES/NO:400258}

Follow up appointment with _____ in _____ weeks.

Patient agrees with plan: {YES/NO:400258}

Basic metabolic panel today: {YES/NO:400258}

[If provider newly started or increased a medication which could change potassium or kidney function, remind patient to obtain lab or ask provider to order lab if not already done]

Consulted with Dr.: _____

Guidelines for follow-up:

- If BP is at goal: See PCP in 3 months
- If BP remains high: See RN in 4 weeks
- After third visit with RN, if BP is still high, follow up with PCP in 2-4 weeks

Website Toolkit Resources

[Timely Follow Up \(hearthealthyohio.org\)](http://hearthealthyohio.org)

Timely Follow Up

Timely follow-up is important for those with elevated cardiovascular risk. For patients with elevated blood pressure, at least monthly follow-up is recommended until the blood pressure is controlled. For smokers, routine follow-up is also recommended for patients interested in quitting. Below are resources to assist primary care teams in implementing a process to ensure every patient receives an opportunity for timely follow-up.

The process maps and flowchart provide examples of how to integrate this into current workflow (Resources 1 and 2). Please review and modify the staff-led cardiovascular visit template (Resource 3) to fit your practice. Resource 4 can be printed for use by staff performing the cardiovascular focused follow-up visit to remind them about common medication side effects and when to draw labs on selected patients.

Resource 1: Process Map for Blood Pressure Follow-up

Resource 2: Tobacco Cessation Flowchart Using the 5As Model

Resource 3: Cardiovascular Health Follow-up Visit Template

Resource 4: Medication Reference Table for Staff Led Visit

Treatment Algorithms (Under Appropriate and Timely Treatment on website)

Medication Management

Hypertension Resources

We encourage your team to review the treatment algorithms (Resources 1-2) and choose or modify one to use in your practice. This is also a good time to review and discuss your blood pressure treatment targets (Resources 3-5).

Resource 1: [Cardi-OH Hypertension Drug Treatment Algorithm](#)

Resource 2: [Cardi-OH Hypertension Change Package Algorithm](#)

Resource 3: [Cardi-OH Blood Pressure Targets: Talking with Your Team](#)

Resource 4: [Cardi-OH Long-Acting, Low-Cost Medications to Achieve Blood Pressure Targets: Evidence for Chlorthalidone, Amlodipine, and Spironolactone](#)

Resource 5: [Cardi-OH Safety and Tolerability of Lower Blood Pressure Targets](#)

Smoking Cessation Resources

We encourage primary care teams to review this frequently asked questions document which provides practical tips on referral and medications for smoking cessation.

Resource 1: [Cardi-OH 2020 Smoking Cessation Guidelines FAQs](#)

Summary

- Team-based care can assist us in monthly cardiovascular followup and provide opportunities to address other care gaps
- Standardized visit templates ensure focus on critical aspects of HTN management and smoking cessation efforts
- Treatment algorithms can support medication intensification during followup
- Process maps for timely follow-up are essential to ensure everyone has the opportunity for frequent high-quality care when needed
- Remember to recognize your own and your team members' hard work

Teams in Action

QI Coaches

QIP Clinics



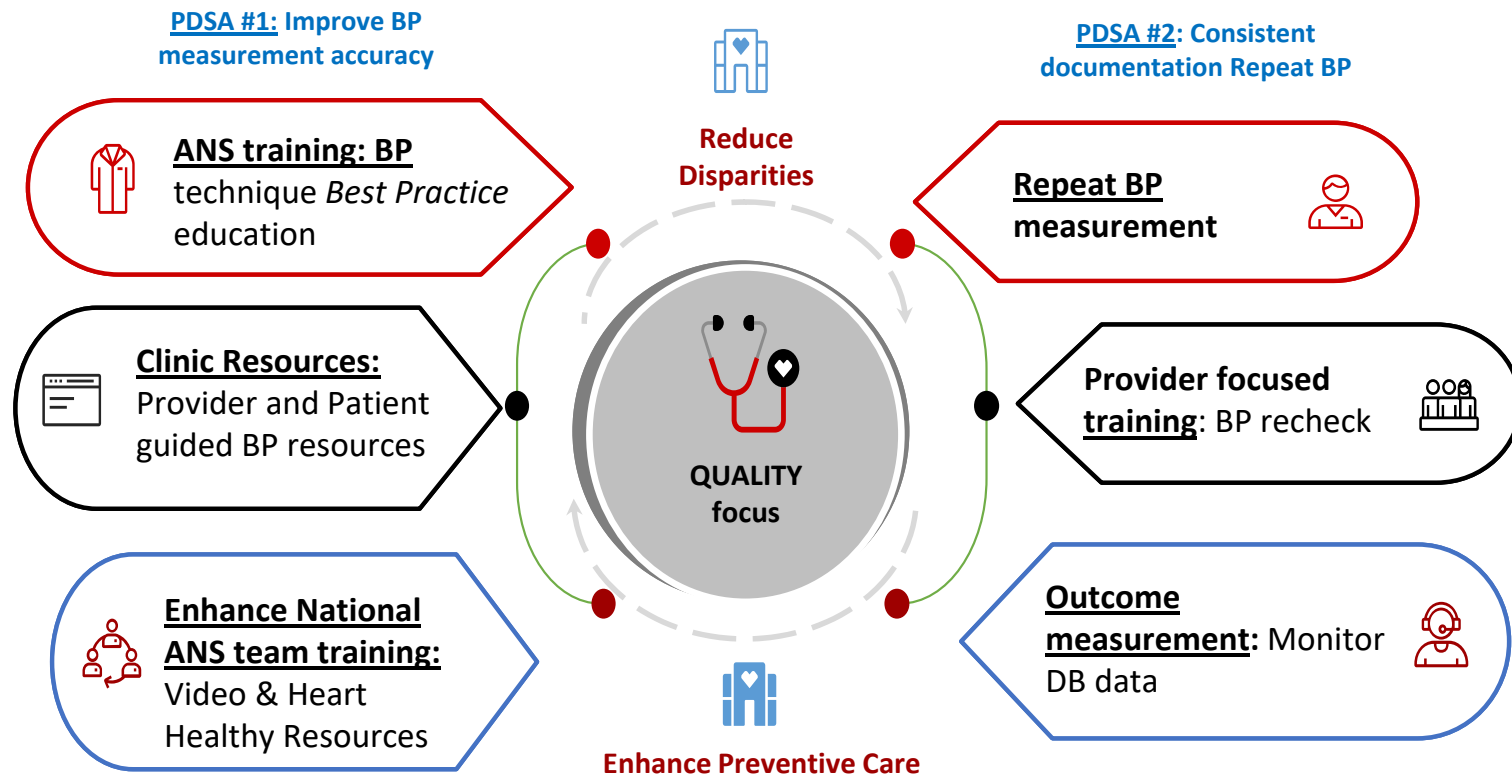


Heart Healthy Ohio
Quality
Improvement
Project



Quality Interventions: PDSA

- **Overarching goals:** Identify “best practice” strategies to augment Chronic Care management, incorporate QI strategies at the clinic level to advance Quality





Aim Statement Worksheet

Write a Theme for Improvement: Improved Blood Pressure of MinuteClinic patients

Team: Tammy, Autumn, Nicole, Erika, Ancillary Staff, Patient

Global Aim Statement

We aim to improve: **Improve Blood Pressure in Control across the practice.**

In: **Canfield CVS**

The process begins with:

- **Educational refresh training** for accurate bp measurement for ancillary staff and providers
 - All Canfield staff, ANS and Oversight Home based Clinic providers to complete the following:
 - Watch the Video - [BP Measurement Video](#)
 - Review the guide to accurate in office BP measurement and print for future reference in the clinic: [Guide to Accurate In-Office BP](#)
 - RQL or oversight provider to use the observation checklist with staff (Caroline suggests completing these quarterly, Autumn will keep check offs): [Observation-skills-checklist](#)
 - Reinforce technique with visual cues on accurate BP measurement – print off the attached document and post in clinic (both A and B site) – Erika is to print off the in-clinic resource and post in clinic) [AHA BP Poster](#)

The process ends with:

- All ANS and NP/PA staff at Canfield complete the outlined training
- 100% of ancillary staff receive oversight provider/RQL observation of BP reading to confirm accuracy
 - ANS team [member](#) will complete patient BP demonstration and Oversight provider will validate reading (within 10mmHg)
- 100% of ancillary staff and providers taking accurate bp measurement consistently

Plan-Do-Study-Act Worksheet #1

Template Created by: UC Health, 2019

Overall project aim: Improved BP Control for all patients

Test start date: 5/4/2022

Objective of test: Develop a consistent, standardized process for taking BP

Test end date 6/3/2022

Plan:	Tasks needed to complete the test	Person responsible	Details/ How
<p>What is the test? Provide refresher training to all providers and ancillary staff, and floating staff</p> <p>How will data/ measure be tracked? Checklist: Participated in refresher y/n</p> <p>What is the prediction for the test outcome? Everyone will receive training and will take BP accurately</p> <p>Consistency across the practice in taking BP</p>	All Canfield staff to watch BP Video	Erika Carroll/Nicole Prox/Autumn by 5.19.22 - Canfield clinic completed, 1 additional ANS team Niles	Email communication to all providers/ANS team members, reinforce in clinic
	Guide to accurate BP measure, review & print for A/B side clinic	Erika/Nicole by 5.19.22 - Present in Niles/Canfield	Email communication, reinforce in clinic
	Oversight provider/RQL use observation checklist sign off ANS/Provider team	Nicole complete during RQL rounding, Autumn to support by 5.27.22 - Autumn signed off ANS team in Niles - 1 additional	1:1, email as necessary
	Hang visual cues document A/B side clinic	Erika/Nicole by 5.11.22 - Nicole hanging in Niles	Verify hung next to VS station

Do:
 What the test carried out as planned?
 Yes / No

Test data/ observations: ****1 outstanding for training & Boardman clinic**

Unexpected events/ observations:
 Balancing measures: additional time or staff resources? ****Amy/Cindy ANS team very receptive/supportive with learning, felt valuable (Autumn), increased knowledge**

Study:
 Did the results match predictions?
 Yes / No

How are the results different than past tests/ previous system?

New learning from the test:

Act:
ADAPT: Improve / edit the intervention and continue testing
 Plan: **Consider adding the BP video to orientation for training, both ANS and NP team. Project team felt valuable. Informative and positive, "getting back to basics"**

ADOPT: Select changes for larger test or implementation
ABANDON: Discard this change and try a different idea



Plan-Do-Study-Act Worksheet

Overall project aim: Improved BP Control for all patients

Test start date: 8/1/2022

Objective of test: Document a 2nd BP for all abnormal blood pressure readings

Test end date 8/31/2022

Plan:	Tasks needed to complete the test	Person responsible	Details/ How
<p>What is the test? Reinforce education to NP/PA providers regarding expectations for documenting 2nd BP readings for all abnormal BP measurements. (All Elevated BP reading parameters, 140/90 or greater – verify range for elevated BP repeat BP taken measure on Heart Healthy Ohio DB – sent message to Doug Einstader on 7.5.22)</p> <p>How will data/ measure be tracked? Leverage existing Heart Healthy Ohio Database for this metric.</p> <p>What is the prediction for the test outcome? Improvement in Elevated BP reading percentage, with 10% increase from Baseline in month of August, 2022.</p>	<p>Review this expectation with all Heart Healthy Ohio participants</p>	<p>Autumn by 8.26.22</p>	<p>Email communication to all providers/ANS team members, reinforce via phone calls.</p>
	<p>Assure that all providers know how to review their repeat BP documentation data within Epic</p>	<p>Autumn by 8.26.22</p>	<p>Email; 1:1 communication</p>

<p>Do: What the test carried out as planned? Yes / No</p> <p>Test data/ observations:</p> <p>Unexpected events/ observations: Balancing measures: additional time or staff resources>?</p>	<p>Study: Did the results match predictions? Yes / No</p> <p>How are the results different than past tests/ previous system?</p> <p>New learning from the test:</p>	<p>Act: ADAPT: Improve / edit the intervention and continue testing Plan:</p> <p>ADOPT: Select changes for larger test or implementation</p> <p>ABANDON: Discard this change and try a different idea</p>
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Clinical Quality Intranet

- Provider resources
- Enhance Awareness Pilot project

Proposed Next Step:

- Incorporate NEJM video into CC education
- Post Graphic in clinic

Heart Healthy Ohio Project

- [Accurate BP Measurement Video from NEJM](#)
- [Guide to Accurate BP Measurement](#)
- [In-Office BP Measurement Graphic](#)



[Heart Healthy Ohio Information](#)

Quote

- "Real change, enduring change, happens one step at a time."
— **Ruth Bader Ginsburg**

Poll

Would your practice team be interested in receiving a Heart Healthy Ohio pin?

- Yes
- No
- N/A



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Next Steps

- Continue to submit EHR data monthly (1st Monday of the month; next due September 6th)
- Review and modify the treatment algorithm and cardiovascular visit template when beginning the timely followup process
- Continue to meet with your QI coach monthly
- Remember to engage a patient and obtain their feedback
- Payer collaboration meetings for those interested September 7 at noon
- Next webinar October 14

[Learn more & access resources at https://hearthealthyohio.org/](https://hearthealthyohio.org/)