



BP Control Manual of Operations

Update: 8/2024



This Manual of Operations is written for community health center leadership, clinical staff, and quality improvement teams as they consider implementing the BP Control program, or are taking steps to implement it.

The manual presents the BP Control program with guidance for reviewing, adopting features of the program, and/or adapting them to meet a community health center's characteristics. The associated appendix offers details.

This manual and appendix describe the BP Control program as implemented at two community health centers, including:

- An overview of the BP Control program
- Membership and key functions of a BP Control Quality Improvement team
- Guidance for reviewing, adopting, and adapting key features of the program
- Algorithms for integrating BP Control into the electronic health record (EHR)
- Training, rollout and booster plans, with associated slides and videos
- Instructions and examples for using data from fidelity reports for continuous quality improvement



Abbreviations

ACC American College of Cardiology

AHA American Heart Association

BP Blood pressure

CDC U.S. Centers for Disease Control and Prevention

CHW Community health worker

CKD Chronic kidney disease

CVD Cardiovascular disease

DM Diabetes mellitus

EHR Electronic health record

HTN Hypertension

IT Information Technology

MA Medical assistant

mmHB Millimeters of mercury

Why focus on adherence to antihypertensive medications?



In 2020, the US Surgeon General issued a Call for Action¹ to make controlling hypertension a national priority. Abundant research literature has documented that uncontrolled hypertension increases the risk of cardiovascular disease, stroke, dementia, and other serious health conditions. These risks can be reduced with pharmacological interventions but patients must adhere to these interventions.

However, it is estimated that as many of 84% of patients with uncontrolled hypertension do not take their antihypertensive medication or do not take it as prescribed².

Although there is evidence that interventions can enhance patient medication adherence, there is a time lag between the development of these interventions and their implementation in real-world settings³. The BP Control program described in this manual intends to reduce this time lag.

About the BP Control Program

The BP Control program is an evidence-based, systems-level, team-based, quality improvement program that identifies patients with uncontrolled hypertension who are not adherent to antihypertensive medications, refers and coaches them for improving medication adherence, tracks progress through all components of the program, and facilitates communication among members of the clinical team. The BP Control program is implemented by the a quality improvement (QI) team that works with the Practice Facilitator⁴ to adopt and/or adapt the program to fit the community health center's characteristics, needs and preferences; rolls out the program; and uses program data for continuous quality improvement.

BP Control is based on evidence that a systems-level, team-based approach to medication adherence can improve patient adherence and blood pressure control⁵.

The BP Control program is based upon the 2017 Guidelines for the for the Prevention, Detection, Evaluation, and Management of Adult High Blood Pressure⁶ from the American College of Cardiology (ACC) and the American Heart Association (AHA). It also incorporates materials from the Hypertension Control Change Program⁷, Million Hearts Program⁸ from the U.S. Centers for Disease Control and Prevention (CDC), and the Target: BP⁹ from the AHA and the American Medical Association.

BP Control features a system-level approach

Historically, a patient's primary care provider (PCP) is a sole provider responsible for addressing a patient's hypertension. This model can contribute to overburdening the PCP.

There is evidence that a systems-level approach contributes to patient hypertension control and enhances medication adherence¹⁰. BP Control has created a systems-level approach by enabling the EHR to prompt and document actions that multiple providers take to care for patients with hypertension, and to facilitate communication and continuity of care.



BP Control is based on a team care

The BP Control program is delivered by the patient's clinical team, following guidance from the Chronic Care Model¹¹. This approach builds upon evidence that a team model can reduce burden on the PCP and enhance culturally sensitive and effective care. Team care has been well-received with clinicians willing to include non-clinician team members, such as community health workers (CHWs), as health coaches¹².

The clinical team is composed of PCPs (physicians and nurses), Medical Assistants (MAs), and Coaches who work together to care for patients.

- The PCP is the patient's physician or nurse who cares for patients with hypertension. PCPs reconcile antihypertensive medications, ask about medication adherence¹³, and refer eligible patients for medication adherence coaching.
- The MA is the health care professional who measures patient's blood pressure and enters the information into the EHR. The MA also asks patients about antihypertensive medications and antihypertensive medication adherence, and refers eligible patients for coaching.
- The BP Control Coach is a lay individual from the community who is trained CHW and additionally trained to coach patients to take their antihypertensive medications according to the prescription directions. The coaching component of the program is based on evidence-based algorithm for helping patients improve medication adherence¹⁴⁻¹⁷.
- The EHR is adapted to incorporate algorithms to prompt clinical team members to take specific actions in the care of patients with hypertension and to document those actions to facilitate communications and continuity of care.

Five components comprise the program, as illustrated in the graph and described below.



1. **Identify** patients with uncontrolled hypertension who are not taking their antihypertensive medications, or who are not taking them as prescribed.

Patients are eligible for coaching in the BP Control program if they:

- have uncontrolled hypertension, defined as: $\geq 140/90$ mmHg if a patient has hypertension, or $\geq 130/80$ mmHg if the patient has hypertension AND diabetes OR chronic kidney disease
- are not adherent to antihypertensive medications.

2. **Refer** the identified patients to a medication adherence coach.

3. **Deliver** the coaching intervention. The BP Control Coach is a CHW who has been rigorously trained in a behavioral counseling protocol to enhance patient adherence to medications.

4. **Document** all components of the program in the EHR. This facilitates communication among all members of the clinical team, including the medication adherence coach. In addition, it allows the health center to track the fidelity of the program delivery, and thus guide quality improvement, as needed.

5. **Track** all components of the intervention on the EHR. This allows monitoring of patient progress through the program.

The BP Quality Improvement (QI) Team is responsible for implementing the program. It is comprised of health center staff and outside consultants (as needed) with combined expertise and influence to review, adapt, train, rollout, and monitor the program for continuous hypertension control quality improvement. The table below describes tasks of specific team members.

Team Member	Role	Tasks
Medical Champion	Physician or nurse with decision-making power and influence	<ul style="list-style-type: none"> • Co-leads oversight of program implementation • Shares medical guidance for the study • Advocates for the study at regular staff meetings • Communicates with the outside agencies as needed, such as an accountable care organization about the program • Contributes to identification of challenges to implementation promptly and development of solutions
Operations Champion	Health center leader with decision-making power & influence	<ul style="list-style-type: none"> • Co-leads oversight of program implementation • Oversees intervention delivery process • Contributes to identification of challenges to implementation promptly and development of solutions
Other Quality Improvement Staff	Other staff leading QI initiatives at the health center	<ul style="list-style-type: none"> • Download the program's fidelity reports • Distribute reports to use during team meetings and to provide feedback to clinical teams and individual clinical team managers
MA and Nurse Supervisors	Lead MA and/or nurse	<ul style="list-style-type: none"> • Train staff on: appropriate techniques to measure and document blood pressure; ask about medication adherence, and refer patients for coaching • Use fidelity reports for regular feedback, training, and ongoing quality improvement efforts
Coach Supervisor	CHW supervisor	<ul style="list-style-type: none"> • Trains and provides ongoing support for Coach • Downloads and reviews coaching session fidelity report and patient tracking reports for ongoing continuous improvement
IT Staff	Staff and/or consultant responsible for EHR redesign	<ul style="list-style-type: none"> • Integrate and embed the program algorithm into the EHR • Design and validate program fidelity reports • Provide technical assistance to staff
Practice Facilitator (Facilitator)	Health center staff member or external consultant	<ul style="list-style-type: none"> • Leads and manages the process of reviewing the BP Control program to determine features to adopt as is, features to adapt, and how to make adaptations. • Facilitates the review and integration of the program into existing staff workflows and EHR • Leads and oversees the work of IT staff/consultant embedding the algorithm into EHR

The BP Control QI Team implements the BP Control program by following the steps described in the following pages and associated documents in the Appendix:

1. Review and adapt program components (Appendix I, II)
2. Review and adapt training, rollout and booster plans (Appendix II)
3. Create and implement a quality improvement plan (Appendix III)
4. Use patient tracking reports (Appendix III)
5. Use fidelity report data for continuous QI

1. Review and adapt program components

The first step of the BP Control QI team is to assess health center practices for the care of patients with hypertension to identify opportunities for integrating BP Control components into the existing workflows, and determine what components require adaptation. To accomplish these tasks:

- 1. Review BP Control program materials** located in Appendices I, II, and III.
 - Workflows for the BP Control program (MA, PCP, other staff)
 - Algorithm for implementing the BP Control program in the EHR
 - Types of visits that are excluded from the BP Control program algorithm
 - ICD 10 Codes that guide the BP Control algorithm for integration into the EHR
 - Antihypertensive medications prescribed at the two community health centers
 - Training and booster materials
 - Fidelity reports and quality improvement materials
- 2. Review health center systems:** workflows, protocols, and practices for hypertension care, i.e. measuring and documenting blood pressure, antihypertensive medications prescribed, training and booster sessions, monitoring quality of delivery, and clinical team communications. Review includes:
 - Gathering documents to see if they are up-to date on guidelines for caring for hypertensive patients
 - Interviewing a sample of staff responsible for measuring blood pressure and caring for patients with hypertension. These staff might include medical assistants, nurses, PCPs, supervisors, pharmacists, and nutritionists. Sample questions may include: *What are your tasks related to measuring blood pressure and/or taking care of patients with hypertension? How do you document your work in the EHR? What works well? What could work better?*
- 3. Synthesize** the information to identify BP Control program features to adopt and/or adapt, and how to make the adaptations.
- 4. Make recommendations** for a tailored BP Control program to health center leadership on:
 - Workflow re-design
 - EHR support for program implementation, including algorithms for:
 - Identifying eligible patients
 - Referring eligible patients
 - Coaching and tracking patients
 - Clinical team communication
 - Fidelity and patient tracking reports
- 5. Come to decisions** for program design and implementation
- 6. Design, implement, test and revise** all changes in the EHR. Repeat this process until accurate.

2. Review and adapt training, rollout and booster plans

Training topics vary by role, and typically include slides and videos on the use of the EHR.

The rollout plan describes the who conducts the initial training and the process.

This plan integrates into ongoing health center communications, training and QI processes.

BP Control QI team members are trainers on topics related to their role (i.e. MA/nurse supervisor trains MAs). Training can also take places independently by following slides and videos.

Booster sessions are held after the program has started and can use new or original materials. The QI process entails reviewing fidelity reports, identifying barriers to implementation, and developing strategies to address barriers. Booster sessions are described in Step 5, pages 13-14.

Role	Training and Booster Topics	Documents in Appendix II	Rollout Plan
MA/ Nurse	<ul style="list-style-type: none"> • Purpose and overview of BP Control • Reminders (alerts) in EHR to document BP readings • MA referral workflow to access template to ask about medication adherence and refer eligible patients <p>Ongoing independent learning</p> <ul style="list-style-type: none"> • Session 1: Measuring/documenting BP • Session 2: Asking about adherence and referring eligible patients to Coach 	<p>Slides</p> <ul style="list-style-type: none"> • Sessions 1 & 2 with competency assessment <p>Video recordings</p> <ul style="list-style-type: none"> • EHR BP documentation reminders; asking about medication adherence; referrals <p>Additional materials</p> <ul style="list-style-type: none"> • 7 Simple tips to get an accurate BP (English/Spanish) • Hypertension categories • Antihypertensive medications 	<p>Trainers: MA/Nursing supervisor, Facilitator, Coach</p> <p>When:</p> <ul style="list-style-type: none"> -Integrated into one of the monthly MA/nurse meetings -Integrated into one of the clinical team weekly meetings of MAs, nurses, PCPs* <p>Length of time: 15 minutes</p> <p>Independent learning</p> <p>Content: Session 1 and 2</p> <p>Trainer: MA/Nursing supervisor receives quiz results, checks skills</p> <p>When: initial hire and annual review</p> <p>Length of time: 30 minutes per session</p>
PCP (MD, nurse)	<ul style="list-style-type: none"> • Purpose and overview of BP Control • Reminders (alerts) in EHR to document BP readings • Alert that BP is uncontrolled with link to document medication reconciliation and adherence screen, and refer eligible patient for Coaching • Team communication <ul style="list-style-type: none"> - Emergencies - Actionable items for PCP - Requesting BP Monitor • Tracking 	<p>Slides</p> <ul style="list-style-type: none"> • Purpose and overview of BP Control • Updated referral workflow <p>Video recordings</p> <ul style="list-style-type: none"> • EHR BP documentation reminders; asking about medication adherence; referrals <p>Additional materials</p> <ul style="list-style-type: none"> • 7 Simple tips to get an accurate BP (English/Spanish) • Hypertension categories • Antihypertensive medications 	<p>Trainers: Medical Champion, Operation Champion, Facilitator, Nursing supervisor</p> <p>When:</p> <ol style="list-style-type: none"> 1. Integrated into one of the monthly meetings of medical operations/PCPs 2. Integrated into one of the clinical team weekly meetings of MAs, nurses, PCPs* <p>Length of time: 15 minutes</p>
Coach	<ul style="list-style-type: none"> • Purpose and overview of BP Control <p>Basic knowledge of hypertension, antihypertensive medications, and common barriers to adherence.</p> <ul style="list-style-type: none"> • Behavioral counseling skills • BP Control coaching protocols • Use of EHR to track calls, patient status, and conduct coaching sessions Role-play 	<p>Slides</p> <ul style="list-style-type: none"> • Basics of blood pressure management and antihypertensive medications, coaching, documenting in the EHR, and communicating with rest of the clinical team <p>Video recordings</p> <ul style="list-style-type: none"> • Accessing and using templates <p>Additional materials:</p> <ul style="list-style-type: none"> • Coaching scripts (English/Spanish) • Medication list • Medication side-effects 	<p>Trainers: Coach supervisor, Practice Facilitator</p> <p>When: Individually scheduled</p> <p>Length of Time:</p> <ul style="list-style-type: none"> • Basic knowledge: 4 hours • Behavioral counseling skills: 2 hours • BP Control coaching protocols: 2 hours • Use of EHR: including tracking calls, pre-visit template, Session 1 and follow-up sessions, communication with clinical team: 4 hours • Role-play: 1-2 hours per session, repeated until Coach adept at facilitating coaching session with EHR documentation (approx: 3 sessions) plus independent practice
QI Staff	<ul style="list-style-type: none"> • Overview of BP Control and QI approach • Fidelity report definitions and flow • Data captured by each report • Use of reports for QI 	<p>Slides</p> <ul style="list-style-type: none"> • Description of QI approach, screen shots of reports, use of reports for QI <p>Video recordings</p> <ul style="list-style-type: none"> • EHR BP documentation reminders; asking about medication adherence; referrals • Downloading fidelity reports 	<p>Trainer: QI Lead</p> <p>When: Integrated into QI meeting and leadership meeting</p> <p>Length of time: 30 minutes</p>

3. Create and implement a quality improvement plan

The **BP Control quality improvement plan** is designed to monitor that each step of the program is being delivered as intended (i.e. fidelity). Fidelity reports are designed to monitor teams and individual providers, and can be created for specified periods of time.

How does monitoring happen?

- A quality improvement staff member is assigned to generate fidelity reports on a given basis, for example monthly, and prepare comparative reports to assess fidelity over time.
- The BP Control QI Team can meet on a regular basis, for example once a month, to review such fidelity reports, identify challenges, develop plans to address the challenges, and review progress.
- Supervisors can review reports for individual staff and determine the need for additional training and support

Types of Reports	Definition	NextGen report
First BP measurement	Two reports document the proportion of patients who had their first BP measured and documented in the EHR: <ul style="list-style-type: none"> • Adult patients with first BP reading • Adult patients with a diagnosis of hypertension 	BPC-1 BCP-2
Second BP measurement	This report documents that patients who met the criteria below received a second BP measure. <ul style="list-style-type: none"> • Patients with hypertension and a first BP reading $\geq 140/90$ mmHg • Patients with hypertension AND diabetes OR chronic kidney disease and a first BP reading $\geq 130/80$ mmHg 	BPC-2
Medication reconciliation	This report documents that staff reconciled medications with the patient as per health center policy.	BPC-2
Medication adherence	This report documents that staff implemented the medication adherence screen 13* to ask patients who have been prescribed antihypertensive medications about how often they take the medication, and/or document that they have concerns about antihypertensive medication adherence.	BPC-2
Referral	These reports document the proportion of patients who were eligible for Coaching were referred, as well as the number and percentage of patients who accepted or declined the referral.	BPC-3
Coach call tracking	This report documents the proportion of patients who were referred for Coaching were contacted.	BPC-7
Coaching	This report documents that the proportion of patients for whom key elements of the coaching session were implemented.	BPC-6

- Protocols follow the 2017 Guidelines for the for the Prevention, Detection, Evaluation, and Management of Adult High Blood Pressure from the ACC and the AHA.

*Use of this tool requires permission from the author

Sample ways to present fidelity report data

Progress by team or practice level

Use the data presented in the fidelity reports to inform quality improvement discussions. These discussions can compare changes during regular intervals, such as from one month to the next.

First BP reading of patients with hypertension Month 1				First BP reading of patients with hypertension Month 2			
Team	Patients with BP measured	All patients who should have BP measured	%	Team	Patients with BP measured	All patients who should have BP measured	%
Team 1	247	337	73%	Team 1	268	296	91%
Team 2	319	339	94%	Team 2	253	274	92%
Team 3	270	308	88%	Team 3	212	252	84%
Team 4	279	300	93%	Team 4	230	258	89%
Team 5	99	104	95%	Team 5	109	114	96%
Total	1,214	1,388	87%	Total	1,072	1,194	90%

Progress by provider

Sample report that compares fidelity by individual provider over time.

Provider Name	67.7%	44	65	Provider Name	68.4%	80	117
Provider Name	62.6%	137	219	Provider Name	68.8%	77	112
Provider Name	73.4%	116	158	Provider Name	0.0%	0	0
Provider Name	60.0%	54	90	Provider Name	59.6%	28	47
Provider Name	71.9%	41	57	Provider Name	71.0%	125	176
Provider Name	94.1%	16	17	Provider Name	66.5%	121	182
Provider Name	74.7%	65	87	Provider Name	54.9%	50	91
Provider Name	64.9%	61	94	Provider Name	69.5%	66	95
Provider Name	77.4%	48	62	Provider Name	64.7%	75	116
Provider Name	72.4%	63	87	Provider Name	69.1%	67	97
				Provider Name	62.5%	15	24

Coach fidelity report

CHW Session Report

Date Period: 02/01/2024 - 02/29/2024

Reports on Fidelity of Sessions Completed during the specified report period

	Session #	Numerator	Denominator	Percentage
01-Pre-session Planning				
% Review patient's BP readings at last visit with provider				
	1	10	10	100.00
% Review patient's current antihypertensive medication: names/dose				
	1	9	10	90.00
02-Agenda				
% Asked about patient's concerns to discuss today				
	1	2	5	40.00
% Discussed session objectives & format				
	1	5	5	100.00
03-Assess				
% Assessed progress towards previous session plan/goal (f/u session only)				
	1	2	5	40.00
% documented a challenge (Session 1 only)				
	1	5	5	100.00
04-Advice				
% Gave personalized advice				
	1	2	5	40.00
05-Assist				
% Set plan/goal				
	1	5	5	100.00
% Set priority				
	1	5	5	100.00
06-Arrange Next Session				
% Set next BP control follow up				
	1	5	5	100.00
07-BP Control Status				
% Control Status selected				
	1	5	5	100.00

4. Use patient tracking reports

Patient tracking reports are support tools for Coaches. These reports prompt the Coach to conduct timely contacts with patients in accordance to protocol. In addition, they serve as the basis for monitoring timely follow-up by the Coach's supervisor.

Report Name	Description of Coach report
BPC-4: CHW Needs Session One	This report lists all patients who have been referred and their contact status.
BPC-5 CHW Needs Followup Session	The report lists the patients due for a follow-up session.

Tracking report images

BPC-4

CHW - Needs Session One

MRN	Patient	PCP Visit Date	Referral Date	Referral Entered By	Visit Provider	Pre-Visit Status
Number	Pateint Name	7/10/23 10:40	7/10/2023	Name and role of person who made referral	PCP name	Referred and Accepted

BPC-5

CHW Needs Follow-up Session

MRN	Patient	Referral Date	Visit Date	Session #	Follow-Up Date	Follow-Up By	Is Active	Declined to Continue	Program Completed
Number	Patient name	Date	Date	Last session # completed	Scheduled date and time	Telephone Call	Yes or No	Yes or No	Yes or No
Repeats until Session 9									

5. Use fidelity reports for continuous QI

This is a sample of the process by which the implementation team conducts QI using the fidelity reports. Booster sessions are held after the program has started. This report can be used to determine if booster sessions are needed as described in Step 2, page 7.

Example of corrective actions based on review of fidelity reports.

Report #	% adherence to protocol	Issue of concern	Corrective actions (dates, trainer, plan)
2nd BP measurement and View Details	<p>30% of patients with a first elevated BP reading did not have a 2nd blood pressure reading.</p> <p>Some individual MAs have lower % of BP measurement than others</p>	<p>The 1st blood pressure reading is elevated (according to the diagnoses), but there is no 2nd blood pressure reading.</p>	<ul style="list-style-type: none"> • Review workflow for 2nd BP readings during team meetings • Hang a tag on each blood pressure monitor with instructions about 2nd BP reading on one side, tips to obtaining accurate BP reading on the other • Program BP monitors to beep if a 2nd blood pressure reading is required • Provide targeted training to individual MAs whose reports continue to reflect low fidelity.
Coaching	<p>No patients had documentation of the medication reviewed</p>	<p>Coach is either not reviewing the medications, or not documenting the review.</p>	<p>Supervisor meets with coach to review the workflow and provide booster training as needed.</p>

Samples of implementation support materials


The following are samples of support materials for health center staff and providers.

When to take a second blood pressure reading

Take a second BP reading if the first one is:


≥140/90 OR ≥130/80

If the patient has hypertension
AND diabetes OR chronic kidney disease

Take the 2nd blood pressure after 1 minute 

Please promptly notify the Provider of elevated blood pressure readings

TARGET:BP



7 SIMPLE TIPS TO GET AN ACCURATE BLOOD PRESSURE READING

The common positioning errors can result in inaccurate blood pressure measurement. Figures shown are estimates of how improper positioning can potentially impact blood pressure readings.

Sources:
1. Pickering, et al. Recommendations for Blood Pressure Measurement in Humans and Experimental Animals Part 1: Blood Pressure Measurement in Humans. Circulation 2005;111:687-716.
2. Handjeri J. The importance of accurate blood pressure measurement. The Permanente Journal Summer 2009;Volume 13 No. 3:51

This 7 simple tips to get an accurate blood pressure reading was adapted with permission of the American Medical Association and The Johns Hopkins University. The original copyrighted content can be found at www.ama-assn.org/ama-johns-hopkins-blood-pressure-resources.

BP Control Coaching Success Story

Patients had lower clinical blood pressure readings after coaching sessions to improve medication adherence

Patient Overview

Age: 64
Language spoken: Arabic (communicated through an interpreter)

Why was the patient referred?
Blood pressure: 177/100 and 156/76.
Referral date: 5/12/2022.

Patient motivations for controlling BP
Patient wanted to control blood pressure to take care of herself.

Patient reported challenges taking antihypertensive meds

- 1) Patient misunderstood the purpose of the medications, the medication label and schedule to take them.
- 2) Patient reported too many pills to track.


Plans made with the Coach

1. Use a pillbox called Med Minder to manage medications & alert if needed.
2. Get reminders from family members.
3. Request prescription renewals in Arabic.


Medication updates

- No medication side effects reported
- No medication adjustments made during coaching period

Results
Patient completed 5 coaching sessions.
Final health BP: 118/80.



**Questions on how to refer?
Contact XX, BP Control Coach
Contact Information
XXXX**

IMPACT SNAPSHOT 

177/100
blood pressure at time of referral

5 visits
patient met with the Coach for medication adherence coaching
5/12/2022 to 7/21/2022

118/80
blood pressure after completing coaching sessions

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1. U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Control Hypertension. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General; 2020.
2. Choudhry NK, Kronish IM, Vongpatanasin W, Ferdinand KC, Pavlik VN, Egan BM, Schoenthaler A, Houston Miller N, Hyman DJ; American Heart Association Council on Hypertension; Council on Cardiovascular and Stroke Nursing; and Council on Clinical Cardiology. Medication Adherence and Blood Pressure Control: A Scientific Statement From the American Heart Association. *Hypertension*. 2022 Jan;79(1):e1-e14. doi: 10.1161/HYP.000000000000203. Epub 2021 Oct 7. PMID: 34615363.
3. Morris ZS, Wooding S, Grant J. The answer is 17 years, what is the question: understanding time lags in translational research. *J R Soc Med*. 2011 Dec;104(12):510-20. doi: 10.1258/jrsm.2011.110180. PMID: 22179294; PMCID: PMC3241518.
4. Hemler JR, Hall JD, Cholan RA, Crabtree BF, Damschroder LJ, Solberg LI, Ono SS, Cohen DJ. Practice Facilitator Strategies for Addressing Electronic Health Record Data Challenges for Quality Improvement: EvidenceNOW. *J Am Board Fam Med*. 2018 May-Jun;31(3):398-409. doi: 10.3122/jabfm.2018.03.170274. PMID: 29743223; PMCID: PMC5972525.
5. Schoenthaler A, De La Calle F, Barrios-Barrios M, et al. A practice-based randomized controlled trial to improve medication adherence among Latinos with hypertension: Study protocol for a randomized controlled trial. *Trials*. 2015;16:290.
6. Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: A report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Hypertension*. 2018;71(6):e13-e115.
7. Centers for Disease Control and Prevention. Hypertension Control Change Package (2nd Ed.). Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services;2020.
8. Centers for Disease Control and Prevention. Million Hearts 2022. Available at: <https://millionhearts.hhs.gov/>. Accessed Feb 27, 2021.
9. American Heart Association (AHA), American Medical Association (AMA). Target: BP. Available at: <https://targetbp.org/>. Accessed Feb 27, 2021.
10. Joshi MP, Clark A, Ludman M. 2016. Systems-based Approaches to Improving Medication Adherence. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.
11. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA*. 2002 Oct 16;288(15):1909-14. doi: 10.1001/jama.288.15.1909. PMID: 12377092.
12. Margolius D, Wong J, Goldman ML, Rouse-Iniguez J, Bodenheimer T. Delegating responsibility from clinicians to nonprofessional personnel: the example of hypertension control. *J Am Board Fam Med*. 2012 Mar-Apr;25(2):209-15. doi: 10.3122/jabfm.2012.02.100279. PMID: 22403202.
13. Voils CI, King HA, Thorpe CT, Blalock DV, Kronish IM, Reeve BB, Boatright C, Gellad ZF. Content Validity and Reliability of a Self-Report Measure of Medication Nonadherence in Hepatitis C Treatment. *Dig Dis Sci*. 2019 Oct;64(10):2784-2797. doi: 10.1007/s10620-019-05621-7. Epub 2019 Apr 29. PMID: 31037593.
14. Rosal MC, Ebbeling CB, Lofgren I, Ockene JK, Ockene IS, Hebert JR. Facilitating dietary change: the patient-centered counseling model. *J Am Diet Assoc*. 2001;101(3):332-41.
15. Miller WR, Rollnick S. Motivational interviewing: helping people change. New York, NY: Guilford Press; 2013.
16. Carroll JK, Fiscella K, Epstein RM, Sanders MR, Williams GC. A 5A's communication intervention to promote physical activity in underserved populations. *BMC Health Serv Res*. 2012;12:374.
17. Glasgow RE, Emont S, Miller DC. Assessing delivery of the five 'As' for patient-centered counseling. *Health Promot Int*. 2006;21(3):245-55