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# Hypertension
## Control

## CHANGE PACKAGE
## for Clinicians

**A MILLION HEARTS® ACTION GUIDE**

## Acknowledgments and Contributors

We would like to extend special thanks to the following individuals for their assistance in the development or review of this document:

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We would like to extend special thanks to the following organizations for their willingness to share tools and resources and provide feedback on the change package:

American Medical Group Foundation

Clinical Decision Support Collaborative for Performance Improvement

Health Center Network of New York

Institute for Healthcare Improvement

Kaiser Permanente Northern California

New York City Department of Health and Mental Hygiene Primary Care Information Project

Redwood Community Health Coalition

Washington State Department of Health

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## Suggested Citation

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# Contents

## About the Hypertension Control Change Package

The Hypertension Control Change Package for Clinicians (HCCP) presents a listing of process improvements that ambulatory clinical settings can implement as they seek optimal hypertension (HTN) control. It is composed of change concepts, change ideas, evidence- or practice-based tools and resources. **Change concepts** are general notions that are useful in the development of more specific ideas for changes that lead to improvement. Change ideas are actionable, specific ideas for changing a process. **Change ideas** can be rapidly tested on a small scale to determine whether they result in improvements in the local environment. With each change idea the HCCP lists evidence- or practice-based **tools and resources** that can be adapted or adopted in a healthcare setting to improve HTN control.

> While the science behind cardiovascular risk reduction is continually evolving, there is strong evidence that a systematic approach to HTN management can significantly improve HTN-related care processes and outcomes.

While the science behind cardiovascular risk reduction is continually evolving, there is strong evidence that a systematic approach to HTN management can significantly improve HTN-related care processes and outcomes. The purpose of the HCCP is to help healthcare practices put systems in place to care for patients with HTN more efficiently and effectively. The HCCP is broken down into three main focus areas (Figure 1):

**Figure 1.** Hypertension Control Change Package Focus Areas

## How to Use the Hypertension Control Change Package

The HCCP is meant to serve as a menu of options from which practices can select specific interventions to improve HTN control. We do not recommend that any practice attempt to implement all of the interventions at once nor is it likely that all interventions will be applicable to your clinical setting.

Start by bringing together a team of physicians, pharmacists, nurses, medical assistants, and administration to discuss the aspects of HTN control that are most in need of improvement. The team can then select corresponding interventions from the HCCP that best address those issues.

In Figure 2 you will find the Institute for Healthcare Improvement's (IHI's) Model for Improvement.[1] The model suggests posing three questions:

1. What are we trying to accomplish?

2. How will we know that a change is an improvement?

3. What changes can we make that will result in improvement?

The answers will point you to your quality improvement objectives and related metrics, and you can choose strategies from the HCCP that have been shown to result in improvement.

**Figure 2.** Institute for Healthcare Improvement Model for Improvement
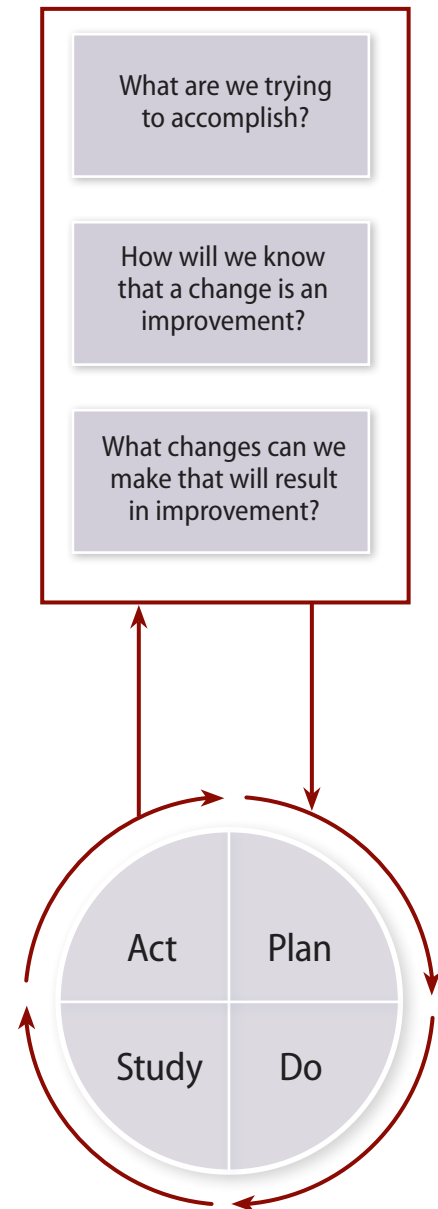
Read through Tables 1, 2, and 3 for a list of change concepts and ideas that clinicians and practices have successfully implemented to improve HTN control for their patient population, and then take a look at the Hypertension Control Case Studies. Each change concept and idea is paired with tools and resources suggested by experts in the field who have successfully used them. See the Acknowledgements and Contributors section (inside cover) for content contributors.

▷ **Key Foundations** (Table 1) offers ways to establish practice foundations for effective HTN control efforts and is likely the best place on which to focus initial quality improvement efforts. These include identifying a champion to provide leadership on focused quality improvement efforts and making HTN a practice priority.

▷ **Population Health Management** (Table 2) presents population management tools and approaches to proactively monitor and manage HTN practice-wide. This includes clinician-driven treatment protocols and using practice data to drive improvement.

▷ **Individual Patient Supports** (Table 3) lists ways that practices can leverage all care steps to better manage HTN for individual patients. These supports span the patient care spectrum, including pre-visit patient outreach, check-in opportunities, interactions during the visit, checkout, and after-visit reinforcement.

▷ **Hypertension Control Case Studies** (page 12) illustrate how practices have successfully used systematic approaches and tools to achieve exemplary levels of HTN control.

The tools contained in the HCCP have been used in the field over the past several years to systematize and improve HTN management; consequently, some clinical details in the tools may reflect treatment and management decisions that differ from your practice. But the tools can be adapted by filtering in the evidence, practice-specific patient population characteristics, and patient-specific needs. Because the science behind HTN control is ever-changing, the HCCP will be periodically updated.

Once you have selected a change idea to implement, work through a Plan-Do-Study-Act (PDSA) cycle (*http://bit.ly/1H1VEA3*) with a small number of patients, that is, a "small test of change" to test the change idea in your clinical setting.

## How to Measure Quality Improvement Efforts

It is essential to monitor and measure quality improvement efforts—both outcomes and processes. Overall outcomes such as improved HTN control are important to measure, but process measures, such as the percentage of newly diagnosed patients with HTN who are brought back for a follow-up visit within a designated period of time, can provide much-needed feedback on whether or not interventions are being successfully carried out. Begin by reviewing small numbers of patient records or have discussions with clinical staff to identify potential barriers to implementation. These small tests of change should be used to assess the implementation of interventions and make needed refinements before spreading the work to a larger scale.

## Additional Resources

You may find it useful to start with the Ambulatory Health IT-enabled Quality Improvement Worksheet (*http://bit.ly/1KB3Xny*) available from the Health and Human Services (HHS) Office of the National Coordinator for Health Information Technology (ONC). This worksheet, or a similar framework, can help document current information flows throughout the patient's office experience and beyond. You can use the HCCP to find evidence-based enhancements for the areas where you have noticed improvement is needed.

The IHI website has a number of quality improvement tools that support its Model for Improvement (Figure 2) including the Improvement Project Planning Form (*http://bit.ly/1IhzWZ7*) to help teams think systematically about their improvement project and the PDSA Worksheet for Testing Change (*http://bit.ly/1KMP7rq*), which walks the user through documenting a test of change. These resources may be helpful for planning, assigning responsibilities, and carrying out small tests of change for improving HTN control.

The Healthcare Information and Management Systems Society (HIMSS) publishes a guidebook series (*http://bit.ly/1dOb26O*) on improving care delivery and outcomes with clinical decision support (CDS).[2,3] These guidebooks can help you apply the CDS Five Rights framework to ensure that all the right people (including patients) get the right information in the right formats via the right channels at the right times to optimize health-related decisions and actions. The guidebooks help health care practices and their partners set up programs that reliably deliver outcome-improving CDS interventions. They also provide detailed guidance on successfully developing, launching, and monitoring such interventions so that all stakeholders benefit.

## Change Package for Clinicians

| Table 1. Hypertension Control Change Package—Key Foundations | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Make HTN Control a Practice Priority** | Designate an HTN Champion in the practice | • Kaiser Permanente. Cardiovascular Physician Champion Role Description: see Appendix A. |
| | Ensure care team engagement in HTN control | • Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: Expanding Roles for Primary Care Team Members in Working with Patients with HTN (pp. 45-47): *http://bit.ly/ZGoe6e* <br><br>• Guide to Community Preventive Services. Cardiovascular. Cardiovascular Disease Prevention and Control: Team-based care to improve blood pressure control: *http://bit.ly/1xVEZGh* <br><br>• American Medical Group Foundation. Provider Toolkit to Improve Hypertension Control. All Team Members Trained in Importance of BP Goals and Metrics: *http://bit.ly/1wcRKx6** |
| | Provide BP checks without appointment or co-pay | • Kaiser Permanente. Walk-in Medical Assistant Blood Pressure Check Protocol: *http://bit.ly/ZGoySr** |

| Table 1. Hypertension Control Change Package—Key Foundations (continued) | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Implement a Policy and Process to Address BP for Every Patient with HTN at Every Visit** | Develop HTN control policy and procedures | • American Medical Group Foundation. Provider Toolkit to Improvement Hypertension Control. BP Addressed for Every Hypertension Patient at Every Primary Care or Cardiology Visit: *http://bit.ly/1zdx7Vh**<br><br>• Kaiser Permanente. Blood Pressure Check Visit Policy and Procedure: *http://bit.ly/1nqETWj** |
| | Leverage local Patient Centered Medical Home (PCMH) activities to help drive comprehensive approach to HTN management | • Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: PCMH Change Concepts, Ideas, and Resources (pp. 18-33): *http://bit.ly/ZGoe6e* |
| | Develop a flowchart for how hypertensive patients will be proactively tracked and managed | • Health Resources and Services Administration. Implementation: Hypertension Control: Critical Pathway for HTN control (Figure 3.1): *http://1.usa.gov/1sunmf3*<br><br>• Institute for Healthcare Improvement. Planned Care Visit Workflow (can be adapted for BP control): *http://bit.ly/1xVTHxf* |
| **Train and Evaluate Direct Care Staff on Accurate BP Measurement and Recording** | Provide guidance on measuring BP accurately | • Sharp Rees-Stealy Medical Group. Checking Blood Pressures Nursing Competency: *http://bit.ly/1ty6uaN**<br><br>• Colorado Springs Health Partners. Correct Blood Pressure Measurement Technique Handout: *http://bit.ly/1sN0OHR**<br><br>• Park Nicollet. Standard Work Form, Blood Pressure Measurement in the Clinic: *http://bit.ly/1rBkXv6**<br><br>• Park Nicollet. Standard Work Form, Automatic Omron Blood Pressure Measurement: *http://bit.ly/1vj9nek**<br><br>• Cornerstone Health Care. BP Measurement: The Proper Way [Video]: *http://bit.ly/1GXBxin*<br><br>• Cornerstone Health Care. BP Measurement: The Wrong Way [Video]: *http://bit.ly/1ocZOgi*<br><br>• HealthPartners. Blood Pressure Accuracy and Variability Quick Reference: *http://bit.ly/1wc3wpv** |
| | Assess adherence to proper BP measurement technique | • Cleveland Clinic. Competency Checklist Blood Pressure Measurement: *http://bit.ly/ZwsgxQ**<br><br>• Kaiser Permanente. Blood Pressure Spot Check: *http://bit.ly/1qDLGYE**<br><br>• HealthPartners. New Employee Blood Pressure Measurement Initial Competency Checklist: *http://bit.ly/1w9vvan**<br><br>• HealthPartners. Quarterly Blood Pressure Auditing Tool: *http://bit.ly/1rgemGC** |

| Table 1. Hypertension Control Change Package—Key Foundations (continued) | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Systematically Use Evidence-Based HTN Guidelines and Treatment Protocols** | Implement HTN guidelines effectively, using the most appropriate information and recommendations | • American College of Cardiology. Perspectives on Hypertension: *http://bit.ly/1tOfPvf*<br>• Centers for Disease Control and Prevention. Elements Associated with Effective Adoption and Use of a Protocol: Insights from Key Stakeholders: *http://bit.ly/2uQcUsg* |
| | Deploy HTN protocols and algorithms | • Centers for Disease Control and Prevention. Evidence-based Treatment Protocols for Improving Blood Pressure Control: *http://1.usa.gov/10qGDFk*<br>• Association of State and Territorial Health Officials. Million Hearts® Success Story. New York Develops Clinical Pathway to Identify and Manage Adult Hypertension: *http://bit.ly/ZJvez5* |
| | Overcome treatment inertia | • American Medical Group Association. BP Addressed for Every Hypertension Patient at Every Primary Care or Cardiology Visit: *http://bit.ly/1zdx7Vh*\* |
| | Manage resistant HTN effectively | • New York City Health and Hospitals Corporation. Adult Hypertension Clinical Practice Guidelines: *http://bit.ly/2tmRlve*<br>• Journal of the American Board of Family Medicine. Resistant Hypertension: *http://bit.ly/10qlDx5*<br>• Family Practice Notebook. Resistant Hypertension: *http://bit.ly/1pEONzs* |
| **Equip Direct Care Staff to Facilitate Patient Self-Management** | Put a prevention, engagement and self-management program in place[†] | • California Healthcare Foundation. Helping Patients Manage Their Chronic Conditions: *http://bit.ly/1X2oldR*<br>• Institute for Healthcare Improvement. Partnering in Self-Management Support: A Toolkit for Clinicians: *http://bit.ly/1FJwBiz* |
| | Ensure team is skilled in identifying/promoting patient medication adherence[†] | • Centers for Disease Control and Prevention. Hypertension Control: Action Steps for Clinicians: Actions to Improve Medication Adherence (Table 2): *http://bit.ly/2ui1c8x*<br>• American College of Preventative Medicine. Medication Adherence—Improving Health Outcomes: *http://bit.ly/1rrMclP*<br>• New York City Department of Health. Medication Adherence Action Kit: Provider Resources: *http://on.nyc.gov/2qQq3hC* |
| | Establish a program to support home BP monitoring[†] | • Centers for Disease Control and Prevention. Self-Measured Blood Pressure Monitoring: Action Steps for Clinicians: *http://bit.ly/2q8mFQd*<br>• New York City Department of Health. Patient Self-Monitoring of Blood Pressure: A Provider's Guide: *http://on.nyc.gov/2qhvjlC* |

\* Source: American Medical Group Foundation's Measure Up/Pressure Down® 2013 Provider Toolkit: *www.measureuppressuredown.com/HCProf/Find/provToolkit_find.asp*.

[†] For patient-facing tools, see Table 3. Use all Care Steps as Appropriate to Support Hypertension Control.

| Table 2. Hypertension Control Change Package—Population Health Management | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Use a Registry to Identify, Track, and Manage Patients with HTN** | Implement a HTN registry | • American Medical Group Association. Registry Used to Track Hypertension Patients: *http://bit.ly/12k9MT1*\* |
| | Identify patients with elevated BP yet without a HTN diagnosis; diagnose HTN as appropriate | • Health Center Network of New York. Undiagnosed Hypertension Registry: *http://bit.ly/1sUmOPG* |
| | Use a defined process for outreach (e.g., via phone, mail, email, text message) to patients with uncontrolled HTN and those otherwise needing follow-up | • Redwood Community Health Coalition. Hypertension Recall Instructions: see Appendix B.<br>• The Office of the National Coordinator for Health Information Technology. Quality Improvement in a Primary Care Practice: *http://bit.ly/1tgdXdO* |
| **Use Clinician-Managed Protocols for Medication Adjustments and Lifestyle Recommendations** | Use protocols to cover proactive outreach driven by registry use and respond to patient-submitted home BP readings | • Minnesota Board of Nursing. FAQ: Use of Condition-Specific Protocols: *http://bit.ly/2riFL6T*<br>• Kaiser Permanente. Protocol for Uncomplicated Hypertension: Registered Nurse Titration of Lisinopril, Hydrochlorothiazide, Atenolol, and Amlodipine: *http://bit.ly/1u85SsR*<br>• UNC Health Care Center. Standing Order: Antihypertensive Initiation and Titration: *http://bit.ly/1thJlrE*<br>• Agency for Healthcare Research and Quality. Blood Pressure Titration Protocol for Diabetes Planned Visit: *http://1.usa.gov/1rABLmk*<br>• Mercy Clinics, Inc. Hypertension Standing Orders: *http://bit.ly/1032em6*\* |
| **Use Practice Data to Drive Improvement** | Determine HTN control metrics for the practice | • Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: Measurement Worksheet (pp.12-15): *http://bit.ly/ZGoe6e*<br>• Heath Center Network of New York. Specifications Hypertension Measures: *http://bit.ly/1xErvxU* |
| | Regularly provide a dashboard with BP goals, metrics, and performance | • New York City Department of Health. Provider Dashboards: *http://bit.ly/2qQyZE3*<br>• New York City Department of Health. John Doe Dashboard: *http://bit.ly/2qcZLra*<br>  ○ More detailed information: Your Practice Hypertension Panel Summary (*http://bit.ly/2ql7xKR*) and Hypertension Panel Management Patient List (*http://bit.ly/2qcZLra*)<br>• Kaiser Permanente—Mid Atlantic States. HTN Report: *http://bit.ly/100yB55*\*<br>• Kaiser Permanente—Mid Atlantic States. Quarterly Status Report: *http://bit.ly/1wE0AmD*\*<br>• Cleveland Clinic. Physician Quality Report Card: *http://bit.ly/1xErHgD*\* |

\*Source: American Medical Group Foundation's Measure Up/Pressure Down® 2013 Provider Toolkit: *www.measureuppressuredown.com/HCProf/Find/provToolkit_find.asp*.

| Table 3. Hypertension Control Change Package—Individual Patient Supports | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Support Patients in HTN Self-Management During Their Routine Daily Activities (e.g., not related to any specific visit)** | Use an online patient portal or other approaches so that patients can access tools, information and practice staff outside face-to-face encounters to address home BP readings and other needs | • The Office of the National Coordinator for Health Information and Technology & National Learning Consortium: What is a Patient Portal? *http://bit.ly/1zfFK0s* |
| | Ensure that the self-management support provided to patients is helpful in their daily routine (e.g., when making food and lifestyle choices) | • Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: Key Messages for Health Coaches Working with Patients at Visits and in Follow-up Calls (pp. 48-62): *http://bit.ly/ZGoe6e*<br>• See Table 1, **Key Foundations** (p. 4-6), for other self-management support tools |
| **Prepare Patients and Care Team Beforehand for Effective HTN Management During Office Visits (e.g., via pre-visit patient outreach and team huddles)** | Contact patients to confirm upcoming appointments; instruct them to bring medications, medication list, and home BP readings; tell them to take medications as instructed on day of visit; if possible, instruct them on submitting home BP readings periodically via apps/portal | • Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: Key Message #1: Building Trust is Critical (p. 49): *http://bit.ly/ZGoe6e*<br>• See Table 2, **Population Health Management** (p. 7), for tools on using registries |
| | Use a flowchart or dashboard with care gaps highlighted to support team huddles | • New York City Department of Health. Hypertension/Dyslipidemia Flow Sheet: *http://on.nyc.gov/2qXhDpq* |
| | Design workflows and use tools to ensure that indicated orders/actions occur during the visit | • Institute for Healthcare Improvement. Partnering in Self-Management Support: A Toolkit for Clinicians: Planned Care Visit Workflow: *http://bit.ly/1xVTHxf* |

| Table 3. Hypertension Control Change Package—Individual Patient Supports (continued) | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Use Each Patient Visit Phase to Optimize HTN Management: Intake (e.g., check-in, waiting, rooming)** | Provide patients with educational materials to help them understand HTN and its implications | • Washington State Department of Health. Know Your Numbers 11x17 poster: *http://1.usa.gov/1xErV7J*<br>• Washington State Department of Health. What's the Big Deal about Controlling My Blood Pressure? 11x17 poster: *http://1.usa.gov/1rAS4iV*<br>• Centers for Disease Control and Prevention. High Blood Pressure Fact Sheet: *http://1.usa.gov/1zKKEDL* |
| | Provide patient with tools to support their visit agenda and goal setting | • Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinical Practice Teams: Appendix 2: Bubble Diagram (p. 97): *http://bit.ly/ZGoe6e*<br>• Institute for Healthcare Improvement. Action Plan Form: *http://bit.ly/1O0L3BT*<br>• New York City Department of Health. My Blood Pressure Log: *http://on.nyc.gov/2riogn2*<br>• Billings Clinic. Blood Pressure Report Card: *http://bit.ly/1nTtAWR**<br>• Fletcher Allen Healthcare/University of Vermont. BP at Goal Patient Questionnaire: *http://bit.ly/1DCLL55** |
| | Measure, document and repeat BP correctly as indicated; flag abnormal readings | • The Office of the National Coordinator for Health Information and Technology. How to Implement EHRs: Clinical Decision Supports (CDS) *http://bit.ly/1q4puqE*<br>• The Office of the National Coordinator for Health Information and Technology. Meaningful Use Case Studies: Improving Blood Pressure Control for Patients with Diabetes in 4 Community Health Centers: *http://bit.ly/1OCaU3R*<br>• See Table 1, **Key Foundations** (p. 5), for correct BP measurement technique |
| | Reconcile medications patient is actually taking with the record's medication list | • Institute for Healthcare Improvement. Medication Reconciliation Form: *http://bit.ly/1wgWtOA*<br>• Beth Israel Deaconess Medical Center. EHR Medication Reconciliation Tool [screenshot]: *http://bit.ly/1vldMd4* |

| Table 3. Hypertension Control Change Package—Individual Patient Supports (continued) | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| **Use Each Patient Visit Phase to Optimize HTN Management: Provider Encounter (e.g., documentation, ordering, patient education/ engagement)** | Use documentation templates to help capture key data such as patient treatment goals, barriers to adherence, etc. | • The Office of the National Coordinator for Health Information and Technology. How to Implement EHRs: Clinical Decision Supports (CDS): *http://bit.ly/1q4puqE*<br>• Mercy Clinics, Inc. Morisky Scale: *http://bit.ly/1FZJlBl**  |
| | Use order sets (e.g., with prompts for med titration; increase compliance via prescribing from patient insurance formulary, using once daily/fixed dose combinations when possible) and standing orders to support evidence based and individualized care | • Institute for Healthcare Improvement. Standing Orders Diabetes Mellitus—Type II (can be adapted for BP control): *http://bit.ly/1DCM0NL*<br>• American Medical Group Association. All Patients Not at Goal or with New Hypertension Rx Seen within 30 Days: *http://bit.ly/13m2izw**<br>• Mercy Clinics, Inc. Hypertension Standing Orders: *http://bit.ly/1O32em6* |
| | Assess individual risk and counsel using motivational interviewing techniques; agree on a shared action plan | • American College of Cardiology/American Heart Association. ASCVD Risk Estimator: *http://bit.ly/1gAltrh*<br>• National Heart, Lung, and Blood Institute. Risk Assessment Tool for Estimating Your 10-year Risk of Having a Heart Attack: *http://1.usa.gov/1fjDXJK*<br>• Mercy Clinics, Inc. 5As Encounter Form: *http://bit.ly/1O4FwKG**<br>• Washington State Department of Health. Improving the Screening, Prevention, and Management of Hypertension—An Implementation Tool for Clinic Practice Teams: Appendix 2: Bubble Diagram (p. 97): *http://bit.ly/ZGoe6e* |
| | Support BP self-monitoring: advise on choosing device/cuff size, check device for accuracy, train patient on use, provide BP logs (electronic/paper/portal) | • Washington State Department of Health. How to Check Your Blood Pressure 8.5x5.5 booklet (English & Spanish): *http://1.usa.gov/1nTAlmf*<br>• New York City Department of Health. Blood Pressure Tracking Card & Action Plan: *http://on.nyc.gov/2qXiG6v*<br>• National Heart, Lung, and Blood Institute/Million Hearts®. My Blood Pressure Wallet Card: *http://bit.ly/2uQ1STQ*<br>• Arch Health Partners. Blood Pressure Tracking Card: *http://bit.ly/1OClxUs** |
| | On the patient portal, provide educational materials to support a low-sodium diet and exercise and links to community resources or support groups | • Centers for Disease Control and Prevention. Reducing Sodium in the Diet to Help Control Your Blood Pressure: *http://1.usa.gov/1dL2NSW*<br>• National Heart, Lung, and Blood Institute. Your Guide to Lowering Blood Pressure: *http://1.usa.gov/1p7tpbF*<br>• New York City Department of Health. Eat and Drink to Lower Blood Pressure: *http://on.nyc.gov/2rARAF8*<br>• New York City Department of Health. Learn to Read Food Labels: *http://on.nyc.gov/2rio5rZ* |

| Table 3. Hypertension Control Change Package—Individual Patient Supports (continued) | | |
|---|---|---|
| **Change Concepts** | **Change Ideas** | **Tools and Resources** |
| | Support medication adherence by providing clear written and verbal instructions and encouraging patients to use medication reminders | • New York City Department of Health. Medication Adherence Action Kit: *http://on.nyc.gov/2qQq3hC*<br>• ScriptYourFuture. Online Tool for Patients to Support Medication Adherence (medication list wallet cards in English and Spanish can be ordered in bulk for free here): *http://bit.ly/1zjQBqi*<br>• Food and Drug Administration. Medicines To Help You: High Blood Pressure: *http://1.usa.gov/1wJzllj* |
| **Use Each Patient Visit Phase to Optimize HTN Management: Encounter Closing (e.g., checkout)** | Provide patients with a written self-management plan, visit summary, and follow-up guidance at the end of each visit | • Mercy Clinics, Inc. 5As Encounter Form: *http://bit.ly/104FwKG**<br>• The Office of the National Coordinator for Health Information and Technology. Providing Patients in Ambulatory Care Settings with a Clinical Summary of the Office Visit: *http://bit.ly/1rDPpoG*<br>• Sharp Rees-Stealy Medical Group. Patient Participation Handouts-English & Spanish: *http://bit.ly/1zjTM17**<br>• Institute for Healthcare Improvement. Action Plan Form: *http://bit.ly/100L3BT* |
| **Follow up to Monitor and Reinforce HTN Management Plans (i.e., after visits)** | Assign staff responsibility for managing refill requests by refill protocol | • Trinity Clinic Whitehouse. Automatic Refill Policy Example: *http://bit.ly/1wJDviw*<br>• University of Texas Medical Branch. Adult Primary Care Prescription Refill Guidelines for Ambulatory Services: *http://bit.ly/1H2hBOW*<br>• Minnesota Board of Nursing. FAQ: Use of Condition-Specific Protocols: *http://bit.ly/2riFL6T* |
| | Implement frequent follow-ups (e.g., e-mail, phone calls, text messages) with patients to make sure they are continuing their medication | No tools in the HCCP at this time. |
| | Set up an automated telephone system for patient monitoring and counseling | No tools in the HCCP at this time. |

*Source: American Medical Group Foundation's Measure Up/Pressure Down® 2013 Provider Toolkit: *www.measureuppressuredown.com/HCProf/Find/provToolkit_find.asp*.

## Hypertension Control Case Studies

Below are case studies illustrating how practices have used systematic approaches, together with specific tools to enhance information flow and workflow, to achieve significant improvements in HTN control. For approaches and tools to replicate these successes, see Tables 1, 2, and 3 in this change package.

**Ellsworth Medical Clinic** (small practice in Wisconsin)
▷ Description of improving BP control approach and tools: *http://bit.ly/1LMxdXH*

▷ Source: ONC How to Implement EHRs: Clinical Decision Supports: *http://bit.ly/1zfXFU2*

**CHC, Inc.** (community health center in Utah)
▷ Description of improving BP control for patients with diabetes approach and tools: *http://bit.ly/1Kd9wGf*

▷ Source: ONC How to Implement EHRs: Clinical Decision Supports: *http://bit.ly/1zfXFU2*

**Kaiser Permanente, Southern California Region** (large integrated health network)
▷ Description of proactive office encounter program: *http://1.usa.gov/1DhXSWu*

▷ Source: Agency for Healthcare Research and Quality (AHRQ) Health Care Innovations Exchange: *http://1.usa.gov/1v6cBol*

**Group Health Cooperative** (large integrated health network)
▷ Description of web-facilitated home monitoring and ongoing pharmacist support: *http://1.usa.gov/1z4fiGJ*

▷ Source: AHRQ Health Care Innovations Exchange: *http://1.usa.gov/1v6cBol*

**Denver Health and Hospitals, Veterans Affairs Eastern Colorado Healthcare System, and Kaiser Permanente Colorado**
▷ Description of weekly home monitoring and pharmacist feedback: *http://1.usa.gov/1wBO3gM*

▷ Source: AHRQ Health Care Innovations Exchange: *http://1.usa.gov/1v6cBol*

**Department of Veterans Affairs**
▷ Description of approach and tools: Synopsis of Large Multi-year, Multi-city BP Improvement Trial: *http://1.usa.gov/1yzk0Hm*

▷ Source: CDC Science-in-Brief: *http://1.usa.gov/1z4hnlT*

**Million Hearts® Hypertension Control Champions**
▷ Description: Million Hearts® Hypertension Control Challenge, with list of winners and links to overviews of their BP control approaches: *http://1.usa.gov/Y9FaS4*

▷ Source: Million Hearts® website: *http://1.usa.gov/18vP8CJ*

## References

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# Appendix A: Kaiser Permanente Cardiovascular Physician Champion Role Description

**PHASE**
PREVENT HEART ATTACKS AND STROKES EVERYDAY

**Cardiovascular Physician Champion Role Description**
**Kaiser Permanente Northern California**

**Role Summary:**

The Cardiovascular Physician Champion will serve as a liaison between and collaborate with peer physicians and the Department and Subspecialty Chiefs, Clinic Manager and Ancillary Staff in order to implement an organized Cardiovascular Risk Reduction Program. The key operational goals of the Cardiovascular Risk Reduction Program are to improve utilization of the hypertension medication treatment algorithm for patients with hypertension as well as statins, RAS blockers and aspirin when indicated for secondary prevention. The Cardiovascular Physician Champion will also support and encourage clinic efforts and initiative to promote healthy diet and lifestyle change for the group's membership as a whole and especially for high risk patients.

The Cardiovascular Physician Champion may also serve as a physician mentor to licensed ancillary staff involved in Cardiovascular Risk Reduction Care under protocol. The general responsibilities of the physician mentor are to provide physician direction, supervision and support case consultation on individual patients as needed.

**Desired Skills:**

1. Knowledgeable and enthusiastic about hypertension treatment and secondary cardiovascular risk reduction, with appropriate clinical expertise and experience.
2. Good communication skills, able to work well with others, and credible with other physicians.
3. Willing/able to invest time in necessary activities including developing local program, conducting educational presentations to local physicians and staff, and promoting cardiovascular risk reduction concepts.

**Functions and Duties as Physician Champion:**

1. Collaborate with the Department Chiefs and Clinic Manager to promote, advocate and implement hypertension and cardiovascular risk reduction clinical practice guidelines and tools.

2. Provide physician input and leadership for implementation, monitoring, and evaluation. Work collaboratively with the stakeholders named above to leverage and optimally utilize local infrastructure.
   - may chair or co-chair advisory group
   - develop local approach to support adherence to hypertension medication treatment algorithm for patients with hypertension as well as statins, RAS blockers and aspirin when indicated for secondary prevention.

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- develop process for review and use of monitoring reports and tools
- collaborate with Pharmacy and local Pharmacy & Therapeutics committee.
- develop local evaluation and quality improvement processes utilizing monitoring reports and feedback tools.

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## Appendix B: Redwood Community Health Coalition
## Hypertension Recall Instructions

**REDWOOD COMMUNITY**
HEALTH · COALITION

Serving Sonoma, Napa, Marin & Yolo Counties

### Hypertension Recall Instructions

The following pages are screenshot by screenshot instructions for recalling patients with hypertension using eClinicalworks. There are two protocols provided:

- Inform patients by mail
- Inform patients by email or automated phone call

**Patient criteria for recall:**
- 18 years of age or older
- Diagnosis of hypertension on problem list
- Active patients
- Not deceased
- Have had at least one office visit in the past 2 years
- Has not had an office visit in the past 6 months
- Does not have a scheduled visit in the next month

**FAQ:**

How frequently should patients be recalled?

In order to have patients come in a timely manner we recommend running the recall monthly.
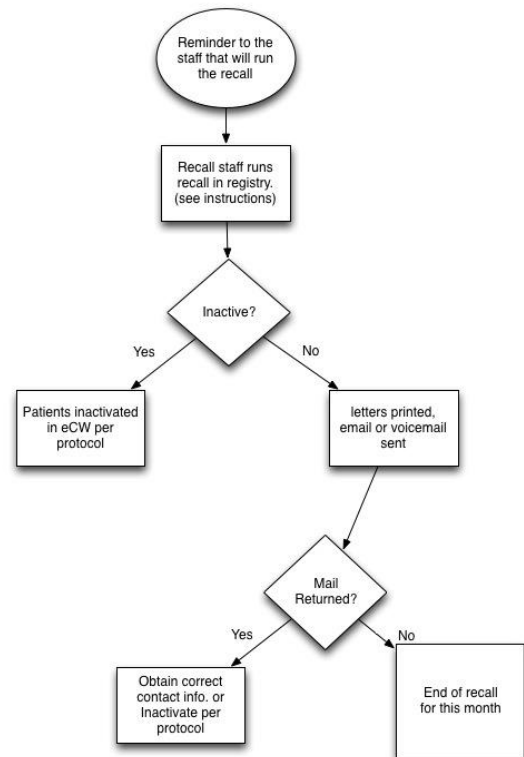
What if too many patients appear on the list, Can it be broken up?

Yes, the list can be sorted by care team, provider or even by count of patients. For assistance with this please contact the RCH EHR Optimization Team.

Can the recall be sorted by care team or provider?

Yes, instructions for this are included with the screenshots that follow.

**Regular Recall Process**

## Acronyms

AHRQ    Agency for Healthcare Research and Quality

BP    Blood pressure

CDC    Centers for Disease Control and Prevention

CDS    Clinical Decision Support

EHR    Electronic Health Record

HCCP    Hypertension Control Change Package

HHS    Health and Human Services

HIMSS    Healthcare Information and Management Systems Society

HTN    Hypertension

IHI    Institute for Healthcare Improvement

ONC    Office of the National Coordinator for Health Information Technology

PCMH    Patient centered medical home

VA    Department of Veterans Affairs

Million Hearts® is a U.S. Department of Health and Human Services initiative that is co-led by the Centers for Disease Control and Prevention and the Centers for Medicare & Medicaid Services, with the goal of preventing one million heart attacks and strokes by 2017.

millionhearts.hhs.gov

Updated August 2017