Million Hearts® and Controlling Hypertension in Adults: Guidance for the Use of Protocols

August 26th, 2014

2:00 pm - 3:00pm CT
Welcome & Introductions

John Clymer, Executive Director
National Forum for Heart Disease and Stroke Prevention
Objectives:

- At the end of the webinar, participants will be able to:
- Identify how protocols may be part of a systems approach to improving blood pressure control rates;
- Summarize the recommended elements of effective hypertension protocols and their use for successful adoption;
- Identify why hypertension protocols/algorithms may be useful; and
- Utilize Million Hearts® tools and resources.
### Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Item / Topic</th>
<th>Speaker / Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 – 2:05</td>
<td>Welcome and Introductions</td>
<td><strong>John Clymer</strong>, Executive Director, National Forum for Heart Disease and Stroke Prevention</td>
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<tr>
<td>2:05 - 2:15</td>
<td>Overview of Million Hearts®</td>
<td><strong>John Clymer</strong>, National Forum for Heart Disease and Stroke Prevention</td>
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<tr>
<td>2:15 – 2:45</td>
<td>Controlling Hypertension in Adults: Guidance for the Use of Protocols</td>
<td><strong>Dr. Mary Ann Bauman</strong>, M.D., Medical Director for Women’s Health and Community Relations, INTEGRIS Health Inc.</td>
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<tr>
<td>2:45 – 2:57</td>
<td>Q and A</td>
<td><strong>John Clymer</strong>, National Forum for Heart Disease and Stroke Prevention</td>
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<td>2:57 - 3:00</td>
<td>Final Remarks</td>
<td><strong>John Clymer</strong>, National Forum for Heart Disease and Stroke Prevention</td>
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</table>
Overview of Million Hearts®
Million Hearts®

Goal: Prevent 1 million heart attacks and strokes by 2017

- US Department of Health and Human Services initiative, co-led by:
  - Centers for Disease Control and Prevention (CDC)
  - Centers for Medicare & Medicaid Services (CMS)
- Partners across federal and state agencies and private organizations
# Getting to Goal

<table>
<thead>
<tr>
<th>Intervention</th>
<th>2009-2010 Measure Value</th>
<th>2017 Target</th>
<th>Clinical target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin for those at risk</td>
<td>54%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Blood pressure control</td>
<td>52%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Cholesterol management</td>
<td>33%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Smoking cessation</td>
<td>22%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Smoking prevalence</td>
<td>26%</td>
<td>10% reduction (~24%)</td>
<td></td>
</tr>
<tr>
<td>Sodium reduction</td>
<td>3580 mg/day</td>
<td>20% reduction (~2900 mg/day)</td>
<td></td>
</tr>
<tr>
<td>Trans fat reduction (artificial)</td>
<td>0.6% of calories</td>
<td>100% reduction (0% of calories)</td>
<td></td>
</tr>
</tbody>
</table>

Sources: National Ambulatory Medical Care Survey, National Health and Nutrition Examination Survey, National Survey of Drug Use and Health
Fewer than Half of Americans with Hypertension Have It Under Control

72 MILLION ADULTS WITH HYPERTENSION (31%)

52%

48%
(35 M)

35 MILLION
ADULTS WITH UNCONTROLLED HYPERTENSION

Aware and treated: 17M
Aware and untreated: 13M
Unaware: 5M

Prevalence of Uncontrolled Hypertension by Selected Characteristics

- **Usual Source of Care**
  - Yes: 89%
  - No: 11%

- **Health Insurance**
  - Yes: 85%
  - No: 15%

- **# Times Received Care in Past Year**
  - ≥2: 74%
  - 1: 26%
  - None: 0%

**Increase in Percent of Patients with Controlled Hypertension**

**Kaiser Permanente Northern California hypertension control rates**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Patients with Controlled Hypertension</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>44%</td>
</tr>
<tr>
<td>2002</td>
<td>50%</td>
</tr>
<tr>
<td>2003</td>
<td>60%</td>
</tr>
<tr>
<td>2004</td>
<td>70%</td>
</tr>
<tr>
<td>2005</td>
<td>80%</td>
</tr>
<tr>
<td>2006</td>
<td>85%</td>
</tr>
<tr>
<td>2007</td>
<td>87%</td>
</tr>
</tbody>
</table>

Promotion of Single-Pill Combination Therapy

Hypertension control reports every 1-3 months and evidence-based hypertension control protocol

Medical assistant visits for follow-up measurements

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*NCQA: National Committee for Quality Assurance; HEDIS: Healthcare Effectiveness Data and Information Set; KPNC: Kaiser Permanente Northern California
Source: Jaffe MG, et al. Improved blood pressure control associated with a large-scale hypertension program. JAMA August 21, 2013, Vol 310, No. 7
Clinical Quality Measures

• Clinical quality measures help measure and track performance in the ABCS

• Million Hearts® focuses on:
  – Simple, uniform set of measures
  – Data collected or extracted in the workflow of care
  – Link performance to incentives

• In the future public health and clinical quality data will be available via electronic medical records and Health Information Exchanges
## Clinical Quality Measures

<table>
<thead>
<tr>
<th>ABCS</th>
<th>Number</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>PQRS 204</td>
<td>Use of Aspirin or Another Antithrombotic</td>
</tr>
<tr>
<td></td>
<td>NQF 0068</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>PQRS 317</td>
<td>Preventive Care and Screening: Screening for High Blood Pressure</td>
</tr>
<tr>
<td>B</td>
<td>PQRS 236</td>
<td>Hypertension: Controlling High Blood Pressure</td>
</tr>
<tr>
<td></td>
<td>NQF 0018</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>PQRS 316</td>
<td>Preventive Care and Screening: Cholesterol – Fasting Low Density Lipoprotein (LDL) Test Performed AND Risk-Stratified Fasting LDL</td>
</tr>
<tr>
<td>(EHR)</td>
<td></td>
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</tr>
</tbody>
</table>

PQRS = CMS Physician Quality Reporting System, NQF = National Quality Forum, EHR = electronic health record
## Clinical Quality Measures (cont’d)

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<tr>
<th>ABCS</th>
<th>Number</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>PQRS #2</td>
<td><strong>Diabetes Mellitus: Low Density Lipoprotein (LDL-C) Control in Diabetes Mellitus</strong></td>
</tr>
<tr>
<td></td>
<td>NQF #0064</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>PQRS #241</td>
<td><strong>Ischemic Vascular Disease (IVD): Complete Lipid Panel and Low Density Lipoprotein (LDL-C) Control</strong></td>
</tr>
<tr>
<td></td>
<td>NQF #0075</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>PQRS 226</td>
<td><strong>Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention</strong></td>
</tr>
<tr>
<td></td>
<td>NQF 0028</td>
<td></td>
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Controlling Hypertension in Adults: Guidance for the Use of Protocols

Dr. Mary Ann Bauman, M.D.
Medical Director for Women’s Health and Community Relations
INTEGRIS Health Inc., Chair, American Stroke Associations Advisory Committee
Chair, The Guideline Advantage Steering Committee
Our Strategic Approach

**Equipping Providers**
- Protocol Standardization
- Incentives
- Increasing role of other Rph and others

**Motivating & Connecting Consumers**
- Ubiquitous BP devices
- Worksite programs
- Technology to connect consumers w/HCPs
- Incentives

**Activating Communities**
- Health ambassadors
- Pharmacy infrastructure
- Apps to integrate consumers w/HCPs
- Community health worker curriculum

**Enhancing Systems of Care**
- Create accountability at all levels of care
- Performance measures
- Surveillance system

Help providers “do the right thing” within current HC system
Create innovative solutions to empower consumers, strengthen connections to HCPs and create urgency for change
Provide communities with ownable, sustainable, scalable and customizable programs
Create accountability at all levels of care

Equipping Providers
Motivating & Connecting Consumers
Activating Communities
Enhancing Systems of Care

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Community engagement worker curriculum
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Performance measures
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An Effective Approach to High Blood Pressure Control
A Science Advisory From the American Heart Association, the American College of Cardiology, and the Centers for Disease Control and Prevention

Writing Group Members:
Alan S. Go, MD, MaryAnn Bauman, MD, SallyAnn King Coleman, MD, Gregg C. Fanorow, MD, Willie Lawrence, MD, Kim Williams, MD, Eduardo Sanchez, MD
Blood Pressure Management is Multifactorial

Requires the engagement of …

- Patients
- Families
- Providers
- Healthcare delivery system
- Communities
System-level Approaches in Hypertension

- Identifying all patients eligible for management
- Monitoring at the practice/population level
- Increasing patient and provider awareness
- Providing an effective diagnosis and treatment guidelines
- Systematic follow-up of patients for initiation and intensification of therapy
- Clarifying roles of healthcare providers to implement a team approach
- Reducing barriers for patients to receive and adhere to medication as well as to implementing lifestyle modifications
- Leveraging the electronic medical records systems being established throughout the US to support each of these steps
Principles for Algorithm Development

- Based algorithm components and processes on the best available science
- Format to be simple to update as better information becomes available
- Create feasible, simple implementation strategy
- Include patient version at appropriate scientific and language literacy level
- Consider costs of diagnosis, monitoring, and treatment
- Develop algorithm in format easily used within a team approach to health care
- Develop algorithm in a format able to be incorporated into electronic health records for use as clinical decision support
- Include a disclaimer to ensure that the algorithm is not used to counter the treating healthcare provider’s best clinical judgment
Recommended Elements of Effective Algorithms

- Clarity and simplicity
- Lifestyle modification
- Treatment by stage of hypertension
- Time interval to titration and reassessment
- Use of low-cost 1st-line treatment
- Exclusions and suggestions for medications based on concurrent medical conditions
Recommended Elements of Effective Algorithms

• Reminder of the underlying causes of non-essential or secondary hypertension

• Adherence-enhancing approaches such as fixed dose and/or combination drugs

• Indications for referral to hypertensive specialist

• Number needed to treat to avoid a clinical event

• Supporting references
AHA/ACC/CDC Hypertension Treatment Algorithm

Systolic 140–159 or diastolic 90–99 (Stage 1 hypertension)
- Lifestyle modifications as a trial
- Consider adding thiazide
- Thiazide for most patients or ACEI, ARB, CCB, or combo
- If currently on BP meds, titrate and/or add drug from different class

Recheck and review readings in 3 months*

Systolic >160 or diastolic >100 (Stage 2 hypertension)
- Two drugs preferred:
  - Lifestyle modifications and
  - Thiazide and ACEI, ARB, or CCB
- Or consider ACEI and CCB

Recheck and review readings in 2–4 weeks**

BP at Goal?

NO
- Thiazide for most patients or ACEI, ARB, CCB, or combo
- If currently on BP meds, titrate and/or add drug from different class
- Optimize dosage(s) or add medications
- Address adherence, advise on self-monitoring, and request readings from home and other settings
- Consider secondary causes

YES
- Encourage self-monitoring and adherence to meds
- Advise patient to alert office if these notes BP elevation or side effects
- Continue office visits as clinically appropriate

Recheck and review readings in 2–4 weeks**

BP at Goal?

NO

YES

Consider referral to HTN specialist

*Recheck interval should be based on patient’s risk of adverse outcomes.
This algorithm should not be used to counter the treating healthcare provider’s best clinical judgment.

Abbreviations:
ACEI, angiotensin-converting-enzyme inhibitor; ALDO ANTAG, aldosterone antagonist; ARB, angiotensin II receptor blocker; BB, B-blocker; BP, blood pressure; CCB, calcium channel blocker; HTN, hypertension; MI, myocardial infarction; SBP, systolic blood pressure; TIA, transient ischemic attack

<table>
<thead>
<tr>
<th>Modification</th>
<th>Recommendation</th>
<th>Approximate SBP Reduction (Range)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce weight</td>
<td>Maintain normal body weight (body mass index 18.5–24.9 kg/m²)</td>
<td>5–20 mm Hg/10 kg</td>
</tr>
<tr>
<td>Adopt DASH eating plan</td>
<td>Consume a diet rich in fruits, vegetables, and low-fat dairy products with a reduced content of saturated and total fat</td>
<td>8–14 mm Hg</td>
</tr>
<tr>
<td>Lower sodium intake</td>
<td>a. Consume no more than 2,400 mg of sodium/day; b. Further reduction of sodium intake to 1,500 mg/day is desirable, since it is associated with even greater reduction in BP; and c. Reduce sodium intake by at least 1,000 mg/day since that will lower BP, even if the desired daily sodium intake is not achieved</td>
<td>2–8 mm Hg</td>
</tr>
<tr>
<td>Physical activity</td>
<td>Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week)</td>
<td>4–8 mm Hg</td>
</tr>
<tr>
<td>Moderation of alcohol consumption</td>
<td>Limit consumption to no more than 2 drinks (e.g., 21 oz beer, 10 oz wine, or 3 oz 80-proof whiskey) per day in most men, and to no more than 1 drink per day in women and lighter weight persons</td>
<td>2–4 mm Hg</td>
</tr>
</tbody>
</table>

* DASH, dietary approaches to stop hypertension
** The effects of implementing these modifications are dose and time dependent, and could be greater for some individuals
Audit and Feedback:

- Identify a key influencer to serve as a champion.
- Identify mentors to provide consultation on implementation.
- After baseline data are collected, discuss and set a goal, such as “Increase by 10% the number of hypertensive patients aged 18 years or older whose blood pressure is under control.”
- Use an electronic or paper registry that identifies patients with high blood pressure and allows tracking over time.
- Use electronic health records to collate and analyze clinical information.
- Provide regular and timely feedback on performance to the entire health care team.
- Make performance data transparent and learn from those who are reaching the goal.
- Celebrate early wins.
Elements Associated with Effective Adoption of Protocols
Insights from Key Stakeholders

Team-Based Care:

• Make hypertension control a priority.

• Fully use the expertise and scope of practice of every member of the health care team.

• Include the patient and family as key members of the team.

• Learn about community resources and recommend them to patients.

• Conduct pre-visit planning to make the most of the care encounter.

• Look for opportunities to check in with patients between visits and adjust medication dose as needed.
Elements Associated with Effective Adoption of Protocols
Insights from Key Stakeholders

Professional & Patient Education

• Use of evidence for adopting and using protocols.
• Train the health care team on how to use the protocol.
• Training on how to measure blood pressure accurately.
• Calibrate and inspect equipment at to ensure correct blood pressure measurement.
• Emphasize the value of home blood pressure monitoring.
• Incorporate coaching and self-management into patient education and follow-up.

Providers can use several different technology platforms.

Practices submit collective clinical data to Forward Health Group for The Guideline Advantage.

Data are processed, analyzed and provided back to the practice via a practice portal.

Performance is measured, professionals can set measurable goals and chart improvements in performance.
Program Platform

Population Manager

One-click access to patient lists

Measure Performance

Populations
Available Data aggregation

System Level

Clinic View Options
Alignment with National Programs

Million Hearts Initiative

The Guideline Advantage reports on the “ABCS” measures of interest to Million Hearts

Uniform Data System (UDS)

The program reports all adult UDS measures of interest to Community Health Centers and Federally Qualified Health Centers

Bridges to Excellence

The program can help systems participate in Bridges to Excellence, in markets where it is applicable, with no additional work required
Relevant AHA Reports, Statements, or Guidelines

- Heart Disease and Stroke Statistics—2014 Update (Circulation. 2014: published online December 18, 2013, 10.1161/01.cir.0000441139.02102.80.)

- AHA/ACC/CDC Science Advisory: An Effective Approach to HBP Control, 2013 (Hypertension. 2013: published online before print November 15, 2013, 10.1161/HYP.0000000000000003.)

- Toolkits including the algorithm and education for your patients visit: www.heart.org/hbptoolkit

- Customizable template for your organization and for additional algorithm examples visit: http://millionhearts.hhs.gov/resources.html
Questions & Answers

John Clymer
Executive Director
National Forum for Heart Disease and Stroke Prevention
Million Hearts® Hypertension Tools & Resources

- Hypertension Control: Action Steps for Clinicians
- Elements Associated with Effective Adoption and Use of a Protocol: Insights from Stakeholders
- Evidence-based Treatment Protocols for Improving Blood Pressure Control
- Protocol for Controlling Hypertension in Adults
- Protocol-Based Treatment of Hypertension: A Critical Step on the Pathway to Progress, *The Journal of the American Medical Association*
- Self-Measured Blood Pressure Monitoring Guide
- 2013 Hypertension Control Champions
- Grand Rounds:
  - Million Hearts® Grand Rounds
  - Hypertension Grand Rounds: Detect, Connect, and Control
- Visit [http://millionhearts.hhs.gov/](http://millionhearts.hhs.gov/) to find other useful Million Hearts® resources.
Thank You!

For more information, please visit the CDC’s Million Hearts® website at: millionhearts.hhs.gov
or the AHA’s Million Hearts® webpage at: http://www.heart.org/HEARTORG/Advocate/American-Heart-Association-Million-Hearts_UCM_463392_Article.jsp
References