EHR Innovations for Improving Hypertension Challenge

Winners and Phase 2

January 23, 2015
Agenda

Million Hearts Blood Pressure Protocols – Hilary Wall, MPH

Green Spring Internal Medicine – Holly Dahlman, MD, FACP

Vibrant Health Family Clinics – Christopher Tashjian, MD, Mary Boles, LPN, Rosanne Matzek, Care Coordinator

Challenge Phase 2 – Adam Wong, MPP
Key Components of Million Hearts®

- **Keeping Us Healthy**
  - *Changing the environment*

- **Excelling in the ABCS**
  - *Optimizing care*
  - **Focus on the ABCS**
    - Health tools & technology
    - Innovations in care delivery

- **Health Disparities**

- **Aspirin when appropriate**
- **Blood pressure control**
- **Cholesterol management**
- **Smoking assessment and treatment**
Hypertension Control is Complicated

- Patient non-adherence to medications, lifestyle changes
- Multiple medication choices, dosages
- Up-titration and follow-up timelines
- Patient resistance to treatment
- Therapeutic inertia
- White-coat hypertension, resistant hypertension

Improved blood pressure control = fewer heart attacks and strokes
Standardized HTN Treatment Protocols

AKA – algorithms, care pathways, care plans

Adopting a protocol:

- Sends a strong signal to clinical staff that HTN control is a priority
- Reduces clinical variability
- Better enables all members of the health care team to titrate/adjust meds
- Can be incorporated into EHRs/CDS tools
- Efficient and cost-effective selection of meds
Evidence-Based Sample Protocols

http://millionhearts.hhs.gov/resources/protocols.html

• U.S. Department of Veterans Affairs
• Kaiser Permanente
• Institute for Clinical Systems Improvement
• NYC Health and Hospitals Corporation
• Million Hearts® website includes:
  – Brief description of the key components in each protocol
  – Supplemental materials provided to guide control efforts
IT Toolkit for Hypertension Control

Holly Dahlman, MD, FACP
Green Spring Internal Medicine, LLC
Lutherville, MD
To demonstrate how our small practice PCMH uses a team-based approach, combining IT tools with evidence-based medicine, to improve hypertension control.
Our Stats: NQF 0018

* 2011: 47.71%
* 2012: 66.04%
  2013: 80.85%
  2014: 78-79%
Our Team

- One physician
- One nurse practitioner-care manager (1/3 of FTE)
- 3 CMAs
- 1 Medical Office Assistant
- 2700 patients seen in 3 years, most > high school education, diverse cultural and economic backgrounds
Our Practice Model

- Level 3 PCMH, part of MMPP Pilot since 2011
- Team-based
- Vision: “to equip, empower and engage patients in their own healthcare”
Steps to HTN Control

THREE R’s

* **Registries**: uncontrolled +/- unseen HTN patients
* **Resources**: DASH Diet
* **Readings**: home BP recorded, reported & reviewed
* Identify high risk patients
* Web message via Portal
* Phone call outreach
* vMessenger
Registry
Blood Pressure Measurement and Recording

* Red text alerts for abnormal BP value
Protocols

- Medication Reconciliation at every visit

- Browse section to pull DASH diet and self-monitoring instructions (patients given copy of visit note)

- Evidence-based Rx Favorites
Med Rec w/ Adherence Notes
The DASH Diet Eating Plan

The DASH Diet is the new...
**Multilingual patient education: in print or via Portal**
Rx Favorites Based on Evidence-Based Protocol

- Hypertension/low K, treatment-naïve: check plasma renin activity and aldosterone to screen for Conn Syndrome
- Hypertension on high risk meds: If BP < 140/<90, order basic metabolic panel, recommend DASH diet (except in ESRD or with hyperkalemia) and set follow-up visit in 3 months
- Hypertension, < 160/<100 and non-sulfa allergic: DASH DIET and HCTZ 12.5 mg daily with BMP in 2 weeks and f/u BP check then
- Hypertension >160/>100: DASH DIET and add lisinopril/HCTZ 10/12.5 mg daily with BMP in 2 weeks and f/u BP check then. If h/o ACE-I cough, losartan 50/12.5 mg daily (or equivalent ARB on formulary)
Rx Favorites
Readings: Patient Self-Efficacy

- Coaching on self-monitoring
- Pts report home BP readings via paper, Portal, Fax
- Review of home BP log/journal with clinician feedback
- Motivational interviewing on lifestyle changes
- Adding medication per protocol
- Reinforcing ongoing monitoring w/scheduled f/u
Other Tips and Tricks

- eClinisense
- Healow App tracking/reporting
- Care Plan Template
- Facebook recipes/articles
- Twitter @GreenSpringMed
- Pinterest @GreenSpringMed
Green Spring Internal Medicine on Facebook
Newest Addition: Care Plan Template
Summary

The 3 R’s
(registries, resources, reporting)

* Population tools
* Resource tools
* Self-management and efficacy tools
Acknowledgements

- HHS/ONC/CDC
- Team Early Adapters
- Dr. Niharika Khanna
- MMPP
- Maryland DHMH
- MHCC
- Delmarva Foundation
- CRISP
- Aledade, Inc
Doing Our Share To Save 1,000,000 Lives

Presented by:
Chris Tashjian, MD
Mary Boles, LPN
Rosanne Matzek, Care Coordinator
Vibrant Health Family Clinics
Who is Vibrant Health?

“Saving the lives of our patients by helping them learn about healthy lifestyle changes, good nutrition, setting goals, caring about themselves and adjusting medications are some things we take pride in.”
VIBRANT HEALTH IS…

- Our Clinic staffs Family Practice, Internal Medicine, Pediatrics, General Surgery, OB/GYN, ENT and Cardiology clinicians on site.

- Patient Care Team Members
  - Provider
  - Medical Assistant
  - Care coordinator
  - Midlevel
  - Front Office Staff
  - Others

- NCQA Certified PCMH since 2013
- 65,000 patient visits annually
Improvement Philosophy

- Develop a registry using our EMR system for population management
- Exploring ways to develop utilize direct patient care staff as health coaches/continue to improve coordination of care at office visits
- Creating a discharge process that connects patients to their care through, closing the loop with education and clear communication.
- Engaging community members and resources for improved patient care in a healthier community

Development, Exploration, Creativity, Passion and Engagement equal measurably improved outcomes
Innovative Changes

- **Blood pressure/ lipid/A1C medication management protocols**
- **Care Coordinator**
- **Proactively manage chronic conditions and hospital discharges**
- **Primary Health Care Provider (MD, PA, NP)**
- **Recall system** - reminds patients of follow-up/routine visits
- **Clinical Staff**
- **Lab Tech** – ensures labs up to date, using chronic disease guidelines
- **Pre-visit plan each visit** (health maintenance/chronic disease status)

*Medicine is a team sport.*
Access to Care and Your Provider

“If you care enough to call, we care enough to see you.”

Choosing a Primary Provider is key to access and continuity.

Definitions:

- Regular appointment = 20 minutes
- Put-in = 10 minute apprt. for a simple visit with PCP, another HCP, or a complex apprt. with PCP only. These are “put ins” by Schedulers.
- Work in = HCP authorized work in following a complex appointment.
- P = Simple Appointment with Primary
- T = Simple Appointment with another HCP
- Simple Appts examples: Sore throats, earaches, colds, cough with cold, UTIs, eye infection, sinus infection, tick bite, ADHD follow up, rash, allergies, remove stitches or staples. (OB recheck is a simple appointment however has its own visit code.
- P2 = Complex with Primary
- T2 = Complex with another HCP
- Complex Appts example: Diabetic, Medication Checks, AWV, Physicals, Hosp F/A, Consults, 1st OB, etc. No “put in” appointments on a P2, T2, or PX/WB slot.
Blood Pressure Tracking

Our EHR Summary Screen includes BP readings and other vitals in an area of high visibility. It also indicates if the readings are high or low.

Each visit to our clinics are pre-visit planned. The clinical staff does a brief chart review on each patient and notates pertinent information on the “PVP” Sheet to ensure the information is covered at their visit.
Blood Pressure and Visit Follow-Up

Patient reminders and accountability

- **EMR Recommendations Page**

Having the EHR to remind us of needed services is essential. We use it at each patient visit as well as for reminder letter process.
Communication is Key

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From: Hamilton RN, Sarah  
To: Gebirsch MD, Gregory;  
Sent: 7/21/2014 5:22:24 PM CDT  
Subject: Chronc Disease Management

Pt. appears on GTG HTN pt panel as out of parameters for optimal control as his last BP was elevated 146/99 when recheck extra-large cuff. Last seen 9/27/2014 for back pain last HTN visit was 1/15/2014. Did start HCTZ 25 mg at that time, only took 1 month (only sent in for 30 days with no refills). Is also taking losartan 100 mg. Would you like to restart HCTZ? He would be agree starting an additional med. Would recheck BMP and BP 1 month after starting. Did refill losartan for 30 days only.

Solid and Consistent Reminder Process

We’ve used our EHR to create a reminder system for our patients. When orders are placed a reminder is created that will tell us when patients are due for services. Then we can send letters to remind the patient.

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From: [Redacted]  
To: [Redacted]  
Sent: 12/03/2013 12:22:26 PM CST  
Subject: HTN  
Due Date/Time: 01/03/2014 9:00:00 AM CST

Return to clinic for HTN/med check in 1 month per TFS  
check to see if labs are due

Addendum by [Redacted] on January 03, 2014 12:08:13 PM CST (Verified)  
Sent letter #1 for HTN

No further contact will be made with the patient regarding this appt. If appt is not completed in two weeks forward to the CC for further follow up.

Addendum by [Redacted] on January 17, 2014 1:20:17 PM CST (Verified)  
Appt Completed

Charted Date: December 03, 2013 12:22 PM CST  
Subject / Title: HTN  
Performed By: Schultz, Deite on December 03, 2013 12:22 PM CST  
Visit Information: 2246292, Vibrant Health Family Clinics, Outpatient, 12/3/2013 - 12/5/2013
Not electronic but still effective…

Blood pressure magnets outside of the exam room door remind us to recheck elevated blood pressures.

As part of our pre-visit planning we fill out BP slips for all patients who have orders for repeat blood pressure checks. These slips are also used for walk-in free blood pressure checks.
Patient Engagement

Our EHR provides a graphing feature that allows us to share with our patients their BP information so they can see how interventions or changes have made a difference. Visuals are important!

We have challenged our staff to use every patient encounter as an opportunity to recheck blood pressures and provide appropriate patient education; this keeps the patient’s actively involved in managing their health.

Why Does My Blood Pressure Matter?

- High blood pressure (hypertension) is a leading cause of heart disease and stroke in the United States.
- High blood pressure causes or contributes to nearly 1,000 deaths per day.
- When your blood pressure is high you are 4 times more likely to die from a stroke and 3 times more likely to die from heart disease.

The River Falls, Ellsworth, and Spring Valley Clinics were recently honored to receive The Million Hearts Award; honoring the work we have done with our patients to improve blood pressure control. This is part of a national initiative to prevent 1 million heart attacks and strokes by 2017. To help our patients improve their blood pressure control we provide an opportunity for free blood pressure checks.

http://www.cdc.gov/
We have worked hard to create new or modify existing patient education documents that are available through the EHR. These documents serve as good conversation starters and impress the importance of good blood pressure control to the patients.
Innovative and Fun Ways to Encourage BP Rechecks

-Blood Pressure Recheck Competition!!!!!!-

✓ When a patient has a high BP-write down BP readings on lime green slip
✓ If you recheck BP-also document recheck on slip
✓ Write your name on the slip! Otherwise you won’t get credit!
✓ Turn in all slips (whether you rechecked or not)-CC will put a large envelope in each unit
✓ At the end of 2 weeks-CC will tally up slips and winner will be based on whoever has the highest percent of rechecks.

June 2nd - June 16th

Winner will receive a prize!!!
Initiation and Titration of Medications Using Established Protocols

1. Patient referred to Care Coordination
   - Appears on monthly provider patient panel review as not at goal
   - Referred by provider/CSS

2. BP Medication Management/Titration
   - BP not at goal
     - Not addressed at OV
     - Green BP slips
   - BP elevated on 3 or more occasions per BP protocol refer to Kurt

3. Medication change initiated per BP protocol titration plan created

4. No med changes made but needs to return for further BP checks/OV with HCP

5. Unable to contact patient after 2 attempts. Document as no further follow-up on chronic disease management noted/care plan. Ensures RTC orders are placed for next due visit and labs.

6. CC contacts patient/leave message to call back. Patient needs ongoing BP management/medication management initiates care plan and continues to follow-up. Providers will be called on message for good communication when medication changes occur.
We extract patient data from our EHR and practice management system using our EHR Reporting program. We manipulate the data in Excel to create patient lists that function for our needs. We can therefore also collect up to date and current data. We look at this together EVERY MONTH!
Care Plan within EHR

*Team members need to know the plan*

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**CARE COORDINATION CARE PLAN**

**Care Giver** (if appropriate):

**Providers(s):** Dr. Goblirsch

**Best Way to Contact Patient:** [Redacted]

**Patient Goal(s):** BP less than 140/90

**Self Management:** Patient expressed understanding of goals listed

**Date of Initial Care Plan:** 7/28/2014

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<tr>
<th>Challenge</th>
<th>Plan</th>
<th>Progress</th>
<th>Resolution</th>
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<tbody>
<tr>
<td>BP has been elevated</td>
<td>(7/28/2014) Restart HCTZ. Check K+ in 1 month. Monitor BP at home. Recheck BP in clinic in 1 month. Care coordinator will call in 2 weeks to check in. Work on exercise/diet.</td>
<td>(8/21/2014) Sent in a refill of cozaar - had autocompleted. Has a refill of HCTZ. Would appreciate a call back in a couple of weeks regarding labs and a BP check.</td>
<td>[Redacted]</td>
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Staying Connected With Data

Measuring Success

- Provide ongoing data for providers and staff on care of patients with IVD, DM, and HTN to facilitate interventions in individual and population care.
- Annual reporting of chronic disease and preventative data through MN Community Measurements shows our commitment to quality care.
- Measure and report outcomes for preventative screenings such as breast cancer and colorectal cancer screening. This data is then used to improve care.
Our group believes in transparency. Everyone knows how everyone else is doing. Makes for great competition! Data is distributed to all at every site.

Our focus is on any patient that has hypertension including those with other co-morbidities.
Why it all works!

- Leadership supports the process
- Providers and all staff are engaged
- Patients are engaged
- We believe in helping our patients get well and stay well
- We have caring and compassionate Care Coordinators
- Team Work !!
Challenge Goals

- Accelerate improvement on the Million Hearts® blood pressure control goal
- Reward innovations in Health IT enabled quality improvement
  - Improve patients’ cardiovascular health
- Promote evidence – based treatment protocols using clinical decision support
- Leverage clinician expertise and recognize real world successes
- Reward scalable decision support tools used effectively across many clinical practices
Phase 2

- Organizations spread Phase 1 winning interventions to as many practices as possible and demonstrate success.

- Submission must include:
  - CDS intervention details
  - Spread results – implementations & commitments, blood pressure control & process improvements
  - Spread strategy


- Review panel selects winner of $30,000 prize
Review Criteria

- Number of practices in which the CDS interventions were implemented, or implementation is underway
- Number of practices expressing interest in replicating the CDS implementation
- Demonstrated blood pressure control improvements
- Comprehensiveness and innovation in supporting blood pressure protocol elements with CDS tools
- Capacity for the CDS implementation-spreading strategy to be used outside the challenge
Timeline & Prizes

Submission period ends October 23, 2015
Winners announced November/December, 2015

Grand Prize: $30,000
Honorable Mentions

And: recognition, publicity, credibility, reach!
http://challenge.sites.usa.gov/challenge/ehr-innovations-for-improving-hypertension-challenge/

http://millionhearts.hhs.gov/

More questions?

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