Welcome to the PHASE Learning Community!
Hypertension: 2017 Clinical Update

Wiresside Chat
Webinar Housekeeping

1. Lines are muted, please chat in questions!

2. You can also unmute your line by pressing *7 to ask a question (*6 to re-mute)

3. To listen to the audio for this webinar, please call 303.248.0285, access code: 5617817.

4. Webinar is being recorded and will be posted on PHASESupport.org and a link will be sent via email.

5. Please fill out our feedback survey at the end of the webinar.
Agenda

Welcome and PHASE Program Update
  • PHASE Initiative Goal

Hypertension: 2017 Clinical Update
  • Dr. Joseph Young

Q&A

Resources and Upcoming Events
Jean Nudelman
Director, Community Benefit Programs – Kaiser Permanente Northern California

PHASE Update: Vision, Goals, and Impact
PHASE 2017-2019
Vision and Initiative-Wide Goal

GOAL
PHASE Initiative prevents heart attacks and strokes in high risk patient populations served by the safety net.

VISION
We aspire to eliminate preventable cardiovascular disease from our communities so that all people in our communities have controlled blood pressure, controlled hemoglobin A1C levels and are tobacco free.
PHASE 2017-2019

Vision and Initiative-Wide Goal

HOW WE WILL GET THERE, TOGETHER:

Kaiser Permanente Northern California aims to support PHASE grantees in being nationally recognized for their excellence in providing cardiovascular disease preventative care, as measured by their performance against nationally established benchmarks.

All PHASE Grantees are:

• Working towards implementing the successful, evidence-based PHASE protocol
• Adopting population health management practices to reinforce the protocol
• Using other quality improvement interventions to deepen their impact
PHASE 2017-2019
Vision and Initiative-Wide Goal

HOW WE WILL BEGIN: Initial improvement efforts will focus on supporting grantees to achieve or maintain the 75th percentile in one or both HTN-related HEDIS measures.

- For organizations currently below the 75th percentile we will provide focused technical assistance, training and coaching to drive a relative 10% improvement by June 2018.
- We will update targets after mid-point of the grant.
- Grantees will also focus performance improvement efforts based on other PHASE-related priorities identified in their Charter for Improvement.
- The PHASE Support Team and coaches will work with participating organizations to refine and address these goals/targets.

Thank you for being a part of PHASE 2017-2019. We look forward to improving patient care for all people, working side-by-side with you.
Dr. Joseph Young
Hypertension Clinical Lead, Kaiser Permanente Northern California

Wiresside Chat - 8 August 2017
Kaiser Permanente Research
Speaker’s Financial Disclosure

- I have no financial relationship with any medically related enterprise other than Kaiser Permanente
- I am not an investigator for a pharmaceutical sponsored trial
- I am not on a pharmacy sponsored speakers bureau
Kaiser Permanente Northern California

- More than 4 million members
- Comprehensive inpatient & outpatient services
- 21 hospitals and 45 medical facilities
- More than 8,000 Physicians
Original Investigation

Improved Blood Pressure Control Associated With a Large-Scale Hypertension Program

Marc G. Jaffe, MD; Grace A. Lee, MD; Joseph D. Young, MD; Stephen Sidney, MD, MPH; Alan S. Go, MD

IMPORTANCE Hypertension control for large populations remains a major challenge.

OBJECTIVE To describe a large-scale hypertension program in Northern California and to compare rates of hypertension control in that program with statewide and national estimates.

DESIGN, SETTING, AND PATIENTS The Kaiser Permanente Northern California (KPNC) hypertension program included a multifaceted approach to blood pressure control. Patients identified as having hypertension within an integrated healthcare delivery system in Northern California from 2001-2009 were included. The comparison group comprised insured patients in California between 2006-2009 who were included in the Healthcare Effectiveness Data and Information Set (HEDIS) commercial measurement by California health insurance plans participating in the National Committee for Quality Assurance (NCQA) quality measure reporting process. A secondary comparison group was included to obtain the reported national mean NCQA HEDIS commercial rates of hypertension control between 2001-2009 from health plans that participated in the NCQA HEDIS quality measure reporting process.

MAIN OUTCOMES AND MEASURES Hypertension control as defined by NCQA HEDIS.
Leading the Nation in HTN Control

Controlling High Blood Pressure – HEDIS Trend

National Benchmarks
- 90th %ile
- 50th %ile

Commercial          Medicare

It’s All About Implementation

It has to work in the real world
Key Elements of a Comprehensive Hypertension Control Program

- Hypertension Registry, Comprehensive
  - Performance Metrics, Transparent and Widely Visible
- Clinic-level feedback to facilitate operational and system-level change.
- Treatment Algorithm
  - Evidence-Based
  - Simple, Implementable
- Single Pill Combination (SPC) pharmacotherapy
- Medical-Assistant BP Checks
  - Better leverage ancillary staff skills
  - Reduced barriers to patients
Speaker's Financial Disclosure

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- I am not on a pharmacy sponsored speakers bureau.
KP HTN Treatment Algorithm

3 Meds to Max Dose in 6 Steps

ACE-Inhibitor / Thiazide Diuretic
Lisinopril / HCTZ
(Advance as needed)
20 / 25 mg X ½ daily
20 / 25 mg X 1 daily
20 / 25 mg X 2 daily
Pregnancy Potential: Avoid ACE-Inhibitors

If not in control

Calcium Channel Blocker
Add amlodipine 5 mg X ½ daily → 5 mg X 1 daily → 10 mg daily

If not in control

Beta-Blocker OR Spironolactone
Add atenolol 25 mg daily → 50 mg daily (Keep heart rate > 55)
OR
IF on thiazide AND eGFR ≥ 60 mL/min/1.73m² AND K < 4.5
Add spironolactone 12.5 mg daily → 25 mg daily

If not in control

Thiazide Diuretic
Chlorthalidone 12.5 mg → 25 mg
OR
HCTZ 25 mg → 50 mg
30% of ACEI Rx’s dispensed as Fixed Dose Combination Therapy
Why Treating HTN Matters? It Saves Lives!

- Stage 1 HTN +
- 1 or more CV risk factors and
- 12 mm drop in SBP for 10 years
- Prevents 1 death for every 11 pts

## Lifestyle Modifications

<table>
<thead>
<tr>
<th>Modification</th>
<th>Approximate SBP Reduction (range)</th>
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</thead>
<tbody>
<tr>
<td>Weight Reduction</td>
<td>5-10 mmHg/10kg</td>
</tr>
<tr>
<td>Adopt DASH eating plan</td>
<td>8-14 mmHg</td>
</tr>
<tr>
<td>Dietary sodium reduction</td>
<td>2-8 mmHg</td>
</tr>
<tr>
<td>Physical activity</td>
<td>4-9 mmHg</td>
</tr>
<tr>
<td>Moderation of alcohol consumption</td>
<td>2–4 mmHg</td>
</tr>
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</table>
Cumulative Event Rates for the Primary Outcome (Fatal CHD or Nonfatal MI) by ALLHAT Treatment Group

<table>
<thead>
<tr>
<th></th>
<th>RR (95% CI)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/C</td>
<td>0.98 (0.90-1.07)</td>
<td>0.65</td>
</tr>
<tr>
<td>L/C</td>
<td>0.99 (0.91-1.08)</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Number at Risk:

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorthalidone</td>
<td>15,255</td>
<td>14,477</td>
<td>13,820</td>
<td>13,102</td>
<td>11,362</td>
<td>6,340</td>
<td>2,956</td>
<td>209</td>
<td></td>
</tr>
<tr>
<td>Amlodipine</td>
<td>9,048</td>
<td>8,576</td>
<td>8,218</td>
<td>7,843</td>
<td>6,824</td>
<td>3,870</td>
<td>1,878</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>Lisinopril</td>
<td>9,054</td>
<td>8,535</td>
<td>8,123</td>
<td>7,711</td>
<td>6,662</td>
<td>3,832</td>
<td>1,770</td>
<td>195</td>
<td></td>
</tr>
</tbody>
</table>
Cumulative Event Rates for Heart Failure by ALLHAT Treatment Group

<table>
<thead>
<tr>
<th></th>
<th>HR (95% CI)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/C</td>
<td>1.38 (1.25-1.52)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>L/C</td>
<td>1.19 (1.07-1.31)</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Cumulative CHF Rate

- **Chlorthalidone**
- **Amlodipine**
- **Lisinopril**

Years to HF

Number at risk:
- Chlor: 15,255, 14,528, 13,898, 13,224, 11,511, 6,369, 3,016, 384
- Amlo: 9,048, 8,535, 8,185, 7,801, 6,785, 3,775, 1,780, 210
- Lisin: 9,054, 8,496, 8,096, 7,689, 6,698, 3,789, 1,837, 313
Avoid ACE-Is, ARBs and Statins in women of child-bearing age unless she is using a highly reliable method of contraception.

Cooper, et. Al., NEJM 354;23, June 8, 2006
Why is Spironolactone Now Best 4th Agent?

**PATHWAYS-2**

- **RCT:** Spironolactone vs Placebo, Doxazosin and Bisoprolol for control of resistant HTN*
  
  *Uncontrolled on ACE/ARB + diuretic + CCB.*

- 58% of pts controlled on Spironolactone!

Williams B, MacDonald TM, et al., www.thelancet.com Published online September 21, 2015 http://dx.doi.org/10.1016/S0140-6736(15)00257-3
PATHWAYS-2: Spironolactone is the Best!

**Figure 2:** Home systolic and diastolic blood pressures comparing spironolactone with each of the other cycles.

- Baseline (n=314)
- Placebo (n=274)
- Spironolactone 25-50 mg (n=285)
- Doxazosin 4-8 mg (n=282)
- Bisoprolol 5-10 mg (n=285)

*Comparison p-values: p<0.0001*
PATHWAYS-2: Spironolactone is the Best!

Figure 2: Home systolic and diastolic blood pressures comparing spironolactone with each of the other cycles.
AOBPM Technique

- Oscillometric device

- Average of three readings:
  - Following 5 minutes of rest
  - Three readings at 1 minute intervals

- Patient unobserved:
  - Clinic staff prepares patient, pushes button and then leaves patient unattended.
  - Readings and calculated average displayed on device.
Comparisons of blood pressure readings obtained in clinical settings using different methods of blood pressure measurement

<table>
<thead>
<tr>
<th></th>
<th>Mean blood pressure* (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centre for Studies in Primary Care(^1)</td>
</tr>
<tr>
<td>Routine manual office BP</td>
<td>151/83</td>
</tr>
<tr>
<td>Automated office BP</td>
<td>140/80</td>
</tr>
<tr>
<td>Awake ambulatory BP</td>
<td>142/80</td>
</tr>
</tbody>
</table>

*The automated office blood pressure (BP) and awake ambulatory BP were similar, and both were lower than the routine manual BP obtained in community practice.

BP Measurement in SPRINT vs. Other Trials

Unattended Blood Pressure Measurements in the Systolic Blood Pressure Intervention Trial Implications for Entry and Achieved Blood Pressure Values Compared With Other Trials

“… BPs taken in SPRINT cannot be directly compared with BPs in other trials and (2) the treatment arm <120 mm Hg in SPRINT compares with a higher SBP value in the other trials.

For generalization, the number of mm Hg that should be added must be clarified; suggestions vary from 5 to 10 mm Hg up to 10–20 mm Hg and a recent study indicates 16 mm Hg.

Overall, it means that the lower treatment arm in SPRINT translates into SBP <136 mm Hg, not very different from SBP <140 mm Hg, which is the currently recommended SBP target for most hypertensive people by all hypertension treatment guidelines.”

“BP measurements taken without observing these conditions are likely to overestimate BP and result in overtreatment, with the potential for higher rates of serious adverse effects and greater utilization of resources. This issue should be carefully considered in the development of any practice-based performance measures for BP control in hypertension that are derived from the SPRINT results.”

SPRINT Research

Question

Examine effect of more intensive high blood pressure treatment than is currently recommended

Randomized Controlled Trial

Target Systolic BP

- Intensive Treatment
  - Goal SBP < 120 mm Hg

- Standard Treatment
  - Goal SBP < 140 mm Hg

SPRINT design details available at:

- ClinicalTrials.gov (NCT01206062)
SPRINT Enrollment Criteria

**INCLUSION CRITERIA**

- > 50 years old
- SBP 130 to 180 mm Hg
  - SBP < 150 if on 4 meds at enrollment
- One or more of the following
  - CVD (clinical or subclinical)
  - 20 < eGFR < 60
  - 10-year Framingham Risk > 15%
  - Age > 75 years

**EXCLUSION CRITERIA**

- Prior Stroke
- Diabetes Mellitus
- Standing SBP < 110 mm Hg
- Polycystic Kidney Disease
- CHF, symptomatic or with ef < 35%
- Proteinuria > 1 g/day
- eGFR < 20
- Adherence Concerns
Primary and Secondary Outcomes

Primary Outcomes
- CVD Composite, 1st occurrence of:
  - MI
  - ACS (non-MI ACS)
  - Stroke
  - HF, - acute, decompensated
  - CV death

Secondary Outcomes
- All cause mortality
- Primary Outcomes + All-cause mortality
- > 50% decline in eGFR in patients with CKD
- > 30% decline in eGFR in patients WITHOUT CKD
- Incident albuminuria
Mean Achieved BPs in SPRINT

- Intensive Treatment Arm – 121.4 mm Hg
- Standard Treatment Arm – 136.2 mm Hg

BPs as measured (very well) in SPRINT via AOBPM, correlate to higher conventional office readings of 5 mm Hg or more*

- SPRINT Intensive arm, mean achieved BP corresponds to conventional readings of mid 120s mm Hg or higher


25% reduction in 1° Outcomes (p < 0.001)

Hazard ratio with intensive treatment, 0.75 (95% CI, 0.64–0.89)

Standard treatment

Intensive treatment
Hypotension Consequences in SPRINT are nuanced

**Statistically Significant**
- Syncope
- Orthostatic Hypotension
  - LESS frequent in Intensive Treatment Arm.

**NO Difference**
- Injurious Falls*
- Dizziness
- Patient perceived health status
  - VR12 with physical and mental health sub-scores
  - PHQ-9

*Defined as not resulting from Syncope
Number Needed to Treat/Harm Relative vs. Absolute Risk Reduction

25% Reduction in Composite Primary Outcome.
- 6.8% vs. 5.2% = 1.6% difference

- **NNT**
  - Primary Outcome – 61; All-cause mortality – 90*

- **NNH**
  - 45 (2.2%)**

“On the basis of the SPRINT results, we estimate that for 1000 persons treated over 3.2 years to a systolic BP goal less than 120 mm Hg compared with less than 140 mm Hg, an average of 16 persons will benefit, 22 persons will be seriously harmed, and 962 will not experience benefits or harms”*

Benefit is typically cited as relative risk reduction (big #)
Adverse events are typically cited as absolute risk (small #)

Can SPRINT findings be generalized to patients with DM?

- **ACCORD Trial:**
  - Also target < 120 mm Hg SBP vs. < 140 mm Hg SBP
  - Primary Composite CV Outcome – MI, Stroke, CV Death with trend to benefit in Intensive Arm but not statistically significant
  - Underpowered – half the size of SPRINT

- **Effect of antihypertensive treatment at different blood pressure levels in patients with DM:** systematic review and meta-analysis. (*BMJ* 2016:352:1717)
  - “If baseline SBP was less than 140 mm Hg, however, further treatment increased the risk of cardiovascular mortality (1.15, 1.00 to 1.32), with a tendency towards an increased risk of all cause mortality (1.05, 0.95 to 1.16).”
Can SPRINT findings be generalized to patients with h/o Stroke?

- Secondary Prevention of Small Subcortical Strokes (SPS3) Trial
  - Patients randomized to target SBP < 130 vs. 130 to 149.
  - 3020 patients randomized.
  - Mean follow up 3.7 years

- Primary Endpoint: Reduction in all strokes
Recommendations

- For patients that meet SPRINT enrollment criteria, i.e. age > 75 years, age 50-74 years with CVD, < 20 eGFR < 60 or 10-year Framingham risk of ≥15%
  - Pending formal evidence review, shared decision making model of care for target SBP of <130 mm Hg* is appropriate
  - When lower target SPB is used, close monitoring for syncope and renal function is warranted

- Trial and observational data does not support expansion of SPRINT goals to patients with DM and / or history of stroke

* Conventional office SBP < 130 mm Hg is roughly equivalent to AOBPM reading of < 120 mm Hg
KP HTN Treatment Algorithm
3 Meds to Max Dose in 6 Steps

ACE-Inhibitor / Thiazide Diuretic
Lisinopril / HCTZ
(Advance as needed)
20 / 25 mg X ½ daily
20 / 25 mg X 1 daily
20 / 25 mg X 2 daily
Pregnancy Potential: Avoid ACE-Inhibitors

If ACEI intolerant or pregnancy potential

Thiazide Diuretic
Chlorthalidone 12.5 mg → 25 mg
OR
HCTZ 25 mg → 50 mg

If not in control

Calcium Channel Blocker
Add amlodipine 5 mg X ½ daily → 5 mg X 1 daily → 10 mg daily

If not in control

Beta-Blocker OR Spironolactone
Add atenolol 25 mg daily → 50 mg daily (Keep heart rate > 55)
OR
IF on thiazide AND eGFR ≥ 60 mL/min/1.73m² AND K < 4.5
Add spironolactone 12.5 mg daily → 25 mg daily
CASES!
Case 1 - Non-adherence?
Case 1 - Non-adherence?

- 55 year old man, 156/76, HR 84
  - Lisinopril-HCTZ 20-25 mg qd
  - Amlodipine 10 mg
Case 1 - Non-adherence?

- 55 year old man, 156/76, HR 84
  - Lisinopril-HCTZ 20-25 mg qd
  - Amlodipine 10 mg

BP 132/70 on same regimen one year ago
Case 1 - Non-adherence?

55 year old man, 156/76, HR 84
- Lisinopril-HCTZ 20-25 mg qd
- Amlodipine 10 mg

BP 132/70 on same regimen one year ago

“Sometimes it’s hard to remember to take your medicines. I know I sometimes forget to take a dose of my medicines.”
Case 1 - Non-adherence?

- 55 year old man, 156/76, HR 84
  - Lisinopril-HCTZ 20-25 mg qd
  - Amlodipine 10 mg

- BP 132/70 on same regimen one year ago

- “Sometimes it’s hard to remember to take your medicines. I know I sometimes forget to take a dose of my medicines.”

- Explore possible reasons for non-adherence
  - Forgets – would a pillbox help?
  - Side effects?
  - Affordability?
Case 2 - Interpreting AOBP results
Case 2 - Interpreting AOBP results

- 55 year old man
Case 2 - Interpreting AOBP results

- 55 year old man
- AOBP reading 1: 144/76
Case 2 - Interpreting AOBP results

- 55 year old man
- AOBP reading 1: 144/76
- AOBP reading 2: 134/74
Case 2 - Interpreting AOBP results

- 55 year old man
- AOBP reading 1: 144/76
- AOBP reading 2: 134/74
- AOBP reading 3: 132/72
Case 2 - Interpreting AOBP results

- 55 year old man
- AOBP reading 1: 144/76
- AOBP reading 2: 134/74
- AOBP reading 3: 132/72
- AOBP average: 137/74
Case 2 - Interpreting AOBP results

- 55 year old man
- AOBP reading 1: 144/76
- AOBP reading 2: 134/74
- AOBP reading 3: 132/72
- AOBP average: 137/74
- Is BP controlled?
Case 2 - Interpreting AOBP results

- 55 year old man
- AOBP reading 1: 144/76
- AOBP reading 2: 134/74
- AOBP reading 3: 132/72
- AOBP average: 137/74

- Is BP controlled?
  - No.
  - Control defined as AOBP Avg. < 134/84
Case 3 - Don’t Under-dose the Thiazide
Case 3 - Don’t Under-dose the Thiazide

- 55 year old man, 142/76, HR 66
  - Lisinopril-HCTZ 20-25 mg
  - Amlodipine 10 mg
Case 3 - Don’t Under-dose the Thiazide

- 55 year old man, 142/76, HR 66
  - Lisinopril-HCTZ 20-25 mg
  - Amlodipine 10 mg

Recommendation
Case 3 - Don’t Under-dose the Thiazide

- 55 year old man, 142/76, HR 66
  - Lisinopril-HCTZ 20-25 mg
  - Amlodipine 10 mg

Recommendation
Increase lisinopril-HCTZ 20-25 to ii qd
Case 3 - Don’t Under-dose the Thiazide

- 55 year old man, 142/76, HR 66
  - Lisinopril-HCTZ 20-25 mg
  - Amlodipine 10 mg

Recommendation
Increase lisinopril-HCTZ 20-25 to ii qd

Remember not to under-dose the thiazide
Case 4 - Use ARB for ACE-I Cough Intolerance
Case 4 – Use ARB for ACE-I Cough Intolerance

- 53 year old woman, 144/64, heart rate 58
  - Chlorthalidone 25 mg
  - Cough on lisinopril
Case 4 - Use ARB for ACE-I Cough Intolerance

- 53 year old woman, 144/64, heart rate 58
  - Chlorthalidone 25 mg
  - Cough on lisinopril
Case 4 – Use ARB for ACE-I Cough Intolerance

- 53 year old woman, 144/64, heart rate 58
  - Chlorthalidone 25 mg
  - Cough on lisinopril

➤ Recommendation: Add losartan 25 mg
Case 5 - Woman of Child Bearing Potential
Case 5 - Woman of Child Bearing Potential

38 y/o women. 140/94. Sexually active, uses condoms

– Chlorthalidone 25 mg daily
Case 5 - Woman of Child Bearing Potential

38 y/o women. 140/94. Sexually active, uses condoms
- Chlorthalidone 25 mg daily

Recommendation: add amlodipine 2.5 mg qd
Case 5 - Woman of Child Bearing Potential

38 y/o women. 140/94. Sexually active, uses condoms
- Chlorthalidone 25 mg daily

- Recommendation: add amlodipine 2.5 mg qd

- ACE-Is and ARBs are potentially teratogenic
Case 6 - Resistant HTN
Case 6 - Resistant HTN

- 55 year old man, BP 156/80, HR 78
  - Lisinopril-HCTZ 20-25 ii qd
  - Amlodipine 10 i qd
  - K = 4.2, eGFR > 60
Case 6 - Resistant HTN

- 55 year old man, BP 156/80, HR 78
  - Lisinopril-HCTZ 20-25 ii qd
  - Amlodipine 10 i qd
  - K = 4.2, eGFR > 60

Recommendation:
Case 6 - Resistant HTN

55 year old man, BP 156/80, HR 78
- Lisinopril-HCTZ 20-25 ii qd
- Amlodipine 10 i qd
- K = 4.2, eGFR > 60

Recommendation:
- Add spironolactone 12.5 mg qd
Case 6 - Resistant HTN

- 55 year old man, BP 156/80, HR 78
  - Lisinopril-HCTZ 20-25 ii qd
  - Amlodipine 10 i qd
  - K = 4.2, eGFR > 60

Recommendation:
- Add spironolactone 12.5 mg qd
- Advance to 25 mg qd if needed
Case 7 - Elderly patient with DM uncontrolled?
Case 7 - Elderly patient with DM uncontrolled?

- 72 year old man with DM. 148/64, HR 78
  - Chlorthalidone 25 mg qd
  - Lisinopril 20 mg qd
  - Amlodipine 5 mg qd
Case 7 - Elderly patient with DM uncontrolled?

- 72 year old man with DM. 148/64, HR 78
  - Chlorthalidone 25 mg qd
  - Lisinopril 20 mg qd
  - Amlodipine 5 mg qd

➢ Recommendation
Case 7 - Elderly patient with DM uncontrolled?

- 72 year old man with DM. 148/64, HR 78
  - Chlorthalidone 25 mg qd
  - Lisinopril 20 mg qd
  - Amlodipine 5 mg qd

Recommendation

- Stand for two minutes and repeat BP
Case 7 - Elderly patient with DM uncontrolled?

- 72 year old man with DM. 148/64, HR 78
  - Chlorthalidone 25 mg qd
  - Lisinopril 20 mg qd
  - Amlodipine 5 mg qd

Recommendation

- Stand for two minutes and repeat BP
- If SBP > 140, increase amlodipine to 10 mg qd
Don’t hesitate to reach out as your 2017 PHASE work unfolds!

**Resources**

PHASEsupport.org

Monthly PHASE Newsletter

**Upcoming Events**

Save the date for the November 16th Convening

Office Hours – Sept. 26th 12:00 – 1:00

Look for an announcement for our October Webinar