HEARTS IN THE AMERICAS
Taller Nacional de HEARTS en México
Kaiser Permanente: The Keys to a Successful and Sustainable Program

Jeff Brettler, MD
Regional Physician Lead, KP SCAL Hypertension Program

Mexico City, February 20, 2020
Key Elements of a Successful HTN Program

- Comprehensive and accurate registry
- Simple and clear guidelines
- Treatment algorithm using combination pill
- Performance feedback
- Team-based care
- Treatment intensification and medication adherence
- BP measurement competency
- EMR/decision support
- Patient education and engagement
- Data Integrity
Health System-Wide Hypertension Registry

- Hypertension Registry developed in 2000
- Elements used for identification:
  - Outpatient Diagnostic Codes
  - Pharmaceutical Utilization Data
  - Hospitalization Records
- Chart review audits of random samples of identified members were conducted
Hypertension Registry

2 outpatient visits within 365 days of each other with a diagnosis code for hypertension

1 outpatient visit with a diagnosis code for hypertension and 1 hospital discharge with a diagnosis code for hypertension within 365 days of each other

1 antihypertensive dispensing in the past 6 months and 1 outpatient visit with a hypertension diagnosis code within 365 days of the dispense date

1 outpatient visit with a code for hypertension AND a member of one of the following populations: Heart Failure, CAD, Diabetes, CKD, CVA (excluding subarachnoid, subdural and cardioembolic)
# Hypertension Registry - Exclusions

<table>
<thead>
<tr>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member deceased according to patient demographics or hospitalization information</td>
</tr>
<tr>
<td>Patient in hospice, under custodial care in a skilled nursing facility, or palliative care</td>
</tr>
<tr>
<td>Patients currently pregnant</td>
</tr>
<tr>
<td>Patients on dialysis (hemodialysis or peritoneal dialysis as identified in POINT CKD)</td>
</tr>
</tbody>
</table>
Key Elements of a Successful HTN Program

- Comprehensive and accurate registry
- **Simple and clear guidelines**
- **Treatment algorithm using combination pill**
- Performance feedback
- Team-based care
- Treatment intensification and medication adherence
- Credibility of BP measurement
- EMR/decision support
- Patient education and engagement
- Data Integrity
**BP GOALS**

- Treat adults with confirmed hypertension to a goal BP < 140/90 mm Hg.
- In adults with ASCVD, CKD, age ≥ 75 years, or 10-year ASCVD risk\(^3\) ≥ 10%, consider treating to a goal SBP < 130 mm Hg. (Exclude adults with eGFR<20 from this lower target.)

**ACE Inhibitor / Thiazide Diuretic**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisinopril / HCTZ</td>
<td>20/25 mg X ½ daily, 20/25 mg X 1 daily, 20/25 mg X 2 daily</td>
</tr>
<tr>
<td>(advanced as needed)</td>
<td></td>
</tr>
</tbody>
</table>

Pregnancy potential: avoid ACE inhibitors\(^1\)

**Thiazide Diuretic**

- HCTZ 25 mg ⇒ 50 mg
- Chlorthalidone 12.5 mg ⇒ 25 mg

**For ACEI intolerance due to cough, use ARB**

- Add losartan 25 mg daily
- ⇒ 50 mg daily ⇒ 100 mg daily
- Do not combine ACEI and ARB.
- Pregnancy potential: avoid ARBs\(^3\)

**Calcium Channel Blocker (CCB)**

- Add amlodipine 2.5 mg daily ⇒ 5 mg daily ⇒ 10 mg daily

**Spironolactone* - Aldosterone Receptor Antagonist (ARA)**

- Spironolactone 12.5 mg ⇒ 25 mg daily
- *If on thiazide AND eGFR ≥ 60 mL/min/1.73 m\(^2\) AND potassium < 4.5 mmol/L

- If spironolactone eligibility criteria not met:
  - bisoprolol 2.5 mg ⇒ 5 mg daily ⇒ 10 mg daily
  - Titratable to BP; maintain pulse of > 55
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- **Performance feedback**
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- Patient education and engagement
- Data Integrity
Performance Feedback

Unblinded data with clear targets

Monthly reporting

Data drilled down to medical center, clinic, team, individual physician and nurse. Facilitates best practice identification and spread at all levels.

Overall control as well as process measures
Figure 1: Standard deviation of hypertension control among 13 medical centers in Southern California Permanente Medical Group (SCPMG) compared to overall hypertension control < 140/90. Blue line represents hypertension control; purple line represents standard deviation of hypertension control.

Handler J, Lackland DT. JASH 2011; 5: 197-207
HEDIS Controlling High BP Measure
September 2018
Provider Level Feedback

<table>
<thead>
<tr>
<th>PCP</th>
<th>HTN Pts (age 18+)</th>
<th>Population</th>
<th>BP Controlled</th>
<th>BP Uncontrolled</th>
<th>No BP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pts</td>
<td>Pts</td>
<td>%</td>
<td>Pts</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>288</td>
<td>255</td>
<td>88.5 %</td>
<td>20</td>
<td>6.9 %</td>
</tr>
<tr>
<td></td>
<td>786</td>
<td>642</td>
<td>81.7 %</td>
<td>25</td>
<td>12.1 %</td>
</tr>
<tr>
<td></td>
<td>583</td>
<td>493</td>
<td>84.6 %</td>
<td>64</td>
<td>11 %</td>
</tr>
<tr>
<td></td>
<td>610</td>
<td>488</td>
<td>80 %</td>
<td>92</td>
<td>15.1 %</td>
</tr>
<tr>
<td></td>
<td>277</td>
<td>213</td>
<td>76.9 %</td>
<td>35</td>
<td>12.6 %</td>
</tr>
</tbody>
</table>
In The Americas

Process Measures

Outreach – BP measurement needed every year

BP measurement: repeat if elevated, standing in older patients

Specialty measurement

Treatment intensification, adherence

Follow-up
2nd BP Report

2nd BP Performance - September 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Performance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLA</td>
<td>96</td>
</tr>
<tr>
<td>ANA</td>
<td>96</td>
</tr>
<tr>
<td>BPK</td>
<td>95</td>
</tr>
<tr>
<td>SUN</td>
<td>95</td>
</tr>
<tr>
<td>RIV</td>
<td>94</td>
</tr>
<tr>
<td>DOW</td>
<td>94</td>
</tr>
<tr>
<td>REGION</td>
<td>94</td>
</tr>
<tr>
<td>PAN</td>
<td>93</td>
</tr>
<tr>
<td>SD</td>
<td>93</td>
</tr>
<tr>
<td>BAK</td>
<td>93</td>
</tr>
<tr>
<td>FON</td>
<td>93</td>
</tr>
<tr>
<td>WOD</td>
<td>91</td>
</tr>
<tr>
<td>AV</td>
<td>91</td>
</tr>
<tr>
<td>SB</td>
<td>90</td>
</tr>
</tbody>
</table>
IN THE AMERICAS

Follow-up BP Report

Elevated Follow Up

- PRIMARY CARE: 79% (Booked) 58% (Kept)
- SPECIALTY CARE: 53% (Booked) 41% (Kept)
- URGENT CARE: 56% (Booked) 42% (Kept)
- ALL: 66% (Booked) 49% (Kept)

PAHO
Key Elements of a Successful HTN Program

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- Simple and clear guidelines
- Treatment algorithm using combination pill
- Performance feedback
- **Team-based care**
- Treatment intensification and medication adherence
- BP measurement competency
- EMR/decision support
- Patient education and engagement
- Data Integrity
Team-Based Care – HEARTS

• Expanded access to care
• Better patient support
• Improved team member collaboration
• Better follow-up
• Cost efficient
• Improved patient and physician satisfaction
• Improved outcomes
Team-Based Care

Allows team members to work up to their scope of practice

- MAs or LVNs
- RNs under protocol
- NPs with supervising MD mentor
- Pharmacists independently
Team Based Care - Hypertension Visit with non-MD provider

- BP is only complaint that’s addressed.
- Focus only on BP related issues – recent vitals, current regimen, adherence, side effects
- Emphasis on titration whenever possible
- Use standard combination medication algorithm
- Repeat every 2 weeks until BP controlled
- Physical or virtual
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Key Elements of a Successful HTN Program

- Comprehensive and accurate registry
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- Treatment algorithm using combination pill
- Performance feedback
- Team-based care
- Treatment intensification and medication adherence

**BP measurement competency**
- EMR/decision support
- Patient education and engagement
- Data Integrity
Blood Pressure Technique Competency

- Education of MAs, LVNs, RNs
- Audits: observed vs unobserved
- AOBP: SPRINT protocol - mandates 5 minute rest and multiple measurements
- Nurse specific data
Key Elements of a Successful HTN Program

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- Data Integrity
Patient Education

- Formal in-person classes
- On-line educational modules
- Home BP monitoring
- Educational handouts at all sites of contact: general HTN, low sodium, DASH diet
Patient Engagement

**Body Mass Index (BMI)**

- Jan 2014: 27.5
- Jan 2015: 27.0
- Jan 2016: 28.0
- Jan 2017: 29.0
- Jan 2018: 28.0
- Jan 2019: 27.0

**Blood Pressure**

- Apr 2018: 136
- Jul 2018: 130
- Oct 2018: 144
- Jan 2019: 130
- Apr 2019: 132
- Jul 2019: 126
- Oct 2019: 137
- Nov 2019: 131

*Blood pressure (BP)*

- Last result date: 9/5/2019
- Last result: 131/83

**Good job!** No action needed.

*If you are at higher risk because of certain chronic conditions, you might benefit from a lower systolic goal.*

Your last blood pressure result was within the healthy range.
## Patient Engagement

<table>
<thead>
<tr>
<th>Medication</th>
<th>Adherence Rate</th>
<th>Days Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>amLODIPEine (NORVASC) 10 mg Oral Tab</td>
<td>Adherence rate = 99.7%</td>
<td>37 days left</td>
</tr>
<tr>
<td>Good job! Our records indicate that you are taking your medication regularly as prescribed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isosorbide Mononitrate (ISOSORBIDE MONONITRATE) 30 mg Oral 24hr SR Tab</td>
<td>Adherence rate = 99.2%</td>
<td>43 days left</td>
</tr>
<tr>
<td>Good job! Our records indicate that you are taking your medication regularly as prescribed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lisinopril (PRINIVIL/ZESTRIL) 20 mg Oral Tab</td>
<td>Adherence rate = 99.4%</td>
<td>43 days left</td>
</tr>
<tr>
<td>Good job! Our records indicate that you are taking your medication regularly as prescribed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atorvastatin (LIPITOR) 80 mg Oral Tab</td>
<td>Adherence rate = 96.9%</td>
<td>87 days left</td>
</tr>
<tr>
<td>Good job! Our records indicate that you are taking your medication regularly as prescribed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Remote BP Telemonitoring
Key Elements of a Successful HTN Program

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Sources of Inaccurate Data or Error

- System – identification, prevalence
- Patient-related
- Device-related
- Procedure-related
- Observer-related
System

- Prevalence – CDC estimator, comparison to NHANES
- Trend analysis at the larger population level
- Monthly reporting with data drilled down to medical center and race/ethnicity - allows us to identify unusual patterns in trending
System

- Annual submission of data for external quality review (HEDIS). We look at both chart review and administrative data. Opportunity to compare fallouts.
- Local quality teams at each medical center provide another check on data. Care managers and physicians work on lists – escalate data issues regarding misclassification of patients.
## Patient-related Error

<table>
<thead>
<tr>
<th>Potential source of inaccuracy</th>
<th>SBP</th>
<th>DBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acute meal ingestion [16,17]</td>
<td>$-6^\circ$</td>
<td>$-5$ to $-19$</td>
</tr>
<tr>
<td>2. Acute alcohol use [18-35]</td>
<td>$-23.6$ to $+24$</td>
<td>$-14$ to $+16$</td>
</tr>
<tr>
<td>3. Acute caffeine use [40-74]</td>
<td>$+3$ to $+14$</td>
<td>$+2.1$ to $+13$</td>
</tr>
<tr>
<td>4. Acute nicotine use or exposure [70,75-103]</td>
<td>$+2.81$ to $+25$</td>
<td>$+2$ to $+18$</td>
</tr>
<tr>
<td>5. Bladder distension [104-106]</td>
<td>$+4.2$ to $+33$</td>
<td>$+2.8$ to $+18.5$</td>
</tr>
<tr>
<td>6. Cold exposure [107-115]</td>
<td>$+5$ to $+32$</td>
<td>$+4$ to $+23$</td>
</tr>
<tr>
<td>7. Paretic arm [116,117]</td>
<td>$+2^\circ$</td>
<td>$-5^\circ$</td>
</tr>
<tr>
<td>8. White-coat effect [120-160]</td>
<td>$-12.7$ to $+26.7$</td>
<td>$-8.2$ to $+21$</td>
</tr>
</tbody>
</table>

Kallioinen, J of HTN March 2017
Cómo tomar la presión de la sangre en la casa

**Compre un monitor de la presión de la sangre de precisión.**
- Puede comprarlo en una farmacia o a través del servicio de salud. Si es necesario, pida el personal que le tome la presión de la sangre con el aparato de precisión y comprobar que corresponda. Cómo prepararse para una lectura de precisión.

**Qué DEBE HACER**
- Asegúrese de que el monitor esté conectado y de que el cable esté colocado correctamente.
- Sienta el monitor en una superficie plana y cómoda.
- Sujete la manga con el brazo en una posición recta con el pulgar hacia la muñeca.
- Mantenga la mano y el antebrazo en una posición recta y cómoda.

**Qué NO DEBE HACER**
- No mire la pantalla durante la lectura.
- No ponga el brazalete sobre la muñeca.
- No haga ejercicio ni coma nada antes de tomar la lectura.

**¿Cuáles son los mejores momentos para tomar la presión de la sangre?**
- Mañana. Tome la presión de la sangre antes de desayunar.
- Tarde. Tome la presión de la sangre antes de recibir las medicinas.
- Noche. Tome la presión de la sangre antes de acostarse.

**¿Cuántos lectores de presión de la sangre deben hacerse?**
Para personas de riesgo, se recomienda tomar la presión de la sangre al menos tres veces por día: una vez de las 8 a las 10, una vez después de desayunar y otra después del ejercicio físico.

**Registro de la presión de la sangre en la casa**
- Lunes: / / a.m.
- Martes: / / a.m.
- Miércoles: / / a.m.
- Jueves: / / a.m.
- Viernes: / / a.m.
- Sábado: / / a.m.
- Domingo: / / a.m.

Esta información no pretende hacer ningún diagnóstico ni sustituir a la atención médica. Si tiene problemas de salud importantes, consulte a su médico.
<table>
<thead>
<tr>
<th>Potential source of inaccuracy</th>
<th>SBP</th>
<th>DBP</th>
<th>Suppl. Table number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device-related</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Device model bias</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury models</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. invasive criterion [167–170]</td>
<td>$-10.6$ to $-4$</td>
<td>$+1.9$ to $+4$</td>
<td>9A</td>
</tr>
<tr>
<td>Aneroid models</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. invasive criterion [162,171,172]</td>
<td>$-9.7$ to $-4.0$</td>
<td>$+5.1^*$</td>
<td>9B</td>
</tr>
<tr>
<td>vs. noninvasive criterion [173–179]</td>
<td>$-0.8^*$</td>
<td>$-1.7^*$</td>
<td>9C</td>
</tr>
<tr>
<td>Automated models</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. invasive criterion [162,167,168,171,182–189]</td>
<td>$-23$ to $+6$</td>
<td>$-3$ to $+5.6$</td>
<td>9D</td>
</tr>
<tr>
<td>vs. noninvasive criterion [167,176,190–227]</td>
<td>$-3.7$ to $+16.53$</td>
<td>$-8$ to $+9.71$</td>
<td>9E</td>
</tr>
<tr>
<td>10. Device calibration error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury [229–238]</td>
<td>$0$–$61.8%$ of individual devices $\geq \pm 3\text{mmHg}$ calibration error</td>
<td>10A</td>
<td></td>
</tr>
<tr>
<td>Aneroid [229–237,239–247]</td>
<td>$1.4$–$69.7%$ of individual devices $\geq \pm 3\text{mmHg}$ calibration error</td>
<td>10B</td>
<td></td>
</tr>
<tr>
<td>Automated [229–231]</td>
<td>$4.5$–$26%$ of individual devices $\geq \pm 3\text{mmHg}$ calibration error</td>
<td>10C</td>
<td></td>
</tr>
</tbody>
</table>
### Procedure-related Error

#### Range of reported significant mean effects

<table>
<thead>
<tr>
<th>Potential source of inaccuracy</th>
<th>SBP</th>
<th>DBP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SBP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient rest period [249,250]</td>
<td>+4.2 to +11.6</td>
<td>+1.8 to +4.3</td>
</tr>
<tr>
<td>Body position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standing [251,252]</td>
<td>−2.9 to +5</td>
<td>+7&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Supine [251–259]</td>
<td>−10.7 to +9.5</td>
<td>−13.4 to +6.4</td>
</tr>
<tr>
<td>Legs crossed at knees [260–266]</td>
<td>+2.5 to +14.89</td>
<td>+1.4 to +10.81</td>
</tr>
<tr>
<td>Unsupported back [267]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsupported arm [268–270]</td>
<td>+4.87&lt;sup&gt;a&lt;/sup&gt;</td>
<td>+6.5&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Arm lower than heart level [255,269,271–278]</td>
<td>+3.7 to +23</td>
<td>+2.7 to +4.81</td>
</tr>
<tr>
<td>Incorrect choice of cuff size</td>
<td>+2.08 to +11.2</td>
<td>+1.61 to +6.6</td>
</tr>
<tr>
<td>Smaller cuff [279–283]</td>
<td>−3.7 to −1.45</td>
<td>−4.7 to −0.96</td>
</tr>
<tr>
<td>Larger cuff [279–283]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuff placed over clothing [284–287]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stethoscope under cuff [288,289]</td>
<td>+1.0 to +3.1</td>
<td>−10.6 to −3.5</td>
</tr>
<tr>
<td>Talking during measurement [290–295]</td>
<td>+4 to +19</td>
<td>+5 to +14.3</td>
</tr>
<tr>
<td>Use of stethoscope bell (vs. diaphragm) [267,296–299]</td>
<td>−3.8 to +1.54</td>
<td>−1.61&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Excessive pressure on stethoscope head [300]</td>
<td>−9 to −2.6</td>
<td>−15 to −9</td>
</tr>
<tr>
<td>Fast cuff deflation rate [301–303]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No significant effects reported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No significant effects reported</td>
<td>−9 to −2.6</td>
<td>+2.1 to +6.3</td>
</tr>
<tr>
<td>No significant effects reported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No significant effects reported</td>
<td>+3.3 to +10.4</td>
<td>−2.4 to +0.6</td>
</tr>
<tr>
<td>Short interval between measurements [304–306]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliance on a single measurement [147,258,259,275,307,308]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interarm variability [311–325]</td>
<td>[3.3] to [6.32]</td>
<td>[2.7] to [5.06]</td>
</tr>
</tbody>
</table>
Procedure-related

- Education of MAs, LVNs, RNs. **Should be ongoing.**
- Audits: observed vs unobserved
- AOBP: SPRINT protocol - mandates 5 minute rest and multiple measurements.
- Patient engagement: patients know their numbers, get printed copy on visit summary and posted on their portal.
Blood Pressure Spot Check  
March 2016

**Aggregated Data Received From:**
Antelope Valley, Baldwin Park, Downey, Fontana, Kern County, Los Angeles, Orange County, Panorama City, Riverside, San Diego, South Bay, West Los Angeles and Woodland Hills

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>TOTAL # YES</th>
<th>TOTAL # NO</th>
<th>% CORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARE ARM</td>
<td>3854</td>
<td>108</td>
<td>97.27%</td>
</tr>
<tr>
<td>CORRECT PB CUFF SIZE</td>
<td>3938</td>
<td>23</td>
<td>99.42%</td>
</tr>
<tr>
<td>ARM SUPPORT AT HEART LEVEL</td>
<td>3912</td>
<td>48</td>
<td>98.79%</td>
</tr>
<tr>
<td>NOT TALKING DURING BP</td>
<td>3879</td>
<td>87</td>
<td>97.8%</td>
</tr>
</tbody>
</table>

**Antelope Valley:**
- Remove clothes from arm
- Reminders to pull sleeves of shirt up
- Shirt sleeve too tight, advised could take shirt off

**Fontana:**
- Patient had to be told to keep feet flat on the floor
## BP Observations and Spot Check Results

**WLA Blood Pressure Technique Observations**

(2016 RESULTS)

<table>
<thead>
<tr>
<th>Depts</th>
<th>Procedure Explained</th>
<th>Bare Arm</th>
<th>Patient Legs Uncrossed/Flat on Floor</th>
<th>Back Supported</th>
<th>Correct Cuff Size Chosen</th>
<th>Arm at Heart Level</th>
<th>No Talking During BP</th>
<th>Elevated? Proper Procedure Taken</th>
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<tbody>
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### Observer-related Error

<table>
<thead>
<tr>
<th>Potential source of inaccuracy</th>
<th>Range of reported significant mean effects (in mmHg) unless specified</th>
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<tbody>
<tr>
<td><strong>Observer-related</strong></td>
<td><strong>SBP</strong></td>
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<tr>
<td>27. Observer hearing deficit [328]</td>
<td>-1.55 to -0.11</td>
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<td>28. Korotkoff Phase IV (vs. V) for DBP [334,335]</td>
<td>N/A</td>
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<tr>
<td>29. Terminal digit preference for zero [8,275,334,336–366]</td>
<td>1–79% over-representation of terminal zero</td>
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Observer-related

- Encourage automatic (vs. manual)
- Terminal digit preference for zero: KPSC survey in 2009 - 22% of recorded BPs ended in zero (Handler, Permanente Journal, 2009).
- Value bias – e.g. recording a DBP of 88, instead of 90. Never formally studied in KP SCAL.
- Telemonitoring – data directly transmitted to EMR. SCAL KP began late 2019.
Key Elements of a Successful HTN Program

- Comprehensive and accurate registry
- Simple and clear guidelines
- Treatment algorithm using combination pill
- Performance feedback
- Team-based care
- Treatment intensification and medication adherence
- BP measurement competency
- EMR/decision support
- Patient education and engagement
- Data Integrity
Lessons Learned - Key Drivers for BP Control*

1. Blood pressure competency
2. Treatment intensification
3. Elevated BP follow-up

*Registry
*Treatment Algorithm
Thank you!

Questions:
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