GSHTP Webinar
Hypertension Update 2014: The Kaiser Permanente Northern California Experience

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South San Francisco Medical Center
More than 2.3 million adult members

Comprehensive inpatient and outpatient services

21 hospitals and 45 medical centers

More than 7,000 physicians
**Hypertension Program Improvement Process**

**Create Your Team**
- Who does the work?
- Staff regionally and locally

**Identify the Population**
- Who is at risk?
- Create registry

**Agree on the Treatment**
- Examine the evidence
- Create/adopt guidelines

**Assess Performance**
- Evaluate status
- Create performance metrics
The Hypertension Teams

Central Hypertension Team
- Physician Leaders
- Analytic Support
- Program Managers

Local Hypertension Team
- Physician Champion
- Facility Manager/Administrator

Local Care Providers
- Clinicians (MD, NP, RN, Pharmacist, etc.)
- Medical Assistants
Central Hypertension Management Team

- Activities
  - Generates/distributes HTN control reports
  - Reviews quality performance and sets goals
  - Organizes Champion training and networking
  - Develops support tools (handouts, etc.)
  - Identifies/disseminates successful strategies

Central Hypertension Team

- Physician Leaders
- Analytic Support
- Program Managers
# Local Hypertension Management Team

## Activities
- Distributes local HTN control reports
- Reviews local quality performance
- Allocates resources to improve performance
- Attends regional training and networking
- Organizes local training and networking
- Distributes support tools (handouts, etc.)
- Imports successful strategies

### Local Hypertension Team

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<th>Role</th>
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<td>Physician Champion</td>
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<td>Facility Manager/Administrator</td>
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Local Hypertension Care Providers

**Activities**
- Review local HTN control reports
- Reviews local quality performance
- Utilize resources to improve performance
- Attend local training and networking
- Use support tools (handouts, etc.)
- Import successful strategies

**Local Care Providers**
- Clinicians (MD, NP, RN, Pharmacist, etc.)
- Medical Assistants
Medical Assistant BP Measurement Checks

Because Doctor Office Visits are neither cost-effective nor convenient for BP measurement

- Enables asynchronous communication
- Medical Assistant BP measurement reduces white-coat effect
- Enhanced compliance because
  - No co-pay
  - Member convenience - delays are rare
- Enables “repatriation” to Primary Care when BP measurement is high outside of Primary Care (for example in specialty clinic).
Patients with hypertension are identified using outpatient diagnostic codes, pharmacy data, and hospitalization records from health plan databases, and diagnoses are verified through chart review audits of random samples of identified members.

Per National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) specifications, patients are not included based on recorded blood pressure measurements alone.
The most effective intervention to improve blood pressure control in primary care settings is an organized system of regular population review rather than primarily patient- or clinician-focused interventions.
Patients were included if they met any of the following:

- 2 or more HTN diagnoses coded in primary care visits in the prior 2 years
- 1 or more primary care HTN diagnoses and 1 or more hospitalizations with a primary or secondary HTN diagnosis in the prior 2 years
- 1 or more primary care HTN diagnoses and 1 or more filled prescriptions for HTN medication within the prior 6 months
- 1 or more primary care HTN diagnoses and 1 or more stroke-related hospitalizations or a history of coronary disease, heart failure, or diabetes mellitus.
Evidence Based Practice Guidelines

- An evidence based guideline is updated every 2 years based on emerging randomized trial evidence and national guidelines.

- Clinicians are encouraged to follow the algorithm unless clinical discretion required otherwise.
Evidence Based Practice Guidelines

Dissemination of guidelines

- printed documents
- e-mail
- clinical tools (e.g., pocket cards)
- lectures
- Videoconferences
- partnering with pharmacy managers
- use of electronic medical record to optimize selection of medication

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Health system–wide adoption, evaluation, and distribution of an evidence-based practice guideline that has *timely* incorporation of new evidence facilitates the ability to *introduce* new treatment options and to *re-emphasize* existing evidence-based recommendations.

**β-blockers example**
Kaiser Permanente National Hypertension Treatment Care Pathway (http://kpcmi.org/how-we-work/hypertension-control/)
What treatment protocol is best?

- Standardized, protocol-driven care, facilitated through the use of a single hypertension treatment guideline remains essential.

- Within a country, a single treatment protocol developed and/or endorsed by key stakeholders, nationally relevant, evidence-based, clear, simple and implementable should be used.

- Core medications should be integrated into guidelines and the treatment protocol.

Angell S, Ordonez P. Identification of a Core Set of Medications & Care Delivery Models for the Medical Treatment of Hypertension, CDC/PAHO Global Treatment Standardization Project (GTSP), March 2013
Does this work?
Percentage of Angiotensin-Converting Enzyme Inhibitor Prescriptions Dispensed as Single-Pill Combination Angiotensin-Converting Enzyme Inhibitor-Hydrochlorothiazide Combination Tablets for Kaiser Permanente Northern California Members, 2001-2012
KP Northern California Hypertension Control Rates vs. California and U.S. Rates 2001-2013

Declines in Heart Disease and Stroke Mortality 2000-2008 KPNC

Since Year 2000:
- 30.4% reduction in mortality from CVD
- 42.2% reduction in mortality from stroke
- 10.9% reduction in mortality from cancer

Heart Attack Rates are Falling in Kaiser Permanente Northern California

Selected References


Angell S, Ordonez P. Identification of a Core Set of Medications & Care Delivery Models for the Medical Treatment of Hypertension, CDC/PAHO Global Treatment Standardization Project (GTSP), March 2013