

Patient-Physician Partnership to Improve HBP Adherence

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Clinical Partners

Baltimore Medical System, Inc. (BMSI)

Johns Hopkins Community Physicians (JHCP)

Johns Hopkins University School of Medicine

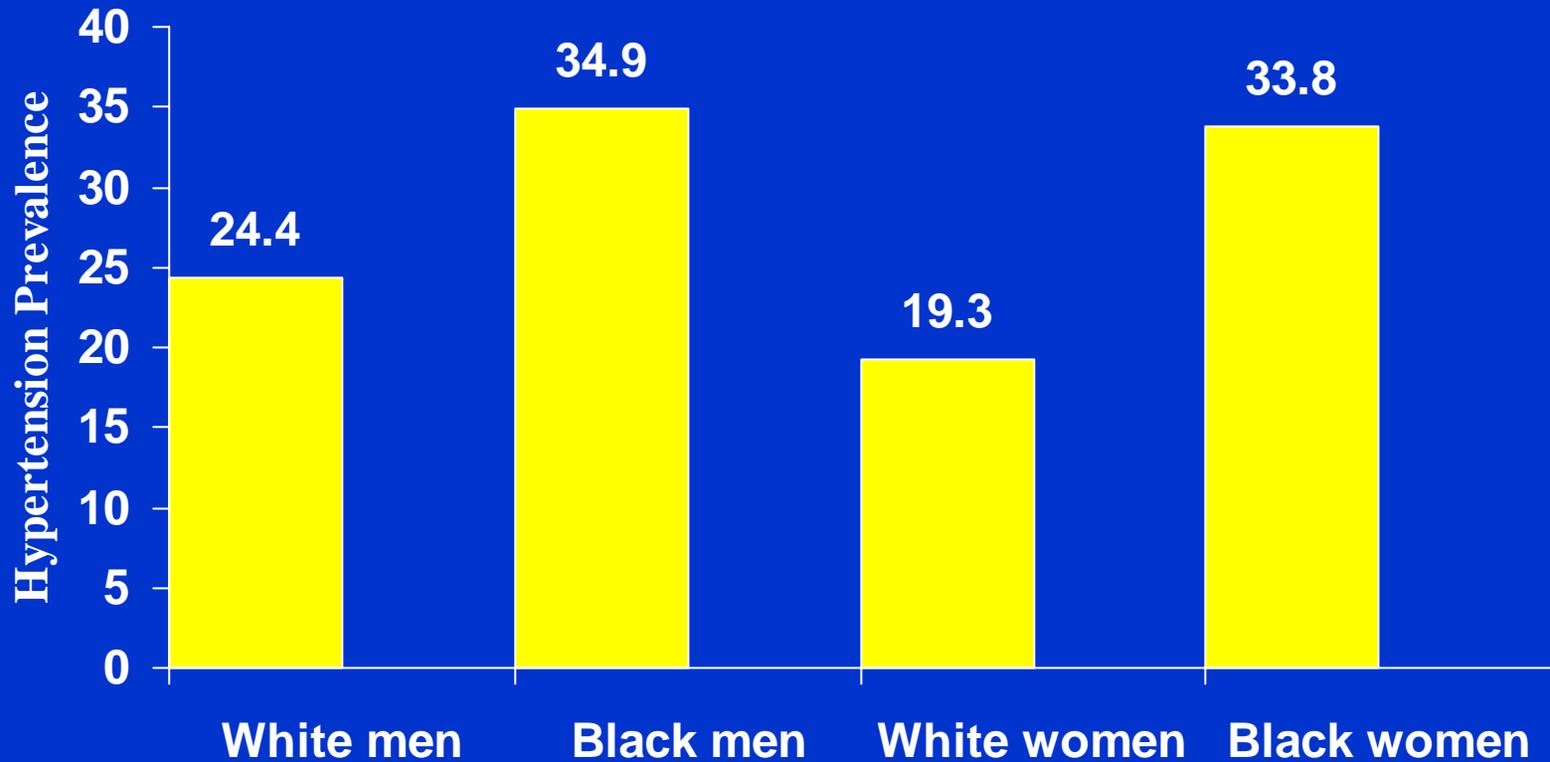
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Hypertension

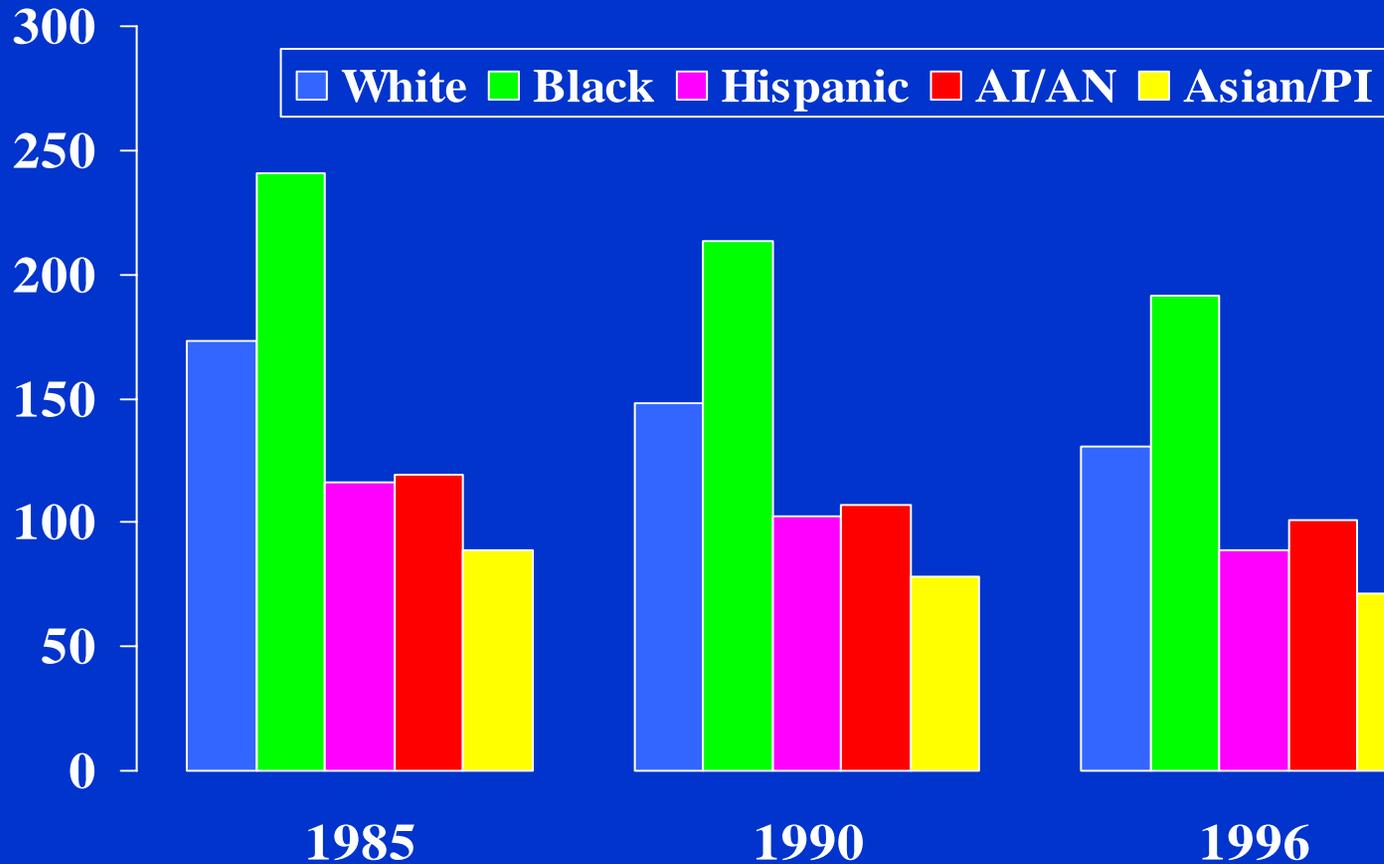
- Common, chronic condition that contributes to cardiovascular morbidity, mortality and resource use
- Despite proven efficacy of pharmacologic therapy and lifestyle modification, most adults uncontrolled
- Limited access and financial barriers play a role, but BP control also suboptimal among patients in care
- Patient adherence and physician management are critical contributors to poor quality of HBP care

Hypertension Among Persons 20 Years of Age and Over, 1988-94



Source: CDC, NCHS, Division of Health Examination Statistics

Mortality Rates for Heart Disease 1985, 1990, and 1996 (USA)



Patient Level Barriers to Hypertension Control

- Access
- Knowledge
- Health literacy
- Health beliefs
- Cultural beliefs
- Self-efficacy
- Social support
- Depression
- Substance abuse
- Complexity of medication regimen

Provider and Organizational Barriers to Hypertension Control

Physician factors

- Knowledge
- Self-efficacy
- Role perceptions
- Practice patterns
- Communication style

Organizational factors

- Scheduling
- Staffing
- Disease management
- Location
- Provider continuity

Interventions to Improve Patient Adherence

- Most interventions have educational, affective, or behavioral emphasis; few are comprehensive
- Interventions with multi-focus including affective emphasis show strongest adherence effects
- Hypertension interventions show largest adherence effect with medication regimens, medium effect size for appoint-keeping, and modest effect sizes for disease management

Roter, 1998

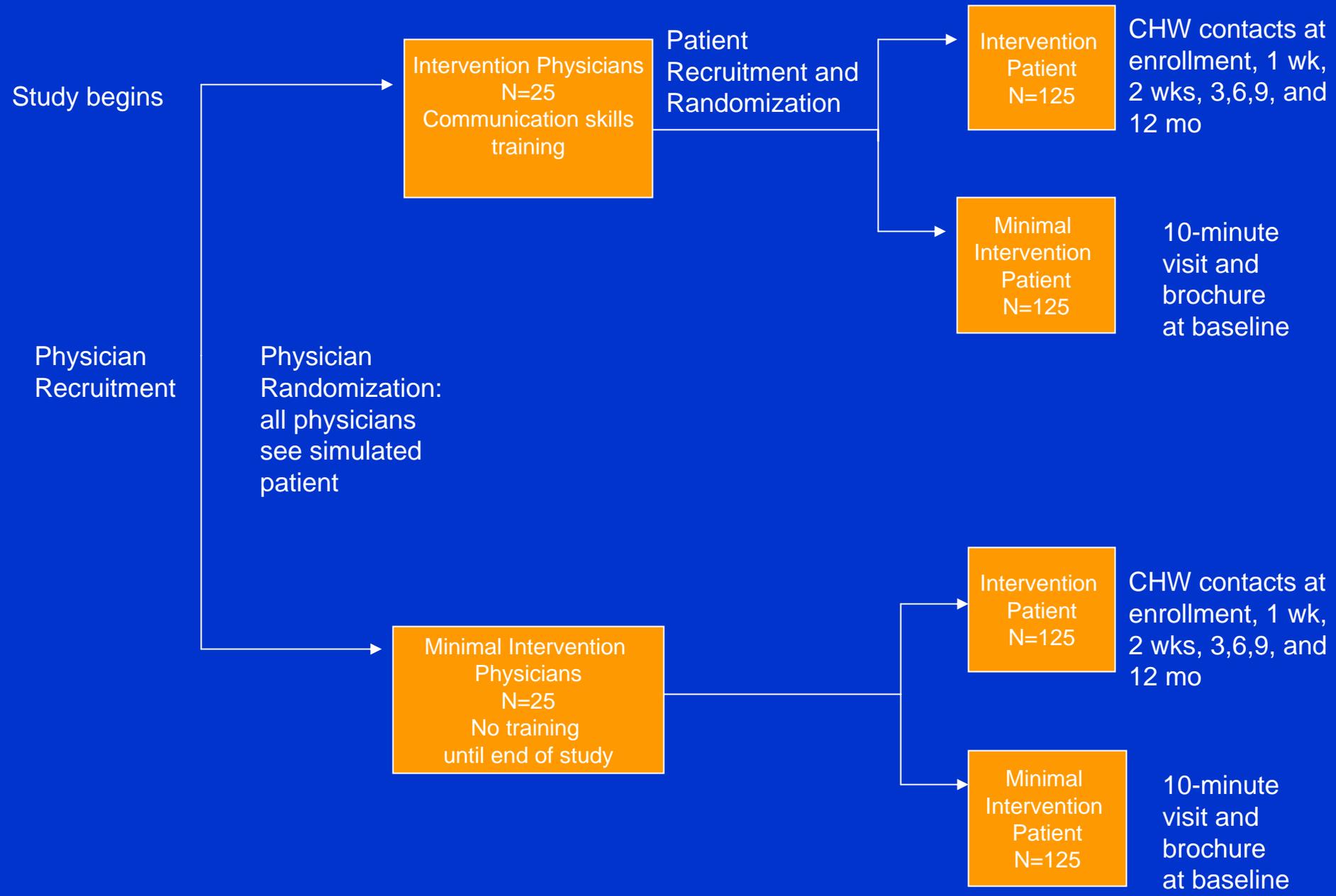
Patient-Physician Communication

- Informativeness, interpersonal sensitivity, and partnership-building associated with patient satisfaction, adherence, recall of information, better health outcomes
Roter 1988, Greenfield 1988, Kaplan 1989, Stewart 1998
- Visits in which physicians use a participatory decision-making style are associated with higher levels of patient satisfaction
Kaplan, 1995
- Ethnic minority and less educated patients rate their visits with physicians as less participatory than white and more educated patients
Kaplan 1995, Cooper-Patrick 1999

Research Question

Do interventions that are designed to improve patient-physician communication for urban ethnic minorities and persons living in poverty improve patient adherence to recommended therapies for hypertension?

Figure 1. Study Design and Intervention Contacts



Recruitment

Physicians

- Via letter from medical director and PI
- Offer CME credit and individualized feedback on communication style
- Opportunity to participate in research, write papers
- Organizations give incentive for physician participation in research (estimated cost \$200 per physician)

Patients

- Via claims, appointment database and physician referral
- Mailed invitation
- Telephone call
- Asked to arrive one hour early for next scheduled appointment

Physicians

- Inclusion criteria:
practicing general internists and family physicians who see patients at least 20 hours per week
- Exclusion criteria:
planning to leave JHCP, BMS, or JHOC before the end of one year



Physician Intervention

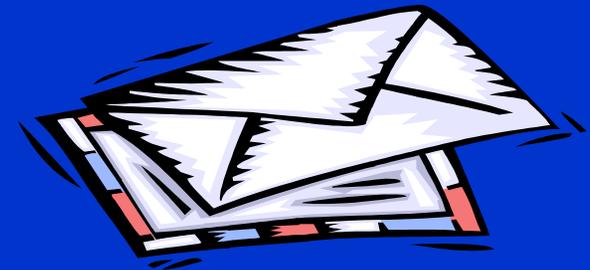
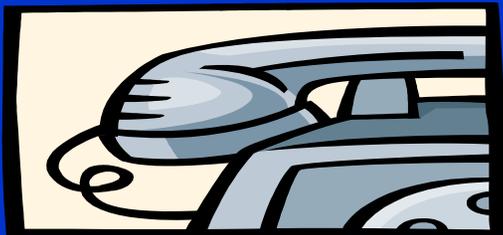
- Based on four-function model of medical interview
- Interactive CD-ROM format features 2 video segments:
 - Expert physician interviewing simulated hypertensive patient
 - Personal, fully RIAS analyzed video of the physician interviewing simulated hypertensive patient
- Workbook linked to expert and personalized interview with step by step exercise to guide physician through self-assessment process
- Estimated administration time: 2 hours

Patients

- Inclusion criteria: 1) age 18 yrs or older; 2) at least 2 clinic BP reading elevated in previous year (SBP>140 or DBP >90); 3) residents of Baltimore City; 4) able to give contact info; 5) able to give written consent; 6) ethnic minority or living in designated zip codes
- Exclusion criteria: 1) refuse informed consent; 2) appear too acutely ill, disoriented, or unresponsive; 3) are likely to move in next 12 months, 4) already participating in another study

Patient Intervention

- 20-minute pre-visit coaching session and 10-minute post-visit debriefing delivered by community health worker at baseline
- Six telephone follow-up sessions for “check-in”, reinforcement and support
- Monthly, serial newsletter featuring dramatic storyline, Q &A column, recipe exchange, health tips, appointment reminders, photographs, 5th grade reading level (photo novella)



Minimal Intervention

Physicians

- Beginning of study:
- Videotaped encounter with simulated patient
- Audiotaped enrollment visits with 10 patients
- Training at the end of one-year follow-up

Patients

- Before enrollment visit:
- 10-minute visit with CHW for education about hypertension
- Educational brochure
- Receive payment for completing assessments

Adherence Outcomes

- Appointment-keeping
- Automated pharmacy records
- Pill counts
- Self-report markers
 - Patient self-report – Hill-Bone Compliance to HBP Therapy Scale
 - Medical Outcomes Study Adherence Scale
 - Physician report of patient compliance
 - CHW report of patient compliance
- Proficiency of adherence-related communication
- Health outcomes

Strengths of Study

- Multifaceted intervention approaches
- Innovative computer-based, individually tailored tutorial for physicians
- Culturally and linguistically appropriate methods tailored to patients' needs
- Support of therapeutic partnership from both patient and physician perspective
- Rigorous evaluation of process and outcomes

Anticipated Challenges

- Physician recruitment
- Patient recruitment and retention
- Quality of administrative data on appointment-keeping
- Standardization of pharmacy data collection
- Interpretation of results across numerous measures of adherence, patient-provider communication, and health outcomes

Expected Significance

- Strong evidence that patient-centered communication behaviors impact upon patient adherence, satisfaction, and health outcomes
- Communication skills programs are mechanisms by which disparities in health care may be reduced
- Culturally targeted patient interventions that increase patient engagement, activation, and empowerment improve patients' ability to:
 - fully participate in the medical interview
 - negotiate treatment plans
 - adhere to treatment recommendations
 - improve health outcomes

