



Reducing Healthcare Disparities through Innovative Strategies to Improve Patient-Physician Communication

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Disclosures

- None

Objectives

- Discuss the concept of vulnerable populations and its implications for health disparities and health literacy research
- Review current evidence for communication disparities by race, social concordance, and health literacy
- Describe intervention strategies being tested for effectiveness at improving communication and reducing health and healthcare disparities
- Provide potential directions for future research

Healthcare disparities and health literacy

- Who is at greatest risk?
- Concept of vulnerability

Health and Healthcare Disparities: Who is at greatest risk?

- Racial and ethnic minorities
- Those with low socio-economic status
- Geography
- Gender
- Age
- Disability status
- Sex and gender (LGBT)
- Other at-risk populations

Low health literacy: Who is at greatest risk?

- Older adults
- Racial and ethnic minorities
- People with less than a high school degree or GED certificate
- People with low income levels
- Non-native speakers of English
- People with compromised health status

Vulnerable Populations

Subpopulations, who because of shared social characteristics:

- Are at higher risk of risks
- Are exposed to contextual conditions that distinguish them from the rest of population
- Have a higher mean distribution of risk exposure than the rest of the population, characterized by a clustering of risks that conspire to foster disease
- Experience stressful social disorganization as a normative reality of life

Vulnerability: Dimensions, Sources, and Temporal Nature

- **Dimensions**

- Social stress process
- Coping mechanisms

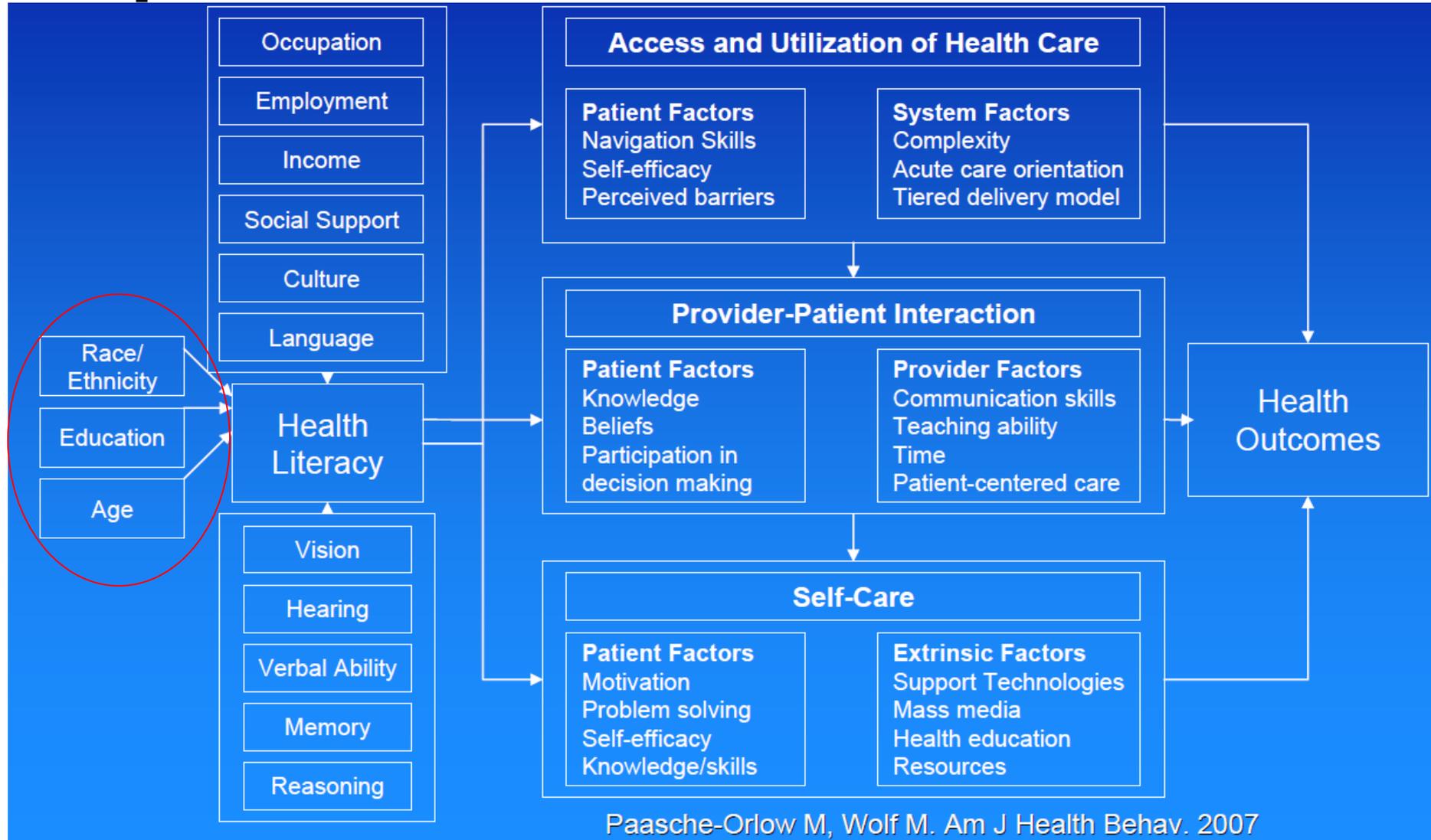
- **Sources**

- Poverty and race
- Physical environment

- **Temporary or Persistent Nature**

- Temporary, particular life crises
- Permanent

Understanding How Health Literacy Impacts Health Outcomes

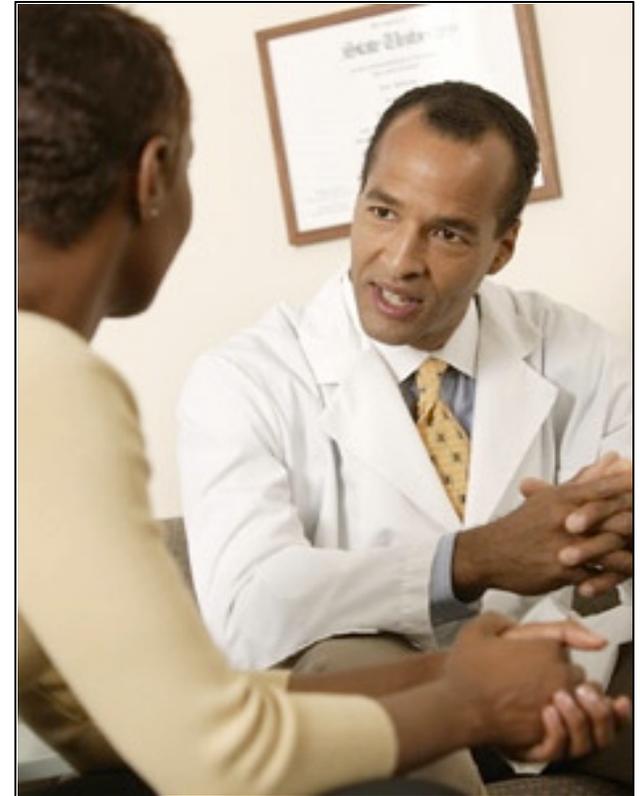


Disparities in patient-physician communication

- Race
- Racial and social discordance
- Health literacy

Racial disparities in patient-physician communication are documented

- Compared to whites, African Americans and Hispanics in primary care settings experience:
 - More narrowly biomedical communication
 - Less participatory communication
 - Less rapport-building and less positive affect



Hooper EM, Med Care (1982); Roter DL, JAMA (1997); Cooper-Patrick L, JAMA (1999);
Oliver MN, J Nat Med Assoc (2001); Johnson RL, Am J Public Health (2004); Ghods B, J Gen Intern Med (2008);
Cene C, J Gen Intern Med (2010); Beach MC, J Gen Intern Med (2010)

Social discordance between patients and physicians increases risk of poor communication



- **Race-discordant** visits are shorter with less positive affect and lower patient ratings of participation
- **Social discordance** across multiple characteristics (age, gender, race, education) has cumulative negative effects on patient-physician communication and perceptions of care

Disparities in communication by health literacy are documented

- Low health literacy may exert its impact on outcomes, in part, via **reduced participation** during medical visits
- Although patients with low and adequate health literacy are similarly interested in participating in medical decision making, low literate patients **ask fewer questions** and are **less likely to seek information** from physicians



Intervention strategies

Are interventions to improve patient-physician communication effective?

They are **effective for changing physician behavior**, but results are mixed for their impact on:

- Patient knowledge and recall of information
- Patient adherence
- Patient satisfaction
- Clinical outcomes
 - Pain reduction
 - Depression resolution
 - Control of diabetes
 - Control of hypertension



Griffin SJ, et al *Ann Fam Med*. 2004; 2(6):595-608.

Dwamena F et al. *Cochrane Database Syst Rev*. 2012 Dec 12;12:CD003267.

Hibbard J, Greene J. *Health Affairs*. 2013; 32(2): 207-214.

Are health literacy (HL) interventions effective?

- A recent systematic review of 38 interventions found the following intervention features to be effective at improving disease biomarkers and hospitalizations:
 - High intensity
 - Theory basis
 - Pilot-testing
 - Skills-building focus
 - Delivery by health professional
 - Simplified text
 - Teach-back methods

Do health literacy(HL) interventions reduce disparities?

Schillinger reported at the 2010 IOM Literacy Roundtable:

- Most studies that evaluate HL interventions
 - demonstrate improvements that disproportionately accrue to those with *adequate HL* or yield similar improvements across HL, or
 - do not report on effects on vulnerable sub-groups
- Seven exceptions in which HL intervention reduced disparities – varied interventionists, conditions, settings – most use tailored, intensive approaches, few target health professional and patient communication skills

Rothman R, JAMA (2004); DeWalt D, BMC Health Svcs Res (2006); Paasche-Orlow M, Am J Resp Crit Care Med (2005); Schillinger D. Health Ed Behav (2008); Wallace AS, Patient Educ Couns. (2009); Machtiger. Jt Comm J Qual Saf. (2007); Muir KW Patient Educ Couns (2012).

Communication Training Methods

Health professionals

- **Strategies**
 - Skills demonstration
 - Observation and feedback
 - Health system environmental change
- **Delivery methods**
 - Didactic presentations
 - Small group discussion
 - Role-playing
 - Clinical experience
- **Tools**
 - Reminders, readings
 - Interactive media, audiovisual aids
 - Web-based tools

Patients and Families

- **Strategies**
 - Skills development
 - Problem-solving
 - Peer support
 - Social environment change
- **Delivery methods**
 - One-on-one coaching or group-based classes
 - Web-based interventions, patient portals
- **Tools**
 - Written materials
 - Audiovisual aids

Communication Training Targets

■ Information Exchange

- Data-gathering
 - Physician – use open-ended questions to probe patient concerns
 - Patient – tell your story; disclose your concerns to physician
- Educating and counseling
 - Physician – provide information in short, clear statements
 - Patient – tell physician what you understand and intend to do

■ Rapport-building

- Physician – make emotional connections, show support to patients
- Patient – share your feelings and fears

■ Participation/Activation

- Physician – engage patient in problem-solving and decision-making
- Patient – ask questions, express opinions, state preferences

Patient-Physician Partnership to Improve HBP Adherence (Triple P Study)

- Design: RCT, factorial design, conducted 2002-2005
- Participants: 42 primary care doctors and 279 patients (60% African American) with high blood pressure
- Settings: 15 community-based clinics in Baltimore, MD
- Programs : Computer-based communication skills training for doctors; Patient activation by community health workers, 6 contacts (1 in-person, 5 by phone)
- Goals: Improve patient participation in decisions, adherence to medications, BP control over 12 months

Physician Intervention

The screenshot shows a software interface for analyzing physician interventions. It features a video player on the left showing a doctor and a patient. Above the video is a timeline with markers for 'DOCTOR' (61%) and 'PATIENT' (39%). To the right of the video is a table of RIAS categories. Below the video are playback controls and a 'Selected Item' section. At the bottom, there are two tables: one for 'Study Lessons' and one for 'Proficiency' examples.

Doctor	Patient	RIAS Category	Glossary
7	0	Data Gathering	
21	53	Patient Education And Counseli	
67	36	Rapport Building	
45	0	Facilitation and Patient Activati	
2	2	Procedural Talk	
0	0	Unassigned	
142	91	TOTALS	

Example	Proficiency	Glossary
2	100 elicit full spectrum early in visit	1
7	200 probe for knowledge/beliefs	4
3	300 monitor adherence/identify problems	3
2	400 assess compliance-related lifestyle/psychosocial	4
2	500 elicit commitment to plan	4
2	900 patient comments	0

Study Lessons	Description	Glossary
+ Mr. Smith		9

Interactive CD-ROM

- Video of MD visit with standardized patient
- Feedback and self-assessment exercises
- Video-glossary of behaviors
- 2 hours to review
- CME credit given

Patient Intervention

- 20-minute pre-visit coaching and 10-minute post-visit debriefing by community health worker at 1st clinic visit
- Five telephone follow-ups over 1 year
- Coaching goals:
 - Help patient identify concerns regarding patient-physician relationship and disease management
 - Build patient's skills in joint decision-making
 - Provide reinforcement and support; build confidence
- Photo-novella: dramatic storyline, 5th grade reading level

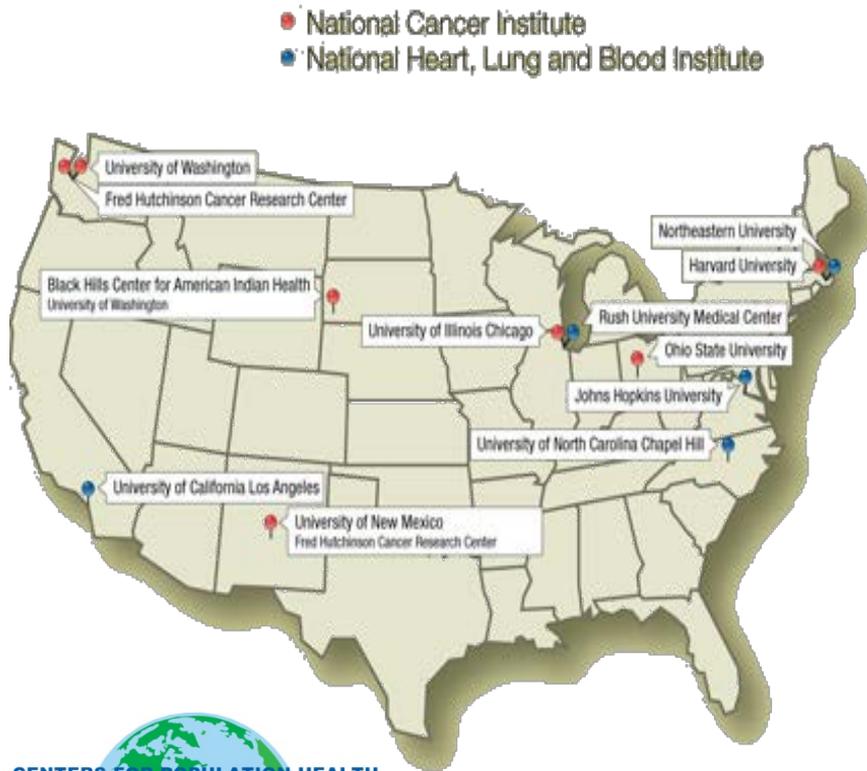
Results

- The combined intervention was effective at improving information exchange, participatory decision-making and systolic blood pressure over 12 months
- Effect on racial disparities:
 - Patient intervention improved patient positive affect blacks>whites, disparities eliminated
 - Physician intervention improved participatory decision-making blacks>whites, but disparities not eliminated
- Effect on literacy disparities:
 - Physician communication skills improved patient question-asking adequate literacy>low literacy, disparities increased

Lessons Learned

- Physician and patient barriers to completion of training/coaching need to be addressed
- Optimal “dose” of interventions still unknown
- Important to incentivize physician participation and build on patients’ support networks
- Studies are needed to explore other factors contributing to disparities in patient-physician communication

Johns Hopkins Center to Eliminate Cardiovascular Health Disparities

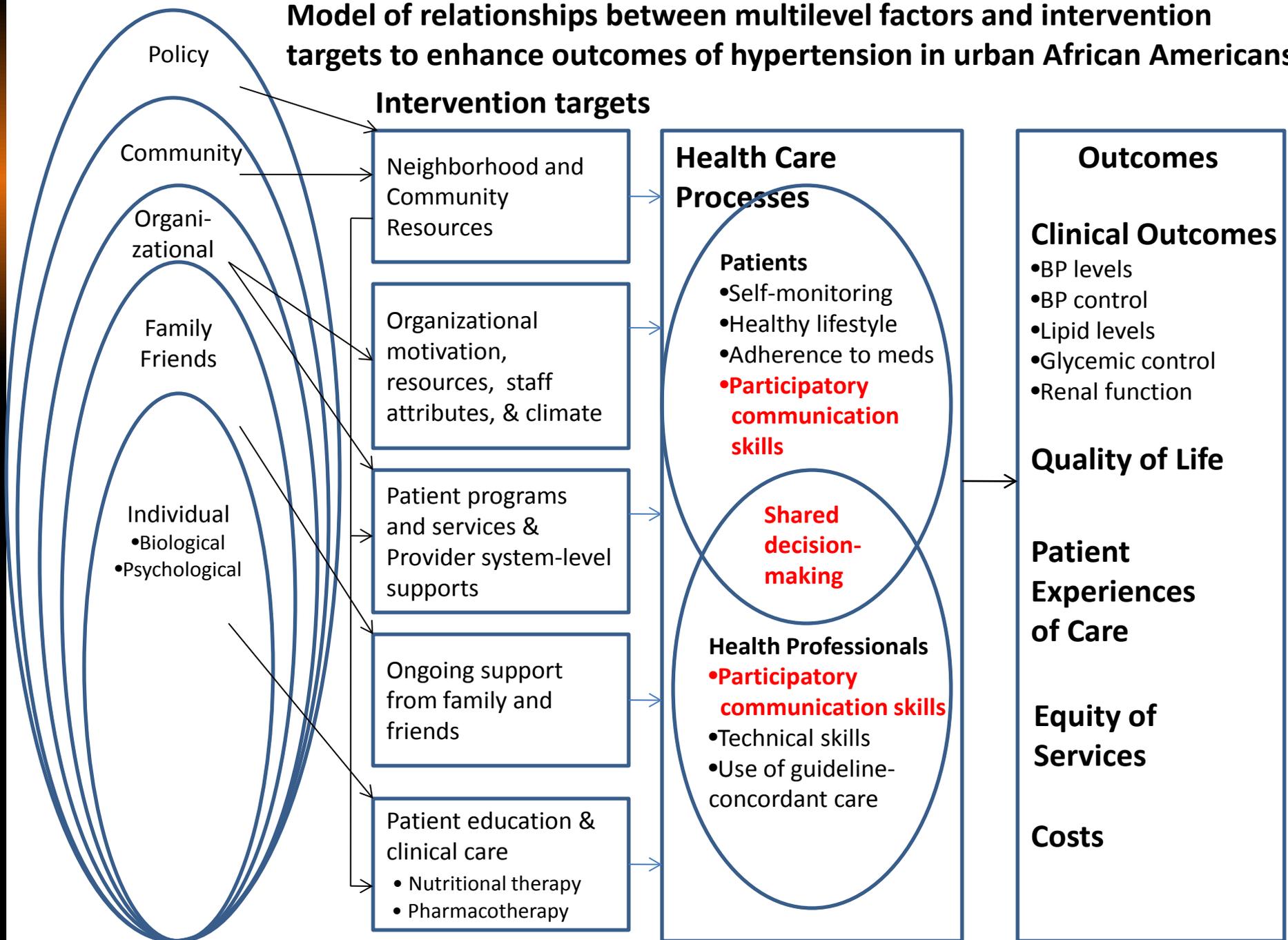


- We are 1 of 10 Centers for Population Health and Health Disparities (CPHHD) funded by the National Institutes of Health
- 5 centers focus on cardiovascular health disparities and 5 focus on cancer disparities

Center Objectives

- **Test comprehensive, multi-level interventions** to reduce cardiovascular health disparities
- Train the next generation of researchers in cardiovascular health disparities
- Create and enhance partnerships with a broad group of stakeholders: community members, organizations, patients, health care providers, health departments, payers, and policy-makers
- Translate and disseminate evidence generated from research into clinical and public health practice and policy to reduce health disparities

Model of relationships between multilevel factors and intervention targets to enhance outcomes of hypertension in urban African Americans



Project ReD CHiP

Reducing Disparities and Controlling Hypertension in Primary Care

- Design: Pragmatic trial using implementation science and community-engagement methods
- Settings: 6 community-based practices in a large primary care network in Baltimore, Maryland
- Interventions: multi-level quality improvement strategies to reduce disparities/improve BP control
 - BP measurement training
 - Patient care management
 - **Provider education**

Participatory Communication Skills Training for Providers

- Delivered on a project-specific website
- Incorporates feedback from provider focus groups and lessons learned from previous work
- Narrow focus on medication adherence - broken down into assessment and partnering skills
- Ultra brief video clips that can be accessed through several pathways on the website
- Helps providers activate patients by considering determinants of disparities and demonstrating how to address them

Welcome to the Project ReDCHiP Communication Skills Training program. Reviewing this program requires about 30 minutes. [The program demonstrates communication approaches to address medication adherence among patients with hypertension.](#)

Johns Hopkins Community Physicians will get relative value units (RVUs) for participating in this program. To use this program and get your RVUs, you must follow the 3 steps below:

- Take the required [pre-training survey here](#).
- Choose your path – you can browse the various communication skills under the SKILLS tab, or choose to view the skills applied to a specific patient scenario under the PATIENTS tab.
- After viewing the demonstrations, click on the GET RVUs tab at the top of the page to finish the post-training survey and claim your RVUs.

You can also print a summary of this training for future reference by [clicking here](#).



[Click above to watch Dr. Kravet's welcome](#)

Meet The Patients. Click the images below.



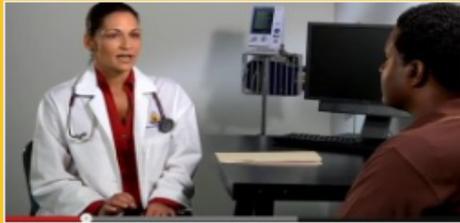
Mr. Jackson



Mrs. Lewis



Ms. Bass



Ask for Patient Opinion Regarding Treatment Recommendations

Ask questions that specifically explore patients' opinions, preferences, thoughts, and points of view or perspectives relating to treatment recommendations. Include questions that invite patients' judgment, or ask for patients' expectations to ensure that any plan includes patient input. To view more 'partnering with patients' skills , click on the images under 'more videos' on the right. To go back and view 'assessment' skills, click on the 'skills' tab above.

[view](#)

Brainstorm and Problem Solve

Brainstorming and problem solving helps motivate patients and better prepare them to successfully implement a treatment plan. Patients who are active in making a plan are more likely to stick to it because the ideas are their own. To view more 'partnering with patients' skills , click on the images under 'more videos' on the right. To go back and view 'assessment' skills, click on the 'skills' tab above.

[view](#)

Make Partnership Explicit

Make statements that convey the physician's alliance with patients in terms of help and support, decision-making, or development of the therapeutic plan. To view more 'partnering with patients' skills , click on the images under 'more videos' on the right. To go back and view 'assessment' skills, click on the 'skills' tab above.

[view](#)

Check Patient Understanding of Regimen and Instructions

Make explicit check-ins with patients to verify that instructions and information are clear and understood. This is the most effective way to know if you have communicated clearly and the patient is prepared to follow through on your recommendations. To view more 'partnering with patients' skills , click on the images under 'more videos' on the right. To go back and view 'assessment' skills, click on the 'skills' tab above.

[view](#)

[Home](#) [Skills](#) [Check Patient Understanding of Regimen and Instructions](#)

Skills: Check Patient Understanding of Regimen and Instructions

Make explicit check-ins with patients to verify that instructions and information are clear and understood. This is the most effective way to know if you have communicated clearly and the patient is prepared to follow through on your recommendations.



[Download Skills Review](#)



More Videos



[Ask for Patient Opinion Regarding Treatment Recommendations](#)



[Brainstorm and Problem Solve](#)

Project ReD CHiP: Outcomes

(Reducing Disparities and Controlling Hypertension in Primary Care)

- Implementation rates
- Guideline-concordant care
- Reduction in racial disparities in blood pressure control
- Sustainability over 12-24 months
- Provider experiences with the intervention and self-reported use of communication behaviors (pre-and post)
- Patient experiences of care, including ratings of provider communication and cultural and linguistic competence
- Costs

Achieving Control Together (ACT) Study

- **Design:** 3 Arm RCT using comparative effectiveness and community-based participatory research approaches
- **Population:** 375 African Americans with uncontrolled hypertension in urban primary care clinic in Baltimore
- **Interventions:**
 - Community Health Worker plus BP Cuff
 - Community Health worker plus BP Cuff AND **Communications Training (Do My PART)**
 - Community Health Worker plus BP Cuff AND Self Management/ Problem-Solving Training
- **Outcomes:** BP control, BP reduction



Do MY PART Communication Training to Activate Patients and Families

- Goal: Help patients and family members or companions better engage in shared decision-making about hypertension care by achieving **four competencies**:
 - **PREPARE for your (medical) visit** (e.g., write questions about care, goals for visit down on paper)
 - **ACT during your visit** (e.g., let the doctor know about your questions)– family members participate constructively (i.e., do not interfere with positive interaction, focusing on supporting patient goals for visit)
 - **REVIEW** your treatment plan with the doctor before leaving
 - **TAKE** treatment plan home, work with family to carry it out



Five-Step Methodology for Evaluation and Adaptation of Print Patient Health Information*

Five-Step Methodology

1. Readability evaluation of original document at whole document, paragraph, and sentence levels
2. Medical terminology/scientific jargon of original document
3. Literacy adaptation process at the sentence level
4. Readability evaluation of adapted document
5. Comparison of pre- and post-adaptation readability

*to meet the <5th Grade readability criterion
Hill-Briggs F, *Med Care* (2012)

The ACT Study: Measures

(Achieving Blood Pressure Control Together)

Primary outcome:

- BP control over one year

Secondary outcomes:

- Costs
- Biological correlates

Process measures

- Audiotape measures of patient-provider communication
- Patient-reports of self-care, adherence, participation in decisions, and ratings of care
- Psychosocial correlates

Social, demographic , and environmental correlates

Conclusions

- Interventions to improve clinical communication show some evidence of effectiveness
- A small, but growing, number of studies focus on the whether such interventions can reduce disparities in care and outcomes
- Relatively few interventions target health professional and patient communication skills
- Most interventions are located within the healthcare system and do not address contextual issues and clustering of risks within vulnerable populations

Implications for Future Research

- Tailored strategies are needed for vulnerable populations and diverse settings
- Multi-level, trans-disciplinary, and theoretically-based approaches are most likely to be effective
- Combining comparative effectiveness and community-based participatory research methods will provide strongest evidence for future implementation, dissemination, and sustainability
- Describing intervention impact on disparities and costs would help to inform practice and policy



Thank you!

Learn more about the Johns Hopkins
Center to Eliminate Cardiovascular
Health Disparities:

Website: <http://jhsp.h.edu/cardiodisparities>

Weekly e-newsletter:

e-mail jhalber5@jhmi.edu to subscribe

