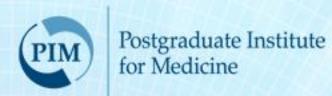


# 9th International Conference on HIV TREATMENT AND PREVENTION ADHERENCE

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# Enhancing Relationships and Communication in HIV Care

Mary Catherine Beach, MD, MPH
Associate Professor of Medicine
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Baltimore, MD, United States

### Disclosures

 I have been paid to develop and deliver non-product based talks on communication and health disparities for Merck & Company



### Overview

- What do we know about communication in HIV care?
- How can we improve communication to better patient outcomes?





#### Better Physician-Patient Relationships Are Associated with Higher Reported Adherence to Antiretroviral Therapy in Patients with HIV Infection

John Schneider, MD, MPH, Sherrie H. Kaplan, MPH, PhD, Sheldon Greenfield, MD, Wenjun Li, PhD, Ira B. Wilson, MD, MSc

**BACKGROUND:** There is little evidence to support the widely accepted assertion that better physician-patient relationships result in higher rates of adherence with recommended therapies.

OBJECTIVE: To determine whether and which aspects of a better physician-patient relationship are associated with higher rates of adherence with antiretroviral therapies for persons with HIV infection.

DESIGN: Cross-sectional analysis.

CARL TRACKS IN CASE OF

SETTING: Twenty-two outpatient HIV practices in a metropolitan area.

PARTICIPANTS: Five hundred fifty-four patients with HIV infection taking antiretroviral medications.

**MEASUREMENTS:** We measured adherence using a 4-item self-report scale ( $\alpha$  = 0.75). We measured core aspects of physician-patient relationships using 6 previously tested scales (general communication, HIV-specific information, participatory decision making, overall satisfaction, willingness to recommend physician, and physician trust;  $\alpha$  > 0.70 for all) and 1 new scale,

**KEY WORDS:** patient compliance; HIV infections; physicianpatient relations; HIV infections/drug therapy.

J GEN INTERN MED 2004;19:1096-1103.

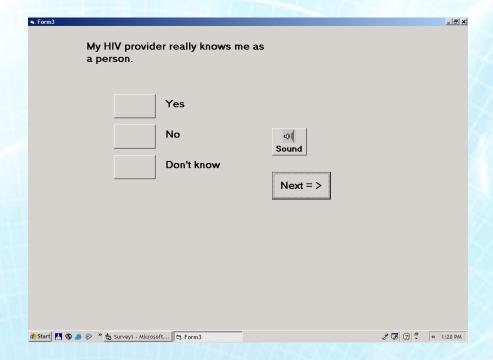
associated with better adherence to antiretroviral regimens for HIV infection is widespread, <sup>1-4</sup> and supported by several qualitative studies. <sup>5-9</sup> However, only a few published empirical studies have examined this relationship, <sup>5,10-15</sup> with mixed results. Two of these studies were conducted among a sample of prisoners, <sup>10,11</sup> and thus have limited generalizability. Bakken et al. <sup>12</sup> found that a scale measuring patients' engagement with their provider was significantly related to self-reported medication adherence, but their adherence measure did not specifically focus on antiretrovirals. The other four studies were done among diverse populations using a variety of methods, and did not find relationships between measures of physician-patient

#### POPULATIONS AT RISK

#### Is the Quality of the Patient-Provider Relationship Associated with Better Adherence and Health Outcomes for Patients with HIV?

Mary Catherine Beach, MD, MPH, 1.2,3,4 Jeanne Keruly, MS, CNRP, 1 Richard D. Moore, MD, MHS<sup>1,5</sup>

<sup>1</sup>Division of General Internal Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA; <sup>2</sup>Phoebe R. Berman Bioethics Institute, Johns Hopkins University, Baltimore, MD, USA; <sup>3</sup>Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; <sup>4</sup>Welch Center for Prevention, Epidemiology, and Clinical Research, Johns Hopkins University, Baltimore, MD, USA; <sup>5</sup>Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA.





## Higher Quality Communication and Relationships Are Associated With Improved Patient Engagement in HIV Care

Tabor E. Flickinger, MD, MPH,\* Somnath Saha, MD, MPH,† Richard D. Moore, MD, MHS,\* and Mary C. Beach, MD, MPH\*

Abstract: Patient retention in HIV care may be influenced by patient—provider interactions. In an urban, academic HIV clinic, 1363 patients rated the quality of communication and relationships with their providers on 5 domains. We used linear regressions to investigate associations between these 5 domains and appointment adherence. In multivariate analysis, patients kept more appointments if providers treated them with dignity and respect, listened carefully to them, explained in ways they could understand, and knew them as persons. Being involved in decisions was not significantly associated with appointment adherence. Enhancing providers' skills in effective communication and relationship building may improve patient retention in HIV care.

**Key Words:** HIV/AIDS, retention, engagement, communication, patient-provider relationship

(J Acquir Immune Defic Syndr 2013;63:362-366)

A growing body of evidence suggests that the quality of patients' relationships with their HIV care providers plays an important role in appointment adherence. Some aspects of patient-provider relationships have been explored and have shown that trust in providers is associated with ART adherence and feeling "known as a person" by providers is associated with HIV viral suppression. Although these studies suggest that patient-provider relationships may generally be important, no previous study has examined the role of specific patient-provider communication and relationship factors in HIV patients' engagement in care.

To address this, we analyzed patient ratings of their HIV care providers in 5 domains: being treated with dignity and respect, being involved in decisions about their care, feeling listened to, having information explained in a way they could understand, and feeling known as a person. We



# Enhancing Communication and HIV Outcomes (ECHO) Study Aims

- 1. To evaluate possible racial/ethnic disparities in patient-provider communication quality;
- 2. To evaluate which aspects of communication and relationships are associated with better patient outcomes;

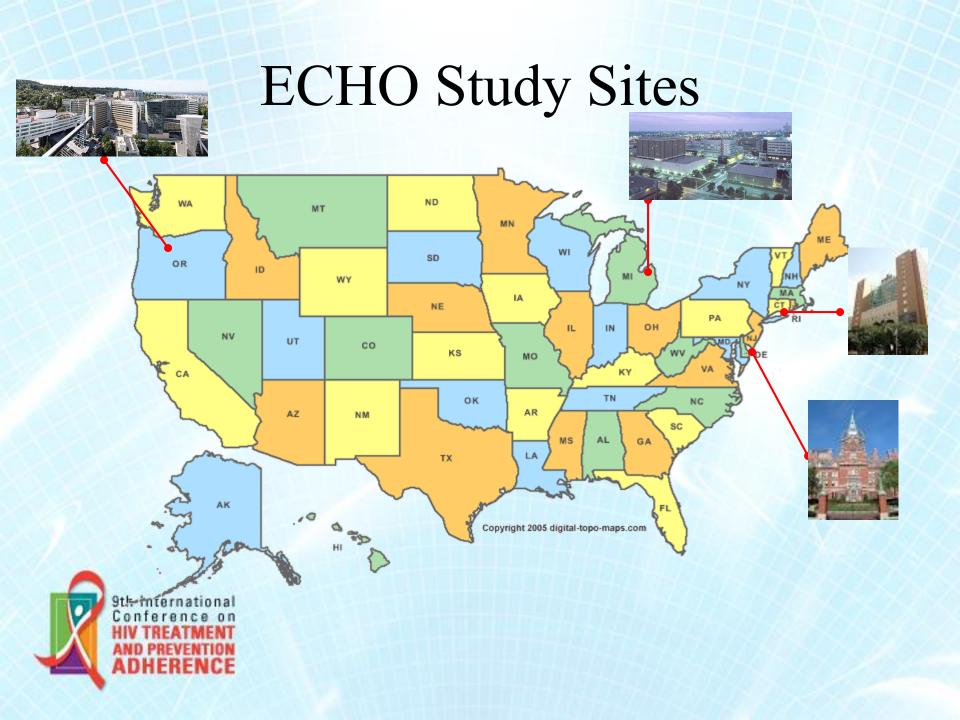
and

3. To develop and test an intervention to improve communication quality in HIV care.

Phase 1
Observational

Phase 2 Small RCT





# Enhancing Communication and HIV Outcomes (ECHO) Study Aims

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#### Patient-Provider Communication Differs for Black Compared to White HIV-Infected Patients

Mary Catherine Beach · Somnath Saha · P. Todd Korthuis · Victoria Sharp · Jonathon Cohn · Ira B. Wilson · Susan Eggly · Lisa A. Cooper · Debra Roter · Andrea Sankar · Richard Moore

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Abstract Poor patient-provider interactions may play a role in explaining racial disparities in the quality and outcomes of HIV care in the United States. We analyzed 354 patient-provider encounters coded with the Roter Interaction Analysis System across four HIV care sites in the United States to explore possible racial differences in patient-provider communication. Providers were more verbally dominant in conversations with black as compared to white patients. This was largely due to black patients' talking less than white patients. There was no association between race and other measures of communication. Black and white patients rated their providers' communication

#### Background

Significant racial disparities exist in HIV care in the United States. In 1994, Moore et al. found that black, HIV-infected patients were 15–20% less likely to receive prophylaxis for Pneumocystis pneumonia than whites with the same clinical indications [1]. Subsequent studies demonstrated similar findings [2–4], as well as disparities in the receipt of anti-retroviral (ARV) therapy [5–9]. An evidence-based review found that the use of ARV therapy and prophylaxis for opportunistic conditions in HIV-infected patients is systematically lower among racial/ethnic minorities compared to white [10]. In addition, clinical enterpress such as HIV-

#### Differences in Patient–Provider Communication for Hispanic Compared to Non-Hispanic White Patients in HIV Care

Mary Catherine Beach, MD, MPH<sup>1</sup>, Somnath Saha, MD, MPH<sup>2</sup>, P. Todd Korthuis, MD<sup>2</sup>, Victoria Sharp, MD<sup>3</sup>, Jonathon Cohn, MD<sup>4</sup>, Ira B. Wilson, MD<sup>5</sup>, Susan Eggly, PhD<sup>4</sup>, Lisa A. Cooper, MD, MPH<sup>1</sup>, Debra Roter, DrPH<sup>1</sup>, Andrea Sankar, PhD<sup>4</sup>, and Richard Moore, MD, MHS<sup>1</sup>

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BACKGROUND: Hispanic Americans with HIV/AIDS experience lower quality care and worse outcomes than non-Hispanic whites. While deficits in patient-provider communication may contribute to these disparities, no studies to date have used audio recordings to examine the communication patterns of Hispanic vs. non-Hispanic white patients with their health care providers.

**OBJECTIVE:** To explore differences in patient–provider communication for English-speaking, HIV-infected Hispanic and non-Hispanic white patients.

DESIGN: Cross-sectional analysis.

**SETTING:** Two HIV care sites in the United States (New York and Portland) participating in the Enhancing Communication and HIV Outcomes (ECHO) study.

**SUBJECTS:** Nineteen HIV providers and 113 of their patients.

**MEASUREMENTS:** Patient interviews, provider questionnaires, and audio-recorded, routine, patient-provider encounters coded with the Roter Interaction Analysis System (RIAS).

**RESULTS:** Providers were mostly non-Hispanic white (68%) and female (63%). Patients were Hispanic (51%), and non-Hispanic white (49%): 20% were female. Visits

patient-provider interactions may reflect differences in patient preferences and communication style rather than "deficits" in communication. If these findings are replicated in future studies, efforts should be undertaken to understand the reasons underlying them and their impact on the quality and equity of care.

KEY WORDS: HIV/AIDS; patient-physician relations; patient-physician communication; health disparities.

J Gen Intern Med

DOI: 10.1007/s11606-010-1310-4

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#### **BACKGROUND**

Hispanic Americans suffer a disproportionate burden of HIV disease, and those infected with HIV receive lower quality care and have worse outcomes, compared to the majority, non-Hispanic white population. <sup>1-4</sup> The underlying causes of these disparities are unclear but are probably manifold. One potential factor that has not been well studied is the role of

# Enhancing Communication and HIV Outcomes (ECHO) Study Aims

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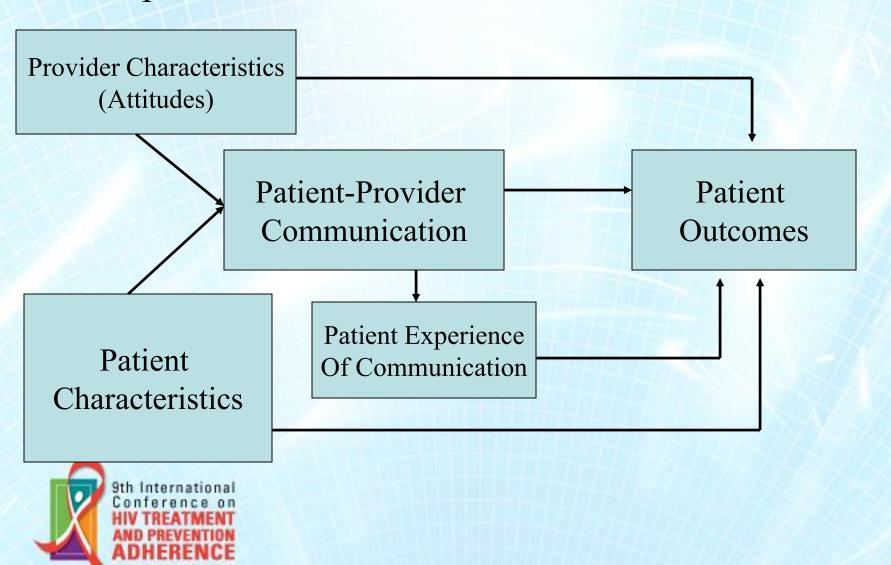
Phase 1

Observational

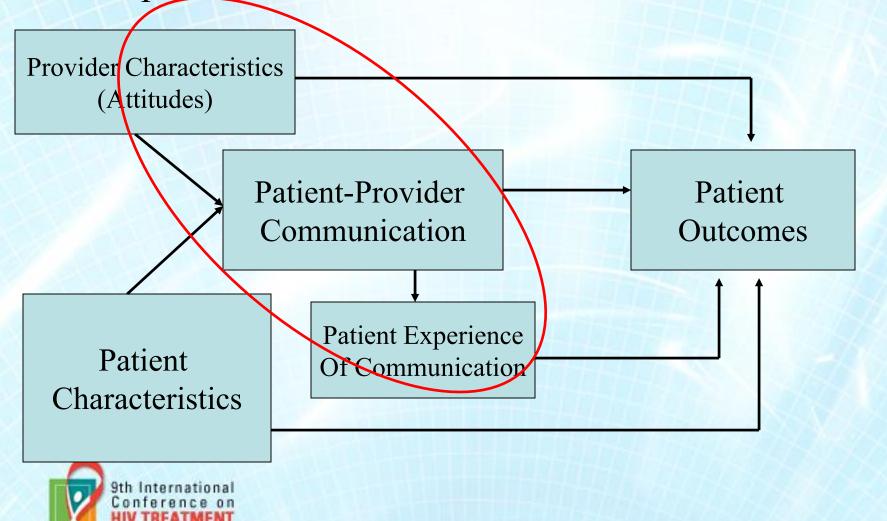
Phase 2 Small RCT



#### Conceptual Framework for Research on Interpersonal Processes of Care and Patient Outcomes



#### Conceptual Framework for Research on Interpersonal Processes of Care and Patient Outcomes



# A Multicenter Study of Physician Mindfulness and Health Care Quality

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Victoria Sharp, MD⁴
Neda Ratanawongsa, MD, MPH³
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<sup>5</sup>University of California, San Francisco, California

6Wayne State University, Detroit, Michigan

#### ABSTRACT

**PURPOSE** Mindfulness (ie, purposeful and nonjudgmental attentiveness to one's own experience, thoughts, and feelings) is associated with physician well-being. We sought to assess whether clinician self-rated mindfulness is associated with the quality of patient care.

**METHODS** We conducted an observational study of 45 clinicians (34 physicians, 8 nurse practitioners, and 3 physician assistants) caring for patients infected with the human immunodeficiency virus (HIV) who completed the Mindful Attention Awareness Scale and 437 HIV-infected patients at 4 HIV specialty clinic sites across the United States. We measured patient-clinician communication quality with audio-recorded encounters coded using the Roter Interaction Analysis System (RIAS) and patient ratings of care.

**RESULTS** In adjusted analyses comparing clinicians with highest and lowest tertile mindfulness scores, patient visits with high-mindfulness clinicians were more likely to be characterized by a patient-centered pattern of communication (adjusted odds ratio of a patient-centered visit was 4.14; 95% CI, 1.58-10.86), in which both patients and clinicians engaged in more rapport building and discussion of psychosocial issues. Clinicians with high-mindfulness scores also displayed more positive emotional tone with patients (adjusted  $\beta = 1.17$ ; 95% CI, 0.46-1.9). Patients were more likely to give high ratings on clinician communication (adjusted prevalence ratio [APR] = 1.48; 95% CI, 1.17-1.86) and to report high overall satisfaction (APR = 1.45; 95 CI, 1.15-1.84) with high-mindfulness clinicians. There was no association between clinician mindfulness and the amount of conversation about biomedical issues.

**CONCLUSIONS** Clinicians rating themselves as more mindful engage in more patient-centered communication and have more satisfied patients. Interventions

### Independent Variable: Mindfulness-Mindful Attention Awareness Scale\*



- Self-report on provider baseline questionnaire
- 14 items
- Sample items
  - I find myself preoccupied with the future or the past. (R)
  - I find myself listening to someone with one ear, doing something else at the same time. (R)
  - I forget a person's name almost as soon as I've been told it for the first time. (R)

Responses: almost always – almost never



# Patient Evaluations of Care are Associated with Providers' Self-Rated Mindfulness

			Provider Mindfulness Tertile	
		Low (n=150)	Middle (n=146)	High (n=141)
High Provider Communication Score, <sup>2</sup> n (%)		62 (41.3)	67 (46.5)	79 (56.8)
OR (95% CI)	Unadjusted	-	1.43 (0.89-2.41)	2.14 (1.26-3.61)
	Adjusted for covariates		1.60 (0.94-2.71)	2.40 (1.30-4.44)
	Adjusted for covariates + visit length	-	1.55 (0.92-2.62)	2.28 (1.23-4.21)
Highest Patient Satisfaction,3 n (%)		82 (54.7)	91 (63.2)	95 (68.4)
OR (95% CI)	Unadjusted		1.71 (0.99-2.96)	2.37 (1.29-4.37)
	Adjusted for covariates	-	1.64 (0.89-3.02)	2.25 (1.10-4.61)
	Adjusted for covariates + visit length	- 1	1.69 (0.91-3.12)	2.23 (1.07-4.66)



### Primary Care Provider Cultural Competence and Racial Disparities in HIV Care and Outcomes

Somnath Saha, MD, MPH<sup>1,2</sup>, P. Todd Korthuis, MD, MPH<sup>2</sup>, Jonathan A. Cohn, MD<sup>3</sup>, Victoria L. Sharp, MD<sup>4</sup>, Richard D. Moore, MD, MHS<sup>5</sup>, and Mary Catherine Beach, MD, MPH<sup>5</sup>

<sup>1</sup>Section of General Internal Medicine, Portland VA Medical Center, Portland, OR, USA; <sup>2</sup>Division of General Internal Medicine & Geriatrics, Oregon Health & Science University, Portland, OR, USA; <sup>3</sup>Division of Infectious Diseases, Department of Medicine, Wayne State University School of Medicine, Detroit, MI, USA; <sup>4</sup>Center for Comprehensive Care, St. Luke's-Roasevelt Hospital Center, New York, NY, USA; <sup>5</sup>Division of General Internal Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA.

BACKGROUND: Health professional organizations have advocated for increasing the "cultural competence" (CC) of healthcare providers, to reduce racial and ethnic disparities in patient care. It is unclear whether provider CC is associated with more equitable care.

**OBJECTIVE:** To evaluate whether provider CC is associated with quality of care and outcomes for patients with HIV/AIDS.

DESIGN AND PARTICIPANTS: Survey of 45 providers and 437 patients at four urban HIV clinics in the U.S. MAIN MEASURES: Providers' self-rated CC was measured using a novel, 20-item instrument. Outcome measures included patients' receipt of antiretroviral (ARV) therapy, self-efficacy in managing medication regimens, complete 3-day ARV adherence, and viral suppression.

#### INTRODUCTION

Human immunodeficiency virus (HIV) infection is a leading contributor to racial inequalities in health and life expectancy in the United States. 1-3 These disparities arise in part from the fact that minority Americans receive lower quality medical care than whites. 4,5 Studies have demonstrated that minority individuals with HIV/AIDS are less likely than whites to receive antiretroviral (ARV) therapy 6,7 and to adhere to ARV regimens once prescribed. 9-11 Disparities in HIV management lead directly to disparities in outcomes, including viral suppression, progression to AIDS, and death. 10-15

Although disparities in HIV care and outcomes are multifactorial in origin, the patient-provider relationship



# Independent Variable: Provider Cultural Competence

- Self-report on provider baseline questionnaire
- Novel measure
- Sample items
  - I always try to find out what patients think is the cause of their illness
  - I feel less than competent working with patients from cultural backgrounds different from mine

Responses: Strongly disagree — strongly agree (6-point scale)



# Cultural Competence and Patient Outcomes (High/middle CC vs. low CC)

<u>Outcome</u>	<u>Nonwhite</u>	White
Medication Self-Efficacy	1.68 (.95-3.0)	0.50 (.18-1.4)
Adherence	2.87 (1.4-6.0)	0.12 (.01-1.3)
Viral Suppression	1.77 (1.0-3.2)	0.41 (.12-1.4)



Adjusted for site; patient age, gender, marital status, employment; provider gender; patient-provider race concordance

# <u>Disparities Analysis</u>: Association of race with outcomes by provider cultural competence

**Provider CC Tertile** 

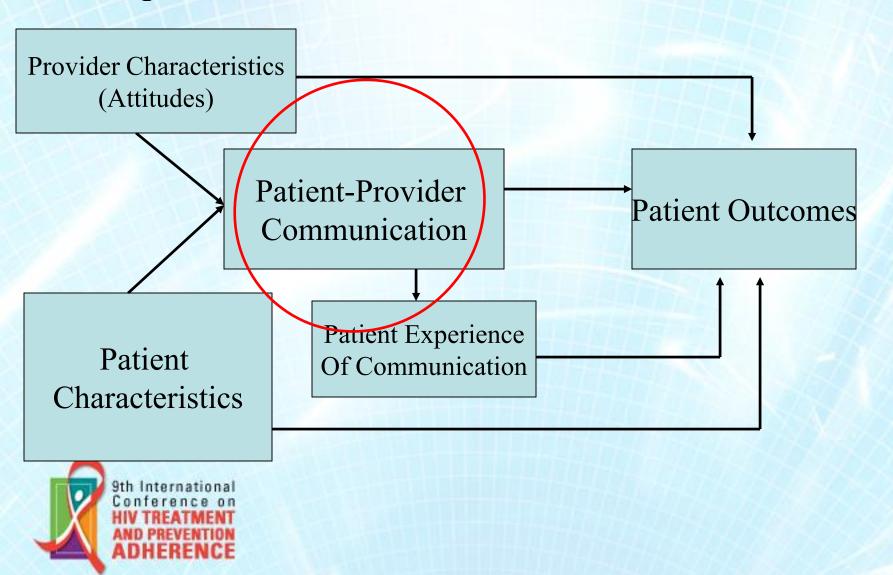
Non-White vs. White Odds Ratio

<u>Outcome</u>	Low	Middle/High	
Medication Self-Efficacy	3.77 (1.2-11.4)	1.14 (0.6-2.2)	
Adherence	6.07 (1.1-33.9)	1.63 (0.6-4.7)	
Viral Suppression	13.0 (3.4-49.0)	1.20 (0.6-2.4)	



Adjusted for site; patient age, gender, education, literacy, employment, substance use, QOL; provider race, profession (non-MD vs. MD)

#### Conceptual Framework for Research on Interpersonal Processes of Care and Patient Outcomes



### Dialogue about ARV Initiation

Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents

January 10, 2011

Developed by the DHHS Panel on Antiretroviral Guidelines for Adults and Adolescents - A Working Group of the Office of AIDS Research Advisory Council (OARAC)



How to Cite the Adult and Adolescent Guidelines:

Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services, January 10, 2011; 1–166. Available at <a href="https://www.adsinfo.nih.gov/ContentFiles/AdultandAdolescentGi\_pdf">https://www.adsinfo.nih.gov/ContentFiles/AdultandAdolescentGi\_pdf</a>. Accessed [insert date]

It is emphasized that concepts relevant to HIV management evolve rapidly. The Panel has a mechanism to update recommendations on a regular basis, and the most recent information is available on the AIDSInfo Web site (http://aidsinfo.nlh.gov).

"Prior to writing the first prescriptions, the clinician should assess the patient's readiness to take medication, factors that might limit adherence, understanding of the disease and the regimen, social support, housing, work and home situation, and daily schedules."



No studies have directly observed clinicians and patients communicating about ART initiation

### **ART Initiation Communication**

Topic	Number of Encounters Total N=24	Percent of Encounters
Readiness to Start	12	50%
Factors limiting adherence	3	13%
Home/work situation	1	4%
Daily schedule		4%
Patient understanding	0	0%
Social support	0	0%



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Phase 1
Observational

Phase 2 Small RCT



### Principles for Intervention Development

- Related to communication
- Focus on content area importance to reduction of racial/ethnic disparities
  - Patient adherence
- Focus on patient-provider dialogue about medication adherence
- Targeted at both patients and providers



# Provider-Focused Intervention Increases Adherence-Related Dialogue, But Does Not Improve Antiretroviral Therapy Adherence in Persons with HIV

Ira B. Wilson, MD, MSc, M. Barton Laws, PhD, Steven A. Safren, PhD, Yoojin Lee, MS, MPH, Minyi Lu, MD, PhD, William Coady, MA, Paul R. Skolnik, MD, and William H. Rogers, PhD The Institute for Clinical Research and Health Policy Studies, Tufts Medical Center (I.B.W., M.B.L., Y.L., W.C., W.H.R.), Boston, MA; Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School, and the Fenway Community Health (S.A.S.), Boston, MA, and the Center for HIV/AIDS Care and Research, Boston University Medical Center (P.R.S.), Boston, MA

#### Abstract

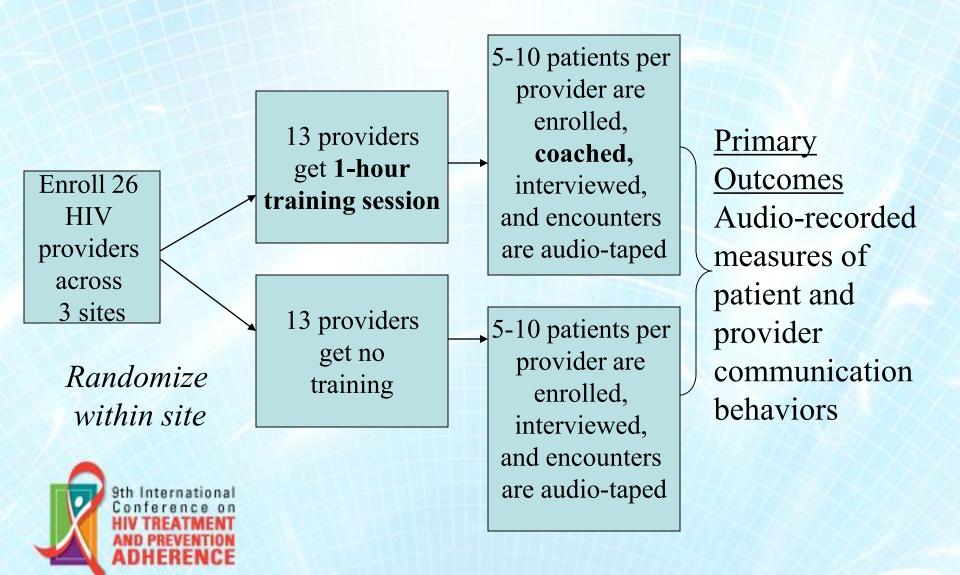
**Background**—Physicians' limited knowledge of patients' antiretroviral adherence may reduce their ability to perform effective adherence counseling.

Methods—We conducted a randomized, cross-over study of an intervention to improve physicians' knowledge of patients' antiretroviral adherence. The intervention was a report given to the physician prior to a routine office visit that included data on: MEMS and self-reported data adherence, patients' beliefs about antiretroviral therapy, reasons for missed doses, use, and depression. We audio-recorded one intervention and one control visit for analyze differences in adherence related dialogue.

Results—156 patients were randomized, and 106 completed all 5 study visits. Percorded visits were available for 58 patients. Using a linear regression model that and baseline MEMS adherence, adherence following intervention visits did not diffrom control visits (2.0% higher, p=0.31, 95% CI -1.95% – 5.9%). There was a trotal adherence-related utterances (median of 76 vs. 49.5, p=0.07) and a significant utterances about the current regimen (median of 51.5 vs. 32.5, p=0.0002) in intervention visits. However less than 10% of adherence-related utterances were described to the current regimen (median of 51.5 vs. 32.5, p=0.0002).

"problem solving" in content, and one third of physicians' problem solving utterances were directive in nature.

### Study Design and Data Collection



### Communication about Therapeutic Regimen

	Intervene	Control	p-value^
All patient therapeutic talk*	56.4	49.9	0.211
All provider therapeutic talk*	110.6	78.0	<0.001
Ratio of provider/patient therapeutic talk*	2.4	1.9	0.003
Any problem-solving about adherence barriers, %	41%	22%	0.026



All values are means except where otherwise indicated ^p-values obtained using Kruskall Wallis tests

# Provider Rapport-Building/ Engagement of Patient

	Intervention	Control	p-value^
Positive Talk	43.6	37.6	0.039
Emotional Talk	26.1	17.6	<0.001
Asks for Patient Opinion	2.9	2.0	0.009

All values are means
^p-values obtained using Kruskall Wallis tests



### Patient Engagement

	Intervention	Control	p-value^
Patient question-asking	10.9	10.9	0.965
Asks for service	0.5	0.5	0.886
Paraphrases/checks for understanding	5.0	5.0	0.695

All values are means ^p-values obtained using Kruskall Wallis tests



#### What did we learn from Phase 2 of ECHO?

- A brief training improved provider communication and increased dialogue about medication adherence.
  - However, most of the increase in adherence dialogue was provider rather than patient talk
- Further training may be required to help providers engage patients more effectively



# Next Step: A More Extensive Intervention

R34MH089279-01



### Study Intervention

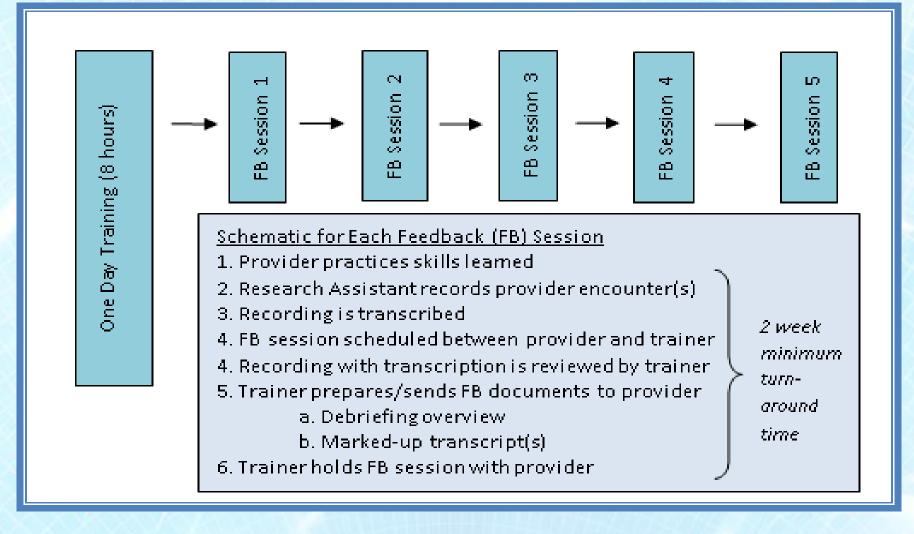
#### **Minimal**



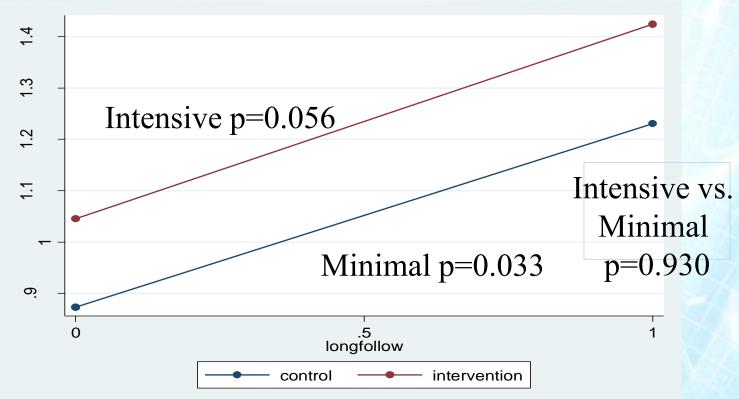


### Feedback Process (Intensive Arm)



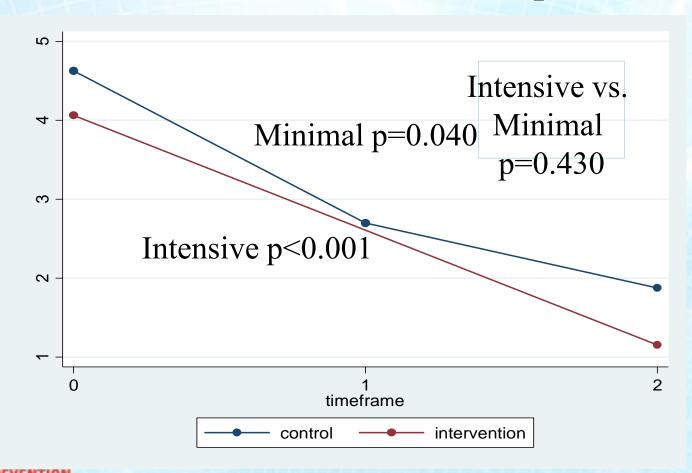


# Changes in Patient-Centeredness for Minimal and Intensive Intervention Groups

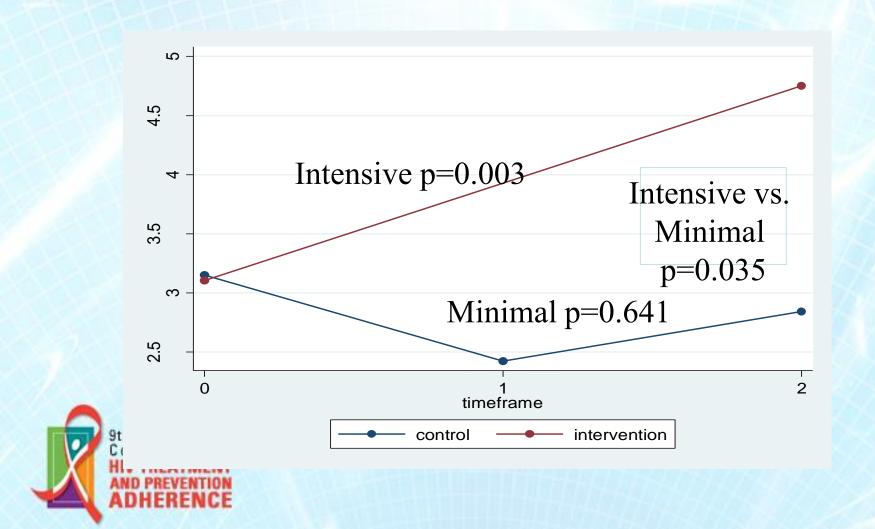




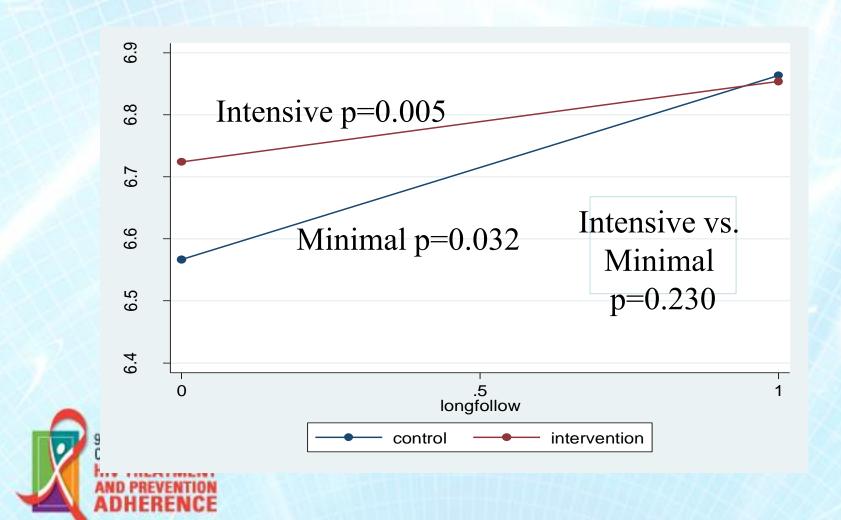
# Changes in Disapproval for Minimal and Intensive Intervention Groups



# Changes in Asking Patient Opinion for Minimal and Intensive Intervention Groups



# Changes in Patient Ratings for Minimal and Intensive Intervention Groups



### Summary

- High quality communication and relationships are associated with better patient outcomes in HIV care
- We have a pretty good idea about what 'high quality' communication looks like, but are learning more
- Interventions to improve communication are effective, but the most effective and efficient ways to do so are not perfectly clear



"I have learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

- Maya Angelou



