9th International Conference on HIV Treatment and Prevention Adherence

Jointly sponsored by

IAPAC
International Association of Providers of AIDS Care

PIM
Postgraduate Institute for Medicine
Enhancing Relationships and Communication in HIV Care

Mary Catherine Beach, MD, MPH
Associate Professor of Medicine
Johns Hopkins University
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.

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 (α = 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; α > 0.70 for all) and 1 new scale.

KEY WORDS: patient compliance; HIV infections; physician-patient relations; HIV infections/drug therapy.


The belief that good physician-patient relationships are associated with better adherence to antiretroviral regimens for HIV infection is widespread,\(^1\)–\(^4\) and supported by several qualitative studies.\(^5\)–\(^9\) However, only a few published empirical studies have examined this relationship,\(^5\)\(^,\)\(^10\)\(^–\)\(^15\) with mixed results. Two of these studies were conducted among a sample of prisoners,\(^10\)\(^,\)\(^11\) and thus have limited generalizability. Bakken et al.\(^12\) 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 relationships and adherence.
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 1,5

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


A growing body of evidence suggests that the quality of patients’ relationships with their HIV care providers plays an important role in appointment adherence.23–25 Some aspects of patient–provider relationships have been explored and have shown that trust in providers is associated with ART adherence26 and feeling "known as a person" by providers is associated with HIV viral suppression.27 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
ECHO Study Sites
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; 

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

---

Phase 1 Observational

Phase 2 Small RCT
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

© Springer Science+Business Media, LLC 2010

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 similarly. Efforts to more effectively engage patients in the health care decision-making process are needed.

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 antiretroviral (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 whites [10]. In addition, clinical outcomes such as HIV VL, CD4+ T cell count, and mortality are worse in black, HIV-infected patients compared to whites [11].
Differences in Patient–Provider Communication for Hispanic Compared to Non-Hispanic White Patients in HIV Care

Mary Catherine Beach, MD, MPH¹, Somnath Saha, MD, MPH², P. Todd Korthuis, MD², Victoria Sharp, MD³, Jonathon Cohn, MD⁴, Ira B. Wilson, MD⁵, Susan Eggly, PhD⁴, Lisa A. Cooper, MD, MPH¹, Debra Roter, DrPH¹, Andrea Sankar, PhD⁴, and Richard Moore, MD, MHS¹

¹Johns Hopkins University, Baltimore, MD, USA; ²Oregon Health Science University, Portland, OR, USA; ³Saint-Lukes Roosevelt, New York, NY, USA; ⁴Wayne State University, Detroit, MI, USA; ⁵Tufts-New England Medical Center, Boston, MA, USA.

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.


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
© Society of General Internal Medicine 2010

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.¹–⁴ 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

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

Provider Characteristics (Attitudes) → Patient-Provider Communication → Patient Outcomes

Patient Characteristics → Patient Experience Of Communication → Patient-Provider Communication
Conceptual Framework for Research on Interpersonal Processes of Care and Patient Outcomes

Provider Characteristics (Attitudes)

Patient-Provider Communication

Patient Experience Of Communication

Patient Outcomes

Patient Characteristics
A Multicenter Study of Physician Mindfulness and Health Care Quality

Mary Catherine Beach, MD, MPH
Debra Roter, DrPH
P. Todd Korthuis, MD, MPH
Ronald M. Epstein, MD
Victoria Sharp, MD
Neda Ratanawongs, MD, MPH
Jonathon Cohn, MD
Susan Eggly, PhD
Andrea Sankar, PhD
Richard D. Moore, MD, MHS
Somnath Saha, MD, MPH

1Johns Hopkins University, Baltimore, Maryland
2Oregon Health Science University, Portland, Oregon
3University of Rochester, Rochester, New York
4St Luke’s-Roosevelt Medical Center, New York, New York
5University of California, San Francisco, California
6Wayne State University, Detroit, Michigan

ABSTRACT

PURPOSE Mindfulness (i.e., 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 β = 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 to improve clinician mindfulness could improve patient care.
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)

*Brown and Ryan, J Pers Soc Psychol. 84(4):822-848
Patient Evaluations of Care are Associated with Providers’ Self-Rated Mindfulness

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

Sornath Saha, MD, MPH; P. Todd Korthuis, MD, MPH; Jonathan A. Cohn, MD; Victoria L. Sharp, MD; Richard D. Moore, MD, MHS; and Mary Catherine Beach, MD, MPH

Section of General Internal Medicine, Portland VA Medical Center, Portland, OR, USA; Division of General Internal Medicine & Geriatrics, Oregon Health & Science University, Portland, OR, USA; Division of Infectious Diseases, Department of Medicine, Wayne State University School of Medicine, Detroit, MI, USA; Center for Comprehensive Care, St. Luke’s-Roosevelt Hospital Center, New York, NY, USA; 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. These disparities arise in part from the fact that minority Americans receive lower quality medical care than whites. Studies have demonstrated that minority individuals with HIV/AIDS are less likely than whites to receive antiretroviral (ARV) therapy and to adhere to ARV regimens once prescribed. Disparities in HIV management lead directly to disparities in outcomes, including viral suppression, progression to AIDS, and death.

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)*

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

Adjusted for site; patient age, gender, marital status, employment; provider gender; patient-provider race concordance
Disparities Analysis: Association of race with outcomes by provider cultural competence

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

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

Provider Characteristics (Attitudes)

Patient-Provider Communication

Patient Characteristics

Patient Experience Of Communication

Patient Outcomes
Dialogue about ARV Initiation

“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

<table>
<thead>
<tr>
<th>Topic</th>
<th>Number of Encounters</th>
<th>Percent of Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness to Start</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>Factors limiting adherence</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td>Home/work situation</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Daily schedule</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Patient understanding</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Social support</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
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;
3. To develop and test an intervention to improve communication quality in HIV care.

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 on adherence, patients’ beliefs about antiretroviral therapy, reasons for missed doses, psychiatric medication use, and depression. We audio-recorded one intervention and one control visit for each patient and analyzed differences in adherence-related dialogue.

Results—156 patients were randomized, and 106 completed all 5 study visits. P1122 recorded visits were available for 58 patients. Using a linear regression model that included baseline MEMS adherence, adherence following intervention visits did not differ from control visits (2.0% higher, p = 0.31, 95% CI -1.95% – 5.9%). There was a trend toward increased total adherence-related utterances (median of 76 vs. 49.5, p = 0.07) and a significant increase in utterances about the current regimen (median of 51.5 vs. 32.5, p = 0.0002) in interventions visits compared with control visits. However, less than 10% of adherence-related utterances were categorized as “problem solving” in content, and one third of physicians’ problem solving utterances were directive in nature.
Study Design and Data Collection

Enroll 26 HIV providers across 3 sites

Randomize within site

13 providers get 1-hour training session

13 providers get no training

5-10 patients per provider are enrolled, coached, interviewed, and encounters are audio-taped

5-10 patients per provider are enrolled, interviewed, and encounters are audio-taped

Primary Outcomes
Audio-recorded measures of patient and provider communication behaviors
## Communication about Therapeutic Regimen

<table>
<thead>
<tr>
<th></th>
<th>Intervene</th>
<th>Control</th>
<th>p-value&lt;sup&gt;^&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patient therapeutic talk*</td>
<td>56.4</td>
<td>49.9</td>
<td>0.211</td>
</tr>
<tr>
<td>All provider therapeutic talk*</td>
<td>110.6</td>
<td>78.0</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Ratio of provider/patient therapeutic talk*</td>
<td>2.4</td>
<td>1.9</td>
<td>0.003</td>
</tr>
<tr>
<td>Any problem-solving about adherence barriers, %</td>
<td>41%</td>
<td>22%</td>
<td>0.026</td>
</tr>
</tbody>
</table>

All values are means except where otherwise indicated

<sup>^p</sup>-values obtained using Kruskall Wallis tests
Provider Rapport-Building/ Engagement of Patient

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
<th>p-value^</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Talk</td>
<td>43.6</td>
<td>37.6</td>
<td>0.039</td>
</tr>
<tr>
<td>Emotional Talk</td>
<td>26.1</td>
<td>17.6</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Asks for Patient Opinion</td>
<td>2.9</td>
<td>2.0</td>
<td>0.009</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
<th>p-value&lt;sup&gt;^&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient question-asking</td>
<td>10.9</td>
<td>10.9</td>
<td>0.965</td>
</tr>
<tr>
<td>Asks for service</td>
<td>0.5</td>
<td>0.5</td>
<td>0.886</td>
</tr>
<tr>
<td>Paraphrases/checks for understanding</td>
<td>5.0</td>
<td>5.0</td>
<td>0.695</td>
</tr>
</tbody>
</table>

All values are means
<sup>^</sup>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

Baseline Assessment → One-Day Workshop on Motivational Interviewing → Follow-up Assessment

6 months

Intensive

Baseline Assessment → One-Day Workshop on Motivational Interviewing → Individualized Feedback → Follow-up Assessment
Feedback Process (Intensive Arm)

One Day Training (8 hours)

FB Session 1 → FB Session 2 → FB Session 3 → FB Session 4 → FB Session 5

Schematic for Each Feedback (FB) Session
1. Provider practices skills learned
2. Research Assistant records provider encounter(s)
3. Recording is transcribed
4. FB session scheduled between provider and trainer
5. Recording with transcription is reviewed by trainer
   a. Debriefing overview
   b. Marked-up transcript(s)
6. Trainer holds FB session with provider

2 week minimum turn-around time
Changes in Patient-Centeredness for Minimal and Intensive Intervention Groups

Intensive p=0.056

Minimal p=0.033

Intensive vs. Minimal p=0.930
Changes in **Disapproval** for Minimal and Intensive Intervention Groups

![Graph showing changes in disapproval for minimal and intensive intervention groups. The graph includes trend lines for control and intervention groups with annotations for p-values: Intensive vs. Minimal p=0.430, Minimal p=0.040, and Intensive p<0.001.](image-url)
Changes in **Asking Patient Opinion** for Minimal and Intensive Intervention Groups

- Intensive vs. Minimal: $p=0.035$
- Intensive: $p=0.003$
- Minimal: $p=0.641$
Changes in **Patient Ratings** for Minimal and Intensive Intervention Groups

Intensive $p=0.005$

Minimal $p=0.032$

Intensive vs. Minimal $p=0.230$
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