

Assessing fidelity and exposure to a physician-driven HIV prevention intervention: Lessons learned at an east Los Angeles HIV clinic



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Issue

The potential benefit of secondary HIV prevention on public health outcomes, such as reduced HIV incidence, makes physician-led interventions with their seropositive patients a high priority for routine primary care.

Knowing if a physician-led intervention is implemented effectively is a reasonable goal for assessment.

Measuring fidelity with and exposure to physician-led interventions presents unique challenges since physician-patient communication occurs in private, constraining objective assessment of whether and how physicians deliver an intervention.

Uncertainty about how or if an intervention is delivered can compromise outcome interpretation and impact evaluation.

Description

Evaluation findings are derived from an effectiveness study assessing Partnership for Health (PfH), a CDC evidence-based HIV prevention intervention.

The initial trial of PfH demonstrated that a brief, provider delivered intervention is efficacious if messages focus on the consequences of not reducing sexual risk behavior.

We focus on experiences implementing PfH in a Los Angeles HIV clinic. We present challenges of collecting valid fidelity and exposure data assessing:

- Patient survey – self-reported exposure to prevention messages at 6 months post clinic visit
- Objective measure of exposure – documented prevention discussion as noted on “HIV prevention prescription” given to patient after each visit
- Patient chart abstraction – documented prevention messages delivered by physician on patient chart
- Patient exit interview – self-reported exposure to prevention messages immediately post clinic visit

Lessons learned and recommendations reflect physician intervention fidelity after the clinic implemented an electronic medical record (EMR) system prompting physicians to discuss prevention. EMR system as an intervention tool was not originally part of the study protocol.

Lessons Learned

The importance of developing evaluation strategies to measure intervention fidelity and exposure that is feasible, flexible, and considers the structure of the clinical environment

Methodological assessments:

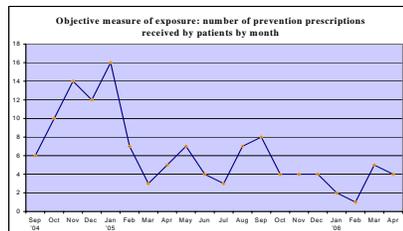
1. Patient survey findings

Intervention exposure

	Baseline N=111 (%)	Wave 2 N=82 (%)	Wave 3 N=67 (%)	Wave 4 N=47 (%)
Did your PHCP talk with you about telling your sex partner you are HIV+?				
No		60 (73.2)	59 (88.1)	42 (89.4)
Yes		22 (26.8)	8 (11.9)	5 (10.6)
Not asked	111 (100.0)			
Did your PHCP give you a prevention prescription?				
No		73 (89.0)	61 (91.0)	42 (89.4)
Yes		9 (11.0)	6 (9.0)	5 (10.6)
Not asked	111 (100.0)			

- Analysis of survey indicates patients were not receiving the intervention at an optimal level

2. HIV prevention prescription findings



- Findings do not clarify whether the few prescriptions tabulated meant physicians were not delivering the intervention or delivering the intervention but not filling out a prescription

Acknowledgments

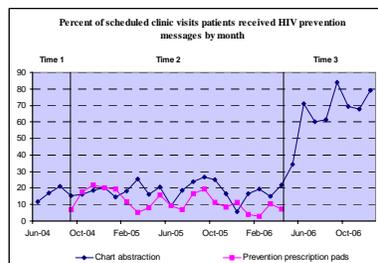
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3. Patient chart abstraction findings

Chart abstraction data: Mean, median, and percent of visits with HIV prevention messages

	Mean	Median
Total Number of visits per month	48.87	43.00
Number of visits received messages	12.39	11.00
% of visits received messages	30.34	20.34
TIME 1 (Pre-Intervention):		
% of visits with prevention messages	16.45*	16.88
TIME 2 (Intervention period before initiation of EMR):		
% of visits with prevention messages (Chart Data)	18.21*	18.47
% of visits with prevention messages (Prescription Pad Data)	11.77	10.87
TIME 3 (Post EMR launch):		
% of visits with prevention messages	65.88*	68.59

*Tests of significance for chart abstraction data are as follows:
The difference in mean percent of messages from Time 1 to Time 2 (One-way ANOVA, df=2, p=0.011)
The difference in mean percent of messages from Time 2 to Time 3 (One-way ANOVA, df=2, p=0.011)
The difference in mean percent of messages from Time 1 to Time 3 (One-way ANOVA, df=2, p=0.011)



- Findings revealed physicians used charts to document prevention discussions rather than the prevention prescription
- 30% of clinic visits included prevention discussions
- Dramatic 250% increase in documented prevention messages delivered after EMR system was implemented

For Further Information

Please contact Gary Garcia at gagarcia@ph.lacounty.gov

4. Patient exit interview findings

Description	(N)	(%)
All patients (scheduled, walk-in, emergent)	102	
Who did you see today at the clinic?		
Physician	99	97.1
Does provider ever talk about sex and people you have sex with?		
Half or more of clinic visits	51	50.0
Less than half of clinic visits	38	37.3
Never	13	12.7
Scheduled patient visits only	82	
Patients reporting that they received:		
*some kind of prevention message	42	51.2
Patients reporting their doctor talked about:		
Safer sex	36	43.9
Using condoms	38	46.3
Protecting partners	32	39.0
Reducing partners	21	25.6
Disclosing status to partners	18	22.0

- Exit interviews were conducted five months after the EMR system was fully integrated into the clinic.

- Findings corroborate chart abstraction data indicating more prevention messages occurred after the launch of the EMR system.

Recommendations

- Assessing content fidelity to PfH and the context of private physician-patient communications can be better evaluated if systems to document intervention fidelity are fully integrated into the clinic routine.

- Clinic physicians and staff should have a participatory role in the design of clinic-based interventions to overcome barriers to intervention implementation, maximize ownership, and ensure compliance to intervention protocols.

- Health care systems enhanced by an EMR system can be an effective mechanism for physician adoption of HIV preventions.

- Electronic reminder systems can prompt physicians resulting in an increased delivery of prevention messages about sexual risk behavior.

- Fidelity and exposure can improve if an individual from the clinic is designated as the intervention “champion” and can provide daily support to physicians to deliver the HIV intervention according to protocol.