

Effectiveness of Data-to-Care Proactive Adherence Interventions on Retention and Relinkage to HIV Care Amid COVID Pandemic

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INTRODUCTION

- Antiretroviral therapy (ART) prescription claims data can help clinicians target adherence interventions for people with HIV (PWH) who are at risk of virologic failure.
- Viral suppression is facilitated by engagement in care (relinkage) and routine follow-up (retention) with medical visits; however, multiple barriers impact both.
- The use of this antiretroviral medication prescription claims data to provide adherence interventions requires the collaboration of pharmacies, prescribers, payers, and public health agencies (AdhereP4).

OBJECTIVE

- This study evaluated the effect of adherence interventions on retention and relinkage to medical visits.

METHODS

- This was a prospective study including PWH at two HIV clinics, who failed to pick up antiretroviral medications ≥ 30 days from the last fill per prescription claims from November 2020-December 2021.
- Eligible patients had interventions attempted
 - “Full intervention”: direct patient contact (e.g., in-person or telephone counseling)
 - “Soft intervention”: indirect patient contact (e.g., text or voicemail messaging)
 - “No intervention” was documented for those unreachable.
- Index date was the date of intervention eligibility.
- The 365-day pre- (baseline) and post- (follow-up) index periods were evaluated for retention and relinkage outcomes for any intervention (i.e., full or soft) group vs. no intervention group.
- Retention was defined as ≥ 2 medical visits ≥ 90 days apart and relinkage was defined as ≥ 1 medical visit.
- Odds ratio of retention and relinkage, comparing any intervention vs. no intervention, were calculated for those who were retained in care and for those who were not relinked to care at baseline, respectively, adjusting for demographic and clinical measures.

Table 1: Baseline Characteristics of 1,187 Patients by Intervention Groups

	Any Intervention (n=879)	Full Intervention (n=574)	Soft Intervention (n=305)	No Intervention (n=308)
Age, years, mean (SD)	45.7 (13.3)	46.6 (13.5)	44.0 (12.8)	50.6 (14.1)
Female sex, n (%) [*]	298 (34)	210 (37)	88 (29)	105 (34)
Race, n (%)				
Black/African American	639 (73)	428 (75)	211 (69)	245 (80)
White	77 (9)	51 (9)	26 (9)	25 (8)
Others	163 (19)	95 (17)	68 (22)	38 (12)
HIV RNA, mean (SD)				
<200 copies/mL, n (%)	15,477 (65,151)	10,678 (38,766)	24,941 (97,694)	12,126 (74,271)
	516 (59)	360 (63)	156 (51)	225 (73)

^{*}at birth

Figure 1: Percent of Patients Retained in Care

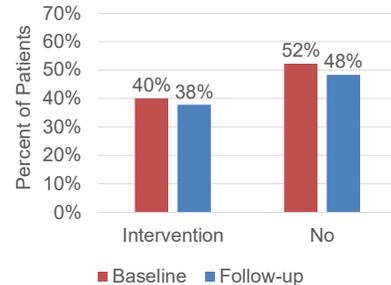


Figure 2: Percent of Patients Relinked to Care

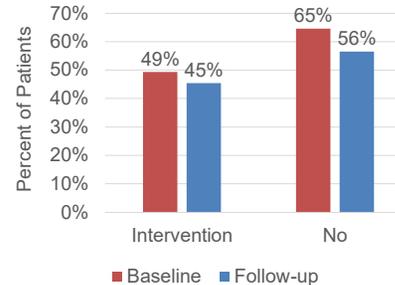
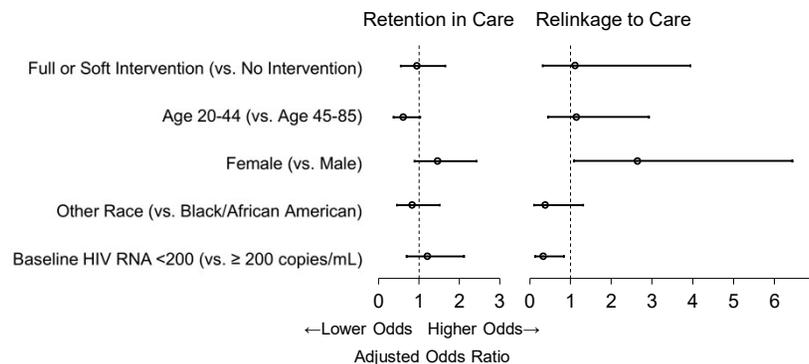


Figure 3: Multivariable Associations Between Covariates and Study Outcomes



RESULTS

- 1,187 patients were included (34% female; 74% African American, mean (SD) age 47 (13.7) years). Patient characteristics were presented in **Table 1**.
- The change (baseline to follow-up) in the percentage of PWH retained in care was -2.3% (40.1% to 37.8%) and -3.9% (52.3% to 48.4%) for the intervention and no intervention group, respectively (**Figure 1**).
- A change of -4% (49.4 to 45.4) and -8.1% (64.6 to 56.5) of PWH relinked to care for the intervention and no intervention group was noted, respectively (**Figure 2**).
- There was no difference in the odds of retention (adjusted odds ratio [aOR], 0.95; 95% CI, 0.55-1.65) or relinkage (aOR, 1.11; 95% CI, 0.31-3.94), comparing the intervention group vs. no intervention group (**Figure 3**).

CONCLUSION

- The percent reduction in PWH retained and relinked to care was smaller in the intervention group compared to no intervention.
- There were no statistically significant differences in the visit outcomes comparing the intervention and no intervention groups.
- This study was completed during the COVID-19 pandemic, which impacted medical visit patterns.

CONTACT INFORMATION

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FUNDING & ACKNOWLEDGMENTS

This project was supported by funds awarded to the Maryland Department of Health by the Centers for Disease Control and Prevention's Division of HIV Prevention under CDC-RFA-PS18-1802. This project was conducted in collaboration with the University of Maryland Baltimore County, Hilltop, Chase Brexton Health Services, Mt. Vernon Pharmacy, and University of Maryland Medical System.