

HIV Prevention: Digital Health Interventions to Improve Adherence to HIV Pre-Exposure Prophylaxis (PrEP)

The analytic framework postulates the pathway leading from digital health interventions to improved adherence to HIV PrEP.

Digital health interventions to improve PrEP adherence are offered to people who are HIV negative and have indications for, and are prescribed, PrEP. Interventions are postulated to increase participants' knowledge of PrEP, HIV, and strategies to stay PrEP adherent; improve motivation to stay PrEP adherent; and increase pill taking behavior and clinic visits. The increase in knowledge and change in pill taking behaviors is expected to increase adherence to PrEP use and increase retention in PrEP care, resulting in decreased HIV incidence and HIV-related morbidity and mortality.

Key potential effect modifiers include access to and affordability of PrEP, access to digital communication, and urban vs. rural locations. Potential additional benefits of the intervention may include reduced risk behaviors for HIV infection and greater access to health care provider or systems. Potential harms include risk compensation that could lead to increased risk behavior, and repeated reminders for pill taking could lead to internalized stigma.