



CALIFORNIA  
HIV/AIDS POLICY  
RESEARCH CENTERS

**Media Contact:**

Calvin Fleming

*On behalf of California HIV Policy Research Centers*

(323) 484-6707

[calvin@goodpr.com](mailto:calvin@goodpr.com)

**FOR IMMEDIATE RELEASE**

**New Study Explores Effectiveness of AI Chatbots in HIV Prevention**

*Novel Research Evaluates Accuracy of AI-Driven Chatbots for Personalized  
HIV Prevention and Health Communication*

Los Angeles, CA – October 24, 2024 – A new study conducted by the [California HIV/AIDS Policy Research Centers](http://www.chprc.org) (CHPRC) explores the potential of artificial intelligence (AI) chatbots to aid in HIV prevention efforts. The research led by Marisa Fujimoto at UC Berkeley and the Northern California HIV/AIDS Policy Research Center is titled “**Evaluating AI Chatbots for HIV Prevention: An Assessment of Response Quality and User Tailoring**” and examines the ability of AI-driven chatbots to deliver accurate, engaging, and personalized health information to people from groups affected by HIV and community-based organizations. More information is available at [www.chprc.org](http://www.chprc.org).

As healthcare increasingly turns to digital solutions, this study provides critical insights into how AI can be leveraged to address HIV prevention in communities that may face barriers to traditional healthcare access. The research assesses not only the technical performance of these chatbots but also how well they cater to individual needs, offering an evaluation of both response quality and user-tailoring in a public health context.

**Key Findings Include:**

- **High Response Accuracy, but Variable Clarity:** AI chatbots can provide HIV prevention information and guidance that is accurate and neutral in tone across a wide range of HIV prevention topics, including pre-exposure prophylaxis (PrEP). However, some responses had a disjointed flow, lacked clear conclusions, and/or did not follow current best practices for use of non-stigmatizing HIV language.
- **Personalized Engagement:** Chatbots successfully simplified their responses when asked, but they largely did not tailor their responses to the needs of specific populations, such as transgender users or users in specific locations.
- **Opportunities for Integration with Existing Public Health Services:** When responses are reviewed and tailored by health professionals, AI chatbots may be a valuable tool for community-based organizations to enhance the efficiency and quality of service provision and to support the development of educational materials.

"New and innovative ways to enhance HIV care and prevention efforts are needed, especially to reach younger, tech-savvy groups who may turn to digital solutions for health information," said Marisa Fujimoto, the study's lead author. "Based on our results, we are cautiously optimistic about the use of AI chatbots for HIV prevention by individuals from communities affected by HIV, community organizations, and health providers. Chatbots are capable of providing reasonably accurate information with few access barriers and could be used best in conjunction with advice from health professionals to optimize information and provide referrals to services.

Nevertheless, our research also raises important questions about how to ensure that AI chatbots provide inclusive guidance that addresses the needs of communities disproportionately affected by HIV, like those seeking gender-affirming care."

The research, funded by the California HIV/AIDS Research Program through the University of California Office of the President, was led by Marisa Fujimoto, Lauren Hunter, and Sandra McCoy from the University of California, Berkeley School of Public Health, alongside Simon Outram and Laura Packel from the University of California, San Francisco.

#### **About California HIV Policy Research Centers**

Three collaborative California HIV/AIDS Policy Research Centers, funded by the California HIV/AIDS Research Program, support research and policy analysis that addresses critical issues related to HIV/AIDS care and prevention in California. The work of the research centers focuses on a "rapid response," which involves short-term research projects designed to quickly address questions that emerge in a dynamic health policy environment.

#### **California Center for HIV Syndemic Policy Research**

The California Center for HIV Syndemic Policy Research (CalCenSyn) is led by Dr. Laramie Smith (UCSD) and Dr. Orlando Harris (UCSF). CalCenSyn seeks to expose the root causes of HIV and syndemic conditions through community-focused capacity building, such as tobacco, substance use, and socio-structural barriers to treatment through its community-academic collaborative.

#### **Southern California HIV/AIDS Policy Research Center**

The Southern California HIV/AIDS Policy Research Center, led by Dr. Ian Holloway (UCLA) and Dr. Jamila Stockman (UCSD), celebrated a successful year of collaboration. Their collective work includes [academic manuscripts](#), [policy briefs](#), [infographics](#), [conference presentations](#), consultations with the [California Board of Pharmacy](#), and has garnered additional state and [federal funding](#). In 2024, the Center is examining the implementation of the [California Healthy Youth Act](#), California's comprehensive sex education law; the intersection of HIV and intimate partner violence; and strategies to implement integrated HIV prevention and treatment services, especially for women experiencing violence.

#### **Northern California HIV/AIDS Policy Research Center**

The Northern California HIV/AIDS Policy Research Center is led by Dr. Emily Arnold (UCSF), Dr. Sandra McCoy (UCB), and Laura Thomas (San Francisco AIDS Foundation). In 2024, the Northern California HIV/AIDS Policy Research Center is planning to examine the impact of staffing shortages on the HIV healthcare system and is looking forward to working collaboratively with the other PRC on rapid response research addressing syndemic factors that contribute to HIV in California.

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