



Pharmacy Consumer Perspectives of Pharmacy-based HIV Prevention Services in Los Angeles County

In 2019, California (CA) authorized pharmacists to prescribe pre- and post- exposure prophylaxis (PrEP and PEP) for HIV prevention for up to 60 days. In 2023, this was extended to 90 days. Despite CA pharmacists' willingness to provide PrEP and PEP in their pharmacies, a 2022 state-wide survey with over 900 California pharmacists and pharmacy students, suggested relatively few (11%) had done so (Hunter, 2023).

Previous studies demonstrate that CA pharmacists face multiple barriers to implementing PrEP and PEP services (Hunter, 2023; Beltran, 2024). Our collaborative work with local pharmacists suggests that low consumer demand for pharmacist-initiated HIV prevention services was a significant barrier to implementation. To gauge interest for pharmacy-based HIV prevention services, we conducted a mixed-methods study to gain perspective from pharmacy consumers. This policy brief identifies real-world barriers and facilitators to implementation of HIV prevention services among pharmacy consumers residing in Los Angeles County (LAC), especially in pharmacies and community healthcare settings.

PrEP/PEP Provision in Pharmacies (P4) Study

The P4 study is a joint project by the UCLA Hub for Health Intervention, Policy, and Practice (HHIPP) and the Los Angeles LGBT Center (LA LGBT Center). Funded through the Ending the HIV Epidemic (EHE) Supplement, under the UCLA-CDU CFAR, the P4 study sought to examine local implementation determinants to pharmacy-based PrEP and PEP services in three EHE priority counties in Southern CA (Los Angeles, San Bernardino, and Riverside). Data were collected from November 2023 to August 2024 and analyzed to examine pharmacy consumers' HIV prevention needs within LAC. The study protocol was approved by the UCLA IRB.

Study Methods

For the quantitative component of the study, survey participants (N=200) were recruited via flyers posted on pharmacy windows and inserted in prescription bags at several LAC pharmacies affiliated with the LA LGBT Center. Participants were eligible if they resided in and used a pharmacy located in LAC. A 50-item questionnaire assessed pharmacy consumers' knowledge, behaviors, and willingness to use pharmacist-prescribed PrEP and PEP. Demographic characteristics were also collected as well as a 5-point Likert scale to examine consumer attitudes towards pharmacists' capacity and trustworthiness in providing HIV prevention services. Descriptive analyses were conducted to provide insights into participant knowledge and behaviors related to PrEP utilization, as well as their willingness to use pharmacy-based PrEP and PEP. A \$20 electronic gift code incentive was offered for completing the survey.

In addition, semi-structured, one-hour interviews were conducted among a subsample of pharmacy consumers (N=7) who completed the survey, resided and used pharmacies in LAC, and indicated willingness

to be contacted for further research. Additional interview participants were recruited via flyers sent by email to the LA LGBT Center’s community advisory board. These interviews were recorded via Zoom and interview transcripts were analyzed using rapid qualitative analysis (Hamilton, 2019). The interview guide included questions related to the benefits and barriers facing consumers seeking HIV prevention services in pharmacies. Findings reported only include LAC pharmacy consumers, which is a subsample of the larger qualitative study population across Southern California.

Summary of Survey Findings

- Nearly three quarters (72%) of LAC consumers indicated visiting their pharmacy on a monthly basis, and approximately half (55%) stated that they primarily used chain retail pharmacies.
- Most pharmacy consumers residing in LAC perceived pharmacists as highly trained (83.5%) and nearly three-quarters had trust in pharmacists’ ability to prescribe PrEP and PEP (74.5%).
- A majority of pharmacy consumers were comfortable using pharmacy-based PrEP (84.5%) and PEP (84%) services.
- Nearly three-quarters of pharmacy consumers expressed comfort in speaking to pharmacists about their health issues (74.5%) and were confident that pharmacists would keep their health information confidential (74.5%).
- A little less than half (45.5%) indicated having a strong relationship with their pharmacist.

Summary of Interview Findings

- Pharmacy consumers interviewed for the study highlighted several benefits of pharmacy-based HIV prevention services, including the convenience and familiarity of the pharmacy setting, the approachability of pharmacists compared to other healthcare providers, and feeling less stigma when discussing sexual health concerns with pharmacists.
- Consumers also noted several barriers to pharmacy-based HIV prevention services, including pharmacists’ busy work environment, the lack of continuity of care, especially for long-term PrEP management, and uncertainty about insurance coverage for PrEP and PEP provided in pharmacy settings.

Survey Results

Characteristics of Consumers

Survey participants were relatively young, with a mean age of 32 years. A majority identified as LGBTQ+ (85.5%) and about half were insured by a public health insurance plan such as Medi-Cal (45.5%). In addition, a little less than half of survey participants identified as White (46.5%), almost a quarter identified as Black/ African American (22%), and 23% identified as “Other.” Nearly half of the participants identified as Hispanic/ Latino/Latinx (47.5%). See Table 1.

Knowledge of and Attitudes toward Pharmacist-Prescribed PrEP and PEP

There was high knowledge of PrEP (93.5%) and PEP (89%) among survey participants. However, awareness of CA law that allows pharmacists to independently prescribe PrEP and PEP (SB 159) was fairly low (17.5%). Overall, participants who were surveyed perceived pharmacists as highly trained (83.5%) and trusted

pharmacists’ ability to prescribe PrEP and PEP (74.5%). However, only about half of participants (45.5%) indicated having a strong relationship with their pharmacist.

PrEP and PEP use

Participants were also asked about their PrEP seeking and PrEP use behaviors to gauge consumer need for pharmacy-based HIV prevention services. Participants reported prior use of PrEP and PEP. In their lifetime, 37.5% had taken PrEP, 6% had taken PEP, and 14% had used both. A third of participants were current PrEP users (33%). Of this subset, the majority (80.3%) reported taking daily oral PrEP, and received their current PrEP prescription from a health care provider that was not a pharmacist (72.7%).

Pharmacy Use and Willingness to Use Pharmacist-Prescribed PrEP and PEP

About half of survey participants reported using a chain retail pharmacy (55%), and a majority (72%) indicating that they utilized their pharmacy monthly. Reasons for choosing a particular pharmacy included location, accessibility, transportation, and availability of a home delivery service. Additionally, over half (57.5%) had previously received a vaccination from a pharmacist.

Most of the participants indicated they would be comfortable using pharmacy-based services for PrEP and PEP (84.5% and 84% respectively). Less than a quarter (23.5%) reported having had a pharmacist prescribe them PrEP or PEP. Nearly three quarters of survey participants reported feeling comfortable speaking to a pharmacist about their health (74.5%) and believed that health information shared with a pharmacist would be kept confidential (73.5%).

When asked about choosing a pharmacy, the most important factor among consumers surveyed was the pharmacy’s location, particularly if the pharmacy was close to their home (49%), or they considered it a “good location” (40%). Consumers also chose a pharmacy based on how well services were provided (40%), including the pharmacy’s ability to collect their prescriptions from their healthcare provider (25%) and the availability of preferred prescriptions in stock at the pharmacy (25%). Other reasons for choosing a pharmacy included convenient operational hours, low wait times, and friendly staff. See Figure 1.

When participants without a current PrEP prescription or non-PrEP users (67%) were asked “If you were to go to your local pharmacy to receive a PrEP prescription, what would you need to have a good experience?” about a third (31.3%) stated that they would need a private room to discuss sensitive information. Over a quarter indicated they would need short wait times (28.3%) to have a “good” pharmacy-initiated PrEP experience.

Figure 1. Reasons for choosing preferred pharmacy

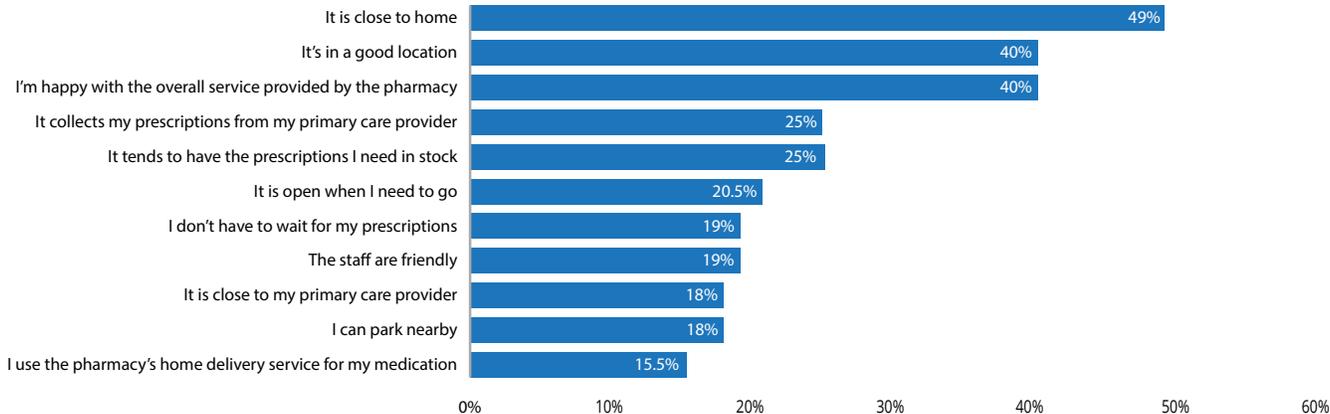


Table 1: Participant Demographics

| Gender | | |
|--|-----|-------|
| Female; Woman; Girl | 37 | 18.5% |
| Male; Man; Boy | 123 | 61.5% |
| Non-binary | 25 | 12.5% |
| Questioning; Exploring | 1 | .05% |
| Declined to answer | 3 | 1.5% |
| Gender identity not listed | 2 | 1% |
| Multiple identities | 9 | 4.5% |
| Race | | |
| White | 93 | 46.5% |
| Black or African American | 44 | 22% |
| Asian | 6 | 3% |
| Native Hawaiian or Pacific Islander | 1 | .05% |
| American Indian or Native Alaskan | 3 | 1.5% |
| Other | 46 | 23% |
| Declined to answer | 7 | 3.5% |
| Ethnicity | | |
| Hispanic/Latino/Latinx | 95 | 47.5% |
| Non-Hispanic/Latino/Latinx | 100 | 50% |
| Decline to answer | 5 | 2.5% |
| Sexuality | | |
| LGBTQ+ | 174 | 87% |
| Straight/Heterosexual | 19 | 9.5% |
| Other | 4 | 2% |
| Decline to answer | 3 | 1.5% |
| Insurance Type | | |
| Private (e.g. Covered California) | 41 | 20.5% |
| Insured through Employer | 52 | 26% |
| Public Plan | 91 | 45.5% |
| Un- or Under-Insured | 13 | 6.5% |
| Other | 3 | 1.5% |

Qualitative Results

In interviews conducted among LAC pharmacy consumers (N=7), the study team identified common themes that emerged regarding both the benefits and barriers to pharmacy-based HIV prevention services.

Benefits of Pharmacy-Based HIV Prevention Services

Interview participants emphasized two key benefits of pharmacy-based PrEP: (1) convenience and familiarity of pharmacies as health access points; and (2) preference for pharmacists over primary care providers (PCPs) due to greater approachability, shorter wait times, and perceived reduced stigma. Quotes from interview participants related to these benefits included:

"The pharmacy is easy for me... pop in, go in and go out... less than 10 minutes...I call in on the phone, then I just go... get that little ticket, and then they call the number... It's easy."

Participant #28

"And there's also a bit more privacy there... like if some people feel a certain kind of way about, like, I don't want my doctor to know that I'm queer... 'cause they might treat me differently... then they wouldn't have to tell their doctor. They could just get it right from the pharmacist... and hopefully, like, the pharmacist would be chill."

Participant #26

"A pharmacist is [looking over] all of the medicines that one might be taking. Maybe able to notice a symptom from a different angle or perspective than a doctor."

Participant #30

"I think that making PrEP accessible via pharmacies is a good idea. I think that maybe it would be important that the blood work can be done like at that pharmacy, and it can be done efficiently. But I think maybe cutting out the doctor could be a way to make it more accessible to people that don't...you know, as I mentioned, like mistrust. I don't know if people feel less mistrust towards pharmacies than they do towards doctors, but, it does introduce another option... it cuts out a layer of work, and I think it could be an effective way to make it [PrEP] more accessible. "

Participant #32

Barriers to Pharmacy-Based PrEP Delivery

Despite the potential benefits to seeking HIV prevention services in pharmacies, interview participants recognized some barriers. In our analyses, four primary barriers emerged: (1) pharmacy staff often appear to be overextended, including concerns that pharmacists are juggling competing responsibilities; (2) lack of personal connection or continuity with pharmacists, limiting trust and open communication; (3) concerns with continuation in long-term PrEP care, including challenges with ongoing monitoring and follow-up; and (4) cost and insurance navigation difficulties, particularly confusion around coverage for pharmacist-initiated services. Quotes from interview participants related to these barriers included:

I think that sometimes, I've seen time and time again when I go to [CHAIN PHARMACY], that the pharmacists there are really, really, really overextended. But I think for someone who might have a fear of being yelled at, or a fear of someone being short with them, it might be kind of an overwhelming experience, especially if you've never been on medication."

Participant #32

"But if you're not even seeing the pharmacist, and it's just the tech, who just wants to get you in and out where we might be missing an important element to one's overall health care."

Participant #30

"It's almost like you're in la-di-da land when you're with your doctor getting the medication prescribed, and it's a more personable experience. But then, once you get to the pharmacy, they don't know your name, they don't know what you know, they don't care what medication you're getting... I guess there's not really a sense of personalized care."

Participant #32

"But I would worry that just when [a Pharmacist who initiated PrEP] says like, 'Okay, now you're gonna follow up with a provider,' like, who would that person be? How would I find them? How much does it cost? How do I pay them? You know, like, where are they? How far from me are they? Like stuff like that.."

Participant #29

"If pharmacies offered [PrEP], but the prices were not affordable, I would not do it."

Participant #24

Discussion

Pharmacist-initiated PrEP and PEP has been recognized as a promising avenue expanding HIV prevention, particularly among populations with limited access to traditional healthcare settings. With almost 90% of the US population living within 5 miles of a pharmacy (Berenbrok, 2022), one study found that patients visit and utilize their local pharmacy at almost double the rate of their primary doctor (Valliant, 2021). Despite significant challenges faced by CA pharmacists in implementing HIV prevention services within their pharmacy (Hunter, 2023; Beltran, 2024), our findings suggest a clear readiness among consumers to engage with pharmacy-based HIV prevention services, particularly pharmacist-initiated PrEP and PEP.

Consumer Trust in Pharmacists

Our findings align with prior research focused on consumer trust relating to pharmacists' capabilities and accessibility. Consumers have reported favorably to receiving clinical services from a pharmacist, such as when receiving contraceptive services (Gardner, 2008), view pharmacists as trustworthy (Gregory, 2021), and are comfortable with receiving a PrEP prescription from their pharmacist (Zhu, 2020). Previous research has indicated that pharmacy consumers view pharmacists as more accessible due to increased business hours, weekend hours, and walk-in availability (Kelling, 2016). Increased pharmacists' role in providing immunization has improved vaccination rates and may reduce rates of vaccine hesitancy (Le, 2022). In fact, during the COVID-19 pandemic, from 2020 to 2022, pharmacists administered over 270 million COVID-19 vaccinations, plausibly accounting for over 50% of all COVID-19 immunizations in the U.S (Grabenstein, 2022). Additionally, pharmacists report higher patient contact in comparison to traditional healthcare settings creating a low barrier of entry when receiving medical care (Koester, 2020), and as a result, are embedded in the routine health practices of many individuals (Valliant, 2021).

Participants interviewed for our study perceived pharmacists as more accessible, less stigmatizing, and, for some, more informative than physicians when discussing sensitive topics, including sexual health. Overall, the participants in this study were receptive to receiving a PrEP and PEP prescription from a pharmacist, further reinforcing the idea that pharmacies can operate as a trusted, low-barrier access point for HIV prevention services.

Structural and Operational Barriers within the Pharmacy

Our study findings reinforce a key insight – pharmacists are not simply accessible providers. They are trusted, frequented, and for some consumers, preferred over other healthcare providers for their HIV prevention care needs. However, our study also highlights significant structural and operational barriers that prevent consumers from readily accessing PrEP and PEP at their local pharmacies. Participants noted longer wait times and overextension of pharmacy staff as significant issues that hamper their willingness to seek pharmacy-based HIV services. Having private rooms to discuss sensitive information was also ranked as highly important if using pharmacy-based HIV prevention services by survey participants, which may not be easy to implement in all pharmacies (Hattingh, 2015). In addition, participants interviewed for our study were concerned about continuity of care within a pharmacy and insurance coverage for pharmacy-based PrEP and PEP services. Similar issues and consumer concerns were found in previous studies examining pharmacist-prescribing of hormonal contraceptives (Lemay, 2025; Rafie, 2022), over-the-counter naloxone (Smart, 2024; Slocum, 2022), and tobacco cessation services (Berry, 2023). These gaps in delivery have been attributed to low demand to maintain stock (Evoy, 2021), lack of reimbursement mechanisms (Bien-Gund, 2025; Gomez, 2022), protocols, training, and competing workplace responsibilities (Xiong, 2021). These exact barriers were cited by pharmacists in CA studies examining implementation of HIV prevention services (Hunter, 2023; Crawford, 2022).

Policy Implications

The promise of SB159 and 339 aligns with a large body of public health research encouraging pharmacies to act as decentralized PrEP and PEP access points to increase uptake, particularly in communities disproportionately affected by HIV but underserved in traditional medical settings. Findings from this study showcase consumers' willingness to use pharmacist-based HIV prevention services, if available.

Taken together, our findings add to the growing body of evidence that pharmacy-based PrEP and PEP are acceptable and desirable. Most research to this point has focused on pharmacist perspectives. From the consumer perspective, the structural and operational barriers impacting pharmacies also translate to practical consequences, including being turned away, unclear pathways to care, inconsistent availability, and lack of information regarding insurance coverage and cost. Consumers also identified the need for privacy, short wait times, and transparent navigation pathways for follow-up care as key deciding factors in utilizing pharmacy-based HIV prevention services.

Aligning CA law with consumer needs will require structural investments that reflect the day-to-day lives of those seeking care such as predictable access, clear communication of offered services, streamlined follow-up, and affordability. Policies like SB159 and 339 created an initial framework for pharmacy-based HIV prevention services, but without parallel investments in training, reimbursement, infrastructure, and public awareness, consumers remain unable to fully benefit from services the law was intended to make accessible.

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