

Self-collect Diagnostic Options Facilitate PrEP Engagement and Persistence

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Background, Methods, & Results

Molecular Testing Labs supports multiple telePrEP partner and their provision of self-collect testing using tailored PrEP-specific Self Collection Lab Testing Kits (**Figure 1**), serving patients through various best practices (**Table 1**) in numerous states while utilizing varying remote care strategies.

Since 2020, one such partner, Q Care Plus (QCP) has innovated a community-focused care management platform offering culturally competent telehealth care, flexible lab options including self-collect testing, and shared patient decision-making in PrEP medication selection. This analysis addresses the ways in which the offer and availability of self-collect testing facilitates PrEP uptake, and the extent to which such testing is associated with ongoing PrEP engagement.

Methods

A requirement that patients access in-person phlebotomy sites to complete the steps of PrEP initiation or continuation may hamper initial or continued engagement.

Unique QCP telehealth patients initiating PrEP in 2021 were characterized in this analysis. A sample size of 5,090 such de-identified patient records were analyzed including basic demographics including SOGI characteristics, zip code, and other characteristics to reflect categorical proportions. Further analysis on a subgroup of 2,049 patients electing self-collect testing was conducted. Patients were grouped into urban-rural categories based on county-level classification scheme from the National Center for Health Statistics.

Follow-up visits in the 6-month period following PrEP initiation were captured according to test collection choice.

Best Practice Considerations	Self-collect Diagnostics for PrEP
Test performance	Molecular is a CLIA-certified, CAP-accredited laboratory validating Laboratory Developed Tests for self-collection
Order initiation	All test kits are clinician-initiated
Linkage to care	Results disclosed by clinicians to assure required linkage to care
Jurisdictional lab result reporting	Molecular reports all test results to local jurisdictional health authorities, consistent with local regulation

Table 1. (above) Best practices in delivery of self-collect laboratory testing for PrEP engagement

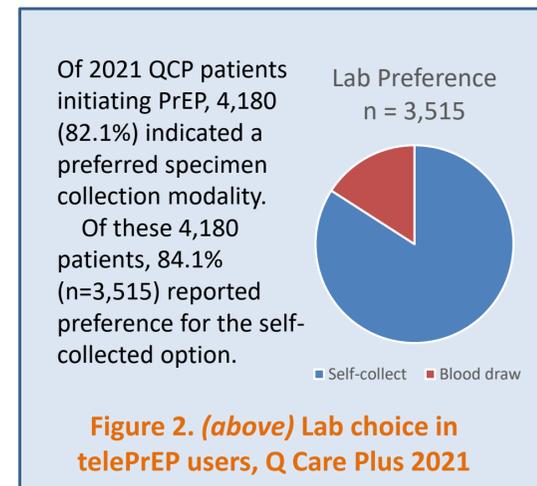


Figure 2. (above) Lab choice in telePrEP users, Q Care Plus 2021

Results

Among 2021 QCP patients, four-fifths elected a self-collect option, avoiding the need to attend a physical phlebotomy site (**Figure 2**). In this cohort, 97.8% were male, 56.9% were under 35 years of age, 15.5% were Black, and 31.1% described their ethnicity as Hispanic. 71% were gay and 18.7% were bisexual. 53.8% reported having insurance (including public plans), and 49.9% lived in a non-core-metro area, with 62.6% residing in the South and 26.6% in a western state. Only 23.3% reported prior experience taking oral PrEP.

Among 2,049 QCP patients electing self-collect testing in 2021, 1.1% of those under 25 years of age were HIV-positive on initiation. During follow-up, 19.3% had a gonorrhea or Chlamydia, and 8.8% had a reactive syphilis test.

QCP patients selecting self-collect testing were slightly more likely to have a PrEP follow-up in the ensuing 6 months (**Table 2**), with self-collect testers 1.14 times more likely to have at least one follow-up compared to those choosing blood draw (Prevalence ratio 1.144; 95% CI: 0.995, 1.316).

Conclusions & Future Research

Conclusions

Patients seeking PrEP via telehealth services have experienced apparent and invisible barriers to healthcare access, including stigma inhibiting care seeking.

A restrictive diagnostic approach to PrEP initiation and continuation imposes an additional barrier to PrEP uptake and persistence, aside from the already daunting requirements of medication adherence and overcoming financial barriers, among many others. Integrating flexible lab test collection options that address patient convenience and privacy concerns is important to cultivating and maintaining the broadest program participation. Where technical limitations impede availability of all assays recommended for PrEP continuation, greater innovation is needed. Tailored patient education to support the self-collection process is critical.

Provoked by COVID-19, medical practice continues to evolve from a traditional clinic-centric model to involve more truly patient-centric approaches, requiring adaptation to and evaluation of novel programmatic shifts. Understanding the opportunities and challenges introduced by these unique approaches will be required by participating clinics and programs, government, and expert bodies.

Future Research

Future Research and Development

- Understand the lab testing preferences, along with facilitators and barriers to testing and persistence in different patient groups
- Further streamline the logistical and testing requirements associated with PrEP access and persistence
- Development of additional microsampling assays needed to fully adhere to evolving PrEP guidelines
- Increase understanding and acceptance of self-collect lab testing as a compliant and validated component of remote care delivery of PrEP and other healthcare services

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Figure 1. (below) Typical Self Collection Lab Testing Kit for HIV PrEP



Table 2. (below) Self-collect lab choice: At least 1 follow-up in 6 months, Q Care Plus 2021 among 2,069 patient stating a preference

Lab Choice	Total	N	%	F/u Visits (mean)
Self-collect	1782	888	49.8	1.17
Blood draw	287	125	43.6	1.17