



Positive Peers

Intervention Implementation Guide

Acknowledgements

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Positive Peers

This guide examines the Positive Peers mobile application (app) intervention, designed by The MetroHealth System in Cleveland, Ohio. This intervention was funded through the Health Resources and Services Administration's (HRSA) Ryan White HIV/AIDS Program (RWHAP) Part F: Special Projects of National Significance (SPNS) Program "Use of Social Media to Improve Engagement, Retention, and Health Outcomes along the HIV Care Continuum" initiative.

Positive Peers is a mobile app for youth and young adults with HIV aged 13–34.

The app offers information, social networking, and self-management tools to support holistic HIV care. The Positive Peers application was designed to improve retention in HIV healthcare, facilitate greater viral suppression, lessen perceived isolation and stigma, and support HIV self-management for users. Positive Peers was developed by HIV clinicians at The MetroHealth System in Cleveland, Ohio with expert collaboration from Blue Star Design and Blackbird Digital. A Community Advisory Board (CAB), comprising in-care young people, provided input on the development and offered ongoing feedback for app updates. A public health evaluator from Kent State University College of Public Health collaborated to determine the extent to which these goals were met.

This guide includes key components of the Positive Peers intervention, outlines the rationale for a mobile app, the capacity required by organizations/clinics to become a Positive Peers Key Health Partner, and includes replication steps to support others in their implementation efforts. Finding replicable interventions that meet Ending the HIV Epidemic in the U.S. (EHE) initiative goals and supporting participants along the stages of the HIV care continuum are key to future programmatic and participant success in HIV care.¹



Ending the HIV Epidemic in the U.S. Pillar: Treat & Respond



HIV Care Continuum Stage: Linkage, Retention & Treatment, Viral Suppression



Priority Population: Youth and young adults aged 13–34 with HIV



Setting: Community Health Center



Achievements

Positive Peers participants who used the app (n=114) were 1.66 times more likely to attend office visits than those in the study who did not use the app. Participation in laboratory tests and achievement of viral suppression among app users varied dramatically by age. The youngest group, aged 13–24, were 2.85 times more likely to obtain HIV laboratory tests and 4.22 times more likely to achieve HIV viral suppression than those who did not use the Positive Peers app.² Subsequent data analysis shows HIV viral suppression effects remain for those who enrolled and had higher use of the app than those who enrolled and did not use the app at all.¹ This is particularly important given the disproportionate share of new HIV diagnoses and poorer retention and viral suppression among young people aged 13–34.





About SPNS

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services (HHS), is the primary federal agency for improving healthcare to people who are geographically isolated, economically or medically vulnerable. The Ryan White HIV/AIDS Program (RWHAP) Part F: Special Projects of National Significance (SPNS) Program is administered by HRSA's HIV/AIDS Bureau (HAB). The RWHAP SPNS Program supports the development of innovative models of HIV care and treatment to quickly respond to emerging needs of clients served by HAB. RWHAP SPNS advances knowledge and skills in the delivery of healthcare and support services for people with HIV who have not been successfully maintained in care. Through its demonstration projects, RWHAP SPNS evaluates the design, implementation, utilization, cost, and health-related outcomes of treatment models while promoting the dissemination and replication of successful interventions.







About the Use of Social Media to Improve Engagement, Retention, and Health Outcomes along the HIV Care Continuum Initiative

The featured intervention was part of the RWHAP Part F: SPNS "Use of Social Media to Improve Engagement, Retention, and Health Outcomes along the HIV Care Continuum" initiative. For this initiative, RWHAP SPNS implemented and evaluated innovative social media methods to identify, link, and retain youth and young adults (aged 13–34) we have not successfully maintained in care in HIV primary care and supportive services. The demonstration sites used system approaches utilizing a variety of social media, internet, and mobile-based technologies to improve engagement and retention in care, and viral suppression. Demonstration sites worked collaboratively with an Evaluation and Technical Assistance Center (ETAC) throughout the four-year project period to collect and report evaluation data and disseminate successful models to the larger public health community. Social media interventions focused on youth and young adults with HIV (aged 13–34) who were aware of their HIV infection status but had never been engaged in care, were aware of their status but had refused referral to care, had dropped out of care, were infected with HIV but were unaware of their HIV status, or had not reached viral suppression.

To learn more about this initiative, visit: <https://ryanwhite.hrsa.gov/about/parts-and-initiatives/part-f-spns/previous-spns-initiatives/spns-social-media>

Getting Started

This table provides a general overview of the Positive Peers intervention so readers can assess the necessary steps required for replication. This intervention facilitates linkage, retention, and viral suppression for youth and young adults with HIV, aged 13–34.

INTERVENTION AT-A-GLANCE	
Step 1 	Involve Leadership Introduce leadership to the Positive Peers website at Positivepeers.org , their Twitter , Facebook , Instagram , and YouTube accounts, and journal publications to demonstrate the rationale, and show that Positive Peers has a positive impact on viral suppression for the youngest, most vulnerable to HIV acquisition.
Step 2 	Develop Capacity to Confirm User Eligibility Assess whether your organization can confirm eligibility (proof of age and HIV status) of people registering for the app in your area. Determine what programs you can use, such as CAREWare* or local Electronic Medical Records (EMR), to make this assessment.
Step 3 	Contract with Positive Peers Contract with Positive Peers as a Key Health Partner, to utilize the app for a desired number of years and receive administrative (admin) access for up to four professionals who can interact with users in your geo-location.
Step 4 	Designate an Administrator Designate an appropriate person to act as your local app admin. A community health worker/peer who has HIV is ideal. Alternatives include a social worker or other professional with whom young people with HIV know and are comfortable. Positive Peers will train your selected admin once a contract is in place.
Step 5 	Conduct Outreach to Potential Participants It is imperative that you have access to young people with HIV to enroll into Positive Peers as participants. You must market the app in your community. You will be provided with palm cards, stickers, and other promotional items. Talk about the Positive Peers app during your local case management meetings or other gatherings of people with HIV, or professionals working with them. You do not have to enroll people in Positive Peers—if you market it, people enroll themselves.
Step 6 	Maintain Ongoing Engagement Stay engaged with Positive Peers: report medical data points such as HIV labs and appointment attendance, participate in quarterly Key Health Partner meetings, and submit feedback on the app.

*CAREWare is a free, electronic health and social support services information system for HRSA's Ryan White HIV/AIDS Program recipients and providers.



RESOURCE ASSESSMENT CHECKLIST

Prior to implementing the Positive Peers intervention, organizations should walk through the following Resource Assessment (or Readiness) Checklist to assess their ability to conduct this work. This intervention is best suited for health departments or healthcare organizations such as HIV clinics. If organizations do not have the recommended readiness, they are encouraged to develop their capacity so that they can successfully implement this intervention. Questions to consider include:

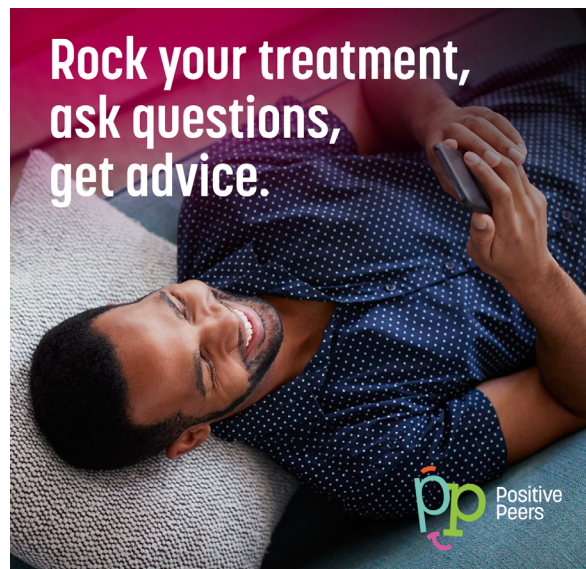
- Does your organization provide HIV primary care services?
- Are staff culturally responsive, compassionate, and interested in working with people with HIV?
- Do you have the ability to verify age and HIV status of people who register for Positive Peers and are affiliated with your organization or live in your Ryan White HIV/AIDS Program jurisdiction?
- Do you have a staff member, preferably with lived-experience of HIV, who can devote about one hour per day to Positive Peers app admin duties?

Setting the Stage

Young people are experiencing the typical challenges of transitioning into adulthood, such as affording education, finding and maintaining employment, and securing stable housing. These challenges are exacerbated when adding the burden of an HIV diagnosis and then navigating, possibly for the first time, a complex healthcare system.^{3,4}

Younger people typically have little experience with disease self-management. They may struggle to keep track of clinical appointments, refill medications, and communicate with insurance carriers to gain access to antiretroviral medications (e.g., prior authorizations). These challenges, combined with lower levels of health literacy, often result in inconsistent or out-of-care outcomes.⁵

Stigma and misperceptions about HIV negatively affect the health and well-being of young people and may prevent them from disclosing their HIV status and seeking HIV care. Moreover, LGBTQ youth report higher rates of isolation than their heterosexual peers.⁶ Given these challenges, there is a need for novel interventions, like Positive Peers, that create unique experiences for youth and young adults, share information in preferred formats and platforms, as well as create a safe and welcoming entry to care.



Description of Intervention Model



CHALLENGE ACCEPTED

The Challenge: Create a human connection in a virtual space for youth and young adults aged 13–34 to connect them with social support from peers and HIV self-management tools to achieve viral suppression. The intervention serves to remind, educate, motivate, and encourage behaviors supporting retention in care and medication adherence.

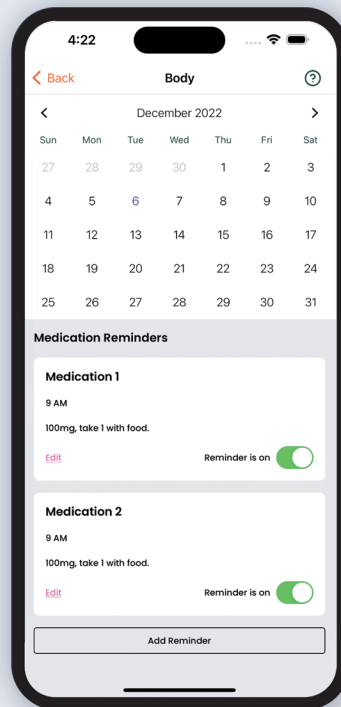
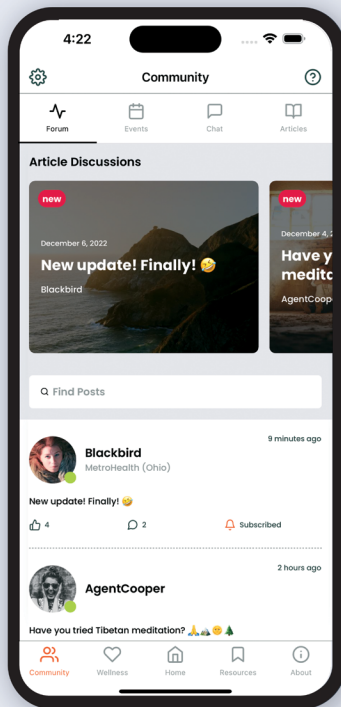
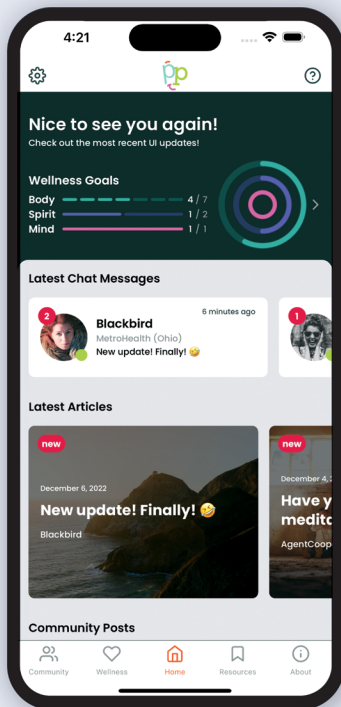
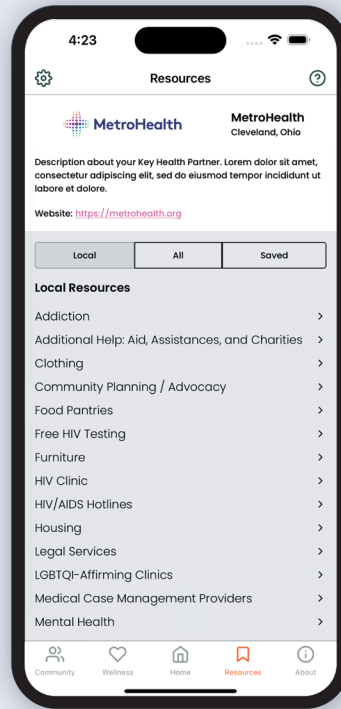
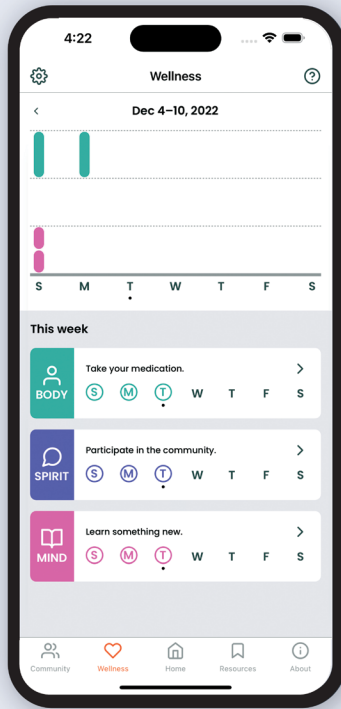
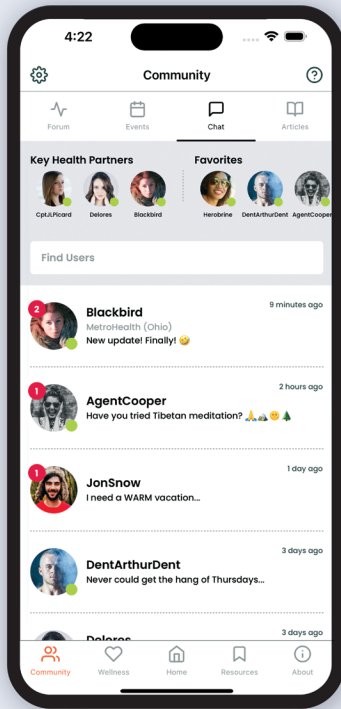
Positive Peers is a mobile app for youth and young adults, aged 13–34, with HIV. The app, available on both Apple and Android devices, offers information, social networking, and self-management tools to support holistic HIV care. The Positive Peers application was designed to improve retention in HIV healthcare, facilitate greater viral suppression, lessen perceived isolation and stigma, and support HIV self-management for users.

The look, feel, and content of the mobile application were thoughtfully created. Positive Peers was designed with guidance from young people with HIV for use by young people with HIV. All content is accessible and written at a 6th-grade reading level.

Young persons with HIV from any community across the U.S. can sign up for enrollment in the app through the Positive Peers website’s virtual onboarding system. The participant can choose to self-prove eligibility for the app (proof of age and proof of diagnosis) or can grant a healthcare organization or Key Health Partner (i.e., an organization that has contracted with Positive Peers to use the app for a designated number of years with users in their geo-location) the right to confirm their HIV status and gather relevant health information, such as labs and visit records.

Positive Peers features health management tools that track healthy activities, sends discreet medication and appointment reminders, and provides overall wellness updates within the Wellness Tracker section.

Positive Peers Intervention Implementation Guide



Within the resources section, Positive Peers provides accurate, easy-to-understand education blogs about living with HIV, health and wellness tips, relaxation videos, and patient stories (i.e., *Tales of Triumph*). Additionally, the app provides curated local community resources such as housing assistance, support groups, food and clothing, substance use programs, local HIV care and LGBTQ-affirming care clinics.

The most unique feature offered by Positive Peers is private social networking within community conversations and private chat sections. The virtual community allows users to communicate with each other, ask questions, post comments, and reply to one another in an ongoing thread of posts/replies. More private communication, in the form of direct message chat, is also available. While the community conversation is open to all participants, the direct message section is age restricted. Participants who are 13–17-year-old youth are only permitted access to direct message other 13–17-year-olds. Similarly, adults aged 18–34 are only able to direct message other 18–34-year-olds.

The app also includes a calendar where app admins can post upcoming support groups, community events, and social gatherings. Positive Peers offers users numerous personalization and privacy options.

Participants can:

- 1) Create their own username and passwords,
- 2) Choose to upload a personal picture or graphic avatar, and
- 3) Choose a skin or color scheme for the app.

A calendar with medication and appointment reminders is also customizable. Users decide how much personal information is shared on the app and with the community.

Theoretical Framework

The Positive Peers app is informed by media affordances theory.^{7,8,9} This theory focuses on technology interaction that fulfills a user's social or information needs, including opportunities to engage and create a customizable experience. Experimentation and adaptation shape a user's perceptions of how technology can work for them. For example, a closed chat group may create a meaningful social connection if the interaction is satisfying.

Positive Peers provides social and technological processes that allow users to meet perceived needs, such as HIV-relevant information or supportive companionship. As user needs evolve, the app is designed to provide a broad complement of supportive services.

Intervention Steps:

1 Secure leadership buy-in

The most important step is getting your leadership on board. Schedule a meeting to present the Positive Peers app, its customer-centered approach, and its impact on viral suppression for the youngest, most vulnerable people with HIV. Present data from your community showing the need for the intervention and the impact it could have.

2 Secure funding

Becoming a Positive Peers Key Health Partner requires an initial investment that covers one year of participation. Subsequent years require a lower investment, approximately half the amount each year. Ending the HIV Epidemic in the U.S. funds may be applied as the Positive Peers app helps young people with HIV sustain viral suppression—a key goal of the “Treat” pillar to end the epidemic.

3 Develop key health partner capacity

Work with your Information Technology (IT) Team to help ensure you have a safe and reliable database to use to confirm eligibility (proof of age and HIV status) for people registering for the app in your area. This can be your local Electronic Medical Record (EMR) or via a secure, trusted application such as CAREWare.

4 Contract with Positive Peers

Contract with Positive Peers for your desired number of years and receive admin access for up to four professionals who can interact with users in your geo-location. Partnership benefits include:

- Access to the app as an admin,
- Ability to contribute to Tales of Triumph (real, personal stories of success),
- Invitation to monthly virtual support group for app users,
- Outreach for re-engagement in care potential with the ability to send direct messages (DMs) to users, and
- The opportunity to create push notification calendar events in your area.

5 Designate an admin

Determine an appropriate person to act as your local app admin. A community health worker/peer who is a person with HIV is ideal. Alternatives include a social worker or other professional who young people with HIV know and with whom they are comfortable. Once the contract is in place, and the admin is ready, Positive Peers staff will provide a 90-minute virtual training and written materials to ensure replicating organizations have all that they need to feel confident using and managing the app.

6 Conduct outreach to potential participants

It is imperative that you have access to young people with HIV to enroll into Positive Peers as participants. You must market the app in your community. Positive Peers will provide you with palm cards, stickers, and other promotional assets. Positive Peers can speak at your local case management meetings or other gatherings of people with HIV or professionals working with them. You do not have to enroll people in Positive Peers—if you market it, people enroll themselves.

7 Maintain ongoing engagement

Stay engaged with Positive Peers by reporting back medical data points (e.g., HIV labs and appointment attendance), participate in quarterly Positive Peers Key Health Partner meetings, and provide feedback on the app, including input from your local CAB.



STAFFING REQUIREMENTS & CONSIDERATIONS FOR REPLICATION



Staffing/Organizational Capacity

Since the Positive Peers app has already been developed, tested, launched, and is in use, the Positive Peers Key Health Partner Program has a minimal staff requirement; it does not need a full-time dedicated staff person.

- *Project Administrator*: A small amount of time from one staff person, such as a social worker or public health worker, is required to complete app admin activities such as monitoring posts, answering questions, creating local event content, and being the key contact the local users know and are comfortable connecting to within the app.



Staff Characteristics

Core competencies include:

- Experience working with people with HIV or having lived experience with HIV
- Familiarity with mobile apps and some general technology experience

Note: Virtual training and written materials will be provided

Replication Tips for Intervention Procedures and Client Engagement

This section provides tips for readers interested in replicating the intervention and, where applicable, examples for further context.

Successful replication of the Positive Peers intervention involves the following:



Secure leadership approval. Because an investment is involved, it is important to have the support of leadership. Having their endorsement can go a long way in securing grants and other funding.



Collaborate with young people with HIV in your community. If you already have a CAB or youth support group, ask the members aged 13–34 to weigh in on introducing Positive Peers to your community. Having an ambassador in the local community is a great way to generate local buzz and excitement. These individuals should be invited to recommend local content and sites where promotional materials can be shared to encourage app enrollment. Consider hiring a member of your CAB as the Positive Peers admin.

Securing Buy-in

Securing the support of leadership, staff, and other relevant stakeholders is an important step when implementing a novel intervention. The following strategies may help to secure buy-in for the Positive Peers intervention:



- ⊙ Remind stakeholders that young people see their phones and social media as their most important means of communicating and socializing. Positive Peers is a way to meet them where they are.
- ⊙ Building a custom app from the ground up is time-consuming and expensive. Joining a well-established and proven app that can be customized to your community is cost-effective and offers tangible, documented outcomes to demonstrate a return on investment (ROI).
- ⊙ People often change their addresses, phone numbers, and even email addresses. They typically do not change social media handles—so once a person is registered for Positive Peers, you have another way to reach them and (re)engage them in care if needed.
- ⊙ To keep users' data secure and safe, in August 2022, Positive Peers moved to a cloud-based, secure server that is SOC-2 (i.e., preventing the unauthorized use of assets and data handled by the organization) and *Health Insurance Portability and Accountability Act* (HIPAA compliant (i.e., protection of sensitive patient information)).

Overcoming Implementation Challenges

Despite the successful implementation of the project, some challenges were experienced, including:

Platform challenge

The key to developing effective social media technologies like the app is to listen to the people who will be using it and ask them where they access information and socialize. What began as a Facebook group is now a mobile app available on iOS and Android platforms and more in line with the social media preferences of this target population.

User expectations

Just because the functionality is there does not mean it will be used. The app has three types of users: some are broad users who click on everything and use all the app has to offer; some are strictly community forum users; and some primarily use the private messaging feature. Different people use it for different purposes, which affords them customized experiences and benefits.

Promoting Sustainability

To ensure the long-term sustainability of Positive Peers, consider the following:

Secure funding: Becoming a Positive Peers Key Health Partner requires an initial investment that covers one year of participation. Subsequent years require a lower investment. EHE or other funds may be applied as the Positive Peers app helps young people with HIV sustain viral suppression, a key goal of the “Treat” pillar to end the epidemic.

Survey participants: Key Health Partners can utilize existing surveys from Positive Peers to disseminate at baseline and at 3-, 6-, and 12-month intervals. Data about substance use, self-efficacy, trauma, stigma, and other measures are collected. User satisfaction surveys can also be sent to obtain feedback on ways to improve participant recruitment, retention, and overall satisfaction.

Add local content: To maximize impact on participant engagement and health outcomes, it is important to add local content, events, and community resources to keep the conversations fresh and current. Success stories about your local young people with HIV can be added to the “Tales of Triumph” feature.

The MetroHealth System, the original implementors of Positive Peers, is working on additional enhanced features, including:

- Improved ease of navigation
- Improved accessibility
- Ability to register and onboard within the app (instead of via the website only)
- Blogs viewable as a feed where registered users will be able to comment
- Intelligent search functionality everywhere in the app
- A new help button
- More in-app tutorials

Assessing the Positive Peers App

Positive Peers app interventionists conducted a single cohort, longitudinal study¹ to understand 1) how engagement with the app differed across demographic factors, such as age and race, and 2) whether the use of the app impacted users' engagement in care and HIV viral suppression. The study recruited app users (n=114) who were compared to a comparable group of nonusers (n=145). Members of both groups were identified through an HIV clinic population at a public hospital in Cleveland, Ohio.

Participants in the user and nonuser groups were aged 13–34 years old and obtained HIV care at that hospital. They also had to be newly diagnosed or not fully engaged in HIV care, as follows: 1) having received an HIV diagnosis within the last 12 months, 2) being out of care for 6 of the last 24 months, or 3) having not reached viral suppression (HIV viral load >200 copies/mL) in the previous 24 months.

Engagement with the Positive Peers app was consistent across all demographics, including age, sex assigned at birth, racial/ethnic group, previous or new HIV diagnosis, sexual preference, educational attainment, and number of times incarcerated.

Positive Peers App user demographics at baseline are presented in the table to the right.

Participant Demographics

n = 114

Age group (years)	%
13–24	35.1
25–29	45.6
30–34	19.3
Sex at birth	
Male	87.7
Female	12.3
Race and ethnicity	
African-American	68.4
White	19.3
Multiracial or other	12.3
Newly diagnosed	
Yes	39.5
No, noncongenital	51.8
No, congenital	8.8
Out of care	
Yes	59.7
No	40.4
Office visits 6–12 months prior	
Yes	27.2
No	72.8
HIV laboratory test 6–12 months prior	
Yes	21.9
No	78.1
HIV viral suppression 6–12 months prior	
Yes	13.2
No	86.8

Outcomes of the Study

One year after enrollment in the study, app users on average experienced more optimal health outcomes than the comparison group. App users overall were 1.66 times more likely to attend office visits than those who did not use the app. Participation in laboratory tests and achievement of viral suppression among app users varied dramatically by age. The youngest group, aged 13–24, were 2.85 times more likely to obtain HIV laboratory tests and 4.22 times more likely to achieve HIV viral suppression than the comparison group. The app's impact attenuated with older users, which can have implications for replication. App users aged 25–29 were just 1.86 times more likely to obtain HIV laboratory tests, and only 1.07 times more likely to achieve HIV viral suppression than those in the comparison group. The app failed to improve HIV laboratory test uptake and HIV viral suppression among the oldest app users, aged 30–34.

These findings are significant considering the pervasiveness of mobile phone use among younger people. A low-impact intervention, such as Positive Peers, may help improve the health and well-being of younger people with HIV, who are more likely to be newly diagnosed, virally unsuppressed, and out of care. They also are more likely to be disparately burdened by psychosocial and behavioral health inequities, including unstable housing, poverty, untreated depression, and substance use.^{10,11} Specialized health apps such as Positive Peers may support self-management of health, such as medication tracking or engaging support from others.¹² The fall-off in the app's benefit among older people perhaps reflects lower mobile and app use rates, often due to demands from work and family.¹³ Older people with HIV also tend to have lived with HIV longer and have more complicated health histories, including comorbid conditions like STIs, hepatitis C, and opioid addiction, and barriers to care, such as under/unemployment and poverty, than young people with HIV.^{14,15}

POSITIVE PEERS: BY THE NUMBERS

One year after enrollment in the study, app users on average experienced more optimal health outcomes than the comparison group.

App users overall were 1.66 times more likely to attend office visits than those who did not use the app:

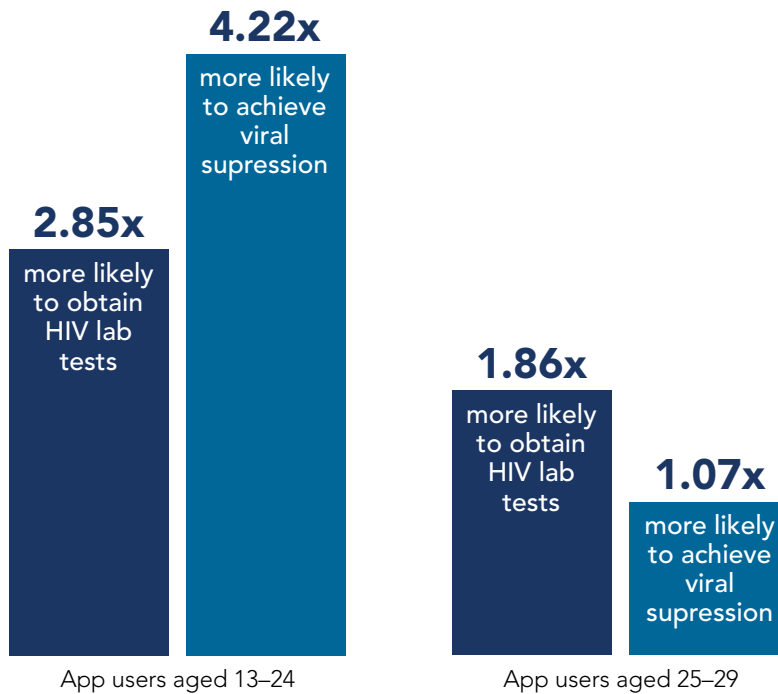
Office visits for people who did not use the Positive Peers app



Office visits for people who did use the Positive Peers app

1.66x

Participation in laboratory tests and achievement of viral suppression among app users varied dramatically by age.



The app failed to improve HIV laboratory test uptake and HIV viral suppression among the oldest app users, aged 30–34.

Conclusion

The Positive Peers app offers users access to reliable and vetted social and medical information in a supportive, monitored community, motivating engagement with content and HIV care self-management.^{16,17} The app's impact on younger users is significant, considering the challenge young people face in engaging HIV treatment and care. Young people with HIV may be best supported through an app that includes tools, resources, and support readily accessible on a phone or tablet.¹⁸ Though not statistically significant in the cohort study, young people of color and LGBT persons, who are disproportionately impacted by HIV,¹⁹ responded positively to the app, suggesting it may help improve health outcomes across diverse populations of young people. Sustained use of the app may increase HIV health literacy²⁰ and reduce stigma, potentially mitigating barriers to care and facilitating HIV viral suppression.²¹

As of October 31, 2022, Positive Peers added five Key Health Partners who are replicating the intervention through their use of the app, including:

- Maricopa County Public Health in Phoenix, Arizona;
- Sacramento County Public Health in California;
- Tennessee Department of Health;
- Equitas Health, an ASO in Ohio; and
- Oklahoma State Department of Health.



OTHER AVAILABLE RESOURCES

Positive Peers & Initiative Resources

The Positive Peers Monograph and Implementation Manual located under the SPNS Social Media Initiative Demonstration Site website (Target HIV): Click on this link and scroll down to “Positive Peers Application (PPA) - Mobile App”:

<https://targethiv.org/library/spns-social-media-initiative-demonstration-site-resources>

“Positive Peers”: Function and Content Development of a Mobile App for Engaging and Retaining Young Adults in HIV Care:

<https://formative.jmir.org/2020/1/e13495/>

Positive Peers Mobile Application Reduces Stigma Perception Among Young People Living With HIV:

<https://journals.sagepub.com/doi/pdf/10.1177/1524839920936244>

Become a Positive Peer Key Health Partner:

<https://positivepeers.org/health-partner/>

The Use of Positive Peers Mobile App to Improve Clinical Outcomes for Young People With HIV: Prospective Observational Cohort Comparison:

<https://mhealth.jmir.org/2022/9/e37868/>

Additional Replication Resources

Integrating HIV Innovative Practices (IHIP):

<https://targethiv.org/ihip>

Best Practices Compilation:

<https://targethiv.org/bestpractices/search>

HIV Care Innovations:

<https://targethiv.org/library/hiv-care-innovations-replication-resources>

Need Help Getting Started?

If you are interested in learning more about this intervention or other interventions featured through the Integrating HIV Innovative Practices project and want to see if you qualify for technical assistance, please email: ihiphelpdesk@mayatech.com

Subscribe to our Listserv

To receive notifications of when other evidence-informed and evidence-based intervention materials, trainings, webinars, and TA are available through the Integrating HIV Innovative Practices project, subscribe to our listserv at: <https://targethiv.org/ihip>

Tell Us Your Replication Story!

Are you planning to implement this intervention? Have you already started or know someone who has? We want to hear from you. Please reach out to SPNS@hrsa.gov and let us know about your replication story.

Endnotes

- ¹ Office of Infectious Disease and HIV/AIDS Policy, Health and Human Services. (2022, July 1). *What is ending the HIV epidemic in the US?* HIV.gov. Retrieved September 23, 2022, from <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>
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