



Center for
Innovation and
Engagement

TIPS FOR ADVANCING DIGITAL HEALTH

Why this Topic?

Digital health has transformed how we communicate and serve diverse communities in HIV prevention and care.¹ To meet people where they are, digital health tools like social networking platforms (e.g., Facebook and Twitter), text messaging, telehealth and health websites have become commonplace. In fact, digital health tools have been key to overcoming potential disruptions in healthcare access related to the COVID-19 pandemic.

Relevant Statistics

The Pew Research Center reported that:

- 93 percent of American adults use the internet.²
- 97 percent of American adults have a mobile phone; and 85 percent have a smart phone.³
- About three out four American adults use social media; 81 percent use YouTube, followed by Facebook and Instagram (69 percent and 40 percent, respectively). Of those who use Facebook, 70 percent use it daily.⁴

Types of Digital Health Tools⁵

- Mobile health or mHealth tools: text messaging or phone calls
- Electronic health or eHealth tools: social media, websites, mobile apps, or videos



Assessing Current Capacity

Digital health is vast and diverse—from having telehealth videoconference visits with a provider, to sending an appointment reminder by email or text, or sharing YouTube videos about antiretroviral treatment adherence. Depending on the issue you would like to address, there may be a free, do-it-yourself option; a lower-cost, ready-to-use product; or more costly custom solutions. If you are considering implementing a digital health technology, below are some questions to consider early on in your planning process.

- What is the ideal use of the digital health technology you are trying to implement? Have you clearly defined the problem and intended outcome?
- How might this digital health technology create more barriers?
- Is there buy-in among organizational leaders and staff? Implementing a digital health technology requires personnel and a system of accountability to support its use.
- Can your organization's information technology infrastructure support this digital health technology?
- What type of skills or knowledge does your staff or organization need to implement this (e.g., graphic design, web programming, videographer, social media expert)?
- What behavior change theories are operationalized in your digital health project? Do you have a clear understanding of the behavior change mechanisms to ensure you know how your project will impact clients or the organization?



Tips to Build Organizational, Systems, and Staff Capacity

Getting started on building your organization's capacity to dive into digital health will, can, and should include different strategies. Below are some exercises and concrete steps to move from the idea stage into action:

- Try mapping out the workflow with and without the technology—how will the resource add value to the process, organization, providers, or clients, if at all?
- Technology is only useful if it can be used easily by staff and seen as valuable to clients. Conduct a focus group with staff, clients, and organizational stakeholders to understand how it would impact your quality of care.
- Conduct a SWOT analysis—identify the strengths, weaknesses, opportunities, and threats of a digital health project. Get ahead of the foreseeable barriers and create a system and culture of learning in your organization.



Centering Health Equity in HIV Service Delivery with Digital Health Technologies

Technology evolves quickly. Low-tech, off-the-shelf platforms are a great starting point to consider implementing in your organization (e.g., appointment reminders and text messaging). Building this functionality into your existing electronic medical record may be costly and involve redesigning your IT infrastructure. Organizations should start small, collect data to build a use case, get organizational buy-in, and scale-up appropriately. Challenge the default settings in your organization and offer alternative ways to stay engaged in HIV care. It is important to tailor digital health projects to the unique needs and lived experiences of clients. Below are some questions to consider:

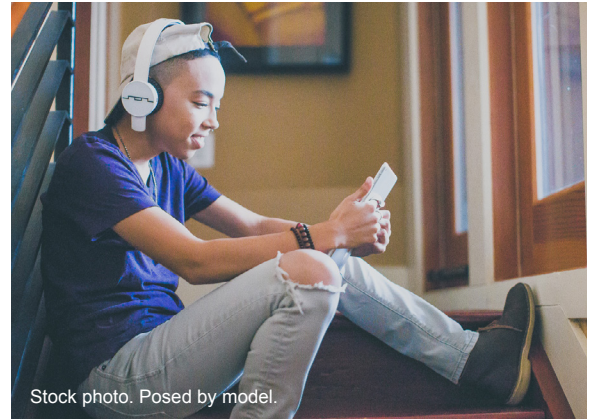
- Are telephone calls and emails the default mode of communication between your organization and clients?
- Do you know what preferences your clients have for regular communication with your organization?
- Do you know what proportion of clients prefer text messaging over a call on their landline or mobile phone?
- What social media platforms are popular with your clients? How frequently do they use them? Is social media an option to include as an emergency contact method?
- Do client-facing staff (e.g., case managers, peer advocates) have a mobile phone they can use to text clients from or to engage with them on social media?
- Consider how digital health tools might re-center how you engage with clients by meeting them where they are.
- Consider including cellphones, phone service, tablets, etc. in your budget for clients who may not be able to afford the technology needed for digital health services.



How to Provide Intersectional HIV Services with Digital Health

Understand the socio-technical landscape—technology is not just a simple device; it carries meaning in people's lives. It connects us to loved ones and social spaces across the world, with the potential for both good and bad.

- Do you know how the population you serve thinks about digital health? Is there trust in using digital health tools?
- How would digital health tools impact those who have the hardest time walking through your doors (especially if you are unable to ask them directly)?
- How does your digital health tool center clients who live at multiple intersecting identities? How do these clients define what is "useful?" Providers and clients may have very different views.



Stock photo. Posed by model.

Stories from the Field

Youth+Tech+Health (<https://youth.org/projects/tiychd/>) created a framework for Trauma-Informed Youth-Centered Health Design that builds on principles from human-centered design, positive youth development, and trauma-informed care. Use this framework to engage with your organization's most vulnerable clients, and center resilience, safety, empowerment, and equity. It is an excellent model centering values, principles, and theories to inform intentional practice in digital health.

While digital health has narrowed gaps in access to HIV care for populations traditionally underserved, stigmatized, or isolated by geography, not every digital health tool, program or system is perfect. In fact, if not carefully designed, they can perpetuate inequity. Allow your approach to designing a digital health resource represent your organization's values or unique client population's needs and strengths.



Stakeholder Engagement/ Community Partnerships

Community stakeholders must be involved in the process from inception to implementation. The success of your digital health tool depends on whether stakeholders will use it, find it valuable, and commit to it over time.

- Does your organization provide capacity building opportunities to stakeholders through a community advisory board?
- How will you generate excitement about your digital health project? Be creative about dissemination. Report back to stakeholders, funders, and your community.
- Start with conversations, presentations or trainings on how digital health can improve eHealth literacy and support medication adherence.⁶ This can help jumpstart excitement for a digital health project.



How to Sustain Efforts

Integrating digital health tools in your organization is an investment that does not stop once your project has launched. Cultivate your investment with a culture of learning. Put into place processes to continually optimize how you use these tools, be vigilant to monitor and troubleshoot technological issues, and evaluate the value it brings to your organization, clients, stakeholders, and most importantly, your community. To ensure efforts are sustained into the future, consider the following:

- What is your plan to evaluate your digital health project? Reflect on theories of behavior change. What constructs do you need to measure over time to identify added value?
- Evaluate the impact of your digital health project on HIV care continuum outcomes. Do not be limited to just laboratory data (e.g., viral load). Can you qualitatively assess how the project has impacted the lives of staff and clients?

References

- ¹Kemp, C. G., & Vellozo, J. (2018). Implementation of eHealth Interventions Across the HIV Care Cascade: a Review of Recent Research. *Current HIV/AIDS reports*, 15(6), 403–413. <https://doi.org/10.1007/s11904-018-0415-y>
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- ⁵Daher, J., Vijh, R., Linthwaite, B., Dave, S., Kim, J., Dheda, K., Peter, T., & Pai, N. P. (2017). Do digital innovations for HIV and sexually transmitted infections work? Results from a systematic review (1996–2017). *BMJ open*, 7(11), e017604. <https://doi.org/10.1136/bmjopen-2017-017604>
- ⁶Perazzo, J., Reyes, D., & Webel, A. (2017). A Systematic Review of Health Literacy Interventions for People Living with HIV. *AIDS and behavior*, 21(3), 812–821. <https://doi.org/10.1007/s10461-016-1329-6>

Conclusion

Technology has transformed our society and the lives of the clients and communities we serve. How we care for people with HIV must change, too. Digital health tools in the provision of HIV care can address structural inequities that otherwise may remain unaddressed. From high transportation costs to stigma and trauma to multiple competing priorities, digital health may be an asset to your organization's plan and provide greater opportunities to ensure health equity.

Additional Resources

Office of the National Coordinator for Health Information Technology

<https://www.healthit.gov/topic/health-it-health-care-settings/assess-your-organizations-readiness>

Resource by HRSA HIV/AIDS Bureau: UCARE4Life Patient Text Message Inventory

<https://targethiv.org/library/ucare4life-patient-text-message-inventory>

Project Overview by HRSA HIV/AIDS Bureau: SPNS Initiative: Use of Social Media to Improve Engagement, Retention, and Health Outcomes along the HIV Care Continuum, 2015–2019

<https://hab.hrsa.gov/about-ryan-white-hiv-aids-program/spns-social-media>



About CIE

CIE is a HRSA Special Projects of National Significance (SPNS)-funded project that identifies, catalogs, disseminates and supports the replication of evidence-informed approaches and interventions to engage people with HIV who are not receiving care, or who are at risk of not continuing to receive care.

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