Demonstration Site Summary

SMARTEE: Social Media App for Retention, Treatment, Engagement, and Education

Howard Brown Health

Chicago, IL

In the Ryan White HIV/AIDS Program (RWHAP), Part F: Special Projects of National Significance (SPNS) Initiative

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

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Executive Summary

The Social Media App for Retention, Treatment, Engagement, and Education (SMARTEE) intervention uses mobile technology to increase engagement in care and adherence to antiretroviral therapy (ART) for these at risk populations.

Using the HIPAA compliant mobile app (Healthvana), clients work with Retention in Care Specialists (RICS) to identify and address barriers to care to improve treatment adherence and retention in healthcare. With the app, clients have access to personal test results and additional health information to increase health literacy, as well as the ability to update their contact information when it changes. The direct messaging feature allows clients and staff to discuss client needs and coordinate care and services in a familiar, convenient method. Over the course of the program, RICS conduct appointment reminders, personal check-ins, and appointment scheduling, in addition to the provision of supportive services needed by each client.

This intervention was designed for agencies, organizations, and clinics that provide HIV primary medical care alongside supportive services following the patient-centered medical home model. Implementation would be most effective in organizations already utilizing electronic health records (EHR) systems in clinical settings or who are interested in expanding their use of technology for client engagement and retention efforts.

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Introduction

Rationale and Description of Need/Scope of Problem

Chicago is the 3rd largest city in the United Stated with an estimated population of 2.7 million.[1] As with other major metropolitan areas, HIV disproportionately affects Chicago. While Chicago represents 21% of Illinois' population, in 2016 it accounted for 61% of the state's new HIV diagnoses.[2] Findings from Chicago's 2018 HIV/STI Surveillance Report indicate that in 2017 the city saw 752 new diagnoses, an 11.5% decline from the 839 reported in 2016.[3] Despite this decline, the incidence among MSM rose for the 6th consecutive year with MSM comprising nearly 75% of all new diagnoses in Chicago.[3] This trend was greater than the national figures reported by the CDC where MSM accounted for an estimated 66% of new diagnoses in 2017.[4]

Comparatively, new diagnoses among Non-Hispanic Blacks/African Americans are greater in Chicago at 55%, than the national percentage of 43%.[3,5] Transgender women in particular face the greatest impact of the epidemic, as the CDC estimates upwards of 56% of black transgender women to be living with HIV.[6] Similar numbers were seen in 2017 among those screened for HIV at Howard Brown Health. Of patients screened in 2017, transgender women had a positivity rate of 1.60%, compared to a positivity rate of 1.12% for cisgender men.[7]

Chicago's HIV trends also mirror the national landscape regarding age. In 2017, youth ages 13 to 24 accounted for 24% of new incidences in Chicago, compared to the national average of 21%.[3-4] While city and local data do not specify the proportion of YMSM ages 13 to 24 that account for new diagnoses, the CDC estimates that in 2017 the percentage was as high as 83%.[4]

To compound this disparity, surveillance data also indicates significant regression at each step of the HIV Care Continuum after diagnosis.[3] Increased individual and systemic barriers like homelessness, unemployment, and stigma can make it difficult for these populations to reach viral suppression and be retained in care.[8] Of people living with HIV in 2017, only 63% accessed medical care at least once during the year, and fewer than 36% were considered retained in care.[4] In 2016, Howard Brown's retention in medical care rates for clients ages 13 to 24 was 44% and an even lower 38% for clients ages 25-34. These figures corroborate the CDC's findings that YMSM of color

and TWOC experience lower instances of viral suppression and retention in care and demonstrates the critical need for novel approaches to improve engagement.[8]

According to the World Health Organization, improving the health disparities of these vulnerable populations begins by addressing structural and intermediary determinants of health that may prevent improved health outcomes.[9] Technology and mobile apps may hold the key to addressing both structural and intermediary determinants of health while increasing access to care. Findings from a study conducted by Pew suggest that nearly 94% of people ages 18 to 29 have access to a smartphone with internet access.[10] Furthermore, while communities of color have lower rates of laptop/computer ownership, Black and Latinx communities rely more heavily on mobile devices for managing their healthcare compared to their white counterparts.[10] While relatively new, interventions utilizing mobile technology to deliver auxiliary services, encourage engagement, and improve retention in care, may prove to be instrumental in helping underserved populations overcome the barriers faced along the HIV Care Continuum.

Target Audience

The Social Media App for Retention, Treatment, Engagement and Education (SMARTEE) intervention uses mobile technology to increase engagement in care and adherence to ART for populations living with or newly diagnosed with HIV. This intervention was designed for organizations and clinics that provide HIV primary medical care alongside supportive services. Ideal implementation settings include organizations already utilizing electronic health records systems in clinical settings, and those interested in using mobile technology in their engagement and retention efforts.

Social Media Intervention Overview

Clients enrolled in SMARTEE work with Retention in Care Specialists (RICS) via a HIPAA compliant mobile app, Healthvana, to identify and address barriers to care to improve treatment adherence and retention in medical care. Over the course of the 18-month program, RICS conduct intake and care plans, send reminders, schedule medical appointments, and communicate with clients through the app. The app is accessible from any mobile device with internet access and provides clients with access to personal lab results, additional health information, and the ability to message staff. The direct

messaging feature allows for discussion of client needs and coordination of care and services in a familiar, convenient method.

Intervention Description

Approach & Framework

The SMARTEE intervention is grounded in client-centered frameworks. Coordinating medical care for enrolled clients follows the Patient-Centered Medical Home (PCMH) model. The **PCMH model** centralizes patient care by having a primary care provider lead a multidisciplinary team that coordinates care based on a patient's needs.[11] When working with clients or coordinating patient care, staff utilize a variety of frameworks with an emphasis on trauma-informed care, and practices centered on harm reduction and cultural humility.

Trauma-informed care is the practice of recognizing and validating the impact of trauma on individuals and communities, and responding in ways that reduce further trauma caused by organizational systems.[12] A trauma-informed approach allows staff and clients to build rapport that can lead to greater engagement and retention in medical care.

Harm reduction is the strategic approach to reducing the harm that results from certain behaviors.[13] In addition to building rapport, harm reduction strategies help clients address harmful behaviors, such as non-adherence to medication, in stages that feel manageable for the client.

Cultural humility is the process of reflecting on one's personal identity, beliefs and values in relation to understanding another's lived experiences.[14] Cultural humility enables staff and clients to work in greater partnership as staff can learn how various dynamics and experiences can impact how a client manages their health.

Target Population

This intervention was designed for clients who were aware of their HIV-positive status and a part of a population at greater risk of being lost to follow up. Clients who identified at MSM or TWOC, were between the age of 13-34 years and who met one of the criteria below were considered a part of the target population:

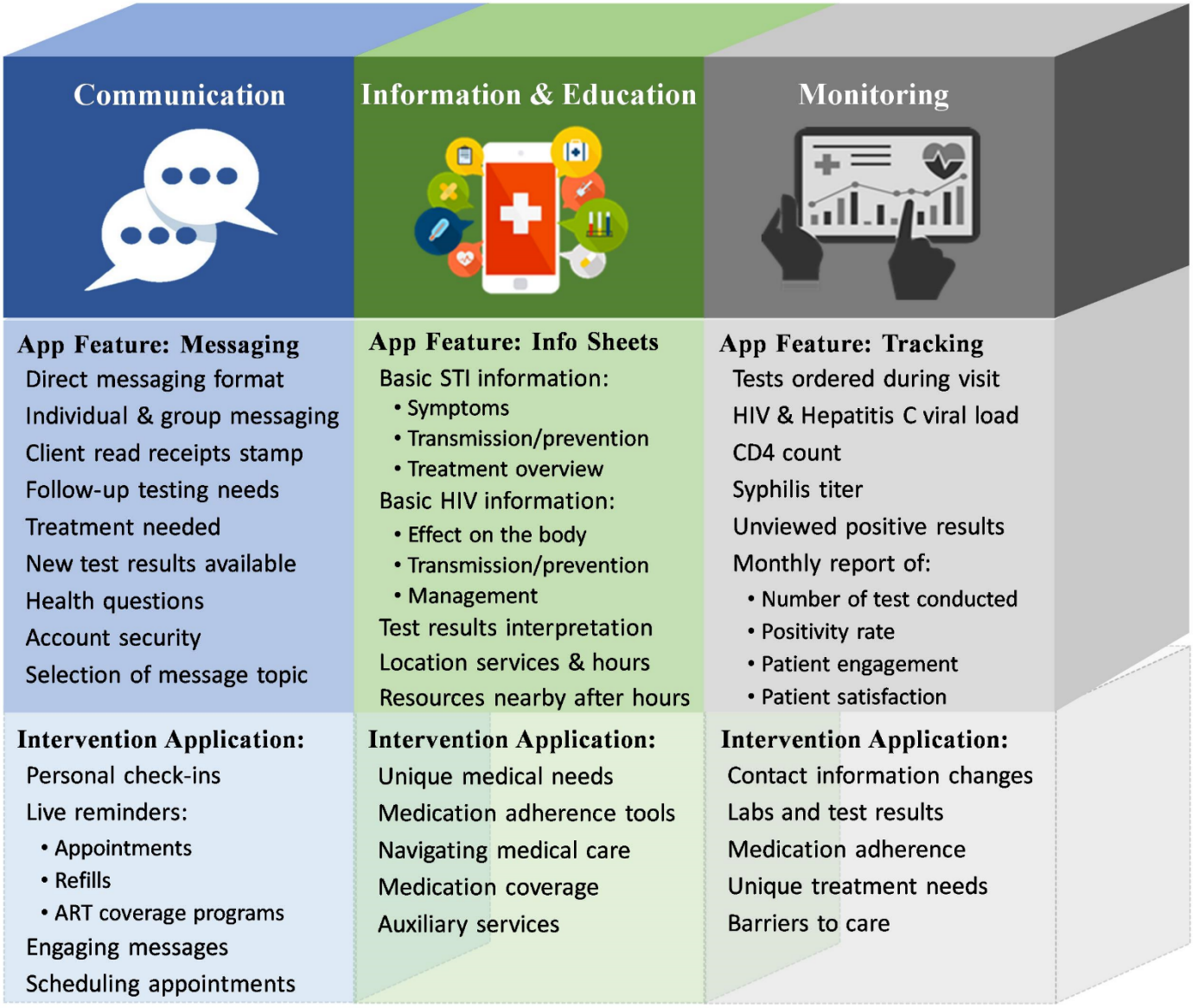
- No medical visit in the last six months
- Non-adherent to ART
- Newly diagnosed

Table 1: Intervention Typology

Program Summary	Intervention Overview	Evaluation Summary
Name: SMARTEE (Social Media App for Retention, Treatment, Engagement, and Education) ***Target Population*** **Age**: 13-34 **Gender**: Cisgender males & Transgender Women of Color **Race/Ethnicity**: All **Sexual Orientation**: MSM & Heterosexual **Sample Size**: 115 **Language**: English **Setting**: Clinic, community setting **Intervention type**: New Adjunct **Comparison Group**: No ***Inclusion Criteria*** **Unaware of HIV status**: No **Newly Diagnosed**: Yes **Not linked/engaged in care**: Yes **Not retained in care/Out of care**: Yes **Not adherent to HIV medication**: Yes **Not virally suppressed**: Yes	***Technology Platforms*** **Facebook**: No **Mobile App**: Yes (adapted) **Social Media**: No **Social Networking Sites/Apps**: No **Text Messaging**: In App Messaging **Website**: Yes ***Functions*** **Communication**: Yes **Education:** Yes – Non-interactive information is provided. CD4, VL, Rx use, side effects, links to outside websites **Gaming**: No **Information**: Yes ***Reminders*** **General (non-HIV care)**: Yes-live **Medical appointments**: Yes-live **Medication adherence**: Yes- live **Self-monitoring/tracking**: Yes **Skills building**: Yes **Social support /networking**: Yes – info on outside chat rooms and social support services	***HIV Health Outcome Measures*** **Increase HIV testing/ Positivity rate/ HIV awareness**: Yes – info about PrEP and PEP for partners, access to test results **Improve linkage/ engagement in care**: Yes **Improve retention in care**: Yes – direct messaging with HIV Retention Specialists to engage client on comfort level (phone or computer). **Improve medication adherence**: Yes **Improve viral suppression**: Yes – combination of direct communication with service providers, Rx reminders, ADAP reminders, info on supportive services. **Improve utilization of support services**: Yes **Improve health literacy**: Yes **Other Ryan White Funding**: Parts: A, C, D, F

App Functions

Image 1: App Functions



Communication

Allows engagement when convenient

Accessible on any device with internet

Instant message format

Push notifications

Category selection for messages

Read stamps of received messages

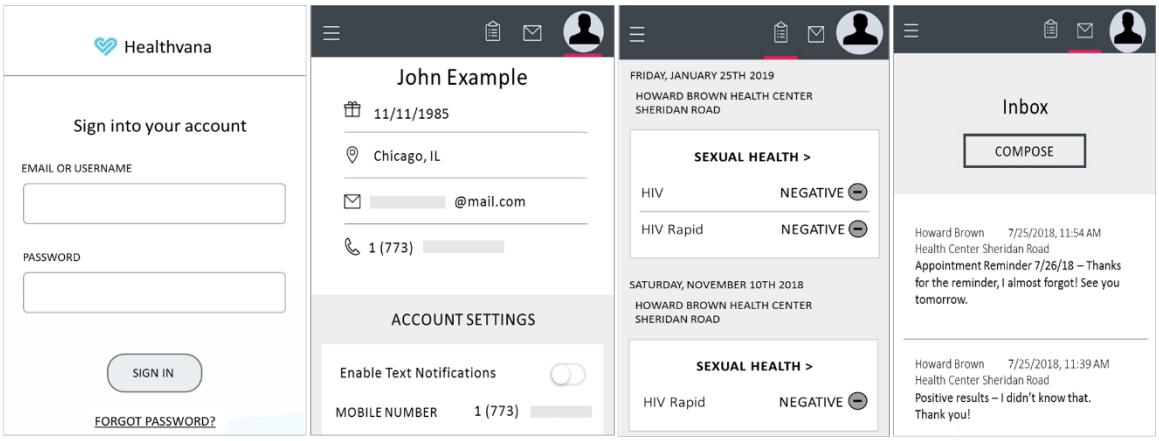
Individual or group messages

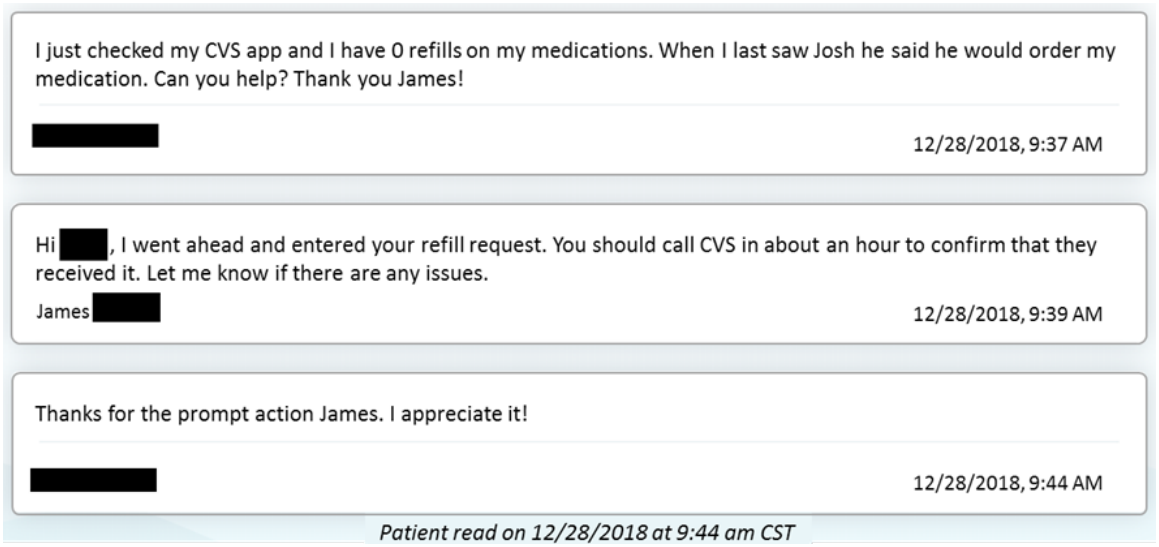
Live reminders for:

- Medical appointments
- Refills
- ADAP
- Additional services (referrals, insurance etc.)

Messages included:

- Personal check-ins
- Weekly messages from UCARE4LIFE Inventory [15]
- STI and HIV lab results





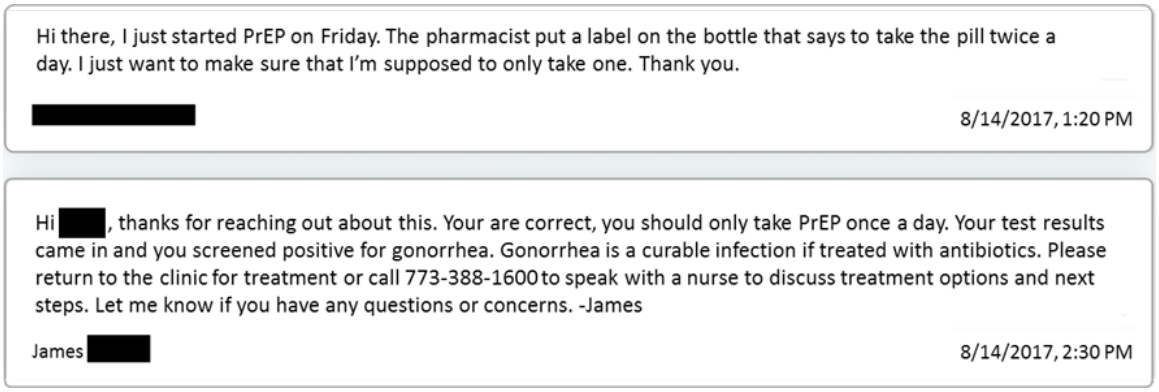
Verbatim record of information exchanged HIPAA compliant auto-logout Direct client access to healthcare teams	

Table 2: Communication

Table 3: Information and Education

Info & Education

Easy to navigate platform for clients and providers

Information is tailored for the population:

- STI results
- HIV viral load
- CD4 count

Basic information and facts on:

- STIs
- HIV/CD4
- Syphilis
- Hepatitis C

Clients can track:

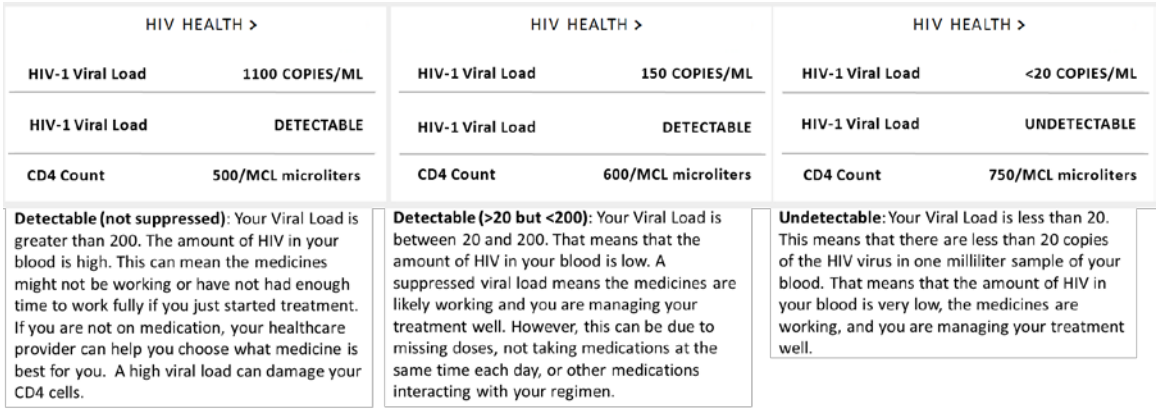
- HIV viral load and CD4 count
- Hepatitis C viral load
- Meningitis vaccines

Results explained in simple format

Info on safer sex

Documents can be stored for future reference and to cut down on paper

Listings of resources available after hours are stored in a documents section for easy access



HIV HEALTH >

HIV-1 Viral Load	1100 COPIES/ML
HIV-1 Viral Load	DETECTABLE
CD4 Count	500/MCL microliters

Detectable (not suppressed): Your Viral Load is greater than 200. The amount of HIV in your blood is high. This can mean the medicines might not be working or have not had enough time to work fully if you just started treatment. If you are not on medication, your healthcare provider can help you choose what medicine is best for you. A high viral load can damage your CD4 cells.

HIV HEALTH >

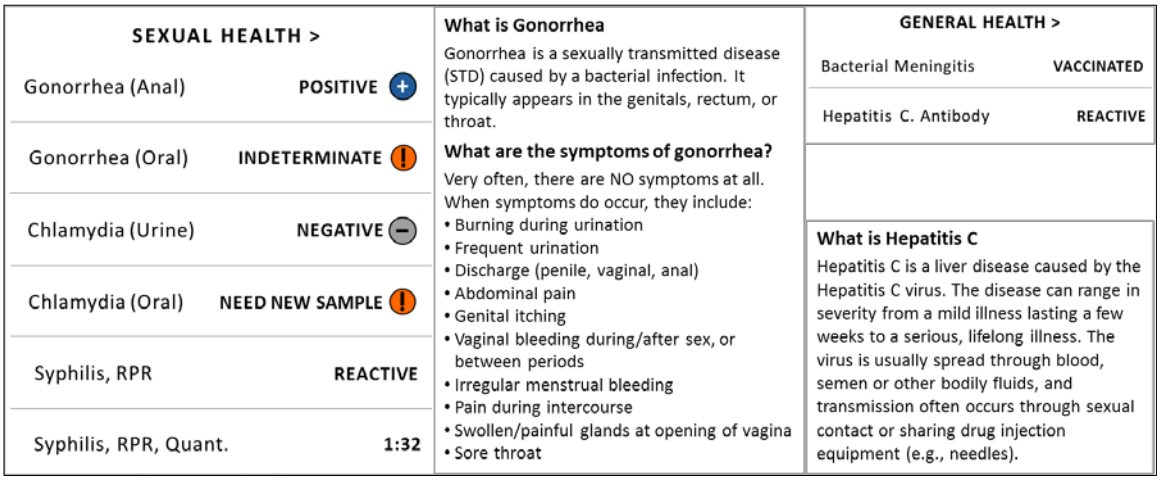
HIV-1 Viral Load	150 COPIES/ML
HIV-1 Viral Load	DETECTABLE
CD4 Count	600/MCL microliters

Detectable (>20 but <200): Your Viral Load is between 20 and 200. That means that the amount of HIV in your blood is low. A suppressed viral load means the medicines are likely working and you are managing your treatment well. However, this can be due to missing doses, not taking medications at the same time each day, or other medications interacting with your regimen.

HIV HEALTH >

HIV-1 Viral Load	<20 COPIES/ML
HIV-1 Viral Load	UNDETECTABLE
CD4 Count	750/MCL microliters

Undetectable: Your Viral Load is less than 20. This means that there are less than 20 copies of the HIV virus in one milliliter sample of your blood. That means that the amount of HIV in your blood is very low, the medicines are working, and you are managing your treatment well.



SEXUAL HEALTH >

Gonorrhea (Anal)	POSITIVE
Gonorrhea (Oral)	INDETERMINATE
Chlamydia (Urine)	NEGATIVE
Chlamydia (Oral)	NEED NEW SAMPLE
Syphilis, RPR	REACTIVE
Syphilis, RPR, Quant.	1:32

What is Gonorrhea

Gonorrhea is a sexually transmitted disease (STD) caused by a bacterial infection. It typically appears in the genitals, rectum, or throat.

What are the symptoms of gonorrhea?

Very often, there are NO symptoms at all. When symptoms do occur, they include:

- Burning during urination
- Frequent urination
- Discharge (penile, vaginal, anal)
- Abdominal pain
- Genital itching
- Vaginal bleeding during/after sex, or between periods
- Irregular menstrual bleeding
- Pain during intercourse
- Swollen/painful glands at opening of vagina
- Sore throat

GENERAL HEALTH >

Bacterial Meningitis	VACCINATED
Hepatitis C. Antibody	REACTIVE

What is Hepatitis C

Hepatitis C is a liver disease caused by the Hepatitis C virus. The disease can range in severity from a mild illness lasting a few weeks to a serious, lifelong illness. The virus is usually spread through blood, semen or other bodily fluids, and transmission often occurs through sexual contact or sharing drug injection equipment (e.g., needles).

Documents

Healthvana Terms of Service and Privacy Policy
Signed Friday, March 31st 2017

Standing Request for Regular Access to Protected Health Information
Signed Friday, March 31st 2017

Howard Brown Resource Page
Signed Friday, January 13th 2017

Statement of Client Responsibilities
Signed Tuesday, November 29th 2016

Howard Brown Health Center Electronic Delivery Consent

Trevor Project Lifeline:
The Trevor Project has trained counselors available 24/7 to provide crisis intervention and suicide intervention for LGBTQ youth. If you are in crisis, feeling suicidal, or in need of a safe and judgment-free place to talk, call 1-866-488-7386 or www.thetrevorproject.org

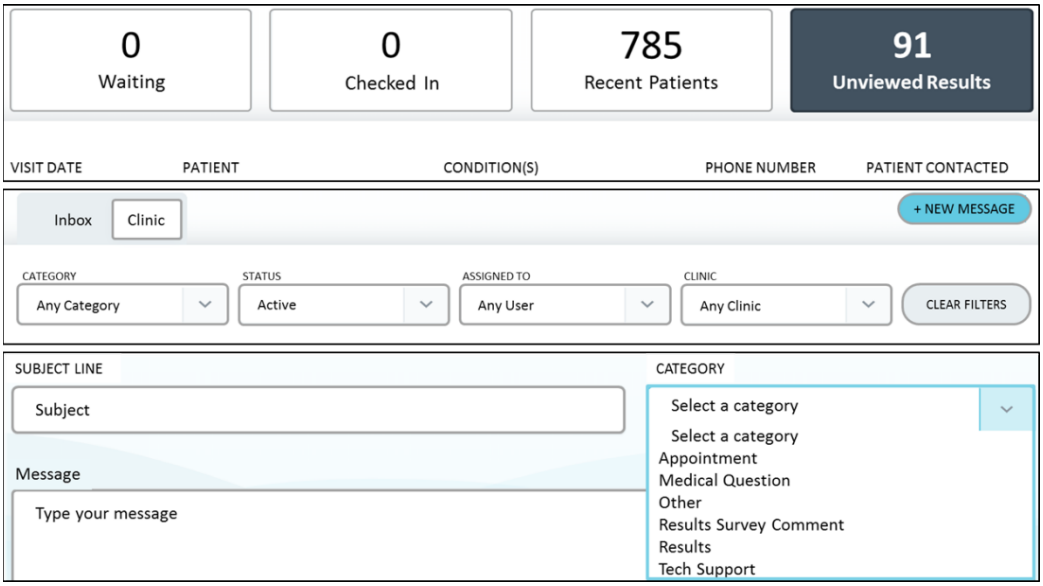
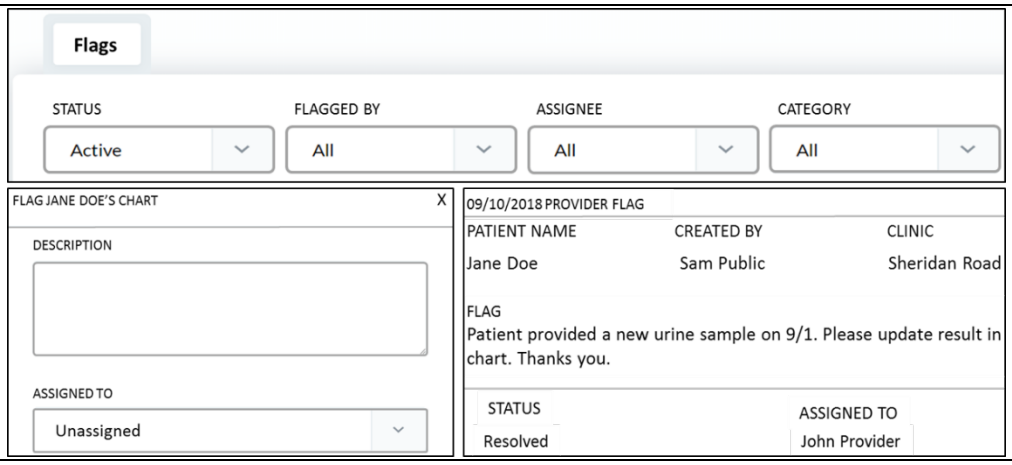
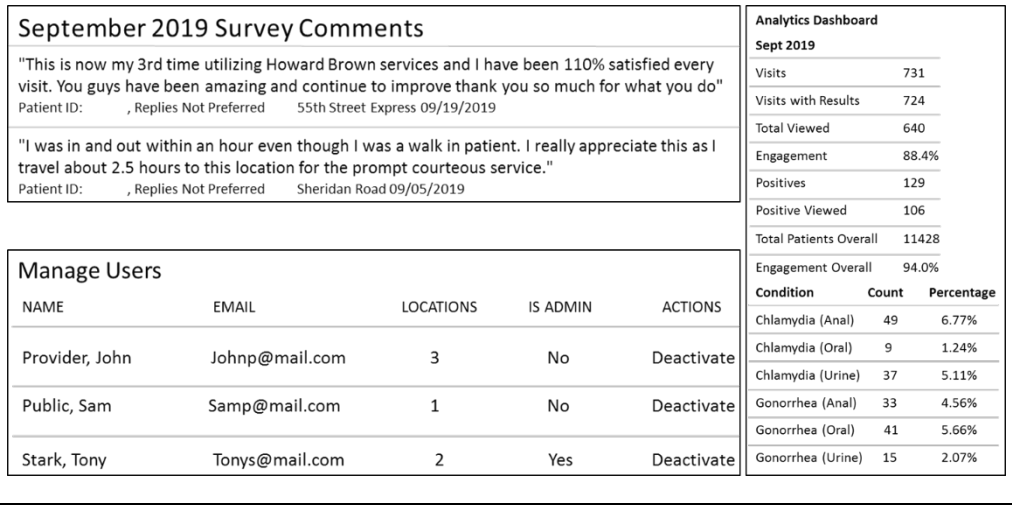
National Domestic Violence Hotline:
Trained advocates are available 24/7 to talk confidentially with anyone experiencing domestic violence or seeking information. Bilingual advocates are on hand and the Language Line offers translations in 170+ different languages. Resources and help can be found 24/7 by calling 1-800-799-7233.

Advocates for individuals who are deaf or hard of hearing are available 24/7 at 1-800-787-3224 (TTY)

National Suicide Prevention Lifeline:
The National Suicide Prevention Lifeline is a national network that provides free and confidential emotional support to people in suicidal crisis or emotional distress 24/7. The Lifeline provides free and confidential support for people in distress, prevention and crisis resources for you or your loved ones 1-800-273-8255 www.suicidepreventionlifeline.org

Rape Victim Advocates (RVA):
RVA provides information and support throughout the emergency medical examination, evidence collection, police reports and court hearings. Services are confidential and available at 14 hospital emergency departments across Chicago. Advocates help navigate hospital and police systems, provide emotional support, and take care of immediate needs such as clothing. 1-888-293-2080

Table 4: Tracking and Monitoring

Tracking	
Dashboards are categorized to identify clients Messages can be categorized and assigned to different staff at various locations Patients responses can be disabled for sending mass messages Clients with unviewed positive STI results are separated for easy identification Healthcare providers can flag charts for follow-up Admins can easily: • Active or deactivate accounts for staff • Provide access to specific locations • Designate other admins Clients can leave feedback about their visit and specify whether staff follow up is preferred Staff can respond directly to client comments if needed Monthly aggregate reporting of STI test results for the agency	  

Core Components

Organizations considering replication need to assess their access to the core elements of the intervention. Core elements are components that are essential for successful implementation and should not be modified. Core elements and components can be references in table 5 below.

Table 5: Core Elements

Core Elements	Evidence of intervention model fidelity
Access to EHR	• Automatic transfer of health information from the EHR to app or platform • EHR orders sets to track program services • Procedures to update client contact information from one platform to another
Outreach Strategies	• Systematic method of identifying eligible participants • Internal program collaboration to determine warm handoff procedures for high needs clients or those eligible for multiple programs
App Features	<u>Direct messaging</u> • Instant/text message format • Procedures enabling client messages to be responded to within 1 business day • Primary method of contact with clients to coordinate/deliver program services <u>Access to medical chart information</u> • Provide clients with digital access to and control of their health information • Tracking of test results to encourage active participation in managing health • Provide health information to increase health literacy
Retention in Care Specialists	<u>Completes care plans and assesses:</u> • Barriers to care and adherence • Mental/behavioral health needs • Additional supportive needs <u>Ensures access to ART by assisting with:</u> • Enrollment in insurance/ADAP/medication assistance programs • Navigating issues regarding pharmacy/insurance/refills • Reminders for coverage renewal due dates • Medication adherence tools (pill boxes, pill splitters etc.) <u>Engages clients in medical care:</u> • Conducts outreach to clients in need of retention in care • Schedules medical appointments and sends reminders for appointments • Facilitates communication between clients and medical care providers • Conducts personal check-ins on adherence, needs and progress of medical goals • Ensure client access to and understanding of lab results and health needs

Adaptable Characteristics

While removing core elements of the intervention would negatively impact implementation, there are components that can be changed. Adaptable characteristics are aspects that can be adapted to suit the needs of an organization or target population without impacting the intervention model. Table 6 below describes the adaptable characteristics and factors of the intervention.

Table 6: Adaptable Characteristics

Adaptable Characteristics	Components that can be changed, adapted or edited as needed
Health App or Platform	• Any health app or platform with the core features can be implemented
Health Information	• Information topic, content, and language can be tailored • The information accessible to the client (lab results, visit summaries, etc.)
Program Scopes	• Participant eligibility • Enrollment procedures and program length • Provided program services • Assessment tools • Reporting and monitoring needs and methods
Outreach Methods	• Frequency of participant identification methods • Procedures can be modified by duration, occurrence, and documentation requirements

Implementation

Pre-Implementation Activities

Select a health app and collaborate with the platform developer on any needed features/functions. Identify the practicality and need of functions with regards to the target population. Purchase any equipment needed and conduct any necessary systems integrations. Collaborate interdepartmentally to develop methods for identifying errors. Test piloting and launching new features one at a time allows teams to more easily identify if emerging errors lay within the app, the IT systems, or the identification procedures and protocols themselves.

1. Establish program integration alongside existing departments and programs

- Identify gaps or needs in the existing programming that can be addressed
  - This can be done by having team meetings and examining program scopes
- Determine the target population and eligibility criteria
- Determine program services based on the identified gaps and methods of delivery
- Internal processes for referrals and the coordination of patient care

2. Develop programmatic procedures and methods
   - Methods for identifying the target population
   - Protocols for monitoring activities, platforms and caseloads (see appendix)
   - Outreach and recruitment methods
   - Measures to monitor individual and program progress toward health outcomes
3. Prepare for implementation
   - Identify needed staff and define their roles and responsibilities
   - Hire and train staff on existing organization protocols and procedures
   - Create enrollment and intake procedures

Youth and Community Advisory Boards

YAB/CABs are relied upon for gathering feedback on the foundational elements of the intervention. Organizations without an existing YAB/CAB should create a focus group or advisory board to gather population/community insight.
The YAB/CAB provides feedback on:

- Features of the app (purpose, function, and practicality, etc.)
- The language used within the app
- The information available on the app
- Program design (program length, activities, platforms used, etc.)
- Marketing materials and recruitment methods
- Engagement strategies (engaging messages, person check-ins etc.)

Marketing

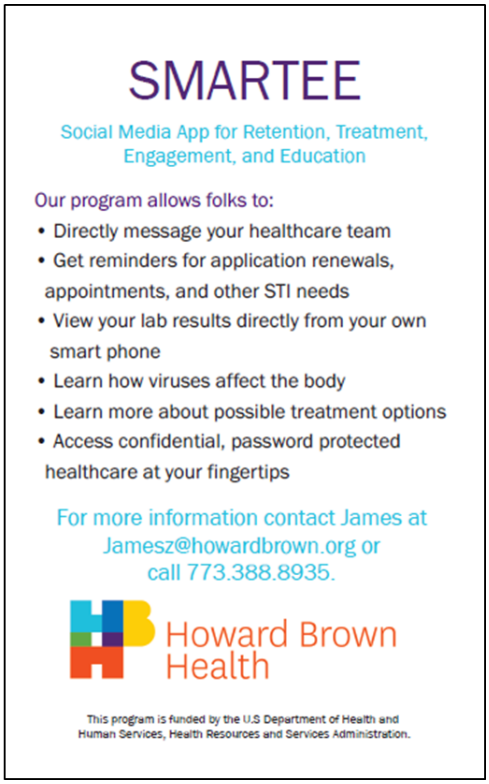
Marketing material advertising program services can be created and dispersed using images and language that appeals to the target population, see Image 2 below. Organizations lacking existing templates or images should consider hiring a graphic designer with knowledge and experience in creating marketing materials for the target

population. Each draft should be passed before the YAB/CAB or focus groups feedback and input. Items to consider when creating marketing materials:

- Setting a timeline for drafts, the turnaround of edits, and the final product
- The ownership of the master files/rights of the materials
- Creating versions with and without the word HIV to protect client anonymity, as seen in image 3 on page 13.
- Cost

Image 2: Marketing Materials

Image 3: Different Version of Marketing



Outreach and Recruitment

Recruitment involved directly contacting clients living with HIV who were experiencing a gap in care or a viral load greater than 200. Two monthly reports generated from the EHR, the first being the HIV/AIDs Bureau's (HAB) Gap in HIV Medical Visits Core Performance Measure and the second listing clients with a viral load greater than 200 copies. Listed clients are contacted by phone, email, or the health app and offered a medical visit and program enrollment.

Scripts and email templates can be created for staff to use as a general guide when conducting outreach (see Appendix A for examples). Internal departments (Partner Services, Linkage to Care, Case Management, etc.) should be made aware of the intervention services so that protocols for transfers and referrals can created collaboratively. Marketing material should be made available in client areas as well as distributed to internal departments for referral.

Procedures/Protocols

The listed protocols and procedures were created to suit the needs of the original intervention team and may need to be adapted for other organizations.

Administration Needs

- The Program coordinator should schedule all individual staff supervision and team meetings following the formats similar to those in Appendix B1 -B4.
- Additional helpful procedures for assigning tasks, monitoring caseloads, and handling of equipment and supplies can be seen in Appendix C1-C4.

Outreach

Staff attempt to contact eligible clients to schedule a return medical appointment and discuss enrollment.

- If enrollment is declined the RICS offers linkage to additional organizational services if needed (e.g., insurance, legal, behavioral health)
- If accepted, the RICS will meet with the client at their scheduled medical visit

Enrollment

1. Following the medical visit, the RICS and client discuss the client's needs, program services, consent for enrollment, and the barrier assessment in Appendix D. RICS also assess needs for:
    - Access to identification cards/records, food, shelter, clothing, and transportation
    - Mental health and substance use
    - Social support, legal issues, and financial assistance
    - Health insurance and medication coverage
2. Clients and RICS complete the intake (Appendix E) and discuss client preferences for:
    - Method of contact
    - Appointment reminders
    - RICS attending client medical appointments
3. Lastly the RICS assist clients with creating their app account and are offered:
    - A user guide for the health app (Appendix F)
    - Adherence tools and safer sex kits
    - Transportation cards to get home

4. After the appointment, the RICS update the client's health app account with their most recent lab results and send a personalized welcome message in the app.

Engagement and Retention Efforts

- Contact clients according to client preferences and the protocol in Appendix G.
- RICS will schedule the client's next two follow-up medical visits, and will meet the client and will meet the client before or after their appointment.
  - ✧ Appointments are scheduled 6 months apart unless directed otherwise by the primary care provider.
  - ✧ The RICS meet with clients a total of 4 times over the course of 18-months.
- RICS will assist clients with the following throughout a client's enrollment:
  - ✧ ART coverage (Medicaid, ACA, ADAP, or other financial assistance programs)
  - ✧ Communicating client needs to medical providers (refills, referrals, needs, etc.)
  - ✧ Assistance with accessing transportation to medical appointments
  - ✧ Ensuring lab results are updated in the app and addressing client messages
  - ✧ Providing resources for additional needs (legal, access to food, housing, etc.)

Closure and Discharge

Clients are discharged upon:

- ✧ 18-months of enrollment or achieved the ability to self-manage their medical care
- ✧ Transferred to long-term services for higher needs
- ✧ 6-months of no returned contact

Upon meeting with the client at their final appointment the consumer feedback form is administered (Appendix H) and the barrier assessment is re-administered for comparison. The client is also given general contact information should they need assistance after discharge.

Partners

Organizations should consider partnering with health app developers who have experience implementing the app in similar organizations. This will help ensure a streamlined implementation.

Staffing Roles

To implement SMARTEE the following staff positions are needed, a Program Manager, Program Coordinator, Retention in Care Specialist, Data Manager. Full job descriptions and list of duties can be found in Appendix I1-I4.

- The **Program Manager** supervises implementation, oversees project operations, and reviews data and analysis.
- The **Program Coordinator** manages communication and coordinates implementation of the intervention with direction from the project manager.
- **Retention in Care Specialists** engage clients who have fallen out of care or who struggle with medication adherence by providing short-term medical case management.
- The **Data Manager** assists with providing needed reports and data analysis to determine success of the program and for quality improvement.

Key Staff Attributes

Ideal attributes of staff in all positions include having a thorough understanding of the needs and challenges experienced by the communities adversely impacted by HIV and the ability to adopt the mission and culture of the implementing agency. Ideal characteristics of staff in all positions include having a thorough understanding of the needs and challenges experienced by communities impacted by HIV. Staff must have:

- ✧ Knowledge of the designated target population and the specific risks and challenges of these communities in accessing healthcare.
- ✧ Strong understanding and application of trauma informed care and harm reduction principals and methods.
- ✧ A deep comprehension of cultural humility and the ability to respect, acknowledge and affirm individual identities and expressions of identity.
- ✧ Understand the importance of using technology and health apps in healthcare settings.
- ✧ Proficiency in creating and following systems of management to assist clients.
- ✧ Willingness to be adaptive to a client's needs to help navigate healthcare.
- ✧ The aptitude to efficiently communicate with other teams and organizations and successfully compromise to create alternative solutions when necessary.

Training

Upon hire, staff complete trainings on using the EHR, HIPAA, blood borne pathogens, and research with human subjects, and using the health app. Additional trainings on motivational interviewing, cultural humility, harm reduction, gender language, trauma informed care, crisis intervention, and skills for activating self-management should be also take place within the first year of hire.

Lessons from the Field

Successes

From the original intervention program at Howard Brown Health in Chicago, IL, implementation successes included enrollment of 115 unduplicated clients enrolled into the program. With a team dedicated to addressing the needs of clients most likely to fall out of care, more clients were able to be contacted to schedule return medical visits. From January 1, 2017 through January 1, 2018, over 1,200 contact were made to more than 600 unique clients experiencing a gap in care. In the same period 258 medical appointments were scheduled for 233 unique clients in need of retention in care support. Notably, clients experiencing a gap in care often declined program services and reported forgetting to schedule a medical appointment as the main reason for going longer than 6 months without a medical visit.

Case Study 1: Addressing Barriers

An example of individual success within the program is participant 98. Participant #98 was a 28 year old black MSM who struggled with homelessness, unemployment, and mental health needs that hindered medication adherence. Additionally, the participant had no acceptable forms of identification which severely limited his ability to access emergency shelters, treatment facilities, and apply for employment. While the participant did not have mobile service, he was able to message his RICS using public Wi-Fi for help with obtaining identification cards and contacting housing programs. Since enrollment, participant #98 obtained identification cards, enrolled in Medicaid, gained employment, and was able to access a long-term shelter.

Case Study 2: Engaging in Care

Participant #29 was a 30 year old white MSM whose HIV diagnosis caused internalized stigma, and exacerbated mental health concerns. After enrollment he requested the RICS to stop contacting him, as he was unwilling to accept his diagnosis and begin ART. His wishes were acknowledged and he was informed that he could reengage when he felt ready.

After several months he contacted his RICS to discuss reengaging in care and initiating ART. Healthvana provided comfort by removing fear of potential judgement that occurs with phone or in person contact. Since enrollment, participant #29 reengaged in care, initiated ART, and achieved viral suppression.

Challenges/Barriers and Tips for Future Implementation

Some unexpected challenges in the original intervention include:

- Difficulty modifying features and functions within the app
  - ✧ Since app features may not be perfect at first launch, it may be necessary to develop protocols to compensate, (forewarnings to clients, providing clients with other methods of contacting staff)
- Diverse (i.e., healthcare providers, app developers) teams with different management styles can make collaboration difficult.
  - ✧ Identify points of contact within each team and have separate meetings/calls.
  - ✧ Designate very specific tasks within the intervention to collaborating teams. For instance, the Data department generates the list of clients with a gap in medical care, but the Program Coordinator filters the list for eligibility scopes.
- Additional items that may be helpful to sites can been found in Appendix J1-J4.

Monitoring and Evaluation

Aims for Local Evaluation

Local evaluation sought to determine if retention in care rates among the target population could be improved if given access to a mobile health platform. Similarly, the impact on medication adherence and viral suppression after providing access to direct messaging with staff and the ability to self-track HIV labs was also explored. It was anticipated that the direct messaging feature would encourage greater engagement in care and subsequent improved health outcomes among enrolled participants.

Monitoring Progress

Retention in care was measured by the number of completed medical visits within each quarter of the 18 month measurement period. Progress for participants who have a viral load greater than 200 copies, was measured by comparing viral load at 6 month intervals starting from enrollment to discharge. Qualitative indications, like client self-reporting, and written responses to voluntary surveys were also used to monitor participant progress and implementation.

Participants/Sample for Local Evaluation

For local evaluation, participant eligibility was limited to MSM and TWOC clients ages 13 to 34 who were receiving their HIV primary care with the organization and not enrolled in medical case management in addition to meeting one the following:

1. Newly diagnosed within the last 12 months.
2. Have not had an HIV medical appointment within the last 6 months.
3. Have a viral load greater than ≥200

Methods for Local Evaluation

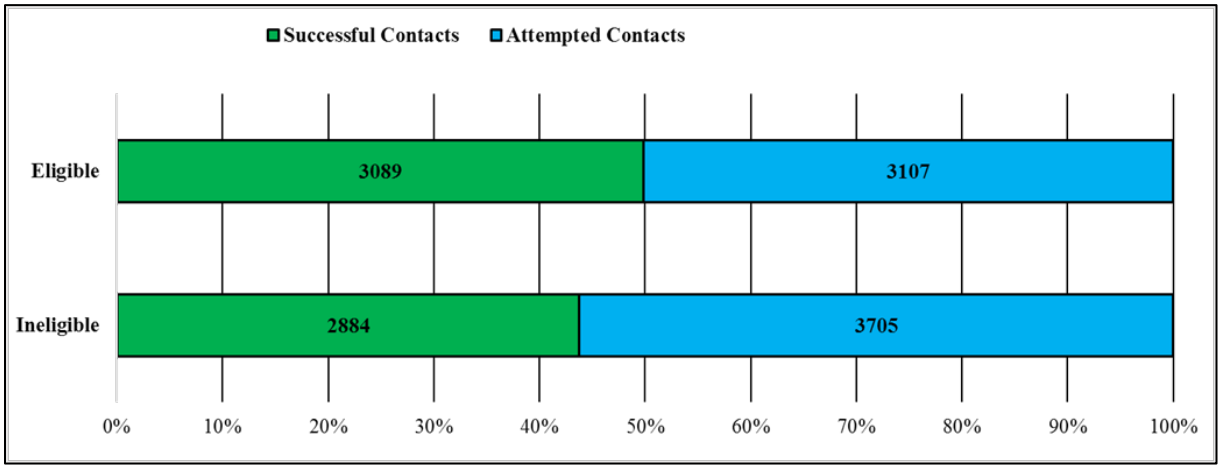
As part of the original program, data collection began upon enrollment. Participants completed the Audio Computer-Assisted Self-Interview (ACASI) survey which collected participant data. The participant's most recent viral load is used as a baseline to monitor progress. The barrier assessment and intake and care plan completed at enrollment, and the consumer feedback completed at discharge were also a part of the local evaluation.

Results for Local Evaluation

From September 13, 2016 through May 31, 2019 RICS contacted 1,861 unique clients in need of retention in medical care. Of the 1,861 clients, 32% were eligible for SMARTEE and the remaining 68% were not. Successful contacts were defined as reciprocated communication with clients via phone, email, or in-person meetings. Attempted contacts were defined as engagement efforts made by staff, including leaving

voicemails, sending emails, and other direct messages that went unreturned by clients. Graph 1 indicates successful and attempted contacts made from 09/13/2016 thru 05/31/2019.

Graph 1: Client Outreach



Intervention staff scheduled over 1,020 HIV medical appointments for clients experiencing a gap in HIV medical care and 609 non-medical office visits. Office visits were scheduled to complete ADAP application for medication access, or to provide other resources and referrals to clients as needed. Charts 1 and 2 below illustrate the number of visits scheduled compared with the number completed throughout the SMARTEE intervention.

<u>HIV Medical Appointments and Office Visits</u>

1,020 HIV medical appointments scheduled for 639 unique clients

649 HIV medical appointments completed by 502 unique clients

Chart 1: HIV Medical Appointments

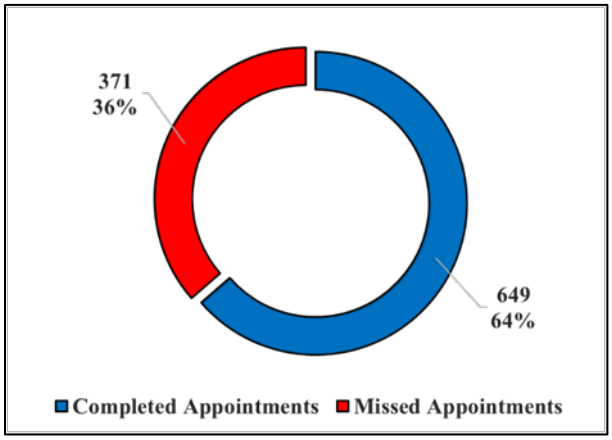
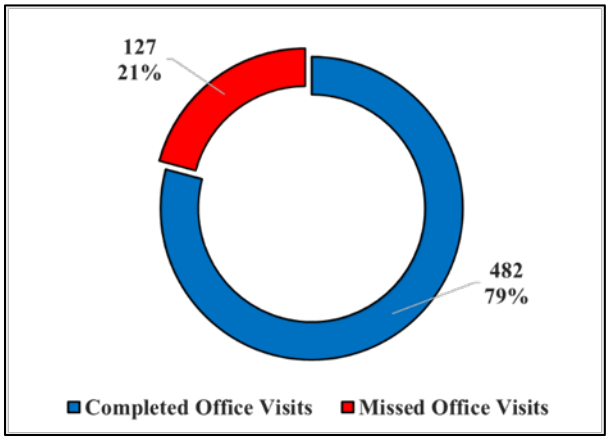
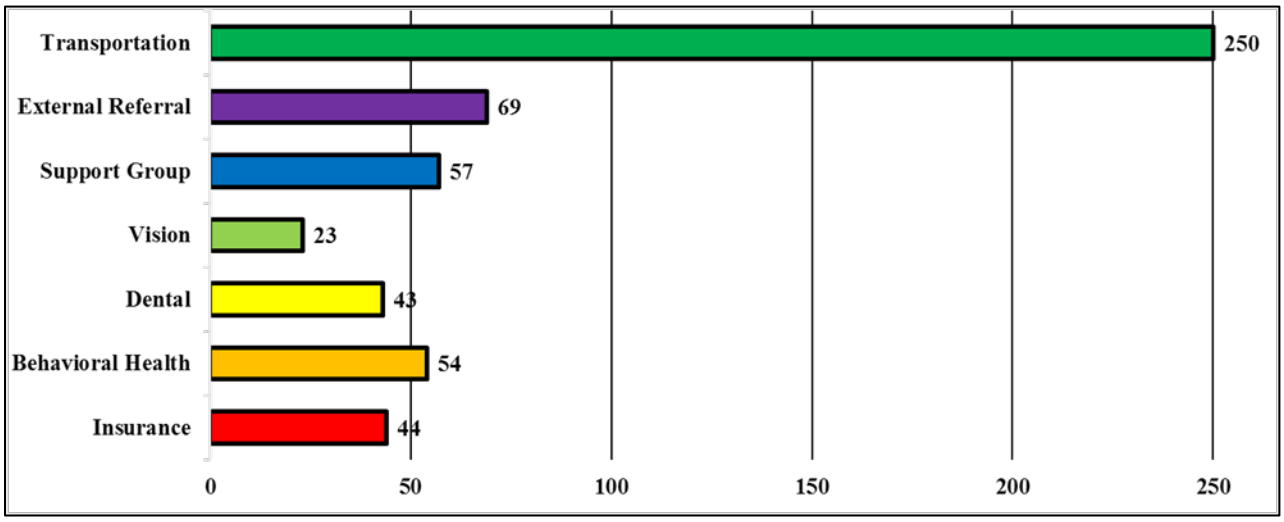


Chart 2: Non-Medical Office Visits



As noted the SMARTEE intervention provided a significant amount of resources to participants. Graph 2 below reflects some of the resources, referrals, and transportation assistance provided. It's important to note that SMARTEE provides clients with two transportation passes per order logged in the report, which equates to over 500 transportation passes.

Graph 2: Additional Resources Provided

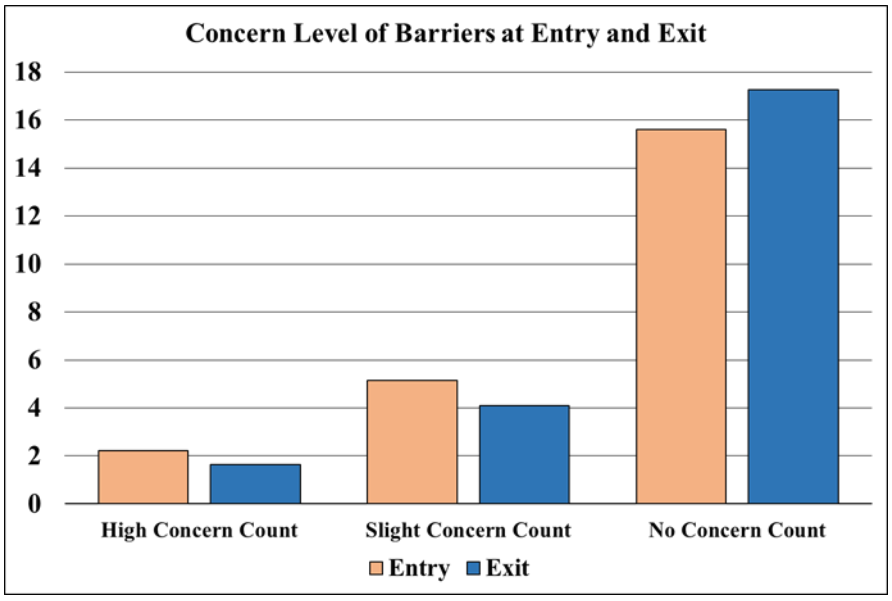


Engagement with clients via mobile technology proved to be efficacious as staff exchanged over 13,638 messages with clients from implementation to project end. These messages included:

- ✧ Appointment reminders
- ✧ Addressing client health concerns
- ✧ STI/HIV result inquiries
- ✧ SMARTEE messages
- ✧ General queries related to HIV/STI treatment and symptoms

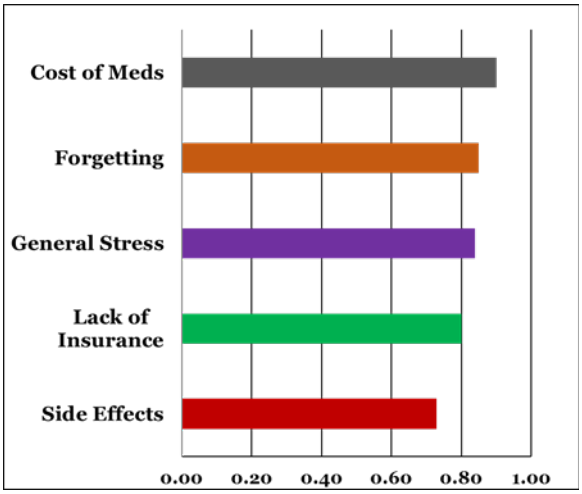
For 68 participants who completed a barrier assessment at baseline and at exit 18 months later, there was a slight decrease in concern for barriers to care. Participant reports of high concerns decreased from a median of 2.23 at entry to a median of 1.63 (SD=3.25) at exit. This is a 26.9% decrease in the number of participants reporting high concerns for barriers to care. Similarly, reports of slight concerns decreased from a median of 5.14 at entry to 4.11 (SD=3.45) at exit, representing a 20% decrease in slight concerns. Participants reporting no concern for barriers increased from baseline median 15.59 to exit median 17.27 (SD=5.04). This is an increase of 10.77% in participants reporting zero or no concern for barriers to care. Graph 3 below outlines the differences in participant levels of concern upon entry and exit of the intervention.

Graph 3: Concern Level of Barriers to Care

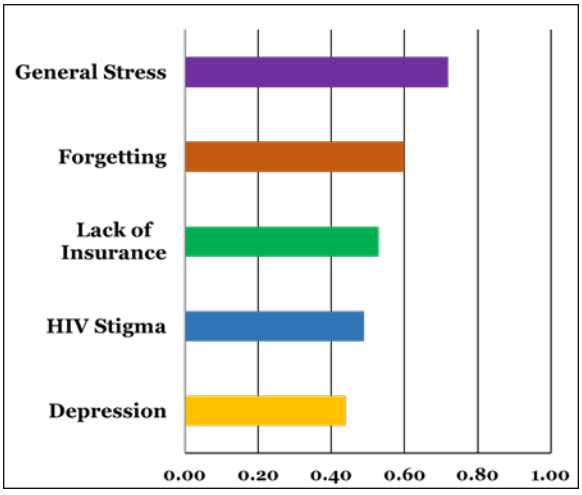


Additionally the top barriers reported by participants also changed from entry to exit of the intervention. Of the 23 barriers on the assessment, the five barriers with the highest concern at entry were cost of medications, forgetting, general stress, lack of insurance, and side effects of medication, as seen in graph 4. Upon exit, the ranking of barriers changed slightly with the top five reported as: general stress, forgetting, lack of insurance, HIV stigma, and depression as seen in graph 5. This difference does not necessarily indicate a decrease in frequency or level of concern as not all participants completed a reassessment at exit. For example, while depression made the exit top five list with a median of .47 which accounted for 7.15% of reporting participants, at entry the median was higher at .70 but only comprised 6.61% of the population.

Graph 4: Top 5 Barriers at Entry



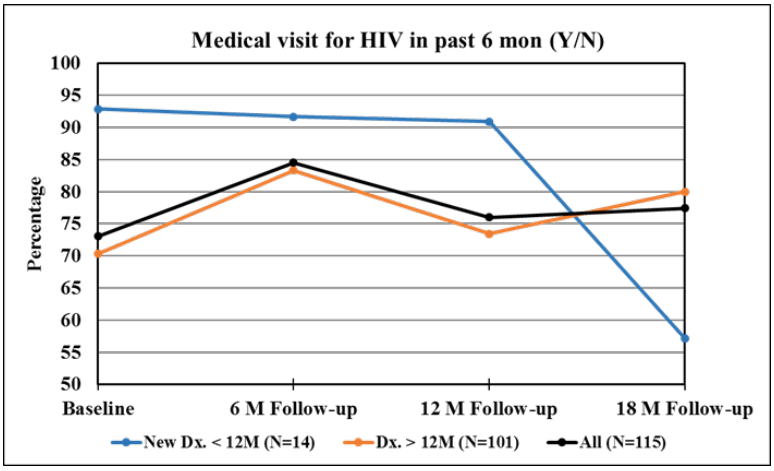
Graph 5: Top 5 Barriers at Exit



Health Outcomes

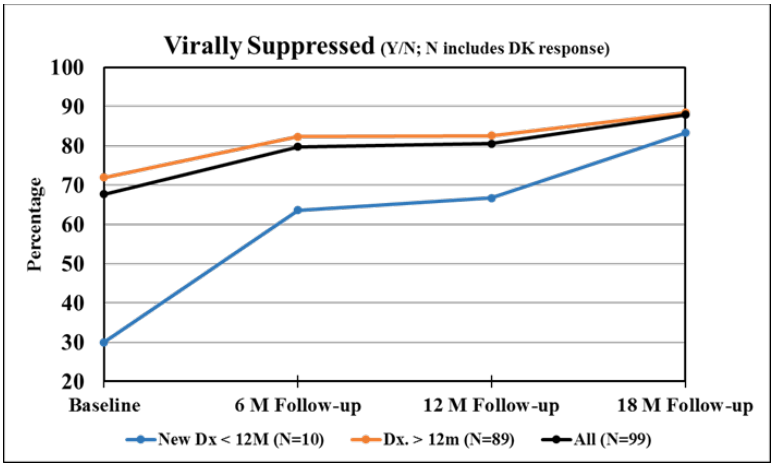
While a single measure cannot effectively measure participant retention in care, preliminary data suggests that different populations may respond differently to various aspects of the intervention. Graph 6 measures participant's responses to being asked if they've attended a medical visit for HIV in the last 6 months. Although self-reported retention in care increased from baseline for all participants, fewer clients who were diagnosed within the last 12 month responded "yes" compared to those diagnosed more than 12 months.

Graph 6: Self-Reported Medical Visit Attendance



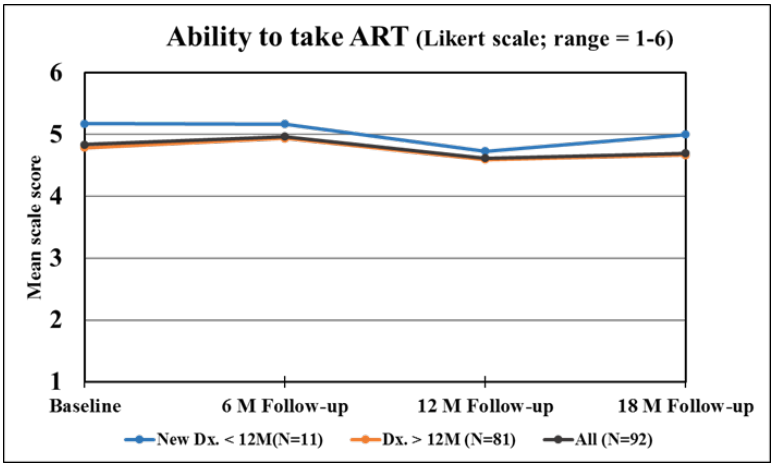
However, this does not necessarily imply poor engagement in care. Graphs 7 & 8 below measure participant responses for viral suppression and ability to take ART. As seen in graph 7, although fewer newly diagnosed participants were virally suppressed at baseline, by 18 months this population neared the average percentage of all participants.

Graph 7: Virally Suppressed



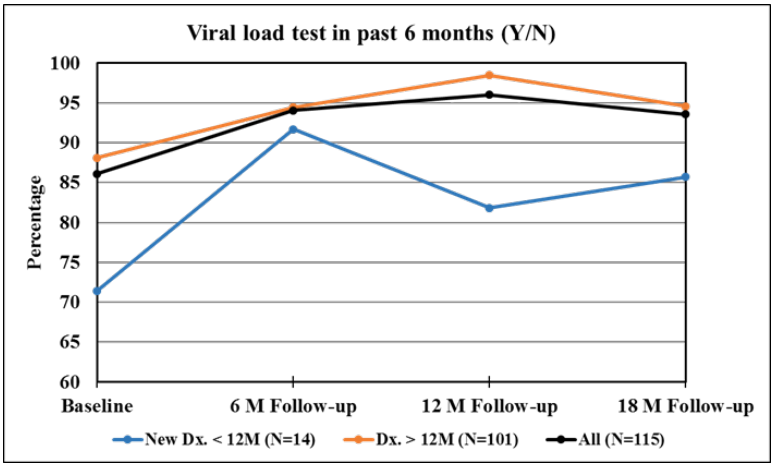
Additionally, newly diagnosed participants who were newly diagnosed consistently reported stronger self-confidence in their ability to take ART on a daily basis compared to all participants as seen in graph 8.

Graph 8: Ability to take ART



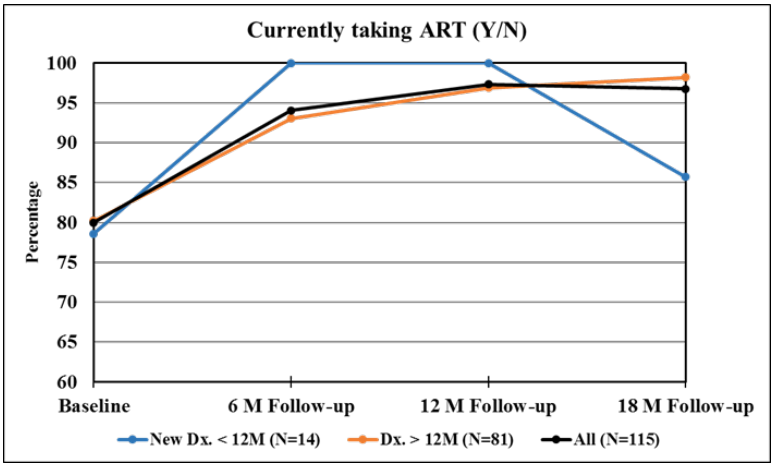
However, there are additional considerations to take into account when assessing some of the preliminary findings. For instance, although only 77% of participants at 18 months reported attending a medical visit within the last 6 months, graph 9 demonstrates that nearly 94% of all participants had a viral load test conducted in the same time frame.

Graph 9: Viral Load test in the last 6 months



While viral suppression rates in graph 7 are not a significant increase, the total number of participants reporting taking ART increased significantly from baseline as shown in graph 10. Minor explanations for some of these differences can be participants not realizing a medical visit was in fact an HIV care visit, newly diagnosed clients not yet understanding that CD4 and viral load tests are routine and not separate testing, and finally non-adherence to ART and no medical visit being issues related to access rather than behavior or client choice.

Graph 10: Currently Taking ART



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Appendix A

Contacting Patients for Retention

Rough Script for Conversation

"Hi, can I speak to _____? Can you just confirm your date of birth?

This is_____, I'm a Retention Advocate for from Howard Brown Health-is now a good time to talk?

_____ (Medical provider's name) wanted me to reach out to you because you are due for your six month check-up. Is now a good time to schedule an upcoming appointment? Etc.

For Study Non-Eligible: I work with our clients to discuss any barriers to attending appointments or taking medication. I'll also show you an app that Howard Brown uses to help clients manage their healthcare from their smart phones. Would it be alright with you if I come to your appt on _____ so we can meet each other and discuss anything that might help make managing your healthcare easier?

For Study Eligible: We are currently launching a study that I thought you might be interested in. We are studying if a Health app that can be used on a smartphone or computer can help people manage their healthcare. The app is very easy to use, and you can see your lab results, directly message your healthcare team, and get other helpful information. The study will involve working with me to discuss your health, goals, and medications. You will be asked to complete a survey every 6 months and we will compensate you for your time. If you're interested, would you be able to stay longer on the day of your medical appointment to meet with me to complete enrollment? This process could take between 90 minutes and 2 hours, so I want to make sure you have that time in your schedule. If you don't have time on the day of your medical appointment, we can schedule a meeting within the 7 business days following your appointment?

Voicemail

"Hi, this is _____ from Howard Brown Health leaving a message for _____. Give me a call back at 773-388-_____ at your earliest convenience. Have a nice day!"

Appendix B1

SPNS Supervision Protocol

Agency Policy	SPNS Supervision Protocol
Rationale	To ensure that Retention staff are properly supported and provided with guidelines to formally discuss project concerns, expectations, and other related tasks required to effectively carry out their role.
Scope	Members of the SPNS Social Media and RIC team.
Definitions	RIC: Retention In Care; SPNS: Special Projects of National Significance
Procedure	**Attendance and participation is mandatory. Absences must be approved prior to meeting.** **Scheduling** 1. Supervision is to be scheduled by the supervisor as a recurring event. 2. No other meetings should be scheduled during scheduled supervision without prior approval from supervisor. 3. Supervisor will inform staff of dates and times in advance to avoid scheduling conflicts. 4. Supervision should occur twice a month at minimum, unless otherwise requested by the employee, supervisor or upper management. **Format** 1. Meetings will be one (1) hour, unless requested differently or all items are addressed. a. Both supervisor and staff should monitor time to ensure all topics/needs are addressed. b. It is the staff member's responsibility to make their supervisor aware of any needs, challenges, or outside situations that the staff member would like to address. 2. Supervisor and staff will have a personal check-in to the extent that they are comfortable with. 3. General Discussion a. Tasks from the last supervision and any progress made b. Factors that make completing tasks difficult and possible resolutions c. Upcoming tasks and timelines d. Clients who stand out on caseloads e. Personal/Professional development (areas of interest, goals, trainings etc.) f. Areas or items you would like support with 4. Overview of items/tasks in need of follow-up for next supervision meeting. **Documentation** 1. Staff will complete an agenda for supervision, and email it to their supervisor no less than 24 hours before the scheduled meeting. 2. Staff will complete the supervision document with the relevant items discussed during the supervision meeting. 3. Upon completion staff will email the document to their supervisor by the end of the day.
Applicable Regulations	None
Materials	Supervision Template, Supervision Agenda

Appendix B2

HOWARD BROWN HEALTH
Supervision Documentation

Date:_____

Staff Present:_____

Type of Supervision:

- ✓ Regular
- O Corrective
- O Other: _____

Items discussed:

_____
_____
_____
_____
_____
_____

Outcome/Plan:

_____
_____
_____
_____
_____
_____

_____ _____
Supervisor Signature Staff

Appendix B3

SPNS Team Meeting Protocol

Agency Policy	SPNS Team Meeting Protocol
Rationale	To provide guidelines for Retention staff to formally discuss project concerns, expectations, job related tasks and needs as a team.
Scope	The SPNS Social Media staff; Retention In Care staff
Definitions	RIC: Retention In Care; SPNS; Special Projects of National Significance.
Procedure	**Attendance and participation is mandatory. Absences must be approved prior to the team meeting.** **Scheduling** 1. Team meetings will be scheduled by the study coordinator as a recurring event. 2. Study coordinator will inform staff of date in advance to avoid scheduling conflicts. 3. Team meetings should occur at a minimum of once a month. **Format** 1. The "Agenda Template," can be found in the "Team Meetings" folder in the SPNS Project folder, on the H Drive. 2. The agenda provides structure for the team meeting and guides the meeting's topics. 3. If the agenda is not available; the following topics should be addressed: • Staff personal check-in, to the extent that they are comfortable • Tasks from last meeting and the progress made since • Concerns, current tasks and project standing • Plans to address upcoming tasks and project goals 4. Staff can be assigned or volunteer to lead team meetings. 5. Staff assigned to lead the meeting must have the agenda completed and emailed to every team member no later than the morning of the meeting. 6. At each meeting a staff member will assigned to take notes. **Expectations** 1. There will be one facilitator for every team meeting. 2. The facilitator will direct the discussion, keep time and complete the agenda. 3. Staff will respect the facilitator's direction of discussion, unless voicing a concern. 4. Team meetings are a safe space; everything said should remain within the team. a. If something is said or done that makes a staff member uncomfortable, they should inform their supervisor. If staff do not feel comfortable going to their supervisor; they should inform the next appropriate level manager. 5. No phones are to be out without prior approval. 6. Laptops can be used for note taking, all other applications and documents should be closed unless retrieving specific information to share with the team. **Documentation** 1. The assigned note taker will attach their notes to the bottom of their copy of the meeting agenda and save it to the H drive by the end of the day.
Applicable Regulations	None
Materials	Agenda Template

Appendix B4

Team Meeting Agenda Template

Date:
Attendance:

I. Personal check-ins.
   a. Each team member will briefly check-in with how they are doing, to the level they are comfortable with disclosing.
II. Professional updates
   a. Each team member will briefly update the team on the progress of their assigned tasks.
      1. Team members will discuss any needs or upcoming tasks/challenges
III. Programmatic updates
   a. Items and tasks the team needs to complete
   b. Brainstorm and discussion of how to accomplish the tasks
      1. Assign tasks and duties to team members
IV. Group Discussion/Topic
   a. While this is not clinical consultation, if an issue with a participant arises and the team member feels the team as a whole can help, now is the time to bring that case forward.
V. Closing discussion
   a. Each member will give a brief summary of the items they need to complete and the steps they need to take in order to complete their assigned duties or address their challenges.
   b. Items staff members will like to discuss during the next team meeting will also suggested at this time.

Appendix C1

Task Folder Management Protocol

Agency Policy	Task Folder Management Protocol
Rationale	The Task Folder Management Protocol is being implemented to allow SPNS staff to effectively and efficiently manage and complete tasks in an organized and timely manner.
Scope	The scopes for the Task Folder Management Protocol are the SPNS Staff.
Definitions	SPNS: Special Projects of National Significance staff.
Procedure	**Task Folders** **1. SPNS Staff Folders** a. Each SPNS staff member will have an assigned task folder where their tasks are to be saved. b. All assigned tasks are due within 5 business days unless otherwise specified by the SPNS Coordinator. c. Each SPNS staff member will check their folder a minimum of three (3) times per day. Task folders will be checked: • At the beginning of the work day. • Before/after lunch break. • At least one (1) hour before leaving for the day. d. Once a task is completed or edited as instructed it will be placed in the SPNS Coordinator's folder for review. **2. SPNS Coordinator Folder** a. The SPNS Coordinator will have one (1) task folder that will contain tasks completed by SPNS staff. b. The SPNS Coordinator will review completed tasks/documents submitted by SPNS staff throughout the day as time allows. c. Once reviewed, the Coordinator will place the document back into the folder of the staff member who was assigned the task. d. The document returned to the SPNS staff task folder will contain edits that need to be made or be approved as completed. **Completed Tasks/Documents** 1. Once a document has been approved as completed by the SPNS Coordinator it will be assigned to a final folder or be sent to the Project Evaluator. 2. When directed to send a document to the Project Evaluator SPNS staff will: a. Provide a brief explanation of the attached document and its purpose in the email. b. Cc the SPNS Coordinator in the email. 3. Completed documents will then be placed in their final designated folder.

Appendix C2

Caseload Chart Auditing

Agency Policy	Assigned by Committee
Rationale	To assist the Retention in Care team in ensuring that Centricity and Healthvana accounts are up to date for all clients on their caseload, to promote consistent and high quality notes by all team members.
Scope	Retention In Care Team
Definitions	**RIC**: Retention in Care, **CMOD**: Case Manager on Duty, **SMARTEE**: Social Media App for Retention, Treatment, Engagement, and Education, **Centricity**: Electronic Medical Records used at HBH; **CM**: Case Manger
Procedure	**Caseload Chart Auditing** 1. Chart Review Timeline a. RIC staff will split their caseload into fourths. b. Monday through Thursday, ¼ of the caseload will be reviewed during designated CMOD hour, which staff are to use for admin time. c. If a CMOD duty arises, chart reviews will be done during Friday's CMOD hour. 2. Chart Auditing in Healthvana a. If a message thread has been marked as "resolved," the corresponding Centricity phone note should be signed and closed. b. RIC staff will ensure that the most recent lab and STI testing visits are accurately reflected in Healthvana. 1. RIC staff will verify that results signed in Centricity, have been transferred to Healthvana so clients are able to view them. c. When conversations have ended or 14 days pass with no client response, messages should be marked as "Resolved" and any corresponding notes in Centricity closed. 3. Chart Auditing in Centricity a. Staff will monitor charts in Centricity for: 1. Overdue labs, medical or study appointments and schedule these when possible. 2. Upcoming appointments should be added to the caseload spreadsheet, and flags added to the chart for CM to remind client of appointments if needed. 3. Medication refills and ADAP needs. a. Contact clients and providers regarding refills as necessary. 4. Phone notes open in Centricity for 24 hours with no contact from the client should have any intended follow up entered, and should then be signed. 5. For clients with other CMs, review notes for relevant information including discharge from program due to relocation, aging out, failure to complete program requirements, etc. Also monitor notes regarding transfer of care, loss of contact, updated contact information, new barriers to care. 6. If other staff have been unsuccessfully attempting to contact a client, RIC staff will contact the client to make them aware of any important information. ***These tasks are not to be done when entering the weekly participant message in the EMR*
Applicable Regulations	None.
Materials	Caseload Spreadsheets

Appendix C3

Peer Chart Auditing

Agency Policy	
Rationale	To allow Retention in Care team members to work together to promote consistent and high quality notes and client contacts.
Scope	Retention in Care Team
Definitions	**RIC**: Retention in Care team, **SMARTEE**: Social Media App for Retention, Treatment, Engagement, and Education, **Centricity**: Electronic Medical Records
Procedure	**Peer Chart Auditing** 1. Peer Chart Auditing Overview a. On the fourth Monday of each month, RIC staff will audit charts for a peer, monitoring for uniformity, accuracy, and to ensure quality patient care. b. RIC staff will review 5 clients per month. These will be chosen using an online random number generator (http://stattrek.com/statistics/random-number-generator.aspx). Each client will be assigned a number based on what row they are in on the Caseload Spreadsheet. The generator will select 5 numbers from the last 15 clients added to the caseload. 1. If there are no changes in charts for reselected clients, staff may choose a client whose chart has not yet been audited. c. The reviewer will note relevant feedback indicated on the peer review checklist. 1. This includes specific examples of areas in need of improvement, as well as areas of excellence. 2. This will be sent to the peer in an email by the end of the day. 3. Peer Chart Auditing on Centricity a. The reviewer will audit documents entered by their peer. The reviewer will look for accuracy regarding: 1. Mode of contact, as well as clarity of recorded interactions. (All notes should have enough context for any employee to comprehend the nature and outcome of the interaction.) 2. Notes for SMARTEE intake appointments should follow the flow of the "Post SMARTEE Intake Centricity Note" template. This includes an accurate record of the consent process, client needs as discussed in the barrier assessment, and next steps for the client in their care plan. 3. Documents have the correct orders entered and are signed correctly. 4. Peer Chart Auditing on Healthvana a. Staff will ensure that all recent visits noted in Centricity are accurately reflected in Healthvana. b. Staff will review message threads to make sure they are being resolved after 14 days.
Applicable Regulations	None
Materials	Caseload Spreadsheets, Post SMARTEE Intake Centricity Note, Peer Audit Checklist

Appendix C4

Client Name:	Yes	No	Comments
VL >200			
Gap in Care			
New Diagnosis			
Correct eligibility orders were used			
Consent process is documented			
Intake Assessment completed			
▪ Information assessed (presentation, insurance, sub. use, BHS needs, access to food/housing etc.)			
▪ Care Plan has at least 2 medical related goals			
▪ Client plan/next steps are clear			
Barrier Assessment completed and effectively reflected			
Ryan White Data is up to date			
Incentives, Ventra, adherence and safer sex tools are documented (offered, requested, declined or accepted)			
Correct orders were entered			
Note is signed			
Directive listing CM was created/updated			
CD4 & VL was completed within the last 6 months?			
▪ If not, an attempt to schedule is documented			
Medical visit was completed within the last 6 months			
▪ If no, a visit is currently scheduled			
▪ If no, an attempt to schedule is documented			
Contact notes reflect logical time frame, detailed account of information exchanged, and intended follow up.			
Notes are signed if older than 24 hours			
CM has communicated attempted contact made by others			
Most recent CD4, VL, STI results are entered in HV			
Dates of tests and visits correspond in both platforms			
Supervisor notified of any major errors			
Notes: *(errors to address, areas to improve, areas done well)*			

Reviewer:	**Signature:**	**Date:**
CM:	**Signature:**	**Date:**

Errors to be corrected by:	**Supervisor sig.:**	**CM sig.:**

Appendix D

Client Code:_____ Date: _____

Please take a moment to answer the question below. This form is very helpful in assessing your needs and concerns about taking your medication as prescribed. Thank you for taking the time to complete this survey.

Adherence Barriers:
Below is a list of issues that may be barriers or challenges to a person's ability to be fully adherent to their HIV medication. Please check the box that best describes how much of a concern each item is to you, personally, when thinking about taking your HIV medication consistently and correctly every day. If you have any questions or concerns please feel free to ask the person administering this assessment.

Barriers	**Highly concerned**	**Slightly concerned**	**Not at all concerned**
Frequent changes to daily routine			
Cost of medication			
Side effects			
Drug or alcohol use			
HIV stigma			
Sexual *or* gender identity stigma			
No or poor access to transportation			
No or poor access to food			
Unstable housing			
Unemployment			
Lack of health insurance			
Depression			
General stress			
Lack of support from family			
Lack of support from friends			
Lack of support from significant other			
Tired of taking medications			
Forgetting to take medications			
Distrust of medical providers			
Unwilling to accept HIV diagnosis			
Forgetting to refill prescription			
Feeling medications are not necessary			
Forgetting dosage or how to take medication			

Please briefly list the biggest barrier(s) to taking your meds EVERYDAY:

_____

_____

_____

Please briefly list the biggest barrier(s) to keeping your medical appointments:

_____

_____

_____

Have you ever used an app to help you with your health before? ☐ **Yes** ☐ **No**

Do you think an app could help you better manage your health? ☐ **Yes** ☐ **No** ☐ **Not Sure**

Do you have any concerns about using an app to help manage your health? ☐ **Yes** ☐ **No** ☐ **Not Sure**

If so briefly explain:_____

_____

_____

_____

How often, if at all, do you miss a dose of medication?

□ **Never** □ **Rarely** □ **Monthly** □ **Weekly** □ **Daily** □ **Not on medication**

Which best explains why you usually miss a doctor's appointment? (Choose all that apply)

□ **I forgot** □ **Schedule/Priority Conflict** □ **No way to get there** □ **No child care** □ **I wasn't sick/I felt well** □ **I was too sick**

Other:_____

Which best explains why you usually miss doses of your medication? (Choose all that apply)

□ **I forgot** □ **Side effects (they make me sick)** □ **I ran out** □ **I didn't feel sick/ I felt well** □ **I had to sell/trade it**

Other:_____

Would it be okay if a Retention Specialist Advocate accompanied you to your medical appointments at Howard Brown Health? □**Yes** □**No** □**Not Sure**

Appendix E

Client Name (legal)	Preferred Name	Date of Birth
Advocate	**Today's Date**	**EMR Patient ID #**

CONTACT INFORMATION

Primary Address: _____ *Receive Mail?* ☐Yes ☐No *Discretion?* ☐Yes ☐No

Mailing Address: _____ *Discretion?* ☐Yes ☐No

Phone Number: _____ *Discretion?* ☐Yes ☐No Alt. #: _____ *Discretion?* ☐Yes ☐No

Email Address: _____ *Discretion?* ☐Yes ☐No

Preferred Method: ☐Phone ☐Email ☐Mail Best Time: ☐Morning ☐Midday ☐Evening ☐Any ☐Actual Time: _____

DEMOGRAPHIC INFORMATION

Gender: _____ PGP: _____ Sexual Orientation: _____

Race:
☐ American Indian/Alaska Native ☐ Asian ☐ Black/African American
☐ Native Hawaiian/Pacific Islander ☐ White ☐ Unknown
☐ More than one/Other: _____

Ethnicity:
☐ Hispanic/Latino
☐ Not Hispanic/Latino
☐ Unknown

Language:
☐ English ☐ American Sign Language
☐ Spanish ☐ Other: _____
☐ Polish *Translator Needed?* ☐Yes ☐No

CLIENT INFORMATION

Employment Status
☐ FT ☐ PT ☐ Unemployed ☐ Retired
Where: _____
Monthly Income: _____
Other Income: _____

Education Status
Highest Level: ☐ Grade 1-8 ☐ Grade 9-12
☐ HS Dip/GED ☐ Tech/Voc ☐ Some College
☐ 2yr Degree ☐ 4yr Degree ☐ Adv. Degree
Currently Enrolled: ☐ Yes ☐ No
Where: _____

Housing Status
☐ Permanent ☐ Non-perm
☐ Institution ☐ Homeless
☐ Other: _____
☐ Alone ☐ Others:
Who: _____

Insurance Status: ☐ Private ☐ Medicaid ☐ Medicare ☐ None ☐ Unknown Benefits belong to: _____

PRIMARY CARE AND HEALTH INFORMATION

Medical Providers: _____ *ROI Needed?* ☐Yes ☐No

Last PCP Visit: _____ Last Dentist Visit: _____ Last Eye Exam: _____ Last PAP Exam: _____

Physical Health: _____

Reactive/Conf Date: _____ Recent CD4: _____ Date: _____
Last Non-Reactive: _____ Recent VrLd: _____ Date: _____

STI History: ☐None ☐Gonorrhea ☐Chlamydia ☐Syphilis ☐Genital Herpes ☐Genital Warts/HPV ☐Other: _____

Medications: _____

Mental Health: _____ *ROI Needed?* ☐Yes ☐No

Substance Use: _____

Referral Source: ☐ Direct Outreach ☐ HBH Staff ☐ BYC ☐ Self-Referred by poster/flyer/palm card ☐ HBH Facebook/twitter

Diagnosis Stage: ☐ Newly Diagnosed ☐ Previously Dx/Transfer ☐ Previously Dx/Out of Care ☐ Previously Dx/Never in Care

SOCIAL INFORMATION

Social Supports: _____

Other Social Services: _____ *ROI Needed?* ☐Yes ☐No

Relationship Status: ☐ Single ☐ Married ☐ Divorced/Separated ☐ Partnered ☐ Civil Union ☐ Widowed

Children: ☐ No ☐ Yes _____

Barriers to Care: ☐ Transportation ☐ Housing Stability ☐ Cost/Insurance ☐ Location of Care ☐ Competing Priorities ☐ None ☐ Mental Health ☐ Substance Use ☐ Fear/Stigma ☐ Schedule ☐ Other: _____

INDIVIDUALIZED CARE PLAN

Goal #1: _____

Task #1: _____

Task #2: _____

Task #3: _____

Task #4: _____

Goal #2: _____

Task #1: _____

Task #2: _____

Task #3: _____

Task #4: _____

Goal #3: _____

Task #1: _____

Task #2: _____

Task #3: _____

Task #4: _____

EMERGENCY CONTACT

I, _____, authorize Howard Brown Health Center to contact the following person(s) in the event o an emergency concerning my welfare or in the event that I cannot be reached by phone or email. I understand that Howard Brown Health Center will only disclose my name and that we are looking to reach you. Please sign below if you consent.

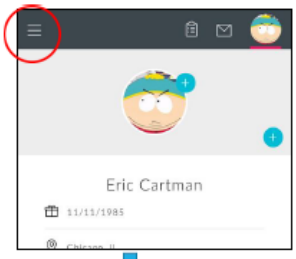
Name: _____ Relationship: _____ Phone Number: _____

Name: _____ Relationship: _____ Phone Number: _____

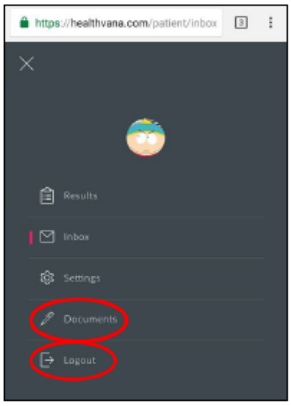
Client Signature: _____ Date: _____

Staff Witness: _____ Date: _____

Appendix F



8. To log out, go back to your profile page. Click the "Menu" icon in the upper left corner. You can see different tabs that will let you see your documents, alter your privacy settings, and allow you to log out. Make sure to log out every time for privacy's sake.



Appendix F
Some Helpful Hints

•Protect your username and password. Do not allow your username and password to be automatically saved. Do not share your username and password.

• If someone else has access to your phone consider disabling the text notifications. Keep in mind this means you will not be notified of any messages until you remember to open the app.

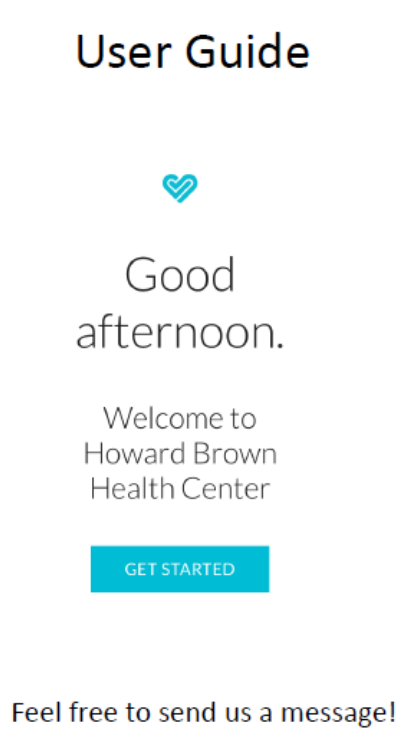
• Be sure that you are checking your account in private, do not log on with others around.

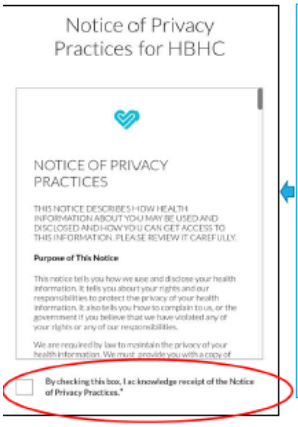
• Healthvana times out after 10 minutes, but it helps to log out of your account after each use

• You will never get sensitive information from us in emails, but the name Healthvana will be in the email. If someone monitors your email consider deleting emails after reading them.

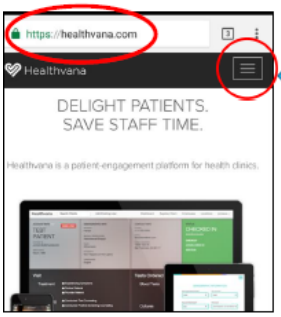
• If someone asks what Healthvana is or why it's on your phone you can reply:

- Healthvana is a health app that lets people have access to their medical records.
- Healthvana is an app that lets me message my doctor's office if I ever need to.
- My doctor's office uses this app to message their patients if they ever need to.
- I needed some vaccinations for work/school and this app lets me keep track of them.
- I heard about Healthvana on TV and I wanted to see what it was about.
- Someone from school/work told me about it and I wanted to see what it looked like.
- I was doing some research for school and wanted to try it for myself.

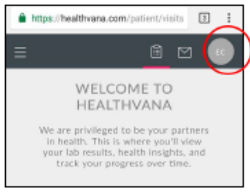




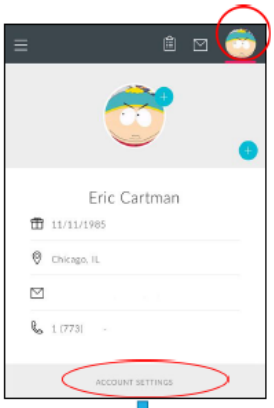
1. After entering your information you will see documents you used to get in paper, like our Notice of Privacy Practices. Once you acknowledge each document they will be available in the "Documents" section.



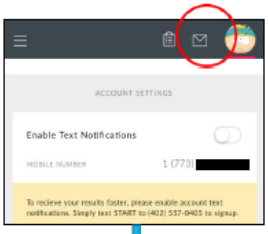
2. Go to **healthvana.com** and click on the menu in the upper right corner to begin accessing your Healthvana account.



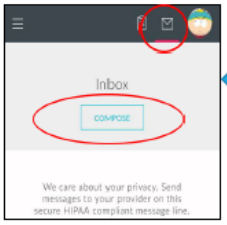
3. This is the home page. Your results will appear on this page, so be careful when opening to protect your privacy.



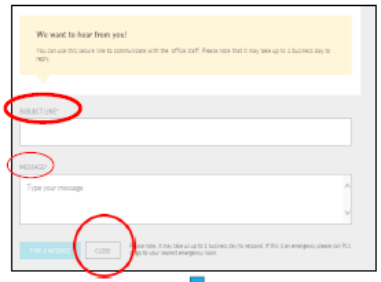
4. If you click the icon in the upper right icon you go to your profile. It shows your basic information and you can customize your picture, which only you will see. Below your profile are "Account Settings."



5. To Help protect your privacy, leave your text notifications disabled if others have access to your phone.



6. This is your message inbox. This is where your messages can be found. If you click "Compose" you will be taken to a screen where you can send a message to your healthcare team.



7. Type in the subject of your message in the "Subject Line," it is best to put your Advocate's name in the subject. Type in your message in the message field. When you are done with your message hit send. Your Advocate will return your message usually within 3 business days.

Appendix G

SMARTEE Retention Protocol

Agency Policy	Retention contact protocol for clients enrolled in SMARTEE.
Rationale	To provide guidance when attempting to engage clients enrolled in SMARTEE and identify best practices to avoid overwhelming the client with undue messages.
Scope	This procedure applies to SMARTEE staff and participants.
Definitions	SMARTEE: Social Media App for Retention, Treatment, Engagement and Education. SPNS: Special Programs of National Significance (Ryan White part F). Advocate: SPNS Retention in Care Specialist who provide medical case management. Participant: HBH client in need of assistance with retention who is enrolled in SMARTEE.
Procedure	**Contact Attempts** a. Participants are to be contacted once a month, at minimum, to check in. b. If two consecutive months pass with no response from the client, staff will attempt to contact the client every other week for the next six weeks. c. If there has been no response by the 3rd follow up attempt, three final retention attempts will be completed over the next three months. 1. If a client doesn't respond to the Advocate within the six month period, Advocates will leave a final message reminding the client that they can still access HBH services. The client will be encouraged to engage when ready. 2. Clients who have not responded to ***any*** contact attempts within the six month period will be removed from the Advocate's monthly contact list. **Example** • Last contact with participant- 1/1/17 • 1st Monthly contact- 2/1/17 • 2nd Monthly contact- 3/1/17 **If participant does not respond to 2nd Monthly contact** • 1st Follow-up attempt- 3/15/17 • 2nd Follow-up attempt- 4/1/17 • 3rd Follow-up attempt- 4/15/17 **If participant does not respond by 3rd Follow-up** • 1st Attempt at retention- 5/15/17 • 2nd Attempt at retention- 6/15/17 • 3rd Attempt at retention- 7/15/17 **Documenting** a. All contact attempts will be documented in Centricity in a phone or progress note. b. Attempts to reach clients should be done via Healthvana, phone and email. 1. Corresponding Social Media contact orders should be used for each attempt. c. The Advocate's Caseload List should be updated to reflect each contact attempt. d. The client will continue to receive weekly participant messages until the client revokes their consent or the study is completed. 1. Staff will continue to document the participant messages in Centricity. e. The Advocate will add a flag to the client's chart requesting notification if the client presents at clinic. 1. If the client presents at the clinic, the Advocate will ask to briefly speak with the client to assess readiness/willingness to reengage in the study.
Applicable Regulations	None
Materials	Caseload Tracking List

Appendix H

Today's date: _____ Staff: _____

Please take a moment to complete this survey. Your honest feedback will be used to improve services at Howard Brown Health and will not impact your ability to receive services at Howard Brown Health. Please note when we mention "Staff" and "Advocate" we are referring to the staff and advocates that you have worked with in the SMARTEE program.

Staff Experience

In the last 12 months, were staff at Howard Brown Health as helpful as you thought they should be?

Never Sometimes Usually Always

In the last 12 months, how often did the staff at Howard Brown Health treat you with courtesy and respect?

Never Sometimes Usually Always

Which of the following qualities of the staff <u>did you find to be true</u> (choose all that apply)?

Patient Enthusiastic Respectful Friendly Responsive None Other

Which of the following qualities of the staff <u>did you dislike</u> (choose all that apply)?

Not Patient Not Enthusiastic Disrespectful Unfriendly Unresponsive None Other

Do you have any additional comments about your experience with the staff at Howard Brown Health?

_____
_____
_____
_____

Program Experience

In your opinion, were there too few, just the right number, or too many contacts with your advocate since enrollment?

Too few contacts Just the right number of contacts Too many contacts

How satisfied were you with the following services provided by your advocate? (*Circle only ONE answer that best reflects how you feel*)

Promptness of your advocate in responding to your requests, messages or phone calls	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Ability of your advocate to listen and understand your problems or needs	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
The amount of privacy provided when working with your advocate	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Level of professionalism and competence of your advocate	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Your advocate's knowledge of available resources	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Respect and care given to you as an individual by your advocate	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied

The App Experience

The app is easy to use.

Strongly disagree | Disagree | Agree | Strongly agree

The information within the app is easy to understand.

Strongly disagree | Disagree | Agree | Strongly agree

The information within the app is useful.

Strongly disagree | Disagree | Agree | Strongly agree

The app is different from other health apps I've used in the past.

Strongly disagree | Disagree | Agree | Strongly agree | N/A

The app itself is helpful.

Strongly disagree | Disagree | Agree | Strongly agree

Which features in the app were ***most* helpful?**

Lab Tracking | Health Information | Direct Messaging | Explanation of results

Which features in the app were ***least* helpful?**

Lab Tracking | Health Information | Direct Messaging | Explanation of results

How often do you use the app?

Once a month or less | Several times a month | Several times a week | Once a day | Several times a day

Your Overall Experience

Overall, how would you rate the quality of services you have received at Howard Brown Health?

Poor | Fair | Good | Excellent

What did you like most about the app? _____

_____

_____

_____

What did you like least about the app? _____

_____

_____

_____

Other Comments: _____

_____

Appendix I1

JOB TITLE: Program Manager, HBH Healthvana Social Media Intervention
REPORTS TO: Program Director, HBH Healthvana Social Media Intervention
FLSA STATUS: Exempt, Full-time

POSITION SUMMARY:
The Program Manager provides leadership for SPNS Social Media staff. Additionally, this Manager oversees and provides direct service and appropriate referrals and support for HBH clients.

PRINCIPAL DUTIES AND RESPONSIBILITIES:

1. Hire, train, supervise and mentor all HBH SPNS social media advocates, volunteers and interns.
2. Collaborate with Program Coordinator and other Medical, Patient Services, and Social Services Staff and Program Managers to provide overall direction for SPNS social media program.
3. Accurately complete all multi-site evaluation reports and statistical data forms.
4. Review and update referral and resource material, for clients and HBH colleagues.
5. Maintain accurate statistics and reporting of program activities on clients served, including managing data for quarterly reports and funder site visits; assist with timely completion of quarterly and annual progress reports to funders.
6. Attend all required department and Howard Brown Health meetings and training sessions, including a weekly meeting with supervisor; increase HIV/STI prevention knowledge of staff at HBH through collaboration, communication and trainings.
7. Represent HBH at multi-site meetings with ETAC and national funders meetings in Washington D.C.

Qualifications, Skills and Abilities:

- Bachelor's Degree and/or equivalent experience with social service/public health field is required. Master degree in public health, health education, social work or related field highly regarded.
- Experience working in HIV/STI prevention, sexual/reproductive health or other community health programs required.
- Supervisory experience required.

Appendix I2

JOB TITLE: SPNS Program Coordinator, HBH Healthvana Social Media Intervention
REPORTS TO: Program Manager
FISA STATUS: Exempt, Full-time

POSITION SUMMARY:
The Program Coordinator - Treatment Adherence and Retention Services (SPNS-Special Projects of National Significance) oversees and coordinates the operational aspects of the SPNS social media retention/treatment adherence grant. The Program Coordinator is responsible for project implementation, ensuring that the project meets required scopes in a manner consistent with IRB requirements and grant work plans. Duties include oversight of social media application implementation, participant recruitment/retention, and data dissemination. The HBHC social media intervention is an innovative integration of smart phone technology and social media into the HIV care continuum. The intervention targets and engages young men who have sex with men (YMSM) and transwomen of color HBHC patients through a downloadable smart phone app or web portal. The SPNS project is a multi- year demonstration project through HRSA to evaluate the usefulness of the tool.

The Program Coordinator will work very closely with the PI, SPNS staff members, and program evaluator of the grant, meeting regularly and discussing all operational aspects of grant implementation with them.

PRINCIPAL DUTIES AND RESPONSIBILITIES:

1. Responsible for drafting and submitting all reports required to maintain SPNS grant funding with support from PI and Supervisor
2. Attend and coordinate weekly SPNS staff meetings with PI and with SPNS staff. Create agendas for these meetings in coordination with PI and Supervisor; record minutes for meetings. Attend all SPNS grantee meetings and phone calls as required.
3. In collaboration with SPNS team, develop, produce and distribute SPNS outreach marketing materials.
4. Assist program evaluator in creating data collection and participant tracking tools. Help document participant contacts, intervention implementation and outcomes during project period.
5. Train HBHC staff in integration of social media app into HIV treatment cascade.
6. Act as liaison to the IT platform company the SPNS project will utilizing throughout the project.
7. Assist staff in entering "counting orders" to capture service utilization within outreach. Ensure orders are correctly built and managed in the EMR, Centricity.
8. Maintaining communication with ETAC regarding technical assistance needs in coordination with Co-PI.
9. Ensure accurate and timely reporting of statistical data and progress in achieving outcomes.
10. In partnership with program evaluator, determine evaluation measures for intervention and tailor data tools to evaluation measures.
11. Participate in ongoing continuing education, and maintain current knowledge of transgender health, sexual health and HIV/STI prevention and treatment related information, by attending trainings, in-services, professional development events and by self-education. Attend conferences and trainings as approved by supervisor.
12. Work on forming collaboration outside venues as necessary to promote program services to a higher number of youth, young adults, transgender women of color, and other targeted populations.
13. Communicate as necessary with HBHC case management, PSS employees, and Linkage to Care specialists to ensure access to care for intervention users.
14. Attend and participate in any required consultation groups and staff meetings.
15. Maintain IRB compliance at all times, notify, IRB of any noncompliance issues ASAP. In consultation with Co-PIs and Manager of Research Compliance, draft and develop IRB submission materials, Keep meticulous records of all IRB submissions and approvals.
16. Present evaluation findings at local, state, and/or national conference(s).
17. Prepare finding abstracts
18. Inform community partners of effectiveness, barriers, and opportunities in engaging HIV patients in social media interventions.
19. Uphold the highest level of participant confidentiality, in person and in practice.
20. Other duties as assigned.

QUAUFTCATTONS, SKILIS AND ABILITIES:

Required:

- Bachelor's Degree in Social Work, Sociology or health related field
- Physical ability to effectively communicate with others, verbally and written; perform basic computer operations and other office functions, whether aided or unaided.
- Experience working in a community based medical/social services setting
- Prior knowledge and experience with HIV/AIDS/Prevention
- Prior experience working with transgender population
- Familiarity with social media technology
- Takes initiative, persists at tasks and pursues completion of objectives
- Grasps new concepts, approaches and systems
- Develops results-oriented conclusions
- Writes in a concise and organized manner, and uses correct grammar
- Challenges current procedures to develop other alternatives
- Brainstorms to develop suggestions and new ideas
- Able to remain calm in emergency situation and remembers to follow emergency policy and procedures
- Adapts own behavioral and communication style to gain cooperation of managers, co-workers, peers, clients, patients, suppliers
- Adapts well to and supports change
- Gives and seeks feedback that will increase the productivity of relationships

Preferred:

- Bilingual-English/Spanish
- Prior HIV prevention outreach experience
- Proficient in electronic medical records (EMR)

Appendix I3

JOB TITLE: Retention in Care Specialist
REPORTS TO: SPNS Program Coordinator
FLSA STATUS: Exempt, Full-Time

POSITION SUMMARY:
The Patient Retention Advocate is responsible for working with Howard Brown Health medical and SPNS staff to insure that primary care patients living with HIV/AIDS remain retained and active in their healthcare. The Patient Retention Specialist will accomplish this goal by using a variety of outreach strategies, including the use of the SPNS Social Media app, targeting patients who are at-risk for being lost to care and re-engaging them into primary care medical services by providing intensive patient navigation and support. This is a full-time position.

PRINCIPAL DUTIES AND RESPONSIBILITIES:

1. Work with a multidisciplinary team of medical providers, case managers, and linkage to care staff to identify patients living with HIV/AIDS who are at-risk or who have been lost to care. (At-risk means missing/cancelling two consecutive primary care medical appointments. Lost to care means patient has not accessed medical care within the last six months.)
2. Conduct active outreach in order to make contact with and re-engage identified patients. Outreach includes, but is not limited to, phone calls, letters, text messages, emails, use of social media apps, etc.
3. Link patients lost to care to Howard Brown Health's primary care medical clinics or another appropriate healthcare provider.
4. Support patient's re-engagement into care by providing short-term case management services through a patient's third medical appointment.
5. Transition patients receiving case management services to appropriate aftercare services upon completion of their third HIV-Specific medical appointment.
6. Conduct a three-month follow-up with all patients terminated from services.
7. Adhere to program procedures for providing linkage into care services including follow-up to ensure and confirm their ongoing engagement in medical services.
8. Provide referrals to both internal and external supplemental and long term resources as needed, including, but not limited to: Ryan White Case Management, Treatment Adherence Services, referrals for Behavioral Health Services.
9. Engage in ongoing self-guided education and attend any and all meetings and trainings required by funding sources or requested by agency/supervisor in order to develop and/or maintain competence in performing functions of the position.
10. In collaboration with SPNS team, develop, produce and distribute SPNS outreach marketing materials.
11. Work on forming collaborations with outside venues as necessary to promote program services to a higher number of youth, young adults, transgender women of color, and other targeted populations.
12. Will follow role assignments that are in alignment with the Patient Centered Medical Home Standards and participate in all Patient Centered Medical Home efforts.
13. Maintain records and other work materials in an organized manner according to agency guidelines.
14. Other duties as assigned

QUALIFICATIONS, KNOWLEDGE SKILL REQUIRED:

- High school diploma with 2 years of experience or bachelor's degree required
- Must possess HIV/AIDS/STI knowledge including prevention, infection, and treatment
- Demonstrate effective interpersonal skills and ability to engage and work effectively with diverse staff and client population is required
- Experience working with youth and transgender clients
- Must have good working knowledge of LGBTQ health issues with specific understanding of the impact of HIV/AIDS and health-related disparities faced by the LGBTQ population
- Must have effective oral and written communication skills and be organized
- Bilingual English/Spanish desired
- People living with HIV/AIDS are strongly encouraged to apply

Appendix I4

JOB TITLE: Data Manager, HBH Healthvana Social Media Intervention
REPORTS TO: SPNS Program Coordinator
FLSA STATUS: Exempt

General Summary:
Responsible for specified duties associated with implementing various research project protocols and analysis at HBH.

Principal Duties and Responsibilities:
1. Act as liaison between and work with Howard Brown's IT and SPNS project staff to ensure timely and accurate entry of all program data.
2. Assist staff with providing summary reports to ETAC and HRSA as necessary.
3. Provide computer media support.
4. Provide data analysis support to Principal Investigator.
5. Participate in other recruitment/retention activities as needed.
6. Attend trainings, staff meetings, and in-services as required.
7. Other duties as assigned, including occasional outreach when necessary.

Qualifications, Skills and Abilities:
Excellent interpersonal and organizational skills, along with an ability to attend to significantly detailed work and juggle multiple tasks are essential. Candidate must be proficient in Windows-based computer skills, including file organization, word processing, data entry, e-mail systems (MS Outlook), and internet navigation. Candidate should be able to work independently. Bilingual Spanish/English, and experience with clinical research and HIV education are highly beneficial. Bachelor's degree in a relevant discipline is preferred.

Appendix J1

Crisis Intervention Protocol- Instant Messaging

Original Implementation Date:	Revision Date:	Approved by: Policy and Procedure Committee or HBH Board of Directors	Implementation Date:

Agency Policy	Crisis Intervention Protocol-Instant Messaging
Rationale	The Crisis Intervention Protocol ensures that staff can properly and effectively manage crisis situations as they occur with clients through Healthvana or during the study survey.
Scope	SPNS Study participants and all HBH clients who use the messaging feature on the Healthvana app.
Definitions	SPNS: Special Projects of National Significance. Healthvana: a mobile application that follows HIPPA regulations and allows users to access their medical records and message their care teams.
Procedure	**Crisis Intervention with study participants during survey completion.** 1. Study staff will be present at all times when surveys are administered. 2. Study staff will monitor behavior to make sure participants are comfortable during the survey process. 3. Study staff will follow up with participants after surveys to make sure that participants are still comfortable and wish to continue with participation. 4. If a survey question triggers a participant, study staff will stop the survey and speak with the participant to help assess how they are feeling. Participants will be offered to take a short break after which they will be asked if they are sure they want to continue with the survey. 5. Once the survey is completed, study staff will follow up with participant to discuss and address how they are feeling and any concerns for future participation in the research project. 6. If a participant does not want to continue or is still upset after the survey, staff will refer the client to behavioral health services or outside mental health services. 7. Clients will also be asked if study staff may follow up with them via the app to check in on how they are feeling. **Crisis Intervention for clients who message staff** 1. Staff will attempt to get the client's location in the event authorities must to be notified. 2. Staff will follow the role of the mandated reporter if client states intention to harm themselves or others. Staff will notify their supervisor immediately. 3. Staff will instruct clients to contact 911 if the client is in immediate danger. Staff will notify their supervisor immediately. 4. Staff will encourage the client to engage over the phone or in person instead of via messaging. 5. Staff will provide clients with resources for external services that can be accessed outside of HBH service hours. 6. Staff will discuss ways to assist clients in avoiding issues or situations that might be triggering and will create safety plans with clients. 7. Staff will follow up with clients after a crisis to provide support and assess the progress of the client. **Staff Duties & Behaviors** 1. Staff will create an environment that allows clients to be open about situations that might be causing stress in their lives. 2. Staff will discuss preventative measures and harm reduction with clients. 3. Staff will monitor for behavior that is out of the ordinary for a given client.
Applicable Regulations	None
Materials	None

Appendix J2

SPNS: Social Media Engagement

Original Implementation Date: 10/18/201	Revision Date:	Approved by: Policy and Procedure Committee or HBH Board of Directors	Implementation Date:

Rationale	To ensure that all participants are remaining engaged in the SPNS Social Media study at an appropriate level to assess the efficacy of the intervention.
Scope	SPNS: Social Media Study participants
Definitions	Advocates: medical case managers who work with study participants. SPNS: Special projects of national significance. SMARTEE: Social Media App for Retention Treatment, Education and Engagement.
Procedure	**Survey Completion** 1. Once a participant completes a survey, a follow-up survey will be scheduled for 6 months from the date. 2. Participants have 4 months from the due date to complete a follow-up survey. (E.g. A participant completes a survey on January 1st, the follow-up survey will be scheduled for July 1st. The client has until October 31st to complete a follow-up survey.) 3. If a client does not complete a follow-up survey within the allowed window period they must wait for next follow-up survey window to open. **Case Management Engagement** 1. Reassessment of Care Plan a. Reassessments of care plans must be completed in person every 3 months at minimum or as client reports changes and progress. b. At time of reassessment any changes are noted and goals are addressed. c. Goals are set with achievable tasks to help clients progress in their goals. If a client has not reached a set goal, the client and Advocate will discuss creating a new goal. d. Utilization of existing Ryan White Services for HBH clients may be used for SMARTEE clients on with prior permission from department leadership. 2. Required Contact a. Advocates will contact clients regarding their medication adherence, goals, approaching appointments and additional needs at least every 30 days via the app, email or phone. These contacts will be added to daily contact tally, on the caseload tracking sheet. b. Advocates will meet with clients before or following a medical appointment to check-in. c. Advocates will schedule other meetings around medical appointments to ensure priority scheduling for clients. d. Advocates will contact clients within 1 business day of a missed appointment. e. If a client does not return contact after 90 days of intense effort, the client will be discharged from the program. 3. Tracking a. All contact with clients will be logged on the Caseload Tracking sheet.
Applicable Regulations	None
Materials	SMARTEE Barrier Assessment, SMARTEE Intake and Care Plan, Caseload Tracking

Appendix J3

Client Contact

APP- Contacted - The client was successfully contacted via phone, email or direct message

APP- Attempted - An attempt to contact the client was made but unsuccessful

APP-OV - Contact with client occurred on site at a HBH location

APP-Pre-programmatic Outreach - Contact with a client who has not yet enrolled

APP-Programmatic Outreach - An enrolled client is given information about the program

APP-Non-programmatic Contact - Contact with a client who is not enrolled in the program but needs assistance regarding the app or other services.

APP-1st Att Contact - A 1st attempt to retain a client who not responded to 3 previous attempts

APP-2nd Att Contact - A 2nd attempt to engage and retain a client was made

APP-3rd Att Contact - A 3rd attempt to engage and retain the client was made

APP-Ex.Att Contact - Indicates at least 3 previous attempts to contact the client were made

APP-Sched Msg - The scheduled participant message was been sent to the participant.

APP-Apt.Rmdr - An appointment reminder was sent to the client

APP-Elig NI - For clients who are eligible for the study but do not want to participate

APP-Int NE - For clients expressing interest in the study but are ineligible to participate

APP-Elig Acc - The client is eligible for the study and accepted the invitation to participate

APP-Ct. Slf Ref - Indicates a client who contacts staff for inquiring about enrolling

APP-Ct. Stff Ref - Used when a HBH staff member refers a client to the program

APP- Rslt Inq-Not Chckd In - Client requests results on the app from not being checked in

APP-Read - A client has read a message sent by staff in the app

APP-Unread - A client has not read a message sent by staff in the app

Service Orders

APP-Viral load - Used on date viral load labs were completed by client

APP-CD4 - Used on date CD4 labs were completed by client

APP-Viral Supp Obtn - A client has achieved an undetectable viral load

APP HIV Lab Edu - HIV medical labs are reviewed, discussed with client

APP-App Edu - Client received instructions or assistance for using the app

APP ART Adher Tools - Medication tools (pill box, pill splitters, etc.) were given to the client

APP-Initial Enroll - The client agreed to enroll in the program and signed the consent forms

APP-Baseline Survey - The client completed the initial baseline survey

APP-6 Mon Survey - The client completed the 6 month follow up survey

APP-12 Mon Survey - The client completed the 12 month follow up survey

APP-18 Mon Survey - The client completed the 18 month follow up survey

APP-Incentive Given - The client is given the incentive for completing a survey

APP-Bon Incent. Given - The client received the bonus incentive for completing all surveys

APP-Transport Given - Client is given transportation cards

APP-Intake/CP - An intake and care plan is completed with a client
APP-Con FB - The client has completed the consumer feedback form
APP-Insur - A referral to the insurance clinic was given to the client by retention staff
APP-BHS Ref - A Behavioral Health Services referral was given to the client by retention staff
APP-Dental Ref - A dental referral was given to the client by retention staff
APP-Vision Ref - A vision referral was given to the client by retention staff
APP-Sprt Grp Ref - Resources for support groups were given to the client
APP-Otsd Ref - Client has requests a specific referral for outside doctor/service
APP-PrEP Ref - A referral for PrEP was been given to client for their partner(s)
APP-PEP Ref - A referral for PEP was been given to client for their partner(s)
APP-Office Appt. Sched - An office visit is scheduled for the client
APP-HIV Med Appt. Sched - Retention staff scheduled a medical appointment for the client
APP-HIV Med Appt Cmpt - Client has completed an HIV medical appointment
APP-MAP App-Completed - Staff complete a Ryan White B application with client
APP-MAP App-Approved - MAP application has been approved
APP-Parnter Elicitation - Discussed eliciting sexual partner(s) for testing/treatment

Discharge

APP-Viral Supp Mntn - Client has maintained an undetectable viral load
APP-LT RWCM - Client is transferred to long term case management
APP-Ct. Declined Services - An enrolled client decides to no longer continue in the study
APP-Program Complete - Client has completed all baseline and follow up surveys

Eligibility

APP-Ct in Age - Client is between the ages of 13-34, the age range of study scopes
APP-TWOC - Client identifies as a transgender woman of color
APP-MSM - Client identifies as MSM
APP-Med Hm - Client receives their HIV medical care at a HBH location
APP-New Dx - Client has been diagnosed with HIV in the past 12 months
APP-VL at least 200 - Client's viral load is equal to or greater than 200
APP-6 Mon App Gap - Client has not had a HIV medical appointment within the past 6 months

Ineligibility

APP-Ct under 13 - Client is younger than 13
APP-Ct Over 34 - Client is older than 34
APP-Ct Not in Target Pop - Client doesn't identify as a transgender woman of color or a MSM
APP-Ct HIV Neg - Client is not living with HIV
APP-Pt. Elsewhere - Client receives HIV care elsewhere and is not willing to transfer care
APP-VL Under 200 - Client's viral load is less than 200
APP-No Med App Gap - Client completed an HIV medical visit within the past 6 months

Appendix J4

Messages and Schedule

We plan to send 3 different messages each month. There are 4 message topics, a general supportive message not related to HIV, medication adherence, sexual health and an HIV fact or care related message. Messages will be sent in numerical order according to topic section. The sections are labeled for tracking, ex. on 9/9/17 message GS15 was sent to 50 participants.

Weeks in the month	Message Topic
Week 1	General Support
Week 2	Medication Adherence
Week 3	HIV Care
Week 4	
Week 1	Inspiring
Week 2	Medication Adherence
Week 3	HIV Care
Week 4	
Week 1	Sexual Health
Week 2	Medication Adherence
Week 3	HIV Care
Week 4	

General Support: GS 1-18

1. Protect yourself. Respect yourself. Love yourself. Reach out to us if you need to talk.
2. Some people find it helpful to tell family or friends their status. Some people don't. You decide who knows what and when.
3. Sometimes it may feel like you're alone—but you aren't. Let us know if you would like information on support groups.
4. Science shows that smiling makes you healthier. Share a laugh with a friend today.
5. Sharing your status with those you trust can help lower stress and improve your overall support network.
6. Extra support at your medical appointment can make you more comfortable. Think about taking someone you trust to your next appointment.
7. Think about finding a group near you to connect with others who know what you're going through.
8. Many people have experienced what you're going through. There's strength in numbers. Use their courage to inspire you!
9. See how many people you can make laugh this week.
10. Getting help sometimes gives you the chance to help others. Support can be a two-way street.
11. We can help you understand what you can to do to take care of yourself. We can put you in touch with other resources, too.
12. Only you know how you are feeling. Keep us updated.
13. Balancing responsibilities with managing your health is important. Take care of yourself first.
14. You decide on how to party and when. Don't let anyone tell you what to do
15. We don't judge. If you are going to use anything tonight, keep yourself safe!
16. Looking for a job, or possibly a new career? Follow the links to find job fairs in the Chicago area this spring! (NOTE: Message can be structured to include one link or multiple links depending on the time of year)
17. Meet-ups https://www.meetup.com/
18. Interested in meeting like-minded individuals? Check out the link below and start socializing today!
19. Have a hobby, and want to share it with others? Follow the link to find hobby meet-ups in your area.
20. Want to meet new people with similar interests, but don't know where to start? Check out the link below and make new friends!
21. Support Groups
22. Interested in learning more about groups offered at Howard Brown? Follow the link and explore your options! https://howardbrown.org/support-groups/
23. Seeking support or a safe space? Check out these groups outside of Howard Brown! http://www.centeronhalsted.org/supportgroups.html
24. Looking for support, but nervous in group settings? You can find support from different communities online. Follow the link to see different support groups outside of Howard Brown Health. https://support.therapytribe.com/
25. Interested in recreation activities in your area? Check out the Chicago Park District in the link below to see what options they offer. https://www.chicagoparkdistrict.com/

1. Looking to get out of the house? Check out the many social and recreational events that are offered outside of Howard Brown! http://www.centeronhalsted.org/newevents.cfm
2. Have a great (and safe) night!
3. Today is a great day for self-care.
4. If you're partying, make sure you're also taking care of yourself.

Inspiring-In 1-26

1. You are brave.
2. Refuse to let anyone ruin your day today.
3. Like great art, your imperfections make you a masterpiece.
4. Positive self-talk is always sexy.
5. Never believe anyone who tells you you're less than incredible.
6. Become the most positive and enthusiastic person you know.
7. You are capable of so much.
8. Love yourself.
9. Your individuality is sacred.
10. Give yourself what you would give to anyone else who is doing their best: respect.
11. Love yourself first and everything else falls into line.
12. You are perfect exactly the way you are!
13. Be proud of the story your body tells.
14. Fabulous comes in all shapes and sizes.
15. There's no wrong way to have a body.
16. All bodies have value.
17. All bodies deserve care.
18. Beauty comes in all forms, so remember you're beautiful!
19. Love the skin you're in!
20. There is no wrong way to have a body. We're all human. We all have flaws. Your body is yours and you should love it for all the things it can do.
21. You are special and important. Embrace yourself and others.
22. Don't let society tell you that your body makes you less than.
23. Being yourself is the best thing a person can be.
24. Be proud of who you are, not ashamed of how someone else sees you.
25. Don't be ashamed of your story, it will inspire others.
26. It's not about becoming a new person, but being the person you were always meant to be.

Sexual Health- SH 1-20

1. Sexually transmitted infections (STIs), like Chlamydia, gonorrhea, and syphilis, are spread from person to person through sex. HIV is also an STI.
2. Be open with your sexual partners.
3. Get tested regularly!
4. If you need help talking about safer sex with your partners, send us a message.

1. It’s important to get tested regularly; different kinds of sexual encounters have different risks.
2. Hepatitis C is a virus that causes inflammation of the liver. Often, there are no symptoms. Testing is easy-ask your provider or case manager if you’ve been tested recently to determine when/if you need retesting.
3. Did you know that there is a cure for Hepatitis C? Howard Brown may be able to help you access treatment. Ask your case manager for more information.
4. Your CD4 percentage reflects what portion of your white blood cells are CD4 cells. This can be a reliable indicator of immune health. When reviewing your labs, ask for your CD4 percentage.
5. ART, in rare instances, can affect kidney function—come in regularly for labs to catch any early signs of kidney issues.
6. Interested in improving your overall health with supplements? Ask your provider about B Vitamins, and other recommendations they might have.
7. The two main forms of cholesterol are: LDL (low density lipoprotein) and HDL (high density lipoprotein). Too much LDL or "bad” cholesterol can lead to heart disease or strokes. Monitoring your cholesterol regularly is an important part of managing your health.
8. Trying to lower your bad cholesterol? Try eating these foods more often: oats, barley, beans, eggplant, nuts, and soy. Ask your provider for more ways to lower your cholesterol.
9. A blood pressure reading between 90/60 and 120/80 is considered healthy. If your numbers are not in that range, make sure to ask your provider about ways to manage your blood pressure.
10. An Anal Pap smear tests a sample of cells from the anus for cancer. It is recommended that folks get an Anal Pap once a year. Ask your provider about getting an Anal Pap.
11. Experiencing nausea or diarrhea as a medication side effect? Try eating smaller meals throughout the day, instead of three large meals. Be sure to also discuss other options with your provider.
12. Interested in changing your smoking habits? Ask your provider or case manager to connect you with local resources, tools or medications to reduce or stop smoking.
13. A1C is a blood test that shows your average blood sugar level over the past 3 months. This can identify if someone is at risk for developing diabetes. Ask your provider how often you should have this test done.
14. Not sure how to begin exercising? If your provider says it’s safe for you to exercise ask your case manager can also help you plan an exercise schedule that works for you.
15. Did you know some insurance plans offer discounted gyms memberships? Ask your insurance company if they offer discounted memberships. You can also ask your case manager for possible referrals.
16. Think you might have an STI? Come in and get tested—it’s better to know for sure.
17. Having safer sex is empowering—part of that involves getting tested.
18. Do you have questions about condoms, dental dams, or other barriers? Let us know and we can help you.
19. Thinking about how you would share your status with a partner? You can ask us for support.
20. Talking to a sexual partner about status can be hard. For tips, send us a message.

1. Knowing each other's status helps you and your partner make healthy decisions about what types of sex you have.
2. Talking openly and frequently with your partner about sex can help you make decisions that keep you both healthy.
3. Knowledge is power. Use yours to make healthy decisions about the ways you have sex.
4. If your partner is HIV negative, they can take meds (PrEP) to stay HIV negative. Ask us about PrEP.
5. Condoms expire after time. Check the date before you open.
6. When it comes to condoms, two are NOT better than one. Don't double up! They could tear.
7. You are strong AND responsible. You have the power to take care of your own health and protect your partner.
8. Female condoms aren't just for vaginal sex. They can be used for anal sex too.
9. There's always more to learn about protecting yourself from STIs and infections. Stay empowered by educating yourself on your sexual health.
10. Get tested for STIs regularly if you are sexually active.

General Medication Adherence- MED AD 1-26

1. When you take your meds regularly, you're in control.
2. Taking your meds regularly? Treat yourself to something nice this week.
3. Be SMART with your ART. Take it on time every day.
4. When it comes to taking your meds on schedule, practice makes perfect.
5. Check your med supply and let us know if you need a refill!
6. Set yourself up for success. Get your meds together for the week.
7. Need to take your meds without anyone knowing? Ask us for advice.
8. Everyone forgets to take their meds once in a while. Don't be too hard on yourself. Keep trying, and let us know if you need help.
9. Having trouble remembering to take your meds? Ask us for ways to help you remember.
10. Going out of town? Don't forget to pack your meds.
11. Try using a pillbox for your meds if you have trouble remembering them.
12. Be aware of things that might be keeping you from taking your ART.
13. If you take ART, you can stay healthy—keep taking those meds!
14. Take ART regularly to keep your VL as low as possible.
15. HIV meds are grouped into 6 classes. Each class targets a different stage of the HIV life cycle. Most complete regimens have 3 medicines from two different classes.
16. Sometimes a complete regimen can be made into a single pill taken once or twice a day. Other times complete regimens require multiple pills, take at different times.
17. Entry inhibitors (EIs), like what's in Selzentry, prevent HIV from attaching to and entering a CD4 cell.
18. NRTIs (Nukes), like what's in Triumeq, Genvoya, and Stribild, block the reverse transcriptase enzyme. This stops the HIV replication cycle.
19. NNRTIs (non-nukes), like what's in Atripla, Odefsey and Complera, bind with and block reverse transcriptase to stop HIV from replicating.
20. Integrase Strand Transfer Inhibitors (INSTIs,) like what's in Tivicay, block the integrase enzyme to stop HIV DNA from being integrated into the CD4 cell's DNA.
21. Protease inhibitors (PIs), like Prescobix and Prezista, block the protease enzyme to prevent transmittable HIV chains from forming.

1. Boosters, like Tybost and Norvir, are medicines that boost the effects of other medications to avoid increasing the dose.
2. Juluca is the first complete regimen made of only two drugs in a single pill. This medication is for those who have been undetectable for at least 6 months.
3. Clinical trials are studies done on new medicines or approaches to see if they are effective and safe for people. Participating in a clinical trial provides researchers with valuable information. Visit https://aidsinfo.nih.gov/clinical-trials for more info!
4. Some clinical trials offer access to new medications for HIV or opportunistic infections. If you are interested in participating in a clinical trial visit the website below for more information. https://aidsinfo.nih.gov/clinical-trials
5. When it comes to taking ART, follow all of your provider's instructions to stay healthy and prevent drug resistance.
6. It's important that you take your ART as directed. Talk to us before making any changes.
7. Missing doses can mean missing out on better health.
8. Is something getting in the way of taking your meds the right way? Send us a message, we may be able to help.
9. Getting older is an adventure. Make sure to take control of your treatment so you can enjoy the ride.
10. Dance and party safely. Drugs and alcohol can interact with your meds. Ask us about possible interactions.
11. When you are prescribed a new med, ask us how it will affect the ones you are already taking.
12. "Drug resistance" happens when your body stops responding to ART. If you are taking your meds regularly, you are less likely to become drug resistant.
13. Being on ART can lower your chances of getting other infections.
14. For your safety, tell us about the other meds, drugs, and herbal supplements you are taking.
15. Skipping ART doses can give the virus time to multiply and may cause your meds to stop working.
16. Having side effects from your meds? Let us know, we can figure out a solution together.

HIV Care: HIV 1-25

1. "ART" stands for antiretroviral therapy. It is the medication you take to reduce the amount of HIV in your body.
2. Your "immune system" has special cells, proteins, tissues, and organs that help protect you from getting sick. Left untreated, HIV can damage the body's immune system.
3. CD4 cells help your body fight off infections. A CD4 count tells you how many CD4 cells there are in your blood. Higher numbers are better.
4. A viral load or VL test measures the amount of HIV in your blood. Lower numbers are better.
5. When HIV attacks the body's CD4 cells, virus levels increase in the body, causing potential symptoms.
6. Myth buster: HIV is not spread by saliva, tears, or sweat. And you can't give it to someone through a hug, handshake, or a kiss.
7. Sharing needles spreads HIV. Ask us where to get clean supplies.
8. Have you seen a dentist this year? Talk to us about a dental referral.

1. While many STIs are treatable, they can take a toll on your immune system, even affecting your CD4 count.
2. While there's no cure, the effect of HIV on your body can be controlled. Treatment can help you live a longer and healthier life.
3. Get your labs done at least twice a year so that you know if your ART is working or if you need to make changes.
4. Stomachache? Headache? Feeling anxious? Can't sleep? Reach out to us and we'll work on a solution.
5. Keeping track of your health can be hard, especially if you see lots of providers. If you don't know or have questions about what to do be sure to ask us.
6. Before your next appointment, make a list of questions about your treatment and bring the list with you so you don't forget to ask us.
7. The 1st step of the HIV life cycle is attachment. This is when HIV connects to the surface of a CD4 cell.
8. The 2nd stage of HIV's life cycle is fusion. During fusion, HIV enters the CD4 cell to reprogram the cell into making more HIV.
9. The 3rd step of HIV's life cycle is reverse transcription. Once inside a CD4 cell, HIV uses the enzyme reverse transcriptase to build HIV DNA that can be mixed into the DNA of the CD4 cell.
10. The 4thth stage of the HIV life cycle is integration. When HIV DNA is created, HIV uses the enzyme integrase to combine its DNA with the CD4 cell's DNA.
11. The 5th step of HIV's life cycle is replication. After HIV DNA and the CD4 cell's DNA combine, the CD4 cell will begin making long chains of HIV proteins.
12. The 6th stage of HIV's life cycle is assembly. When long chains of HIV proteins are formed they will then assemble into long chains of HIV that are un-transmittable.
13. The 7th stage of HIV's life cycle is budding. As long chains of HIV exit a CD4 cell, HIV uses the protease enzyme to cut the long chains which creates transmittable HIV.
14. https://splice.gopro.com/v?id=5mj9Lb
15. https://splice.gopro.com/v?id=pd2bGE
16. Get nervous talking to your provider? Write down any questions you have and bring them with you so you don't forget.
17. Take notes during your appointment. This will help you to stay on top of your treatment plan and keep you healthy.
18. If we use confusing words, ask what we mean. We're here to help.
19. If you don't understand the results of your VL test or CD4 count, ask us to explain.
20. Ask us what screenings, labs, or tests you should get and when you should get them.
21. We are all on your team. Be sure to ask questions and follow up on things that are unclear.
22. Make sure to find a provider who you like and can talk to. Talk to us about your concerns and options.
23. Help keep our schedule on track. Arrive to your appointment at least 15 minutes early so you have enough time to check in.
24. When is your next appointment? Establish a system to keep track of your appointments.
25. Having trouble keeping up with your care? Let us know; we might have services that can help.
26. If you feel sick, contact us and we'll help you figure out if you need to come in.