

## Implementation Manual and Workbook

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# PositiveLinks

**A smartphone-based linkage and engagement in care program  
for people living with chronic disease and their care providers**

## Frequently Used Terms, Acronyms, and Abbreviations

<b>Administrator</b>	Member of either the PositiveLinks Team or the Site Care Team with administrator rights to PositiveLinks Portal.
<b>Prospective Partner</b>	Any agency contemplating implementing the PositiveLinks Program.
<b>Avatar</b>	Emoji selected by Members to represent themselves on the Community.
<b>Care Provider</b>	Site-specific staff that deliver services to PositiveLinks Members. Staff types include community health workers, case managers, medical case managers, mental health professionals, and clinicians. An individual Care Provider may also be a Contact listed within the Contacts section of the PositiveLinks Member App.
<b>Check-In</b>	Daily questions sent to members to assess their mood, stress, and medication adherence
<b>Clinic</b>	A place where people living with HIV receive care. A Clinic may be a part of a larger entity that is the Partner organization.
<b>Community</b>	Anonymous digital social support community for PositiveLinks members
<b>Username</b>	The anonymous alias that a PositiveLinks Member selects to use for community posts and app login.
<b>Member</b>	PositiveLinks Member, a user of PositiveLinks.
<b>Partner</b>	A system with one or more implementing Sites. The Partner may also be the Site implementing PositiveLinks program supported by their Site Care Team and PositiveLinks Team
<b>PositiveLinks Member App</b>	Smartphone Application that is used by Members of the PositiveLinks program.
<b>PositiveLinks Provider App</b>	Smartphone Application that is used by Providers of the PositiveLinks program.
<b>PositiveLinks Member</b>	Members enrolled in PositiveLinks program.
<b>PositiveLinks Portal</b>	Online portal used by Sites to administer PositiveLinks program.
<b>PositiveLinks Program</b>	PositiveLinks Apps and Portal plus clinical integration. PositiveLinks program as a whole.
<b>PositiveLinks Team</b>	The UVA-based team that oversees PositiveLinks Program Site implementations; the team that works with the Site Care Team.
<b>Site</b>	The Site where PositiveLinks Program will be implemented
<b>Site Care Team</b>	Site-specific team comprised of Care Providers, Site PLC, and Site Administrators. This team works with the PositiveLinks Team either directly (as a Partner) or indirectly (through a Partner).
<b>Site PositiveLinks Coordinator</b>	Site PLC - Partner or Site Care Team staff member who coordinates and administers PositiveLinks program at the Site

<b>Acronyms and Abbreviations</b>	
<b>ASO</b>	AIDS Service Organization
<b>CoC</b>	Certificate of Confidentiality

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## PositiveLinks Implementation Manual and Workbook

<b>EMA</b>	Ecological Momentary Assessment
<b>EMR</b>	Electronic Medical Records
<b>IRB</b>	Institutional Review Board
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MCM</b>	Medical Case Manager
<b>MI</b>	Motivational Interviewing
<b>MOA / MOU</b>	Memorandum of Agreement
<b>PLWH</b>	People Living with HIV
<b>RiC</b>	Retention in care
<b>RWC</b>	Ryan White Clinic
<b>SBCM</b>	Strengths-based Case Management
<b>UVA</b>	University of Virginia
<b>VDH</b>	Virginia Department of Health
<b>VL</b>	Viral Load

# Introduction

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## Welcome Letter

Dear Reader,

Welcome to the PositiveLinks Implementation manual! We are excited to share this program with Partners and Sites, and the people living with HIV they serve. The PositiveLinks program is unique to many other m- and e-Health technologies and programs because its design is informed by ‘warm technology.’ This means that PositiveLinks facilitates and enhances the care environment for each Site and for each PositiveLinks Member. PositiveLinks is much more than a medication and appointment reminder app. This full-featured smartphone-based program and online portal, along with its integration into practice, combines self-monitoring of medication adherence, mood and stress levels, with coordination of care and social support. People living with HIV report their mood and stress, build social support by engaging with other Members anonymously on the digital social support community, answer quiz questions, learn from interactive educational resources and receive support from the Site Care Team based on the data they report.

This manual serves the following three functions:

- 1) Introduces PositiveLinks program and provides information on its development and intended use, its theoretical underpinnings, and its research base.
- 2) Supports decision-making criteria to help potential Partners determine whether or not PositiveLinks App is an appropriate fit for their Site(s).
- 3) Provides detailed guidelines for Site Care Teams to plan for, implement, integrate into practice, and administer PositiveLinks with people living with HIV.

Our goal is to provide you with all the details you need for a successful launch of PositiveLinks. If at any time you have questions, concerns, or suggestions, do not hesitate to contact the PositiveLinks Team.

Again, I want to welcome you to the PositiveLinks community. I can’t wait to hear about your experiences implementing the program at your Site.

Sincerely,

Rebecca Dillingham MD, MPH

PositiveLinks Director



## How to Use this Manual

Learn more about what PositiveLinks is and who uses it. Learn about its development and the theories and principles on which it is based	<a href="#">Section 1</a> gives an overview of PositiveLinks
See a quick summary of the features of PositiveLinks App and PositiveLinks Portal	<a href="#">Section 2</a> helps you get started using PositiveLinks with general information about PositiveLinks App and Portal
Find out whether PositiveLinks is a good fit for your Site, and how to prepare for implementation	<a href="#">Section 3</a> focuses on Pre-Implementation activities that help Sites assess their readiness and capacity for implementing PositiveLinks
Learn how to use PositiveLinks Member App and get tips for training and supporting Members	<a href="#">Section 4</a> provides detailed information on using the PositiveLinks Member app
Learn how to use PositiveLinks Provider App	<a href="#">Section 5</a> provides detailed information on using the PositiveLinks Provider app
Learn how to use PositiveLinks Administrator App	<a href="#">Section 6</a> provides detailed information on using the PositiveLinks Administrator app
Learn how to use PositiveLinks Portal to register, administer, and report Member data	<a href="#">Section 7</a> provides detailed information on using PositiveLinks Portal
Learn how to use actionable data from PositiveLinks to engage Members and improve care at your Site	<a href="#">Section 8</a> guides Sites to integrate PositiveLinks into practice to benefit Members and improve their connection to care
Learn how to implement PositiveLinks and recruit, enroll, and follow-up with Members	<a href="#">Section 9</a> provides information on recruitment, enrollment and follow-up

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# 1. PositiveLinks App General Information

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This section answers basic questions, such as 'what is PositiveLinks?' and, 'who is PositiveLinks for?' A brief history of PositiveLinks and its guiding principles, theories, and logic model are also provided.

*This section is organized as follows:*

*What is PositiveLinks?*

*Who is PositiveLinks for?*

*Evidence base for PositiveLinks*

*PositiveLinks App Human Support Team Roles*

*What is Strengths-based Case Management?*

*What is Motivational Interviewing?*

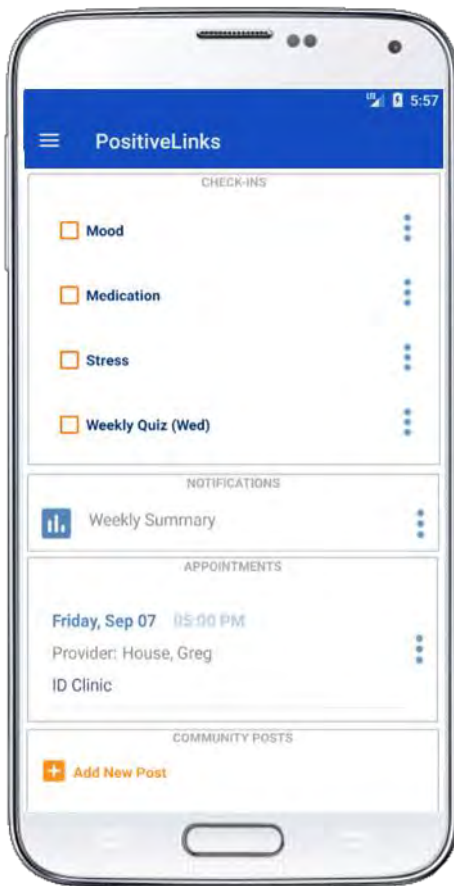
*How SBCM and MI Integrate with PositiveLinks*

*The need for PositiveLinks*

*PositiveLinks Logic Model*

*Research on PositiveLinks*





## What is PositiveLinks?

PositiveLinks is a Site-provided smartphone app used by people living with HIV, and an online portal used by the Site Care Team to enhance the care they provide. PositiveLinks provides care coordination, self-management tools, and social support to people living with HIV. It offers Site Providers real-time, actionable data on medication adherence, mood, and stress, upcoming appointments, community and private messages, reports and resources.

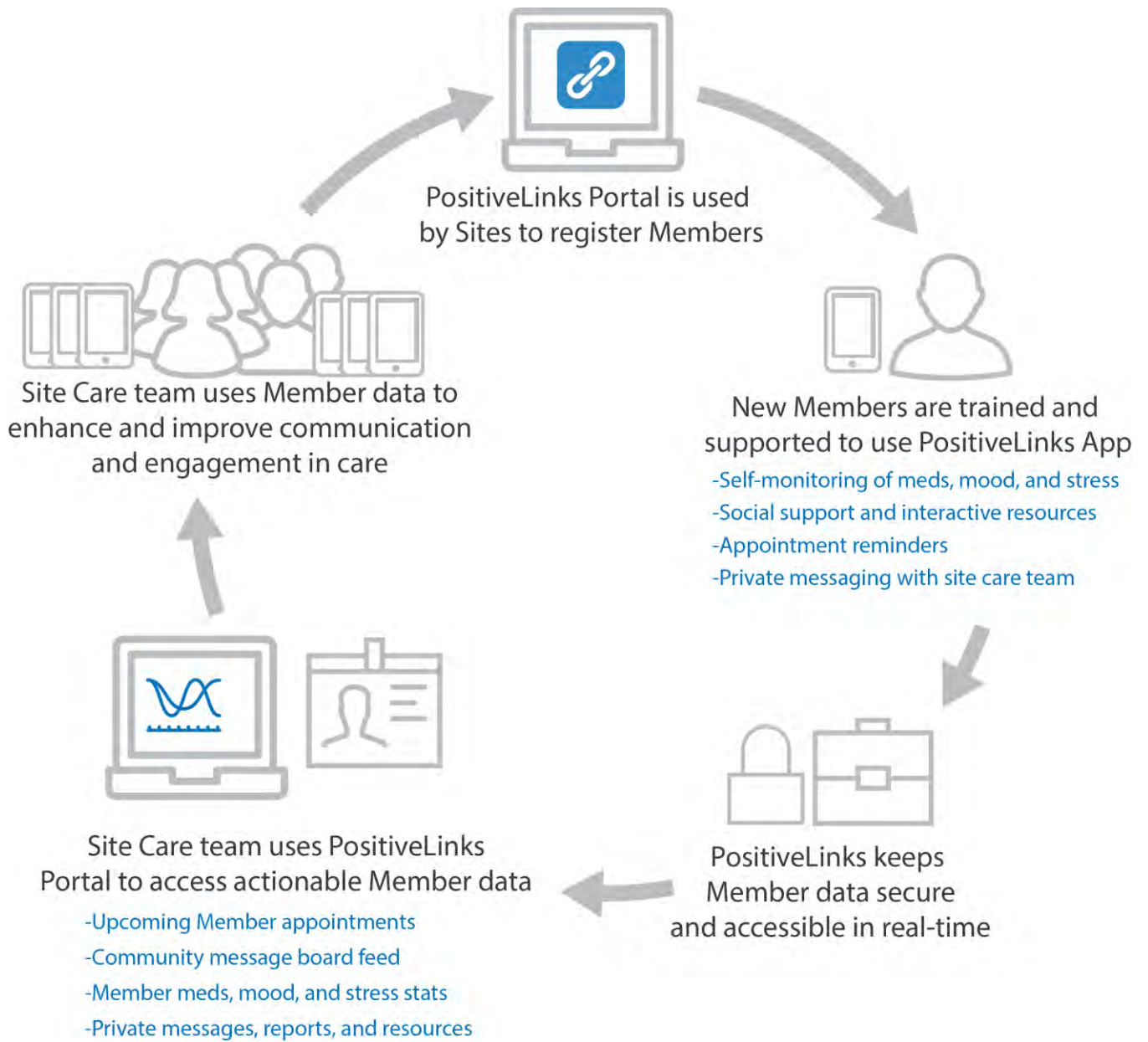
The PositiveLinks Program provides tools for HIV care coordination: it facilitates Member appointment scheduling and reminders and helps Members maintain positive behaviors. Tools include self-monitoring of medication adherence, mood, and stress levels; the opportunity for social support anonymously through a digital social support community; access to Site Care Team members through private messaging; and interactive educational resources.

The primary goal of PositiveLinks Apps is to improve linkage and retention in care (RiC). PositiveLinks App can enhance existing Care Provider RiC activities, or can be used by Care Providers as a new RiC program.

To many people, the term technology brings to mind items such as computers, electronic devices, and sophisticated machines. These devices may seem cold and impersonal having no feeling or emotion.

PositiveLinks, however, employs *warm technology*. Warm technology leverages the capabilities of communication technology while retaining the focus on human warmth, connection, and support. Warm technology enables PositiveLinks App to provide holistic support to a private and protected intentional community tailored to its Members. Rather than replacing more intimate forms of communication like cold technology, PositiveLinks increases the connection between Members and their Site Providers in a cost effective way.

PositiveLinks App facilitates communication that benefits the Site Care Team and Members by creating more than 100 potential contact points per Member each month. Site Providers have access to real-time data reported by Members. PositiveLinks offers Sites more ways to access available information to set and monitor care goals, as well as to identify unmet Member needs and to facilitate referrals to appropriate services.



Member engagement with PositiveLinks is associated with improved appointment adherence and partner outcomes and has enjoyed this success because the Members choose to use PositiveLinks App and enjoy using it



## Who is PositiveLinks App for?

PositiveLinks is designed for those newly diagnosed with HIV, those who have returned to medical care after a long gap in care (or are considering returning to care), those who regularly miss medical appointments, those who struggle with medications adherence, those who feel isolated or stigmatized in their diagnosis, and those recently released from incarceration. PositiveLinks App has been successfully used with a diverse demographic community in terms of age, race, sex, gender identity, HIV risk factors, education, and employment levels.

## Evidence Base for PositiveLinks

Programs and interventions that have shown the largest effect on improved long-term retention in care (RiC) include Strengths-Based Case Management (SBCM) and Motivational Interviewing (MI). SBCM has been shown to increase numbers of Member contacts and engagement in partner-based interventions. In addition, smartphone-based interventions, especially text messaging, have shown promise. A recent review by Thakkar et al found that ‘mobile smartphone text messaging approximately doubles the odds of medication adherence’ for chronic diseases. MI is an intervention used to facilitate behavior change that fits within the strengths-based practice framework. PositiveLinks program effectiveness is based on integrating components of these evidence-based- strategies.

## PositiveLinks Human Support Team and Roles

PositiveLinks App, informed by effective evidence-based interventions, uses warm technology to facilitate communication and to support shared decision-making between Members and their Care Providers, as well as to provide the opportunity for Members to build a social support network. PositiveLinks App achieves its successful results through establishment of a robust human support team by each implementing partner. Following are descriptions of the typical roles of the team that supports Positive Link App.

## PositiveLinks Site Care Team Roles

### ***PositiveLinks Partner/Site Health System Leadership***

Implementing Site leaders who are responsible for coordinating PositiveLinks implementation project must be able to articulate how the PositiveLinks Program fits within their strategic vision for holistic Member care and engagement that goes beyond the typical Site visit.

### ***Site PositiveLinks Coordinator (PLC)***

Each Site Care Team identifies or hires a full-time, on-site PositiveLinks Coordinator. PLCs serve as the primary point-of-contact for PositiveLinks for both Site Care Team and Members. PLCs also serve as primary contact to the UVA PositiveLinks Team.

### ***Site Providers***

Site HIV medical and case management Care Providers play an instrumental role in supporting PositiveLinks. Site Providers reinforce the importance of PositiveLinks use, assist in goal setting and tracking, and generally support Members in making the best use of PositiveLinks to improve Member outcomes.

### ***Site IT security stakeholders***

PositiveLinks may potentially connect to a Site's electronic medical record (EMR). Each Site Care Team must include, or consult with its own IT security stakeholders to ensure that PositiveLinks complies with its institutional regulations. Site IT stakeholders may be required to install the integration EMR component on Site computer systems.

## What is Strengths-Based Case Management? (SBCM)

PositiveLinks is informed by the principles of Strengths-based Case Management. SBCM is a social work practice theory that emphasizes people's self-determination and strengths. It is a philosophy and a way of viewing PLWH as resourceful and resilient in the face of adversity. It is Member-led, with a focus on future outcomes and strengths that people bring to manage living with HIV. SBCM centers on areas which are supported and enhanced by PositiveLinks, including; building effective relationships; assessing strengths; goal setting; and enhancing communication and facilitation skills.

Building effective relationships is at the heart of the PositiveLinks App with its use of warm technology to foster relationships. Strength assessments consider a Member's ability to accomplish a goal or skill by focusing on and reminding Members of past successes and by identifying and communicating Members' skills.

Goal Setting helps Members plan how they will overcome difficult situations and barriers to their medical care or other life goals. Self-monitoring through PositiveLinks App helps Members identify areas in which they wish to set goals. When setting goals, Members are encouraged to use the SMART method. Smart goals, based on the acronym SMART, follow these guidelines: Specific, Measurable, Achievable, Relevant and Time Bound. This includes clearly specifying achievable goals; identifying steps Members will take to achieve goals; considering ways Members can overcome barriers to reaching goals; and naming the people and tools available to help Members achieve goals. PositiveLinks App provides support for Member goal setting and goal tracking.

## What is Motivational Interviewing (MI)

Motivational Interviewing is a counseling method that focuses on facilitating and engaging intrinsic motivation within Members in order to change behavior. MI is a goal-oriented, Member-centered counseling approach for eliciting behavior change by helping Members explore and resolve ambivalence. Compared with non-directive counseling, it's more focused and goal-directed.

A key skill for Providers who practice MI is to be non-judgmental. In this way Providers help Members to become more aware of potential problems, consequences or barriers that are keeping them from achieving their goals. Providers help Members see benefits from changing a behavior. The MI approach encourages Members to recognize inconsistencies between their behavior and their goals, and thus elicits motivations for changing behavior from Members themselves. In this way Members decide when they are ready to change a behavior with support, rather than persuasion, from the counselor.

## How SBCM and MI Integrate with PositiveLinks

The philosophies behind SBCM and MI, and the communication skills they employ, form the basis of the interactions between Site Providers and Members, both in-person and using PositiveLinks communication tools.

PositiveLinks Site Providers use SBCM and MI counseling skills to support PositiveLinks Members. These skills help the Site Care Team decide when Members need care coordination services or mental health referrals. The Site Care Team and Member interactions may occur in-person or within the PositiveLinks App, thus reinforcing the human support component. Communication by phone at scheduled check-ins and communication through private and community board messages through PositiveLinks helps increase regular points of contact with Members.

Using the principles of SBCM and MI, Site Care Team avoids communicating in a 'big brother' manner, and instead elicits candid responses that help determine how Members are doing. This serves to strengthen the relationship between Members and the Site Care Team and increases Member engagement in their own medical care.

## The Need for PositiveLinks

Retaining people living with HIV (PLWH) in HIV care is imperative to achieve individual and community health goals. The PositiveLinks Program provides holistic support to PLWH to address potential gaps in the HIV care continuum. Without access to and retention in care (RiC), PLWH will not benefit from the tremendous advances in anti-retroviral therapy (ART) that support individual health, improve well-being, and offer the potential for a normal life span. When PLWH are not successfully engaged in care, there is also a missed opportunity for prevention, as effective HIV suppression with ART reduces transmission in sero-discordant couples by 96%.

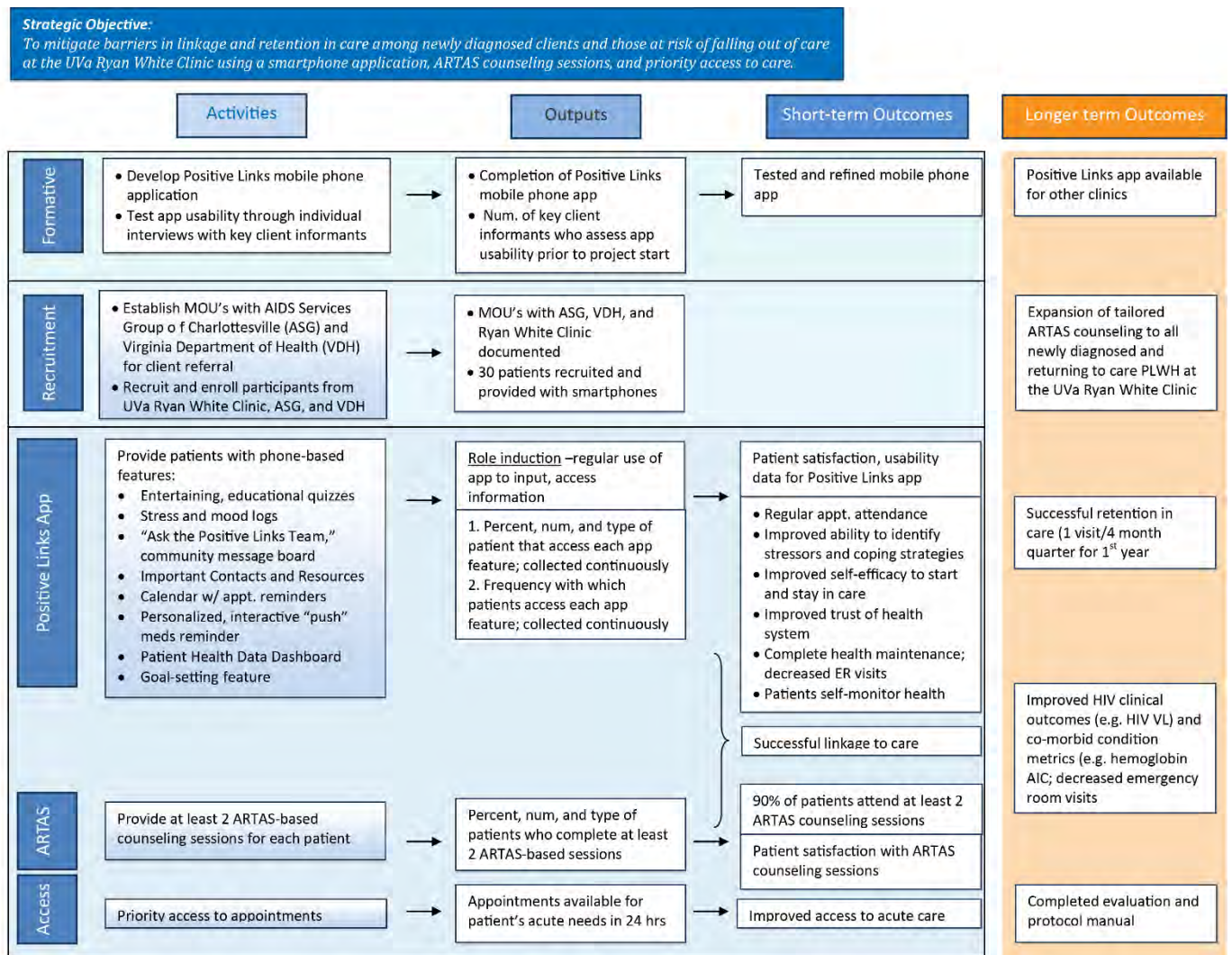


Unfortunately, the promise of improved health and reduced transmission remains remote for many. The HIV Care Continuum model developed by Gardner et al helps to illustrate this. Nationally, the HIV Care Continuum shows that only 19-29% of PLWH maintain a non-detectable viral load (VL), which is the level that optimizes health benefits for individuals and reduces HIV transmission.

## PositiveLinks Logic Model

The PositiveLinks Program Development Team employed a Member-centered design process, analytical data, behavioral psychology, and the evidence base in the literature to inform the design and use of the PositiveLinks App.

The PositiveLinks logic model provides details of how the PositiveLinks Team perceived each application function to contribute to the care, health, and wellbeing of PositiveLinks App Members and the Site Providers who administer the PositiveLinks App. Assumptions in the logic model have been iterated based on Member and Provider feedback so they continue to align with the short and long term needs of the stakeholders and with the objectives of the project.



## Research on PositiveLinks

The original pilot and implementation research for the PositiveLinks Program was conducted by Rebecca Dillingham MD, MPH, and Karen Ingersoll, PhD, at the University of Virginia. The project was supported by a grant from AIDS United and the M-A-C AIDS Fund. Health Decision Technologies developed PositiveLinks in collaboration with UVA. The scale up and broad-based implementation of the PositiveLinks Program was made possible by funding from the Virginia Department of Health (VDH).

From 2013 to 2016, PositiveLinks App was developed, in collaboration with Members and stakeholders, and piloted at University of Virginia's Ryan White Clinic. Thus, Ryan White Clinic was the first Site in which the PositiveLinks Program was implemented. Findings from this study showed that the most popular feature of PositiveLinks among Members was the Community board. The cohort of PositiveLinks Members with the lowest rate of retention used PositiveLinks App the most and demonstrated the greatest increase in rate of retention in care. CD4 count and viral load improved significantly in Members who used PositiveLinks App.

PositiveLinks App pilot was successful at Ryan White Clinic to the extent that it is now presented as a component of Usual Care. This means PositiveLinks App is an 'opt-out' aspect of usual Site care rather than an 'opt-in' research program. The PositiveLinks Team continues to enhance, expand, and integrate PositiveLinks more thoroughly into Usual Care, and continues to work with the Ryan White providers, and all Site Care Teams, to improve care continuum metrics.

### **PositiveLinks Program research outcomes are published in:**

Dillingham R, Ingersoll K, Flickinger TE, et al. AIDS patient care and STDs (2018) 32(6):241-50. <https://doi.org/10.1089/apc.2017.0303>

Flickinger TE, DeBolt C, Xie A, et al. AIDS and Behav (2018) 1-2. <https://doi.org/10.1007/s10461-018-2174-6>

Flickinger TE, DeBolt C, Waldman AL, et al. AIDS Behav (2017) 21: 3087. <https://doi.org/10.1007/s10461-016-1587-3>

Flickinger TE, DeBolt C, Wispelwey E, et al. Telemedicine and e-Health (2016) 22(9):746-754. <https://doi.org/10.1089/tmj.2015.0160>

### **PositiveLinks App has been discussed in numerous oral and poster presentations, including:**

- The International AIDS Conference, Amsterdam (July 2018)
- The International Association of Care Providers of AIDS Care (IAPAC) annual meetings on Adherence in 2014, 2015, 2016, 2017, and 2018
- International Conference on Communications in Health Care (ICCH) in 2015, 2016, and 2017
- Society of General Internal Medicine (SGIM) in 2015, 2017, and 2018
- United States Conference on AIDS in 2015 and 2016
- Society of Behavioral Medicine Conference 2016 and 2018

## 2. Getting Started with PositiveLinks App and Portal

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The Getting Started section gives a brief systems and features overview of PositiveLinks App and Portal. This section lists necessary and optional hardware and software for the project. It provides details and security considerations each Site should consider.

*This section is organized as follows:*

*System Description*

*Installation and Activation*

*PositiveLinks Member App Features*

*Check-Ins Feed*

*How am I?*

*Medication*

*Mood*

*Stress*

*Labs*

*Community Board*

*Appointment Reminders*

*Documents*

*Messages and Contacts*

*Resources*

*Questions*

*Additional Features*

*Quizzes*

*Weekly Summaries*

*Achievements*

*PositiveLinks Provider App Features*

*Availability*

*Members*

*Summary Page*

*Dashboard*

*Chat*

*Documents*

*Appointments*

*Lab Results*

*Services (Restricted Access)*

*Messages*

*Appointments*

*Resources*

*Questions*

*Services (Restricted Access)*

*PositiveLinks Portal Features*

*Portal Summary and Menu*

*Member Dashboard*

*Security*



## System Description

PositiveLinks System (V 3.0) includes a Member smartphone app, a Provider smartphone app and a web-based Portal for administration of PositiveLinks App. PositiveLinks smartphone apps works with Google's Android operating systems and Apple's iOS.

- **Android**
  - o Android OS: 5.0 or higher
  - o Internet connection required, cellular internet preferred
- **iOS**
  - o iOS version: 10.3 or higher
  - o Internet connection required, cellular internet preferred

## Installation and Activation

PositiveLinks System is a smartphone application and web-based portal. It is designed to facilitate linkage and retention in care for people living with HIV. PositiveLinks helps promote medication adherence and positive health behaviors.

**PositiveLinks Member App** is available by download from the University of Virginia. It is not available through public app stores. Members are directed to a secure product download page at <https://uva.positivelinks.info> (sites have their specific URL). Members login with a username and password created in the PositiveLinks Portal.

**PositiveLinks Provider App** is available for download at <https://uva.positivelinks.info> (sites have their specific URL). Provider accounts can be created by site administrators.

**PositiveLinks Portal** is available online at <https://uva.positivelinks.info> (sites have their specific URL) and uses the same login information as the provider app.

## PositiveLinks Member App Features

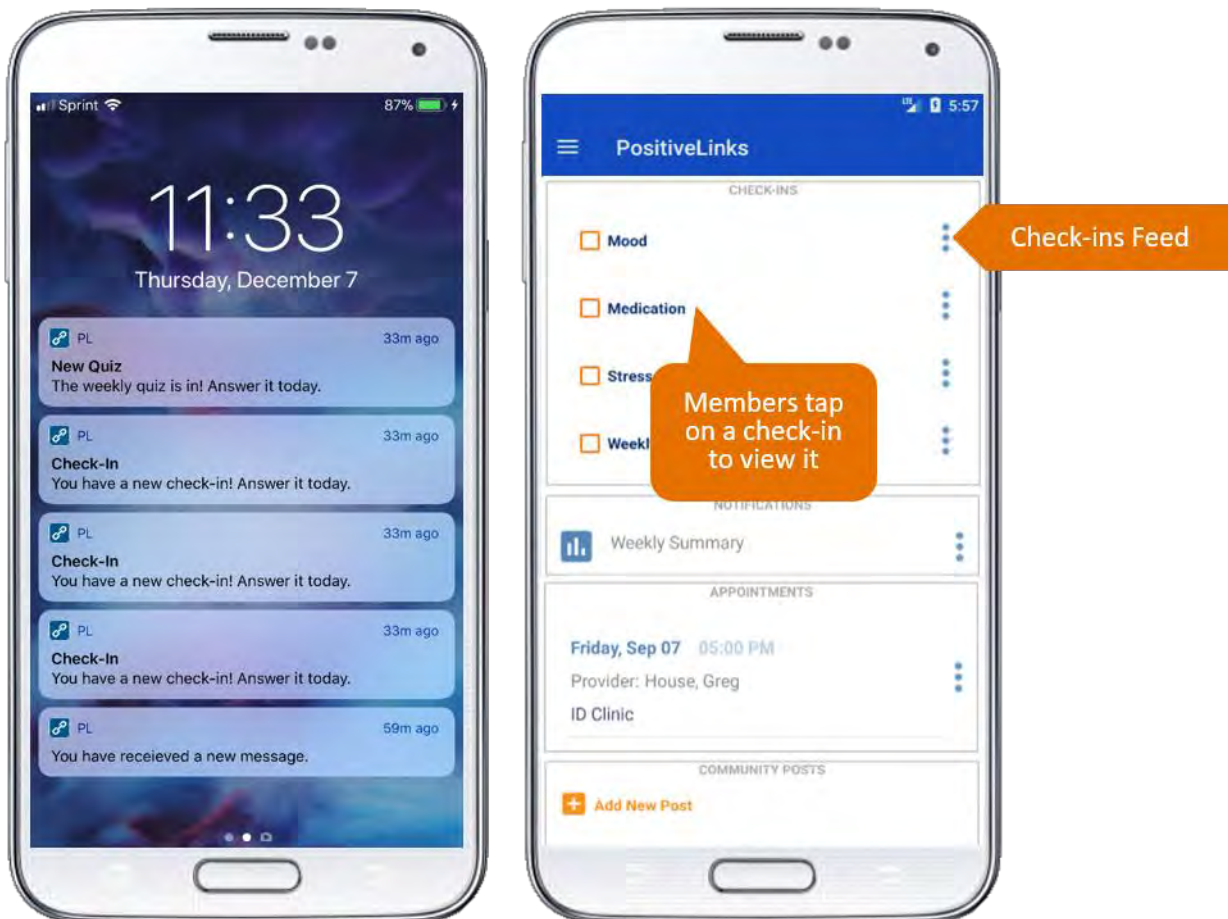
This section provides a brief overview of the PositiveLinks program which is comprised of Member and Provider Apps and Provider Portal. Detailed *how-to* steps for Site Care Teams can be found in section [4a](#) and [4b](#).

The Home screen is displayed when a Member signs into PositiveLinks App. All app features are accessible from the side menu in the top left on Android or from the bottom menu on iOS (see [4b](#) for more information on the iOS member app).

### Check-Ins Feed

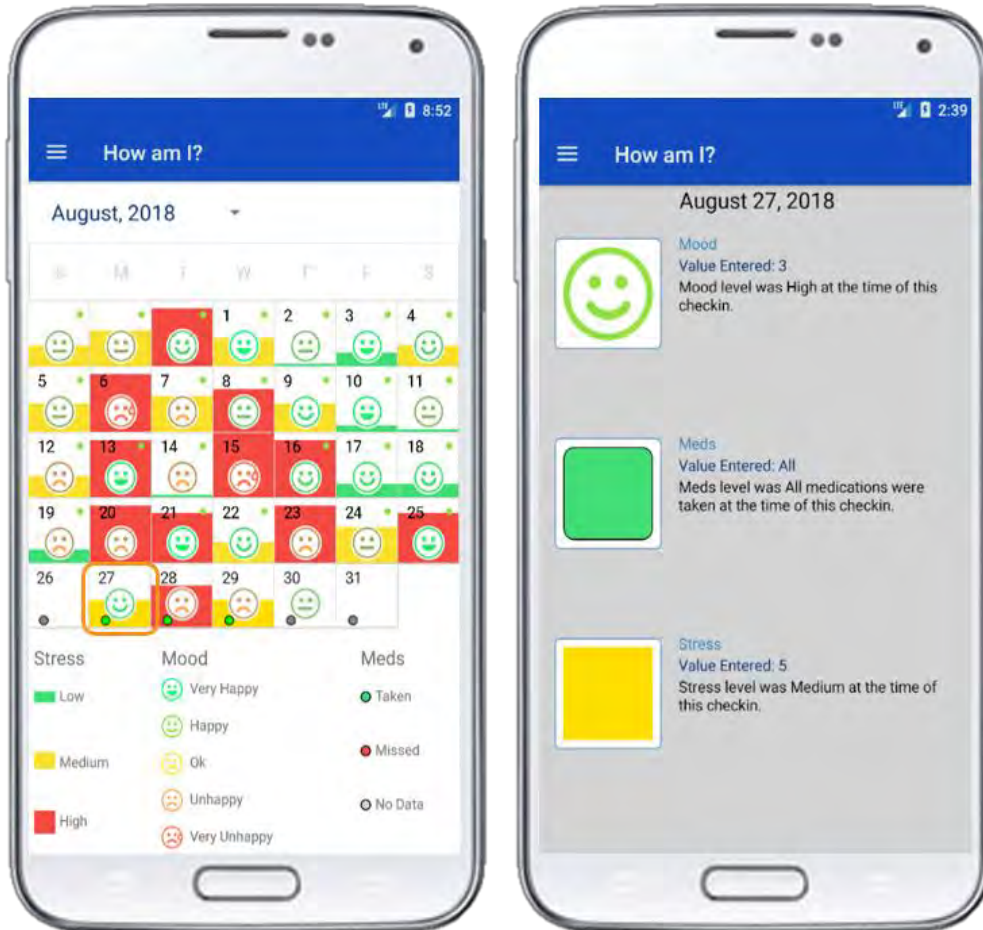
Members receive push notifications on their smartphones each day. When Members login to PositiveLinks, the check-in notifications display in the **Check-Ins feed**. Each day, Members receive three questions; one on medication adherence, one on mood, and one on stress level. Members get feedback based on their responses to the questions and may personalize the feedback they receive for their medication question.

- *Did you take your meds today? (Yes/No, timing and wording of reply can be customized)*
- *What is your mood? (Scale of -5 to 5)*
- *What is your stress level? (Scale of 1-10)*



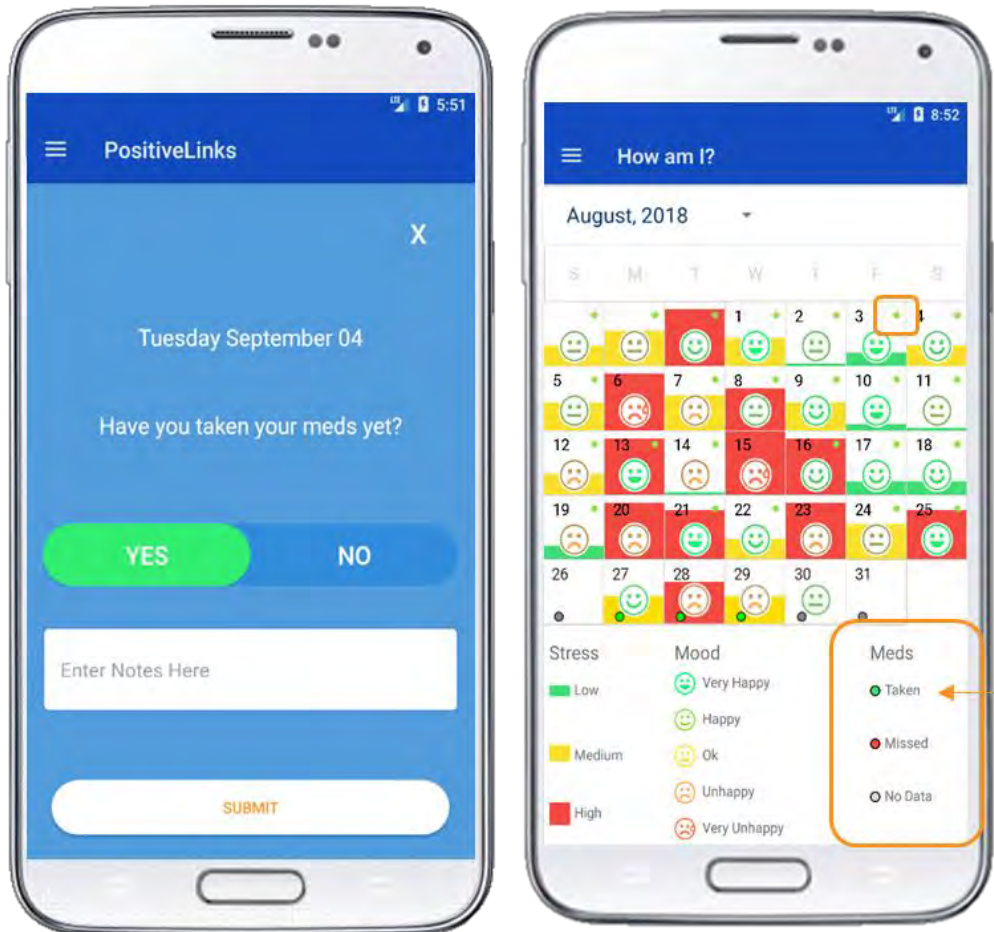
## How am I?

The **How am I?** page allows Members to view their responses to medication, mood, and stress check-ins over time. All check-in responses are viewed on a monthly calendar. Weekly averages for medication adherence are displayed graphically below the calendar.



### Medication

The monthly calendar view displays daily responses for **medication** adherence. A green dot represents a 'Yes' (or all) response to a Medication check-in, red represents a 'No' (or none) response, and grey indicates no response was received for that date. A yellow dot also displays for sites that enable an all, some, or none response system. Members can also view a graphical display of average weekly medication adherence over time below the calendar view. Adherence rate is calculated by the number of days Members respond 'Yes' to their Medication check-in divided by 7.

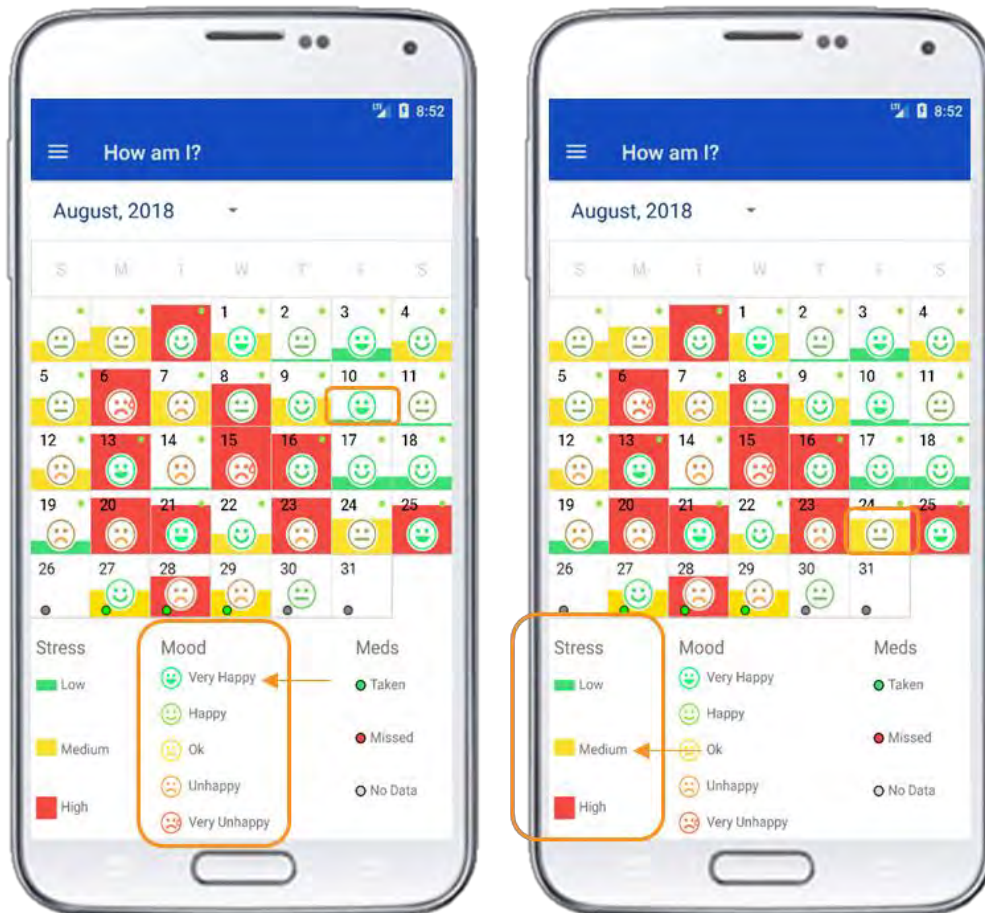


### Mood

The monthly calendar displays daily **mood** responses through a range of emoticons.

### Stress

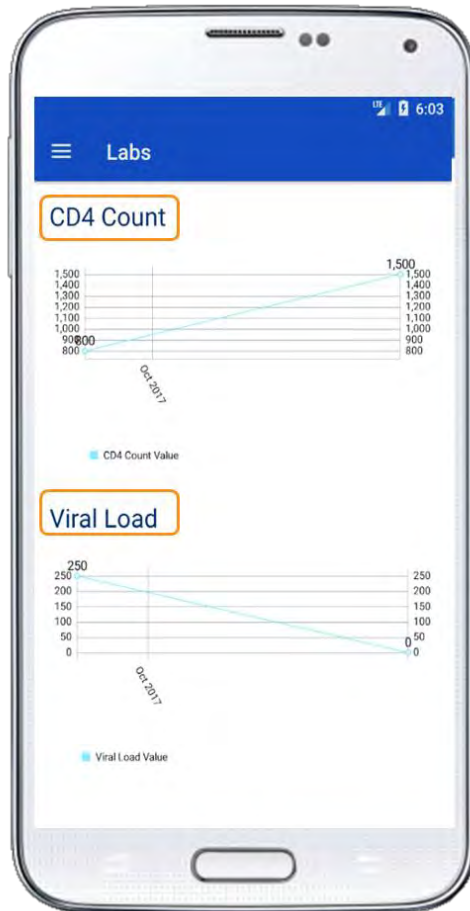
The monthly calendar displays daily **stress** responses through green, yellow, or red bars. A green bar indicates low stress, yellow indicates medium stress, and red indicates high stress.





## Labs

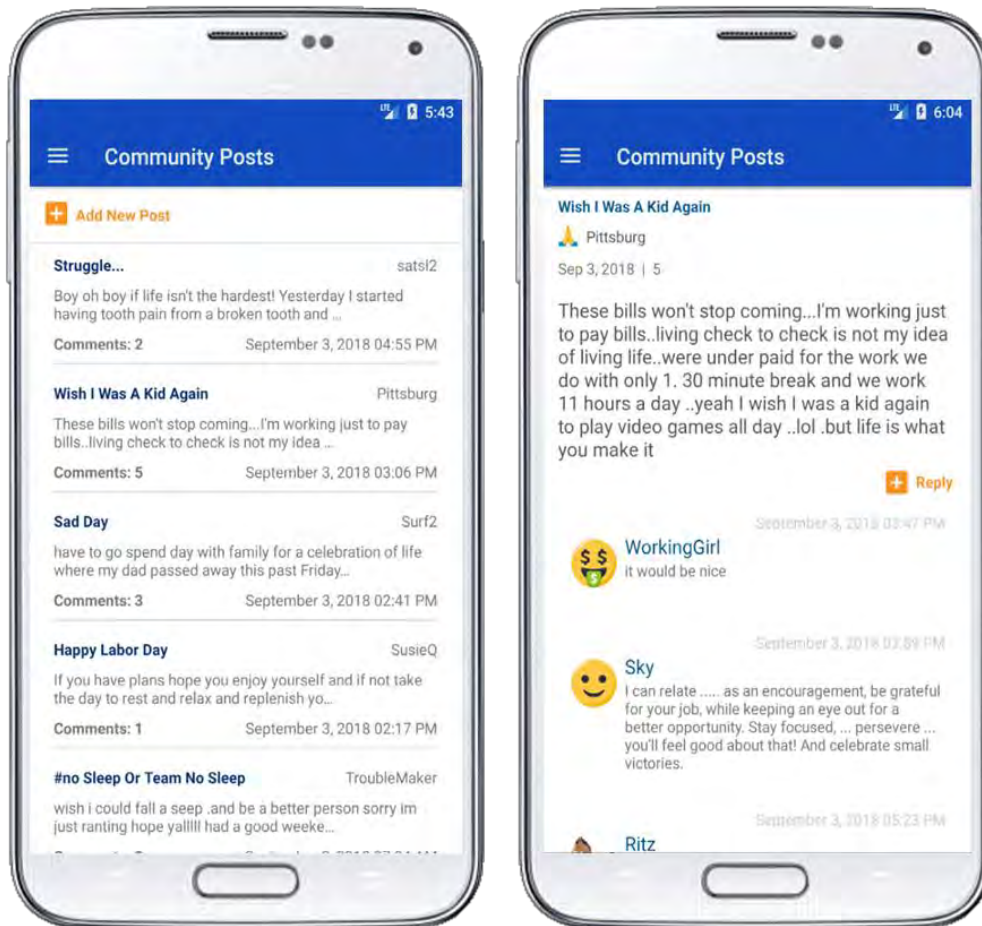
Lab values are graphically displayed so Members may note patterns over time and track their most recent levels. Members can click on the individual points to see the exact numbers. **CD4** and **Viral load** data is either manually entered through the PositiveLinks Portal or transferred from Electronic Medical Records (EMR). A ‘get in the green’ band displays goal values for the member.



## Community Board

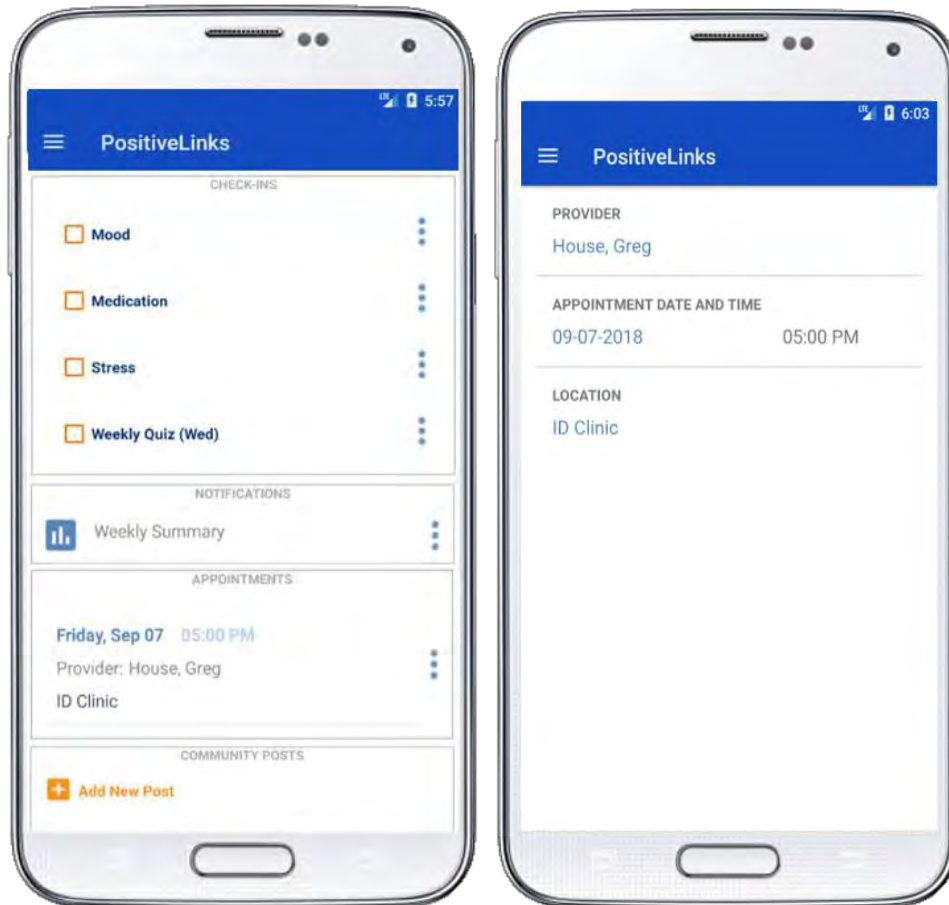
The **Community** board is a private digital social support community. Members are asked to remain anonymous when posting to the Community. During enrollment Members select an alias, called a Username, by which they are known to the PositiveLinks community. They also have the option to select an emoji, called an avatar, to represent themselves on the Community.

Members may start new conversations or respond to existing posts. The Site PLC observes the Community for posts with misinformation, information that reveals identity, inflammatory comments, and indications of health crises. The PositiveLinks team intervenes as appropriate. Intervention may include; introducing new conversation topics, providing corrected information, and immediate individual follow-up with Members in the case of medical or psychological crisis. Section 4 provides more detail about using the Community and Section 7 describes some challenges and solutions for integrating the Community into practice.



## Appointment Reminders

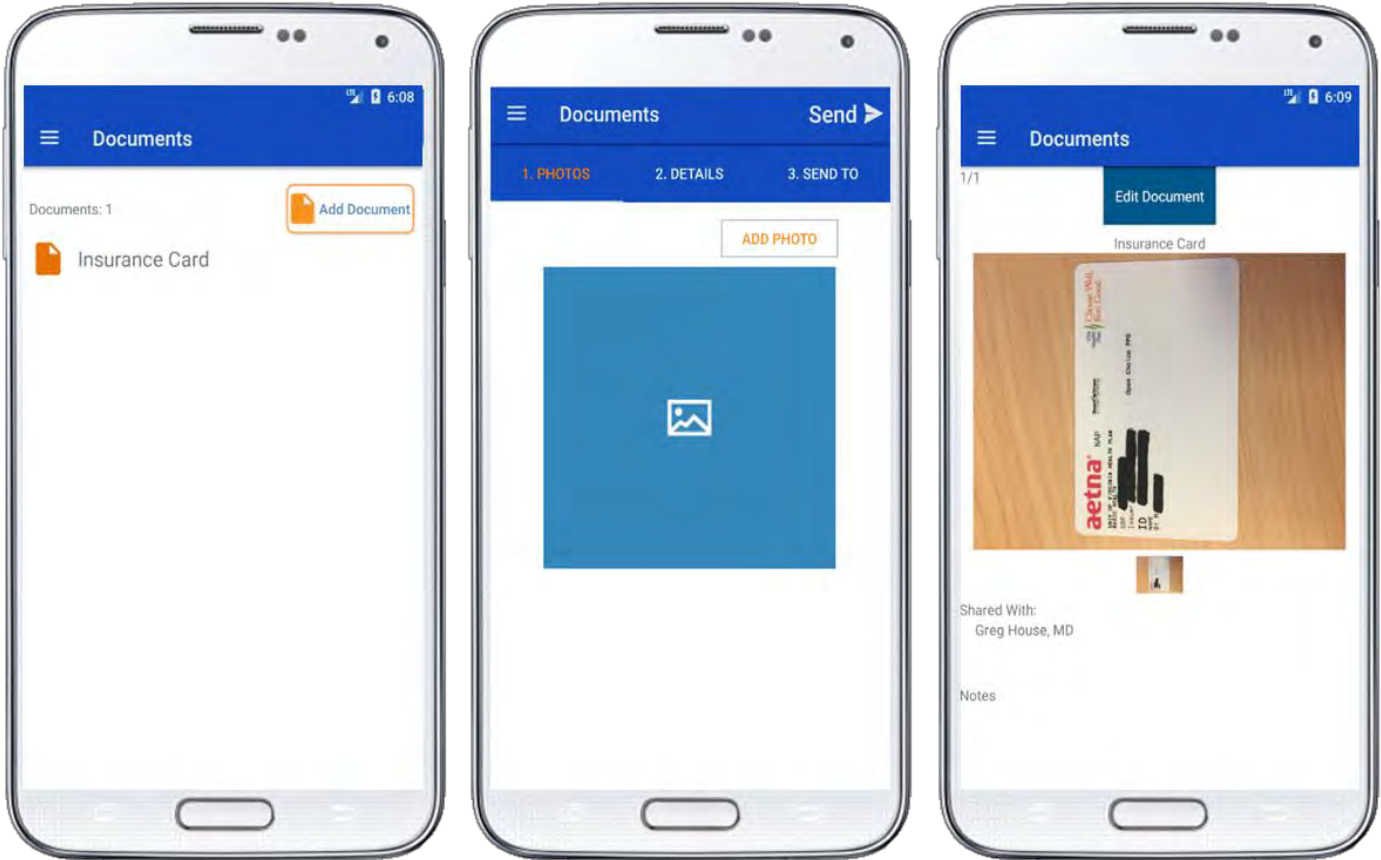
Reminders are push notifications for Appointments that help Members remember appointments. The PositiveLinks Site Administrators may enter appointment information manually or feed in appointments from the EMR depending on how a Site chooses to integrate PositiveLinks. The Site Administrators can enter appointment information from the PositiveLinks Portal. Appointment data includes date and time of appointment, location, and name of the provider. Members can also add their own reminder notifications using this feature. Upcoming Appointments are displayed as a list and calendar view under the appointments tab.





## Documents

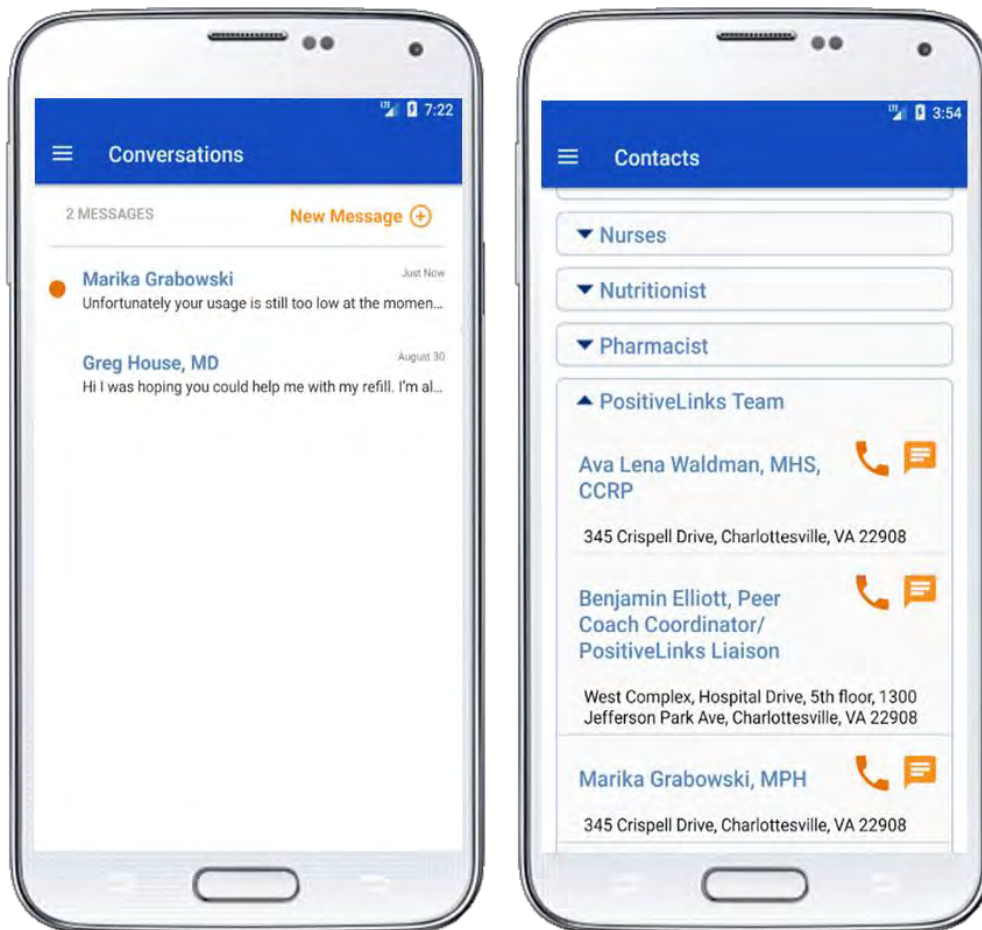
The **Documents** feature allows members to upload images to their provider through the app. Documents may include information required for clinic eligibility or insurance purposes including housing status, photo ID, and paystubs. Once a document has been captured as an image the Member can choose which Site Care Team member they wish to share the document with.



## Messages & Contacts

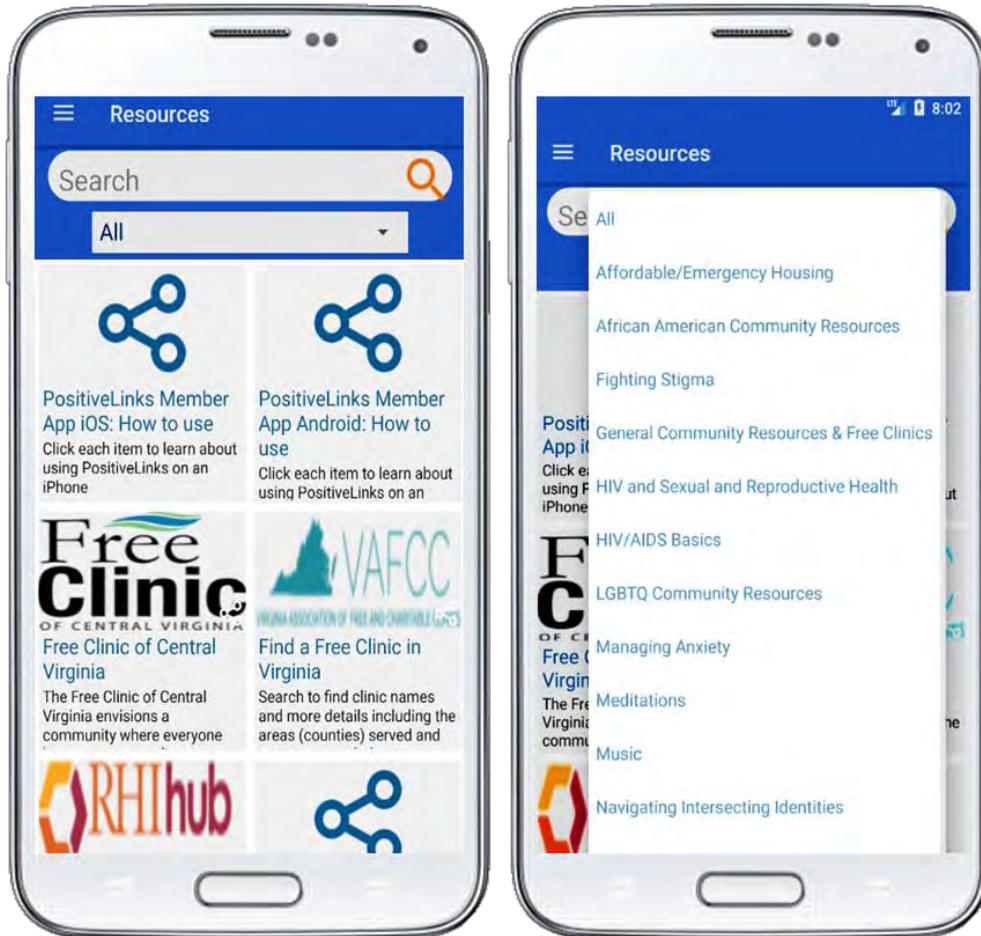
The **Messages** feature allows members to send and receive secure communications with the Site Care Team. A customized list of the Site Care Team and their contact information is entered into the Site's **Contacts** list. This can include the Site's Front Desk, HIV Care Providers, Mental Health Care Providers, Medical Case Managers, Site PLC, and any local resources and organizations the Site wishes to include. Contacts display under role headings, for example; Nurses, Nutritionist, Peer Coach Coordinators. Tap a heading to display its contacts. Members can add their own contacts as needed to this list as well.

Site Care Team members are notified by email when they receive PositiveLinks Messages from Members. A link in the email allows convenient access to PositiveLinks Portal where Messages are displayed.



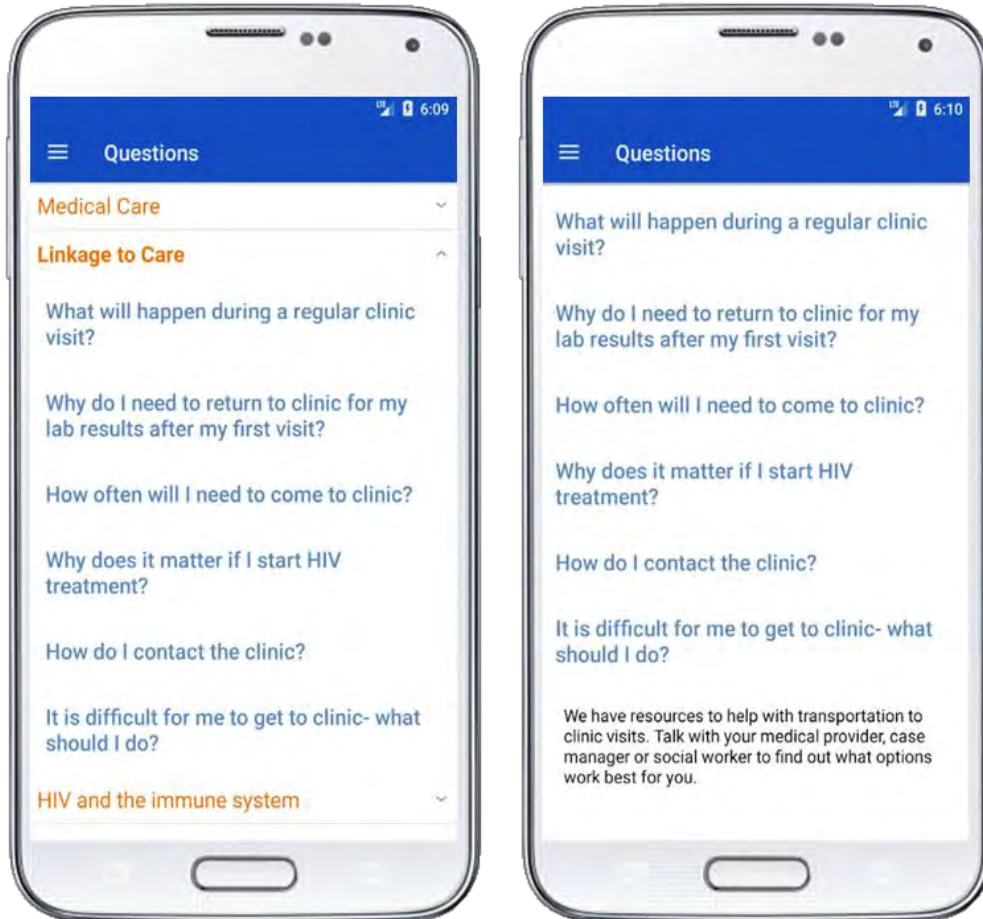
## Resources

PositiveLinks App includes a selection of interactive **Resources**, multimedia resources including video and audio files and web links. Information is available on stress management, social support, mindfulness, and dealing with stigma. Informational resources are also available for the basics of HIV/AIDS, LGBTQ resources, and financial assistance options.



## Questions

The **Questions** section provides answers to common questions of people living with HIV and links to high-quality online resources where Members may access accurate and detailed information about HIV. Partners may customize the Questions to their own Site using the PositiveLinks Portal.

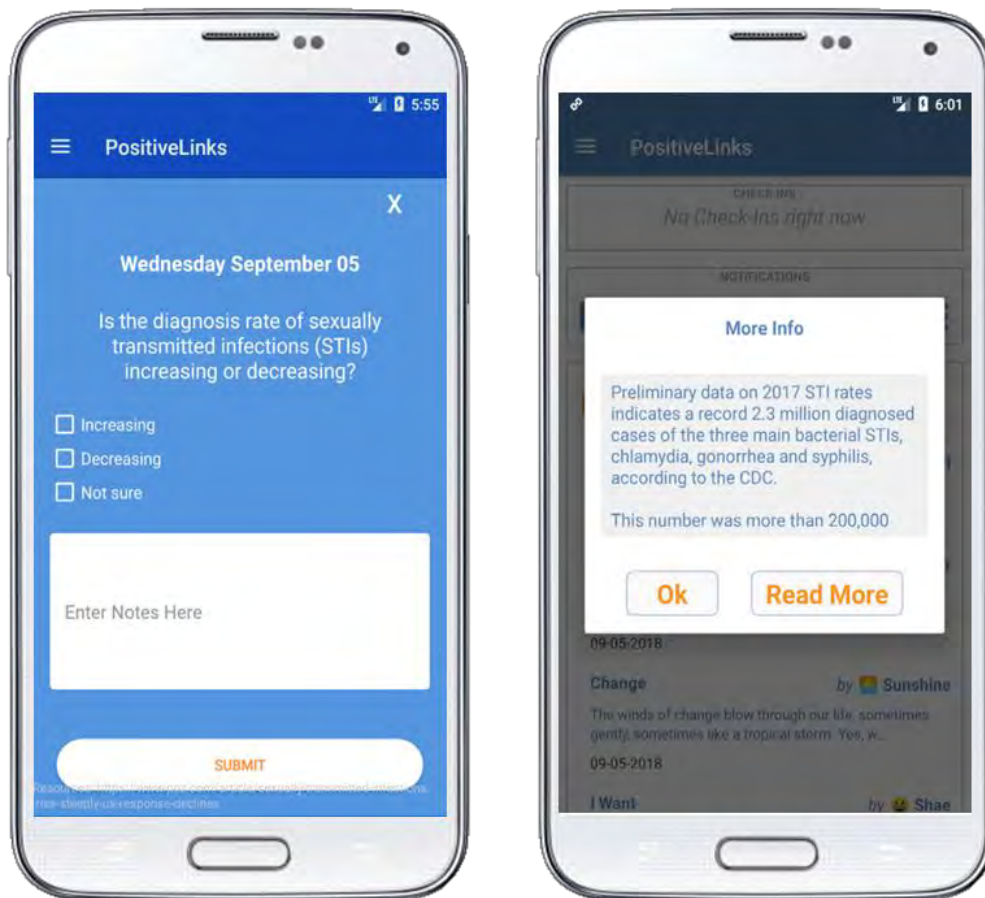


## Additional Features

### Quizzes

Members receive **Quiz** questions on a range of HIV topics. Site Administrators determine Quiz questions and their frequency. Questions are typically fact based and formatted to encourage Members to reflect on their own experiences. After responding, Members see answer feedback designed to inspire deeper reflection on the question.

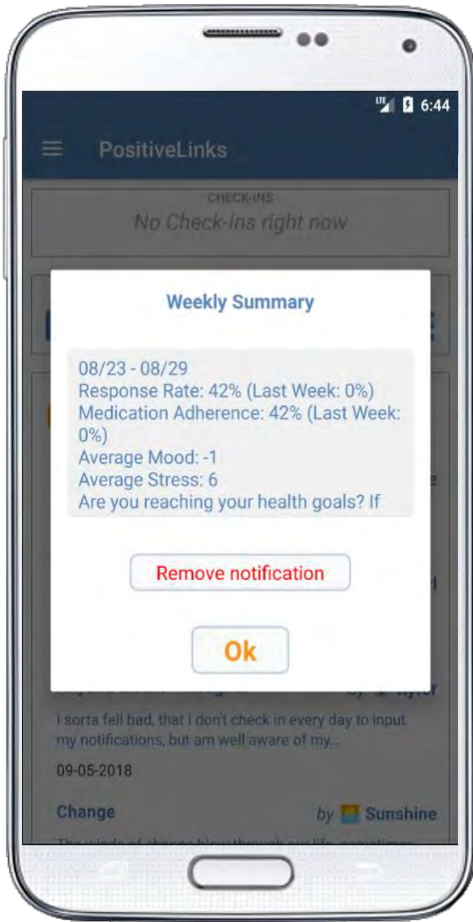
Quizzes allow Sites to assess what Members already know about HIV as well as areas of weakness. For example, at UVA, many Members missed questions about how ART resistance occurs. The PositiveLinks Team responded by producing three short videos that explain the relationship between ART adherence and resistance and posted it on the community board as well as made it accessible in the Resource section of PositiveLinks App. A bank of Quiz questions is included with PositiveLinks implementation. Sites can create their own Quizzes using PositiveLinks Portal.





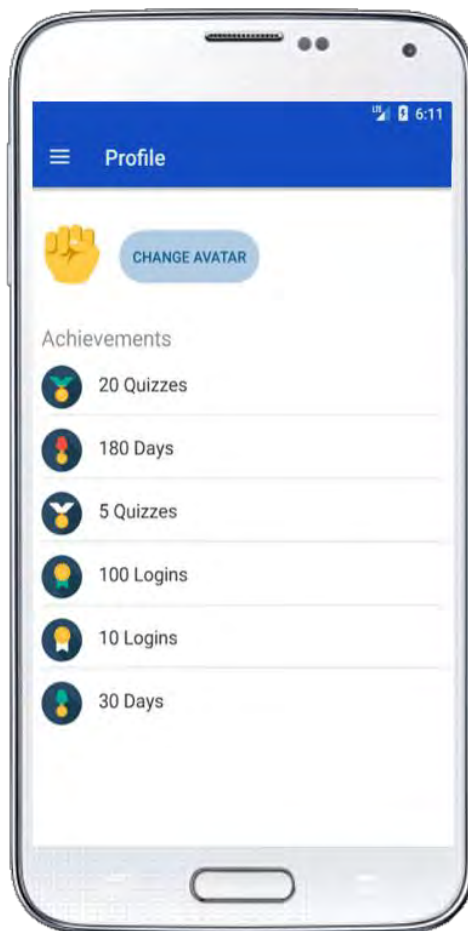
### Weekly Summaries

Members are sent a **Weekly Summary** of their responses to medication adherence, mood, and stress check-ins. Medication adherence and averages of reported Stress and Mood are displayed, along with a comparison of these ratings from the previous week. A message asks Members, 'Are you reaching your health goals?' and invites them to reach out to the PositiveLinks Team for help. Weekly Summaries help Members track their progress and reflect on their responses with one glance.



### *Achievements*

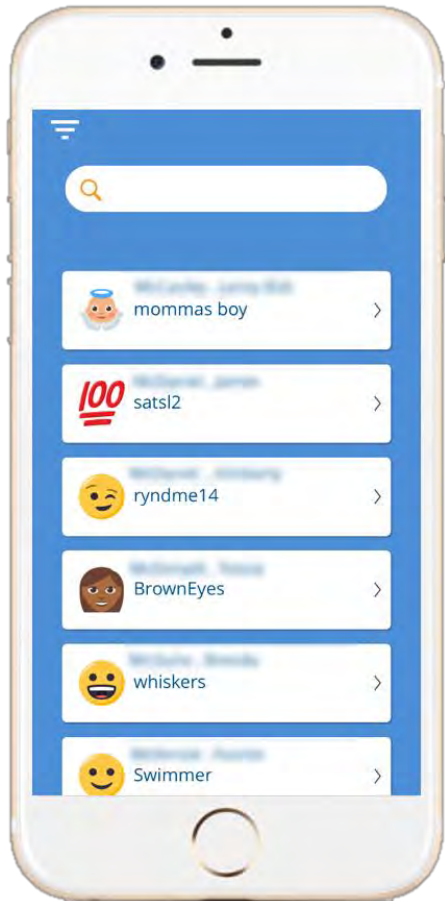
PositiveLinks Members receive recognition for reaching certain benchmarks, such as 100% adherence, while using PositiveLinks App. **Achievements** provide motivation for Members. Section 7 discusses how Site Administrators can use Achievements to engage Members and improve care. Providers can view Achievements in the Member Dashboard on the PositiveLinks portal.



## PositiveLinks Provider App Features

### Availability

The **Availability** section allows Site Providers to indicate their out of office status to Members. Messages sent when a Site Provider is listed as unavailable will generate an auto-reply to the respective Member. This feature helps Members know when they can expect replies from a provider they message.



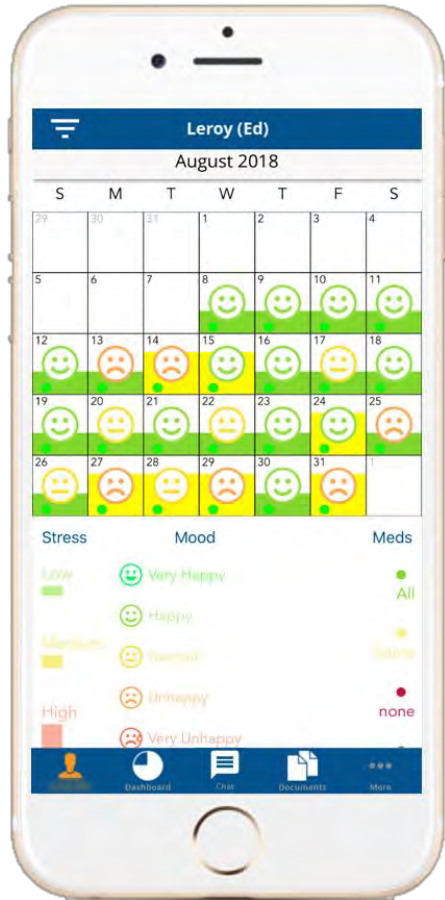
### Members

Site Providers can search for **Members** by Username or last name to locate their individual member pages including the calendar summary, dashboards, documents, and messaging.



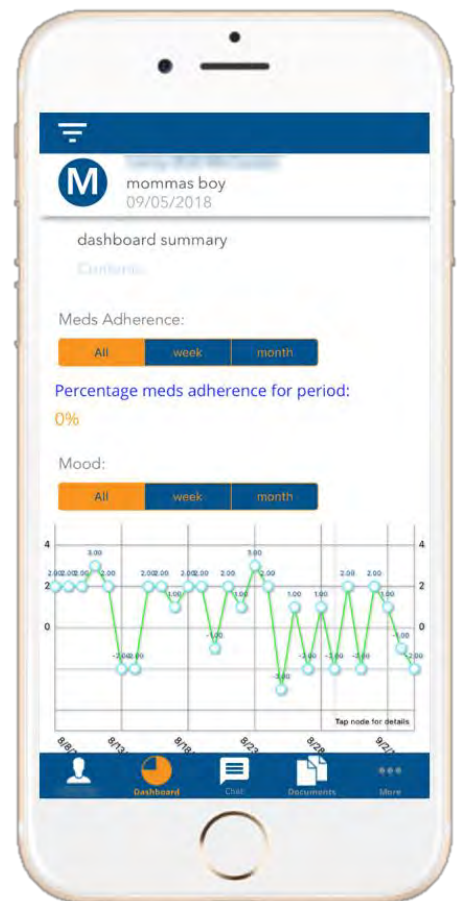
### Summary Page

The **Summary page** with the Member's first name displays first with the monthly calendar indicating their daily responses for the Medication, Mood, and Stress check-ins.



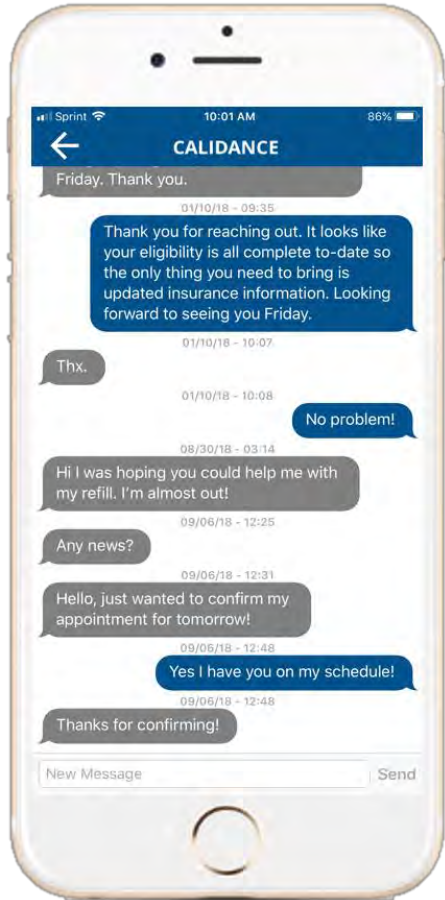
### Dashboard

The **Dashboard** feature shows Site Providers the graphical displays of the check-in responses for the past week, month, or all time.



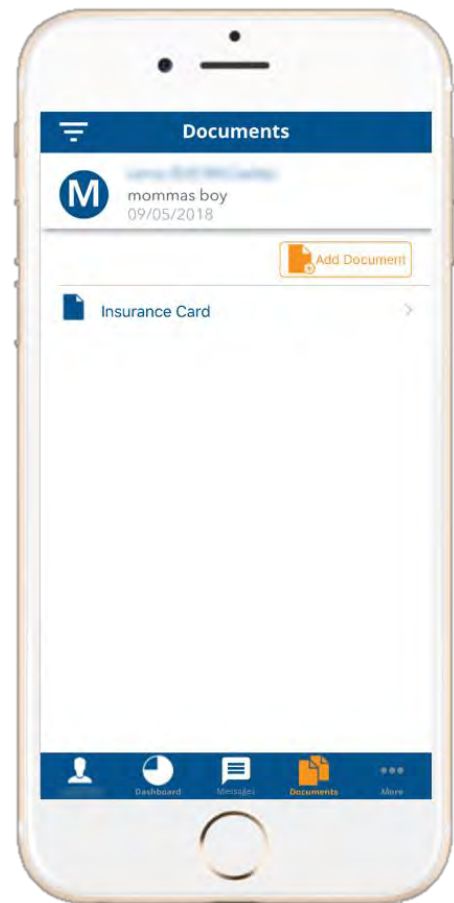
### Chat

The **Chat** feature accessible from the Member page pulls up the chat history with that Member and allows the Site Provider to read and reply to messages from the Member. A full list of messages with members is available from the **Messages** section of the app.



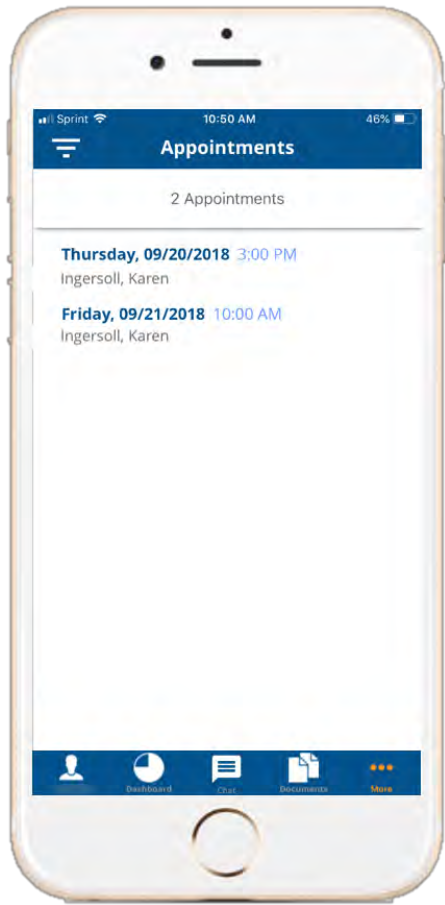
### Documents

The **Documents** page allows Site Providers to upload documents to their patient's user account and view documents uploaded and shared to them by patients.



### Appointments

Providers can view upcoming appointments they have with a specific member from the **Appointments** tab of the member page. Certain providers can have access to all appointments, by any provider, for the specific member in this section (determined by provider category). A full list of appointments is available from the main **Appointments** section accessed from the main menu.



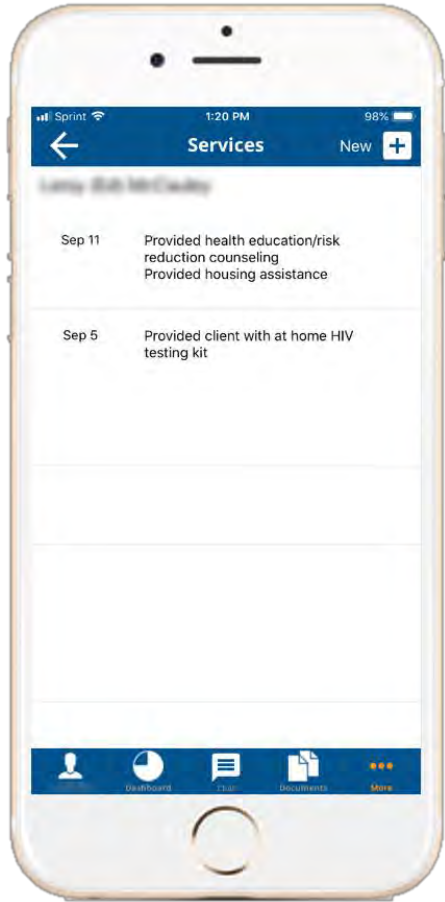
### Lab Results

Providers can access and review Member **CD4** and **Viral load** results from this feature.



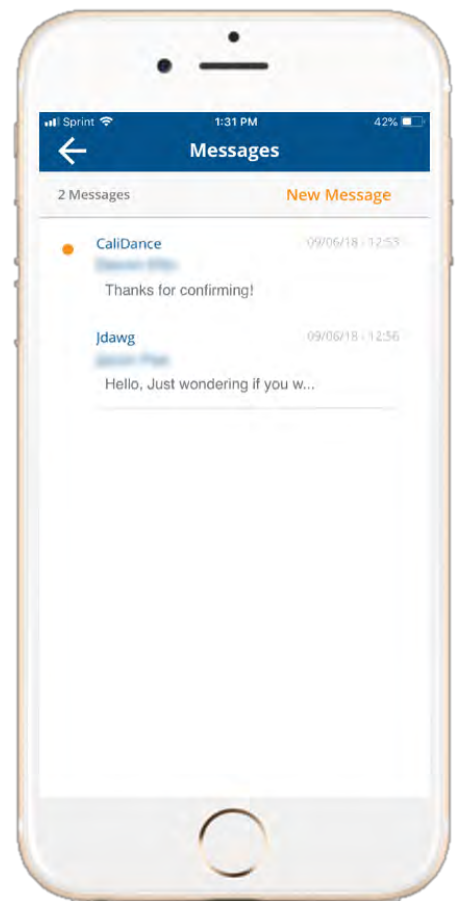
### Services (Restricted Access)

Certain provider types are able to access a **Services** feature that allows them to document interactions with clients for the purposes of reporting to their clinic administrators or state sponsors. PL at UVA currently allows all Community Health Workers (CHWs) to access this feature. From the member section of this feature providers can add new services and view or edit old features.



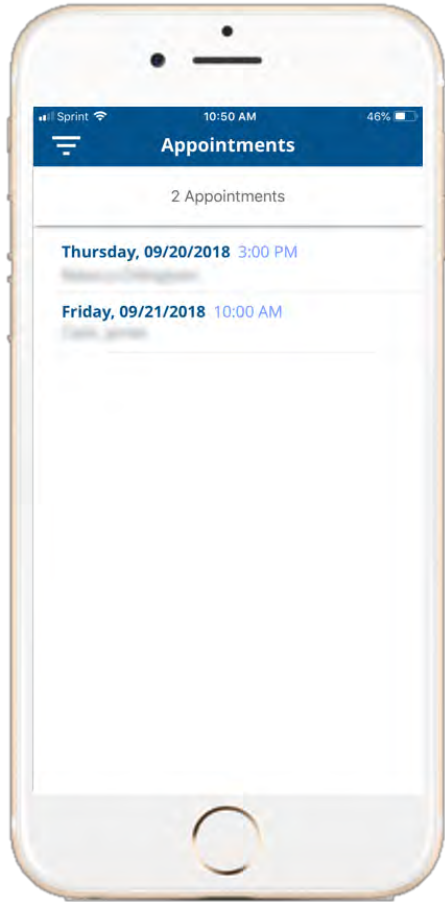
### Messages

In addition to the member chats, messages can be accessed from the **Messages** section on the main menu. From this access point, all conversations with Members are displayed and Site Providers can read and respond to messages or start new conversations. All messages are displayed in conversation bubble format with timestamps for all messages. Messages display the Username and legal name for a Member to allow for easy identification for Site Providers.



## Appointments

Providers can view their upcoming appointments with all PositiveLinks Members from the full **Appointments** feature. Appointment details include Member name, date, and time. PL Administrators and providers designated as Community Health Workers can view all upcoming appointments while other Providers can only view appointments with their patients.



## Resources

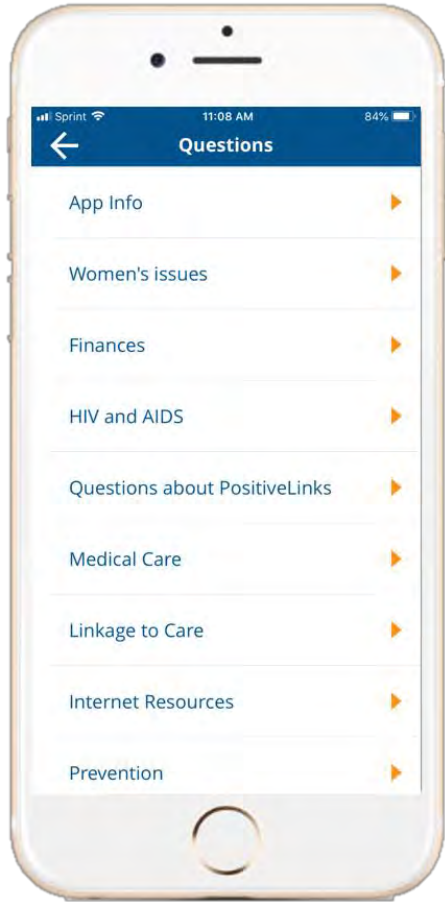
Providers can view the **resources** that are available for Members to access through their app.





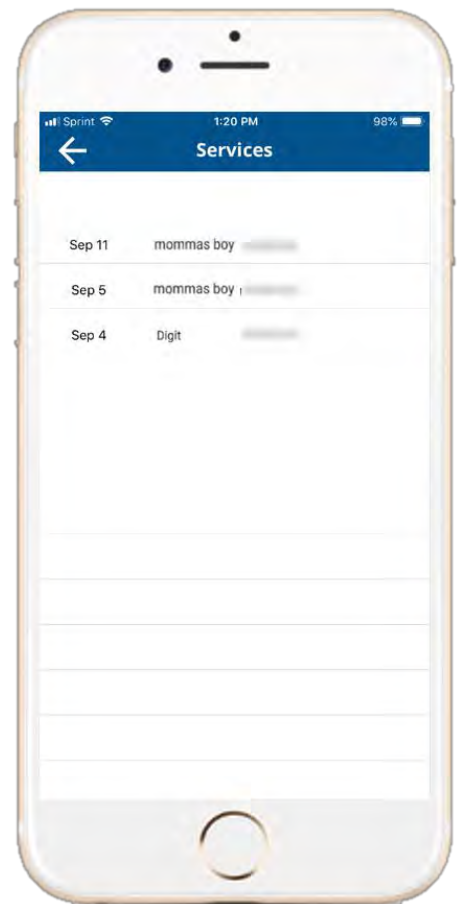
### Questions

Providers can view the **questions** that are available for Members to access through their app.



### Services (Restricted Access)

From the menu of the app, previously identified provider types can access the full **Services** feature. This view displays all services they have provided to PL members. Providers can view and edit previous services but new services need to be added from the member specific services page.

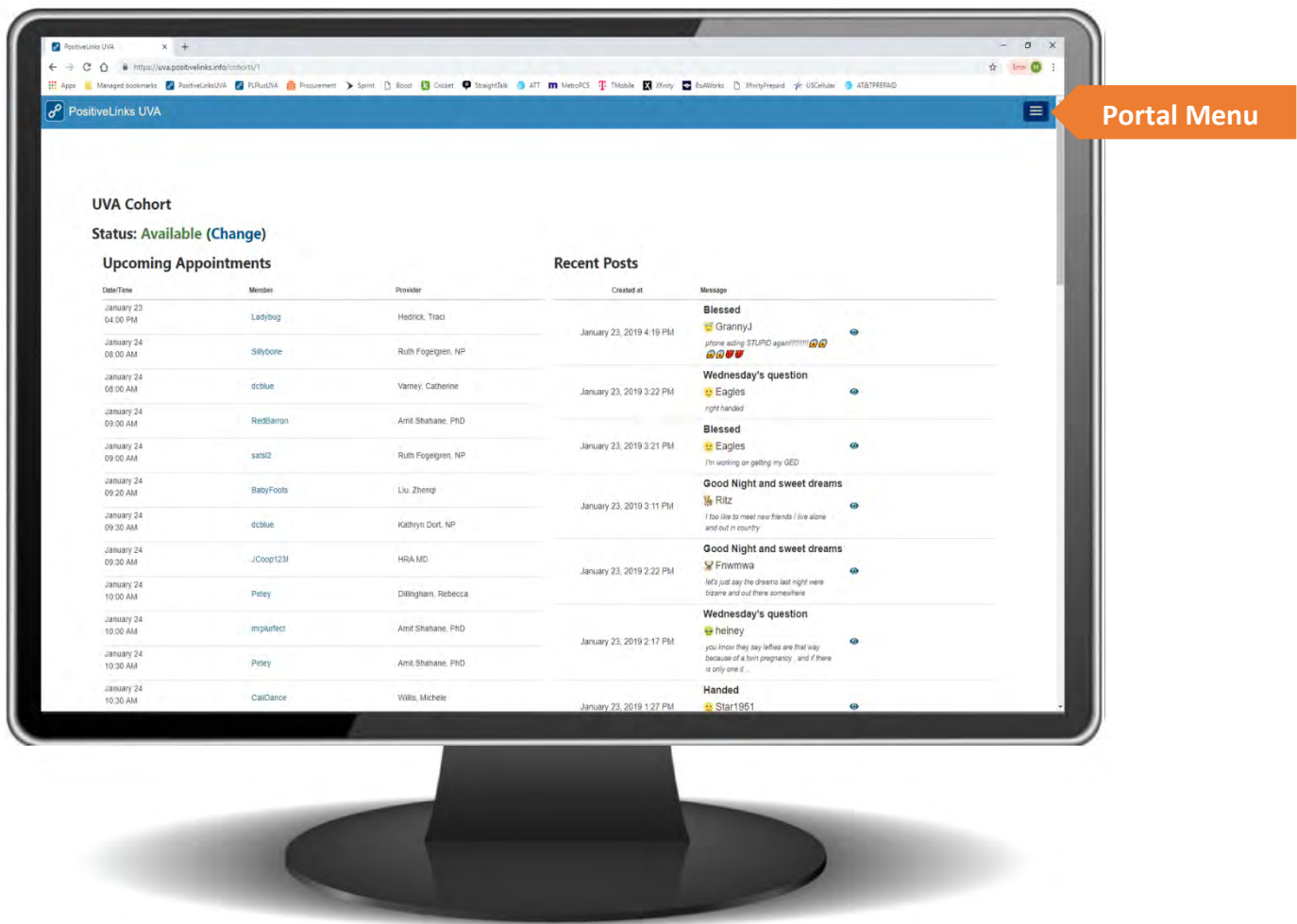


## PositiveLinks Portal Features

PositiveLinks Portal serves as the administrative back-end to the PositiveLinks App. It includes features designed to make PositiveLinks App data a key component of dialogue between Site Providers and Members. The goal of PositiveLinks is to extend the Site Care Team’s reach beyond Member appointments and to efficiently provide actionable data to the Site Care Team to help drive collaborative decision-making with Members and appropriate referrals as needed.

### Summary and Menu

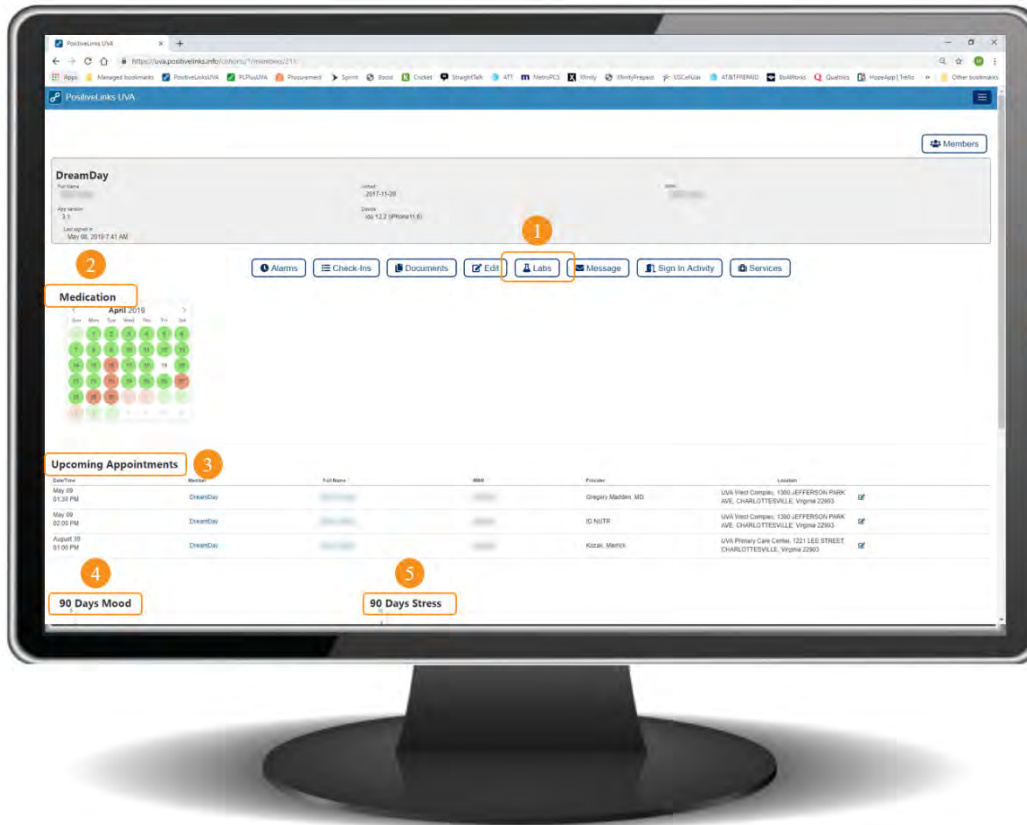
The Summary screen displays upcoming Member appointments, Community Feed (Admin view only), and cohort Member statistics on check-in responses for Mood, Stress and Medication adherence. The Menu provides Site Providers access to view their Appointments, Contacts, Members, Messages, Questions, and Resources. It also provides administrative access to manage the content Members see in the PositiveLinks App, including; Appointments, Check-Ins, Community, Contacts, Labs, Questions, Quizzes, and Resources. Site Administrators have access to all features available to Site Providers and the ability to add/edit Member and Provider accounts.





## Member Dashboard

The Member Dashboard is the core of the Site Care Team's tool set. It displays a snapshot of the Member's activities between appointments. The Portal Member Dashboard displays; Check-In response rate, self-reported Medication Adherence, CD4 and Viral Load, and Mood and Stress responses. Upcoming appointments are also displayed below the check-in and lab data. From the Member Dashboard Providers can view check-ins, view or upload documents, view lab values, message, and review or add services (restricted access). Administrators can also edit member alarms, profile, and labs from this page.



- 1 **Labs**  
*View lab values for Member*
- 2 **Meds Adherence**  
*View self-reported Medication adherence by month over time*
- 3 **Upcoming appointments**  
*View upcoming appointments for the member*
- 4 **Mood**  
*View self-reported Check-ins for mood over time.*
- 5 **Stress**  
*View self-reported Check-ins for stress over time.*

## Security

Given the sensitive nature of HIV status, security and privacy are paramount concerns for the operation of the PositiveLinks program. This section explains App Security and Privacy protocols put in place from the technology perspective (app development, data storage). Specific, protocols and considerations that the Institution must make in conjunction with their individual IT security teams is discussed in Section 3.

## Developer and IT Manager Access

Only authorized personnel are allowed to work on the PositiveLinks web and database servers. All connections are controlled through secure VPN—eliminating possibility of SSL monitoring or phishing attacks, blocking any kind of unauthorized account access by third parties.

## Data Storage and Management

PositiveLinks utilizes a single, virtualized architecture in which computing resources, application code, and databases are unique to each Site. This makes for simpler database backup, restoration, log downloading, etc. and provides greater security.

## Encryption for Data in Transit

TLS encryption. Public/private key pairs for PGP or S/MIME may also be used, based on configuration requirements

## Encryption for Data at Rest

For Data volumes that contain PII or PHI utilize AES256 encryption, all transmissions are encrypted end to end, encryption keys expire after 12 months.

## PositiveLinks App Security and Privacy

Confidentiality and privacy are fundamental to the design and functioning of the PositiveLinks App. Security features include:

- PositiveLinks App password cannot be changed by Member and may be remotely blocked by Administrator
- Data transmission between App and Portal is encrypted
- Neither Data nor Personal Health Information (PHI) is cached or stored locally on PositiveLinks App. It is securely fetched during each session.

## PositiveLinks Portal Website Security and Privacy

Careful consideration has been given to balancing ease-of-use and security in the design of the PositiveLinks Portal used for administrative functions.

## PositiveLinks Portal Administrative Functions

Access to portals and dashboards require an SSL connection and a valid username and password.

## 3. Pre-Implementation Phase

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The Pre-implementation phase guides Partners through the preparations required for PositiveLinks implementation. During pre-implementation, Sites assess their readiness and capacity for carrying out the project, make appropriate plans for funding and staffing needs, consider safety and ethical protocols, and establish any required Memorandums of Understanding at their institution. In this phase, Sites formulate technology and computer system plans as well as identify monitoring and evaluation plans that meet their organization and Site goals. Prior to implementing PositiveLinks, Site Care Teams are encouraged to identify barriers to implementation along with strategies to overcome these barriers. This section contains hands-on tools – checklists, questions for reflection, case study examples, and recommendations – that Sites can use when conducting pre-implementation activities.

*This section is organized as follows:*

- Core, Recommended, Optional implementation levels*
- Pre-Implementation Reflection*
- UVA Case Study Introduction*
- Decisions and Task Checklist for Pre-Implementation*
- Determine Partner/Site staff capacity and readiness*
- Assess hardware, software, computer system needs*
- Determine Site roles for PositiveLinks project*
- Determine a PositiveLinks App workflow*
- Consider security, privacy, and protocols*
  - Example of Security and Privacy protections taken at UVA*
  - UVA Security Protocol for the initial project*
- Develop budget for implementation*
- Develop a monitoring and evaluation plan*
- Create outreach & marketing strategy*
- Activities to assess readiness*
- Develop an implementation schedule*
- Readiness Checklist*

### Core, Recommended, and Optional Elements of PositiveLinks

Starting in the pre-implementation phase, we refer to **core**, **recommended**, and **optional** elements of implementing PositiveLinks. The ability to tailor PositiveLinks implementation to your Site's particular needs is an integral part of its effectiveness. Each Site decides which elements of PositiveLinks best fit its needs. Core elements are those essential to the central mission and fidelity of PositiveLinks in its intended use to improve Member engagement in care. This Manual shows those required, core elements, versus those that are recommended, or optional. Each Site should consider their own data to decide how PositiveLinks can best serve the needs of their Members and Care Providers.

The **Core** elements of PositiveLinks are those directly related to *warm technology* and work to do the following:

- Build an interpersonal relationship between Site Providers and Members through the use of PositiveLinks
- Facilitate each Member's ability to self-monitor Medication, Mood, and Stress levels
- Deliver social support from peers through membership in a private digital social support community of PLWH

**Core** components are the key ingredients that *must* be included in the implementation of PositiveLinks in order to maintain the integrity of the program. Core components are the key components responsible for the effectiveness of the intervention.

**Recommended** components are elements that have been shown to be valuable and important but may be altered or even omitted, based on Partner/Site discretion due to factors such as feasibility and desirability.

**Optional** components are elements that have proven helpful to support the PositiveLinks Program but are not integral to implementation. Optional components may be related to a Site's decision to implement PositiveLinks as a research project or as a standard care intervention.

## Pre-Implementation Reflection

### Questions for Reflection on PositiveLinks Project

What is the viral suppression rate at our Site?

What percentage of Members are meeting our benchmarks for linkage to and retention in medical care?

Who at our Site is struggling to reach clinical benchmarks for viral load suppression, linkage to and retention in care?

Who at our Site will benefit most from the PositiveLinks Program?

How does our Site support increased Member engagement in care?

How successful are our current programs?

How can our current programs or methods integrate with PositiveLinks?

<b>Decision and Task Checklist for Pre-Implementation</b>	
✓	<b>Decisions and Tasks</b>
	Define Site ‘target population’ for PositiveLinks.
	Determine Site staffing roles and hiring needs for PositiveLinks implementation.
	Determine sources of Site funding for PositiveLinks.
	Research IT security protocols at Site and address security concerns.
	Determine whether PositiveLinks app and portal security protocol for data encryption meet institutional requirements.
	Evaluate computer system security and organization protocols for IT security.
	Will Site provide smartphones, phone cases, data plans?
	Determine whether Site will integrate PositiveLinks with its EMR. Check with IT security department to determine EMR integration feasibility.
	Determine Site training needs for Strengths-based Case Management or Motivational Interviewing.
	Determine personnel roles. Will Site hire a PositiveLinks Coordinator or fill the role internally?
	Determine monitoring and evaluation strategy. What types of data will Site follow? At what interval will reporting be done (internally and externally)?
	Will Site PLC be responsible for evaluation or will this be someone else’s role?
	Will Site provide psychological supervision for PLC? Who will fill this role? Determine percentage of time or work effort for supervisory role.
	Who makes up the Site Care team?
	Determine PositiveLinks workflow integration strategy.
	Determine which security and ethical protocols are necessary to implement PositiveLinks.
	Develop a Budget for PositiveLinks. Will PositiveLinks project be implemented within the Site's organizational budget, or will it require an alternative funding strategy? If funds are available, how stable/sustainable is the funding?
	Develop Project Timeline.
	Determine outreach strategy for recruiting and enrolling PositiveLinks Members
	Establish MOAs and MOUs with community referral organizations as necessary.

## Determine Partner/Site Staff Capacity

The first Pre-Implementation activity is to assess the capacity of your organization to implement PositiveLinks from the perspective of staff capacity. Here are recommended staff practices and capacity for implementation of PositiveLinks.

### RECOMMENDED Site Staff Capacities

**Experience with Strengths-based Case Management (SBCM) or Motivational Interviewing (MI).** PositiveLinks works best when Site Care Team members are able to extend the support offered by PositiveLinks with ‘check-in’ and/or counseling support. Staff should have some training in SBCM or MI. Best results are seen when there is a culture of SBCM at the Site and it is integrated within the organization. Practitioners of SBCM within the Site include receptionists, social workers, medical case managers, nurses, phlebotomists and Care Providers, among others. SBCM supports Member’s strengths and abilities. SBCM will be discussed more in the Integration section.

**Staffing requirements.** PositiveLinks should become part of the standard care for PLWH at the Site. This aim is made possible with the coordinated efforts of the Site Care Team made up of Coordinator, Care Providers, IT stakeholders, and Site managers with the support of the PositiveLinks Team.

**PositiveLinks Coordinator.** A single point of contact at Site responsible for the overall implementation and management of PositiveLinks.

#### Questions for Reflection on Site Capacity and Readiness

Is there a culture of MI or SBCM at our organization?

Should our organization invest in SBCM or MI training for staff?

Will we need to hire additional staff in order to implement PositiveLinks?

Where can we recruit a PositiveLinks Coordinator?

Will we have an evaluator on the project, or can someone take on PositiveLinks evaluation responsibilities as part of existing duties?

Will anyone’s job become redundant if we implement PositiveLinks?

Where will the PositiveLinks budget or funding come from?



## Assess Hardware, Software, and Computer System Needs

### Hardware

If your organization decides to provide smartphones, we recommend that you give Members who already have a PositiveLinks compatible smartphone the option to use the PositiveLinks app on their own device.

## UVA Case Study

Follow the experiences of the UVA team throughout the pre-implementation of PositiveLinks. Each section will share the rationale, decision-making, and lessons learned by UVA Site Care Team.

### *Smartphones and Cases*

#### **MEMBER DATA**

Data from UVA showed that potential PositiveLinks Members changed smartphone numbers frequently. Further, the percentage of potential Members with smartphones lagged behind the national smartphone ownership rates. Not having up-to-date contact information is one barrier to engagement in care. These factors guided UVA's decision to provide Samsung Galaxy 2 or 3 to PositiveLinks Members to mitigate this potential barrier.

Members who already owned a better smartphone than the model provided, however, had lower app engagement, and primarily used their regular smartphone for everything *but* PositiveLinks App. For this reason, UVA suggests other Sites consider the option of offering Members the PositiveLinks app on their own personal device when desired.

#### **SMARTPHONE PLAN**

UVA provided Members with a comprehensive smartphone plan that included unlimited voice, text and data. The advantage was that Members received uninterrupted service on their smartphones. When Members were not engaged and using PositiveLinks, however, the UVA Site Care Team found that stopping service by terminating the contract was more expensive than letting the contract expire at the end of the term.

#### **SMARTPHONE CASES**

After replacing many cracked smartphones, UVA decided to provide cases for Members. Although there was no cost to replace broken smartphones, doing so interrupted Member use PositiveLinks and sometimes interfered with their pattern or habit of reporting on medication adherence, stress, and mood even after their smartphone was returned.

<b>Decision Checklist for Smartphones and Cases</b>	
✓	<i>Decisions and Tasks</i>
	Require PositiveLinks Members to provide their own smartphone.
	Provide smartphones for some or all PositiveLinks Members.
	Provide smartphone contracts for PositiveLinks Members.
	Provide pay-as-you-go smartphone plans or plan payments/stipends for PositiveLinks Members.
	Provide smartphone cases.
	Require smartphone cases, but do not provide them.
	Do not require or provide smartphone cases.

<b>Questions for Reflection Smartphones and Cases</b>
Will we provide smartphones?
Will we provide contract smartphone data plans? Month to month, or pay-as-you go plans?
Will we make smartphone cases a requirement? Will we provide smartphone cases?
Which smartphone data carrier should we use to optimize price and area coverage?
Who can we develop a relationship with at a smartphone company?

## Software and Computer Systems

This manual refers to V3.0 of PositiveLinks. PositiveLinks is designed to integrate with the *Epic* EMR System. Integration, however, may not be feasible for some Sites, and for others there may be security considerations that make automated integration less desirable. When integration is not selected, manual entry through PositiveLinks Portal is recommended. Any information that could be automatically populated through EMR integration, may instead be entered manually by Site PLC or Administrator.

Prior to PositiveLinks implementation ensure secure Site computer systems are in place.

### Questions for Reflection on IT and EMR Integration

Who are the IT security staff at our Site who must be contacted about EMR integration of PositiveLinks?

What protocols must we put in place for a smooth integration process?

Will we integrate PositiveLinks with the EMR?

## Determine Roles and Responsibilities

The University of Virginia provides support through the PositiveLinks Team. This team is responsible for providing leadership, assessing and assisting the Site's capacity to implement PositiveLinks. The Partner or Site implementing PositiveLinks will have Site Administrators to manage the implementation at each Site.

<b>PositiveLinks Team</b>	
<p><i>PositiveLinks Program Director</i> Responsible for coordinating and leading PositiveLinks projects</p>	Rebecca Dillingham, MD, MPH
<p><i>PositiveLinks MHealth Director</i> Supervisory support for Motivational Interviewing and Strengths-based Case Management. Provides guidance and assistance with conduct of project</p>	Karen Ingersoll, PhD
<p><i>Senior Implementation Specialist</i> Provides implementation oversight to Implementation Project Managers and guidance and training in project procedures to implementing Site</p>	Ava Lena D. Waldman, MHS, CHES, CCRP
<p><i>Program Evaluator</i> Provides oversight of PositiveLinks program evaluation</p>	Wendy Cohn, PhD
<p><i>PositiveLinks Clinical Research Coordinator</i> Provides support in data management, data analysis, enrollments, and technical support to Members.</p>	Marika Grabowski, MPH
<p><i>Instructional Designer</i> Provides documentation and learning materials for PositiveLinks Sites and Members</p>	Michelle Hilgart, MEd, PhD
<p><i>PositiveLinks Web Developer</i> Manages all app and portal development and works to resolve all related issues that develop</p>	Jason Schwendinger

## RECOMMENDED

### Full-Time Site PositiveLinks Coordinator

**Role of the Site PositiveLinks Coordinator (PLC).** The PLC manages Member enrollment in PositiveLinks, provides PositiveLinks and Portal technical support to site, and project data collection, review, and analysis. The PLC also trains Site staff on PositiveLinks, and serves as a resource for Member health education, strengths-based counseling, and care coordination. Because this role routinely refers Members to additional care, the PLC should be familiar with Site-specific referral processes. We recommend this be a full time position.

**Guidelines for Selecting a PLC.** The success of your Site's PositiveLinks program depends on selecting a PLC who is a good fit. Experience, education, and skill-set are important factors, we recommend the most successful PLCs have assets and traits such as flexibility; patience; the ability to solve problems creatively; genuine interest in the well-being of Members; cultural competency and comfort with diverse populations and lifestyles; a growth mindset; and excellent time management and organizational skills.

**RiC Site staff.** Site staff who will be supporting the PLC to identify Members for PositiveLinks App and provide case management services to PositiveLinks Members should know about PositiveLinks and contribute to a culture of SBCM and support holistic engagement of Members. It is recommended that PositiveLinks Team provide the training courses for Site staff.

## OPTIONAL

### Split Site PositiveLinks Coordinator Position

**Split responsibilities of PositiveLinks Coordinator (PLC) between two people.** The PLC position may be separated into a data management and analysis component and a direct service delivery position. In this situation, however, it is critical that both PLCs collaborate closely and effectively to share information, so that each can make decisions and take action based on reported data.

Here is a table of the recommended training. In addition to in-person training listed here, training modules will also be available on the PositiveLinks website.

<h2 style="text-align: center;">RECOMMENDED PositiveLinks Staff Training</h2>			
In- Person Course Name	Content Description	Who should Attend	Who Will teach
Introduction to PositiveLinks	PositiveLinks Development, features, intended use, and impact.	PositiveLinks Site Care Team	PositiveLinks Team
Integrating PositiveLinks into Standard Care	Best practices for using PositiveLinks at your Site.	Partner/Site Manager, PLC, Site Providers	PositiveLinks Team
PositiveLinks App and Installation, Use, and Management	App installation and technical support training.	PLC	PositiveLinks Team
PositiveLinks Portal Monitoring and Reporting	Portal tools and functionality for Member and cohort monitoring.	PLC	PositiveLinks Team
<b>OPTIONAL</b> strengths-based Counseling	Basics of SBCM and MI. Scenario-based activities with PositiveLinks App on how to best support Members	PLC	PositiveLinks Team

<h3>Questions for Reflection PositiveLinks Staffing and Training</h3>
Which institutional stakeholders need to be consulted about PositiveLinks staffing requirements?
Do we already have a candidate for PLC, or will our Site hire someone to be the Site PositiveLinks Coordinator?
Will anyone's job or duties change as a result of implementing PositiveLinks at our Site?
Who are the support staff at our Site? How many? Who else needs to be involved in training on PositiveLinks?
Once we have identified a PLC, how will we coordinate the PLC's training with the PositiveLinks Team?

## Determine a PositiveLinks Workflow

Integrating a new care system takes careful planning and strategizing. Take time now to think through how PositiveLinks will integrate into your Site workflow and how the Partner will introduce and gain buy-in to the PositiveLinks project. Some key considerations: Who will introduce and train Members on PositiveLinks App? When will PositiveLinks App be introduced? What is the implementation impact of PositiveLinks?

### UVA Case Study

#### *Determine PositiveLinks Workflow*

##### **HUMAN-CENTERED DESIGN**

As part of the human centered design philosophy on which PositiveLinks is built, UVA PositiveLinks Team interviewed key stakeholders to determine how we would integrate PositiveLinks at UVA. This included; primary HIV care Providers, nurses, social workers, case managers, mental health care Providers, community health workers, front desk staff, and patients (potential Members). Our key questions were; 1) How can a shared dashboard between Providers and Members be the most useful for care? and 2) How can PositiveLinks seamlessly become part of standard practice?

##### **WORKFLOW ASSESSMENT**

UVA Site Care Team included multiple stakeholders and performed an extensive workflow assessment prior to implementing PositiveLinks. This assessment included determining on roles, responsibilities, budget and other day-to-day project management.



Here is an example workflow questionnaire that may be adjusted for each Partner/Site.

## PositiveLinks Partner/Site Example Workflow Questionnaire

Through PositiveLinks App, Members respond to queries about their medication adherence, mood and stress; track their query responses over time; respond to quiz questions about HIV and other topics; set reminders about appointments; access multimedia educational resources and frequently asked questions; communicate with the PositiveLinks Site Care team; and communicate with each other through a secure Community Message Board. We are interested in how Partner and Site Care Teams can best access, interpret, and respond to information from PositiveLinks App and PositiveLinks Portal to optimize Member care.

- 1 What is your role at the Partner/Site?  primary HIV care provider  nurse  social worker  case manager  mental health care provider  community health worker  front desk staff  other
- 2 Do you currently assess Member medication adherence, and if so, how? How do you respond to Members with low adherence?
- 3 Do you currently assess Member mood or stress levels, and if so, how? How would you respond to Members with low mood or high stress?

*PositiveLinks App and Portal allows members to track their medication adherence, mood and stress levels, and makes this information available to the Site Care Team.*

- 4 How likely would you be to access your Site Members' self-reported medication adherence information on the PositiveLinks Portal? Please rate from 1 (not at all likely) to 5 (very likely)
- 5 How important is it for you to have access to Members' self-reported medication adherence information? Please rate from 1 (not at all important) to 5 (very important)
- 6 If there is a change in a Member's self-reported medication adherence, who on the Site Care Team do you think should be notified? How do you think that notification should occur at your Site? How do you think a Member's problem with self-reported adherence should be addressed at your Site?
- 7 How likely would you be to access your Site Members' self-reported mood and stress information from the PositiveLinks Portal? Please rate from 1 (not at all likely) to 5 (very likely)
- 8 How important is it for you to have access to Members' self-reported mood and stress information? Please rate from 1 (not at all important) to 5 (very important)
- 9 If there is a negative change in a Member's self-reported mood or stress, who on the Site Care Team do you think should be notified? How do you think that notification should occur? How do you think a Member's problem with self-reported mood or stress should be addressed at your Site?

*PositiveLinks allows private messaging between Members and the Site PositiveLinks Coordinator and Care Team. Would your Site want to receive or send private messages with Members?*

How do you think these specific kinds of messages should be handled at your Site:

- 10 Medication refills?  
Medication problems or side effects?  
Medical symptoms or concerns?  
Mental health symptoms or concerns?  
Appointments or other scheduling questions?  
Social concerns, such as questions regarding finances, insurance, housing or similar issues?  
PositiveLinks technical questions?
- 11 How do you think PositiveLinks will improve relationships between Members and Site Care Team?
- 12 How do you think PositiveLinks will challenge relationships between Members and Site Care Team?
- 13 Comments, concerns, questions, or feedback on PositiveLinks and its implementation and integration at your Site.

## RECOMMENDED

### Determine PositiveLinks Workflow

**Include multiple stakeholders.** We recommend you give careful consideration to how you will integrate PositiveLinks into your organization. One of the best ways to ensure that everyone is on board with the process is to include stakeholders in the integration process and listen to their feedback. Every Partner and Site is different, and different people fill the many roles that make up a Site's Member care experience. Each Site should integrate PositiveLinks in the way that best strengthens its community of care. Consider a workflow assessment as part of the implementation process.

#### Questions for Reflection on PositiveLinks Workflow

How will Site staff be made aware of PositiveLinks and buy-into the program?
As we think about our PositiveLinks workflow, which stakeholders should we include in our planning process?
Who are the care Providers, case managers, front desk staff, and others we should include?
How might PositiveLinks disrupt our current Site workflow?
How might PositiveLinks enhance Member/Care Provider communication at our Site?
How and when do our Site staff prefer to act on data made available through PositiveLinks?
Who at our site will introduce PositiveLinks to Members?
At what point in the care trajectory at our Site will PositiveLinks be introduced to Members?
At what point in a care visit will PositiveLinks be introduced to Members?
In what space at our Site will Members be trained to use PositiveLinks (and smartphone)?

## Consider Security and Privacy protocols

Password-protection is a core requirement of the PositiveLinks App. In order to ensure the privacy of individual Members, their PositiveLinks data does not integrate with their other smartphone applications. PositiveLinks App encrypts transmitted data. Cyber security is a constantly changing field. Each institution has different rules and regulations for implementing projects regarding security and privacy. PositiveLinks App security features are described in Section 2. This section helps Sites think through the security decisions that must be made at the Site and Member levels. Here are some things to consider before implementing PositiveLinks at your site.

### UVA Case Study

#### *Security and Privacy Protections*

##### RESEARCH STUDY IMPLEMENTATION

PositiveLinks was implemented as a research study at UVA before being transitioned to a standard care program. The PositiveLinks Site Care Team submitted a protocol to the HSR-IRB who made suggestions for ensuring that disease specific information remain private. UVA received a certificate of confidentiality (CoC) from the NIH. CoCs protect researchers from having to disclose names or identifying information of research subjects in response to legal requests or documents.

##### SECURITY PROTOCOLS

There are specific security features built into PositiveLinks that followed recommendations of the University of Virginia General Counsel's Office and Office for Information, Security, Policy, and Records. These include a password Members must enter before navigating from the PositiveLinks splash screen into the app. This password was determined by the PositiveLinks UVA team and was unable to be changed by Members. PositiveLinks is a self-contained "walled garden" application that does not rely on other applications on the smartphone, such as email, contact lists, or calendars, to accomplish functionality. This minimizes the risk of inadvertent Member disclosure through actions like email or calendar synchronization. Encrypted transmission between the smartphone and servers using a Secure Sockets Layer (SSL) connection to ensure that messages or data intercepted during transmission to the app data server would be encrypted and unreadable.

UVA chose to encrypt smartphones prior to use. Encryption required that Members enter a password containing 6 letters and 1 number in order to unlock their Samsung Galaxy SII study smartphone. UVA also used the remote wipe function, using the Samsung DIVE service. This feature allowed the PositiveLinks Site Administrators to remotely track, lock, and wipe the smartphone when lost or stolen as long as the smartphone is turned on and in a location where cell smartphone service is available. PositiveLinks members were also provided with a number available 24/7 to report a lost or stolen smartphone.

## UVA Case Study

### *Security Protocol and Possible Risks*

**MEMBERS TRAINED ON PROTECTIONS AND PROTOCOL**

Members were trained thoroughly on security protocols during the PositiveLinks enrollment and smartphone training process. This helped ensure Members understood the protections in place for their benefit and the protocol to be followed if their smartphone was lost or stolen. The PositiveLinks Site Care Team used the same protocol when a Member withdrew from the study and did not return their smartphone within two days of notification.

**POTENTIAL RISKS**

The Site Care Team identified possible risks related to PositiveLinks Members in the original IRB protocol and explained these to Members as part of the informed consent process.

Possible Security and Privacy Risks to PositiveLinks Members	
There is a small but serious risk that breaches of privacy and/or confidentiality might occur. The risk of violation of Member privacy and confidentiality is minimal due to the requirements of the privacy plan in this protocol.	Occurs rarely
Others may accidentally see the smartphone and the text messages and then ask the Member questions about the purpose of the smartphone or the meaning of the text messages	Occurs sometimes
Smartphones may be accidentally exposed to others and if Member writes a text message revealing sensitive health information or illegal activity, others may see it	Occurs rarely
Member may feel uncomfortable discussing or answering questions related to HIV diagnosis	Occurs sometimes
Members may become accustomed to using their smartphone and the PositiveLinks App over the course of the intervention period and subsequently experience psychological or practical problems at the end of the program	Occurs sometimes

## UVA Case Study

### *Security and Privacy Lessons Learned*

#### SMARTPHONES

UVA found smartphone encryption and maximum security passwords were usability barriers. Feedback with Members, suggested that most felt secure with a password protected app versus the need for extra security on the smartphone. UVA HSR-IRB later concluded that PositiveLinks Site Care Team should *suggest* encrypting smartphones to Members in order to have maximum security, but Members are no-longer required to encrypt and password protect smartphones. While UVA Members had only a few cases of lost or stolen smartphones, the remote locate and wipe feature on the Samsung smartphone, although activated, worked only in limited circumstances -- when smartphones were in range and on -- making this feature mostly useless. UVA no longer requires this and instead informs Members about this feature and how they can set it up on their own if they choose to do so.

#### PUSH NOTIFICATIONS

PositiveLinks sends push notifications to Members in the form of daily queries and quiz questions. Members also have an option, in PositiveLinks settings, to have the most recent Community board posts popup on the smartphone. There were times when HIV was mentioned explicitly on the Community. A family member of one PositiveLinks Member saw the smartphone when a Community message popped up and this led to the Member to disclose his HIV status to his family. PositiveLinks Members should be made aware of this possibility and choose settings for push notifications according to their own privacy preferences.

## RECOMMENDED

### Security and Privacy

**Encryption and passwords.** Suggest that Members encrypt their smartphones and use difficult passwords for maximum security, but do not require them to do so.

**Remote wipe not recommended.** This feature is difficult to use and requires the smartphone be on and within range to function. It also requires an email address which entails additional administration and difficulty for Members.

**On-Call Number and Staffing.** It is recommended that there is always someone on-call for PositiveLinks Member emergencies.



Questions for Reflection on PositiveLinks Security and Privacy Protocols
Will Members be required to encrypt their smartphones?
How secure are the internal computers and databases at our site that will be housing PositiveLinks data and Member information?
Who on the IT security team should be consulted about PositiveLinks?
Can PositiveLinks be integrated with the EMR at our Site?

*Here is a checklist of security systems and additional decisions that should be considered by the implementing Site.*

Checklist of System Security Considerations	
✓	<b>Decisions and Tasks</b>
	<b>HIPPA requirements.</b> HIPAA identifiers have been limited to minimal required on internal documents and computer systems only. Confidentiality applies to the PositiveLinks Coordinator’s interactions with Members.
	<b>Site’s Privacy Policies.</b> Protocols required by the Site to ensure privacy are being followed throughout PositiveLinks implementation. The need for IRB approval has been determined and appropriate process is being followed. The Site Care Team is following Site policies regarding confidentiality certificates from NIH, and other protocols to protect privacy of Members.
	<b>Hardware.</b> Will it be the Site's policy to encrypt and password protect smartphones or will Members be able to make this decision on their own?
	<b>Software.</b> PositiveLinks App requires password protection, user anonymity, and that the Community board Username does not contain any identifiable information such as a nickname, DOB, initials, address.
	<b>Data Management.</b> Secure Server is required for PositiveLinks implementation.
	<b>Offsite meeting.</b> Will Site develop a protocol for offsite meetings with staff and Members? Will staff transport Members in personal vehicles? If an offsite enrollment occurs what precautions are in place to ensure Member privacy is maintained? Will Site develop a protocol in which staff checks-in with supervisor before and after sessions?
	<b>On-Call Number and staffing.</b> Is there a protocol and process in place for PLC to observe the Community board? Who will observe the Community when PLC is unable to? Will the Community be observed 24/7 or limited hours? To whom will observing staff escalate an issue during evening and weekend hours?

## Develop Budget for Implementation

One important aspect of the pre-implementation phase is carefully thinking through and developing a PositiveLinks project budget. Budgets will vary by organization and type of implementation. This section is meant to provide guidance and suggestions to help your Site consider the full scope of budget items.

<b>Budget Worksheet</b>		
<i>Item</i>	<i>Amount Budgeted \$</i>	<i>Source of Funds</i>
Personnel		
Smartphones/data and Cases		
Computer Equipment		
Travel and Transportation		
Incentives		
Training and certification		
Other Site specific items		
<b>Total</b>		

### Personnel

The budget should include funding to support one full-time PositiveLinks Coordinator (PLC), and a percentage of administrative time to manage the PLC. Funds may also be required for part-time support for PositiveLinks evaluator or data manager. Consider how on-call staff will be supported, and from where that support will be obtained.

### Smartphones and Cases

If Site will supply Member smartphones/data plans and cases, the funding for these must be identified.

### Computer Equipment

Site PLC will require a secure desktop/laptop computer to perform PositiveLinks related tasks. Site PLC will require a PositiveLinks smartphone.

### Travel and Transportation

Transportation is often a barrier for people living with HIV to stay engaged in care. Enabling Site PLC to travel to PositiveLinks Members is one way to offset this barrier and reinforce Member support. Site PLC may travel to off-Site locations such as Member homes or other non-care sites to conduct Member enrollments or PositiveLinks training sessions. Site should identify the source of funds required to reimburse PLC for work-related travel.

### Training and Certification

Verify that Site Administrators staff, Providers, and Members are certified to use and implement PositiveLinks program by administering and tracking training and assessments. PositiveLinks team can administer the delivery and tracking of certification tests.

### Incentives

If Site provides incentives for participation to increase engagement, the source of these funds must be determined.



## UVA Case Study

### *Budgeting for and Using Incentives*

**RAFFLE**

UVA budgeted for and implemented a monthly raffle for Members who achieved perfect or near perfect response rates to their self-monitoring queries.

The UVA Site Care Team found this increased Member response rates and engagement in PositiveLinks over time. UVA's raffle, in usual care, is a \$25 gift certificate. Gift certificates were selected instead of checks because some Members do not have bank accounts and cashing checks can be expensive. The process at UVA is to mail or deliver in-person gift certificates to winning Members. PositiveLinks Portal offered reporting tools that helped UVA PLC access the data for raffles.

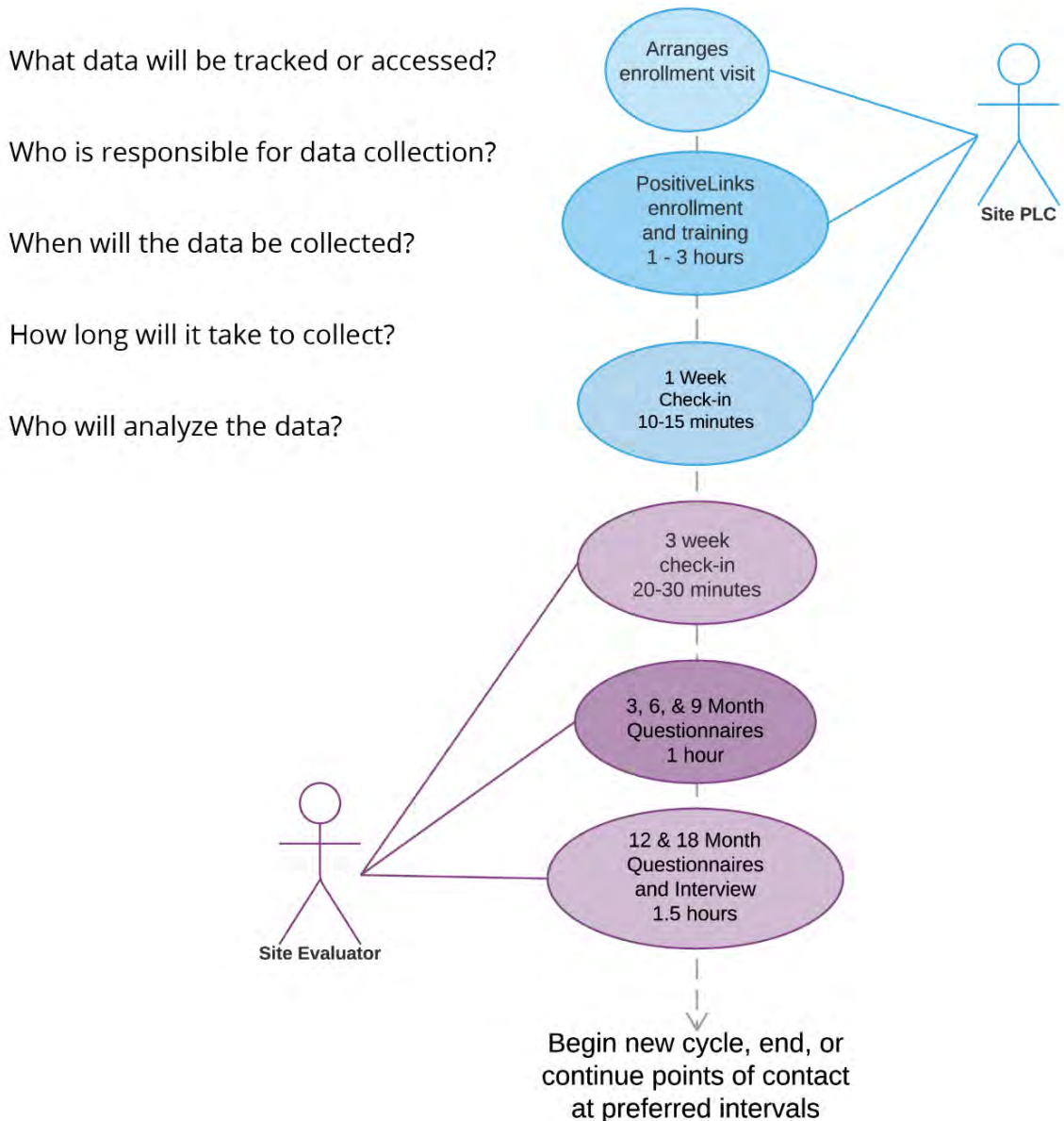
#### Questions for Reflection on Budget Development

<h4>Questions for Reflection on Budget Development</h4>
What funding sources does our Site have to implement PositiveLinks?
What personnel costs will our Site have to budget for?
What computer equipment costs will we have for PositiveLinks?
Will our Site provide smartphones? Smartphone data plans? Smartphone Cases?
Will our Site provide incentives?
How will our site handle training and certification of PositiveLinks?
Will PositiveLinks replace anyone’s job at our Site?

## Develop a Monitoring and Evaluation Plan

Each Site implementing and planning to use PositiveLinks must determine the appropriate time points and duration for Member enrollment, monitoring, and evaluation. PositiveLinks allows for a wide range of actionable data to be collected at once and allows Sites to make care decisions in real-time. Each Site must decide which data they want to track and act on, and create a plan and set of procedures for how it will take place.

Monitoring and evaluation can help with documenting the implementation process, identifying places to improve the program and ensuring accountability and fidelity to the program. Even if your organization decides not to implement a study protocol for PositiveLinks, monitoring outcomes of interest for quality improvement purposes is recommended.



## UVA Case Study

### *Developing a Monitoring and Evaluation Plan*

#### **POINTS OF CONTACT**

UVA Site Care Team implemented PositiveLinks as a research study. The study design included a plan for points of contact with Members over 18 months.

- Enrollment: In-person, 1 – 3 hours
- 1 week check-in, phone, in-person, or private message, 10 – 15 minutes
- 3 week check-in, phone, in-person, 20 – 30 minutes
- 6 month survey, in person, 1 hour
- 12 month survey and interview, in-person, 1.5 hours
- 18 month survey and interview, in-person, 1.5 hours

Members were enrolled in person and trained to use PositiveLinks App and smartphone. At the check-ins, Members were asked how they liked using their smartphone and PositiveLinks App. They were asked to share any questions, concerns, or confusion they had using PositiveLinks so barriers to use could be overcome. At the 3 week check-in, Members were asked again about their use of PositiveLinks and given the opportunity to change settings or further customize their daily self-monitoring queries and answer feedback.

#### **DATA**

The team was interested in tracking a wide range of data. The data collected at UVA can be broken into four categories; demographic/mediator, human process, cost, and outcome data.

##### *Demographic/Mediator*

Demographic Survey, Substance Abuse, Mental Health, Coping and Perceived Stress, Self-Efficacy, Stigma

##### *Human Process*

Data for linkage and support, Member/Site staff interactions, PositiveLinks App usage, length of enrollment, opt-out rate, Member satisfaction with Site communication, Site staff satisfaction, Member/Member interactions, Member Community usage and satisfaction

##### *Cost*

PositiveLinks program costs, Member cost

##### *Outcome*

Pharmacy pick-up, ART adherence, missed visit proportion, retention in care, immunologic response, CD4, VL

## UVA Case Study

### *Assessment and Reporting*

#### **BASELINE ASSESSMENT**

UVA Site Care Team conducted a baseline assessment of linkage and retention data to identify highest risk population. The team then reflected on current policies and procedures for Member engagement to determine areas in which PositiveLinks could make the greatest impact.

#### **WEEKLY REPORTING**

UVA Site set up a weekly reporting process in order to stay current on Member needs. The goal of the weekly report is to maintain the overall picture of Members using PositiveLinks and to identify actionable data. The following weekly reports are used by UVA Site.

- Recruitment statistics
- Data collection update
- Demographic data
- Weekly PositiveLinks App usage
- Response rate
- PositiveLinks App query response by Member
- PositiveLinks App version/update

UVA Site PLC spends about 45 minutes to generate the weekly report. PositiveLinks Portal is also used to generate and analyze reports. Member rosters and site EMR is used to collect member demographic information each week as well. All of this data is then used to update UVA Sites templates in Excel and is then transferred to a presentation format in PowerPoint.

After preparing the reports, they are reviewed for trends and discussed by the team. At the UVA Site, PositiveLinks offers the Site Care Team the capability of seeing in real-time what Members are experiencing so they can be responsive and adapt quickly to changing situations.

**RECOMMENDED**

## Monitoring and Evaluation Plan

**List of outcomes.** Create a list of outcomes of interest, and the measures that will help you know whether or not you have met your targets.

<b>Questions for Reflection Monitoring and Evaluation Plan</b>
At what time points, and for what durations, should our Site PLC interact with Members?
Will our Site collect survey data? If so, how will it be done? Who will collect it?
If we collect data, is there space and time for Members to meet with the data collector?
How will we know if PositiveLinks is a success at our organization?
What data and indicators will help our Site measure this?
What other outcomes or effects are we interested in tracking?

## Develop Recruitment Strategy

PositiveLinks recruitment works best through a referral system among Site staff, the community, and Members themselves. One way to raise awareness of PositiveLinks is to post flyers at the Site, in the community, and at partner Sites. Maintaining good relationships with community organizations is imperative. One way to do this is to clearly explain the project to interested affiliates before implementing PositiveLinks. Another important step is to establish, whenever appropriate, Memorandums of Understanding (MOU) or Memorandums of Agreement (MOA) with partner organizations. This ensures that the roles of the Site and of each organization, as well as the individual responsibilities, are clearly defined and delineated.

## Identify Barriers and Solutions

Barriers exist to all program implementations. Although Sites may not be able to address all potential barriers before implementation, it is critical to take the time and effort to identify barriers prior to implementation and to plan how to overcome them. While some barriers are Site specific, others can be common across different sites. Here are some common barriers, the problems they represent, and potential solutions. Blank sections are included for Site Administrators to identify and enter their own Site's barriers and to think through solutions.

<b>BARRIER</b>	<b>Site PLC assigned to tasks not related to PositiveLinks project</b>
<b>PROBLEM</b>	Site PositiveLinks Coordinator won't have capacity to support PositiveLinks Members and full scope of activities.
<b>SOLUTION</b>	Ensure PLC's time for PositiveLinks is protected. This way PLC has time to provide the support and coordination services Members need to strengthen their connection to medical care.
<b>RESPONSIBILITY</b>	Site or Program Director / PLC Supervisor

<b>BARRIER</b>	<b>Poor internal buy-in of PositiveLinks from Site Care Team</b>
<b>PROBLEM</b>	The Site Care Team have many responsibilities and limited time. Adding an additional program may seem overwhelming to them.
<b>SOLUTION</b>	Communicate to Site Care Team early on the benefits PositiveLinks provides to Members and to the Site Care Team. Involve Site Providers in the implementation process. Listen to and address their concerns. Conduct a workflow assessment to determine how PositiveLinks will integrate into current and future responsibilities.
<b>RESPONSIBILITY</b>	Site or Program Director/ PLC

<b>BARRIER</b>	<b>Lack of clarity and confusion among community partners</b>
<b>PROBLEM</b>	Confusion among referral partners about their role, or how PositiveLinks integrates into Site care, can mean missed opportunities for Member recruitment and weakened community relationships.
<b>SOLUTION</b>	Develop clear marketing and educational materials for community partners. Ask for their feedback and concerns and address any issues quickly. Develop MOUs or MOAs with partners whenever appropriate so responsibilities are clearly defined.
<b>RESPONSIBILITY</b>	Site or Program Director / PLC Supervisor / PLC

<b>BARRIER</b>	<b>Lost and broken smartphones</b>
<b>PROBLEM</b>	Members lose or break their smartphones and need a replacement. Members are out of touch with PLC and Site staff.
<b>SOLUTION</b>	Develop and maintain good working relationship with smartphone Providers. Develop and train staff and Members on protocol for smartphone replacement. Obtain a second contact number for Members for this situation.
<b>RESPONSIBILITY</b>	Site or Program Director / PLC Supervisor / PLC

<b>BARRIER</b>	<b>Logistical challenges</b>
<b>PROBLEM</b>	Issues such as lack of adequate space for meeting with PositiveLinks Members, or lack of convenient place to train Site staff.
<b>SOLUTION</b>	Think through needs ahead of time and collaboratively find ways to overcome the logistical challenges. Be flexible, adaptable, and open-minded to creative solutions. Elicit ideas from Site staff. Be willing to accept workable solutions even if they are not perfect ones.
<b>RESPONSIBILITY</b>	Site or Program Director / PLC Supervisor / PLC



<b>BARRIER</b>
PROBLEM
SOLUTION
RESPONSIBILITY

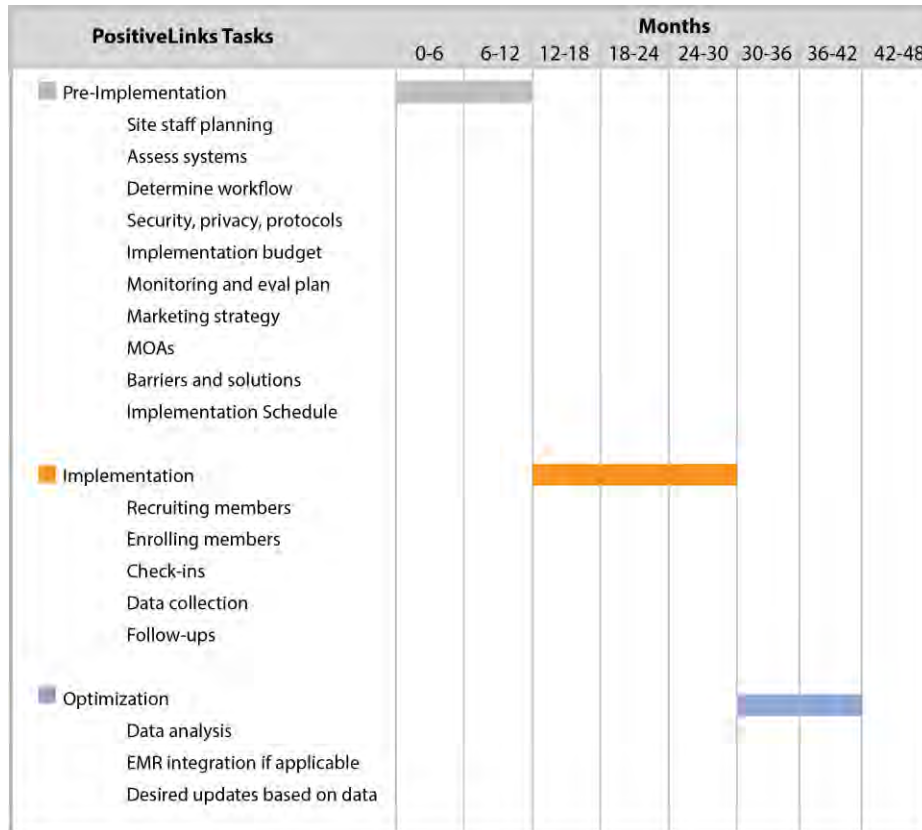
<b>BARRIER</b>
PROBLEM
SOLUTION
RESPONSIBILITY

<b>BARRIER</b>
PROBLEM
SOLUTION
RESPONSIBILITY

## Implementation Plan

This section helps guide Sites through factors to consider when developing a PositiveLinks implementation plan. PositiveLinks implementation is complex and involves a coordinated effort among a number of different stakeholders. To successfully implement PositiveLinks it is helpful to create and share with stakeholders an implementation plan so that all those who participate in the implementation and use of PositiveLinks are aware of milestones, deliverables, and deadlines.

Here is an example of an implementation timeline. The timing for each set of PositiveLinks tasks will be specific to the Site's capacity and readiness, as well as the decisions they make about their use of PositiveLinks.



### OPTIONAL

#### Split Site PositiveLinks Coordinator Position

**Create a Gantt Chart.** The chart can show project deadlines, deliverables, and milestones. Using a chart during implementation can do more than keep the Site Care Team on track, it can help communicate a shared vision to project stakeholders and help everyone affected understand project status during the implementation.

## Site Readiness Checklist

This checklist contains questions related to Site capacity and readiness for PositiveLinks implementation. This table is meant to help Sites think through its current capacities and those it may need to build. The list includes items that while not required, are meant to help Sites better understand their options and make clear decisions.

Determine Site capacity and readiness	Yes	No	Comments   Next Steps
<b>Does Site staff have experience with SBCM or MI?</b>			
<b>Does Site have resources to train and support staff in using SBCM or MI with Members?</b>			
<b>Technology and Computer Systems</b>			
<b>Will Site provide smartphones? Cases? Data Plans?</b>			
<b>Will EMR integration with PositiveLinks be a future goal?</b>			
<b>Personnel Roles and Responsibilities</b>			
<b>Do you have support from key Site leadership staff to support the PositiveLinks at your Site?</b>			
<b>Do Site staff have an understanding of the benefits and goals of PositiveLinks?</b>			
<b>Have you identified a PositiveLinks Coordinator?</b>			
<b>Has your site scheduled or completed PositiveLinks training?</b>			
<b>How is your site handling training and certification?</b>			
<b>Have you identified any additional training needs?</b>			
<b>Integrate PositiveLinks into Site Workflow</b>			
<b>Have you performed a workflow assessment at your Site?</b>			
<b>Security and Privacy Protocols</b>			
<b>Have you identified Site policies and procedures that must be in place prior to PositiveLinks implementation?</b>			
<b>Will you need a certificate of confidentiality?</b>			
<b>Will you require Members to encrypt their smartphones or have secure passwords on the smartphone?</b>			
<b>Will you set up the remote locate and wipe for Members?</b>			
<b>Do you have a protocol in place for what to do when smartphones are lost or broken?</b>			
<b>Project Budget</b>			
<b>Do you have funding in place for PositiveLinks?</b>			
<b>Monitoring and Evaluation Plan</b>			
<b>Have created a monitoring and evaluation plan?</b>			
<b>Have you decided which data you will collect? At what intervals? Who will be responsible?</b>			
<b>Outreach Plan</b>			
<b>Do you have clear specific roles for partner organizations within the system of care related to PositiveLinks?</b>			
<b>Do you have established referral protocols, MOAs or MOUs, with existing community partners?</b>			
<b>Have you developed a Member outreach plan?</b>			
<b>Has your Site identified needed marketing/educational pieces?</b>			

## 4a. Using PositiveLinks Member App – for Android Users

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This section provides detailed information about using the PositiveLinks Member App for Android platforms. It helps prepare PLC and the Site Care Team for using PositiveLinks.

Before implementing PositiveLinks Program, the Site PLC and Site Care Team will need to know how to use the features and administrative components of PositiveLinks. The Site Care Team will receive in person training by the PositiveLinks Team. This is supplemented by online learning modules and resources within this manual.

This section is a guide for the Site Care Team on using the PositiveLinks Member App for Android users. Section 4b provides guidance for using the PositiveLinks Member App for iOS users.

*This section is organized as follows:*

*Decision and Task Checklist for Using PositiveLinks App*

*Downloading PositiveLinks App*

*Accessing PositiveLinks App*

*PositiveLinks Member App Features*

*Menu*

*Home Screen*

*Check-Ins Feed*

*Medication Check-In*

*Mood Check-In*

*Stress Check-In*

*Quizzes*

*Notifications Feed*

*Achievements*

*Weekly Summary*

*Appointments Feed*

*Community Feed*

*How am I?*

*Medication Adherence*

*Mood*

*Stress*

*Response Rate Meter*

*Labs: CD4 & Viral Load View*

*Community Board*

*Appointments*

*Messages*

*Documents*

*Contacts*

*Questions*

*Resources*

*Profile*

*Achievements*

*Need Help? Feature*

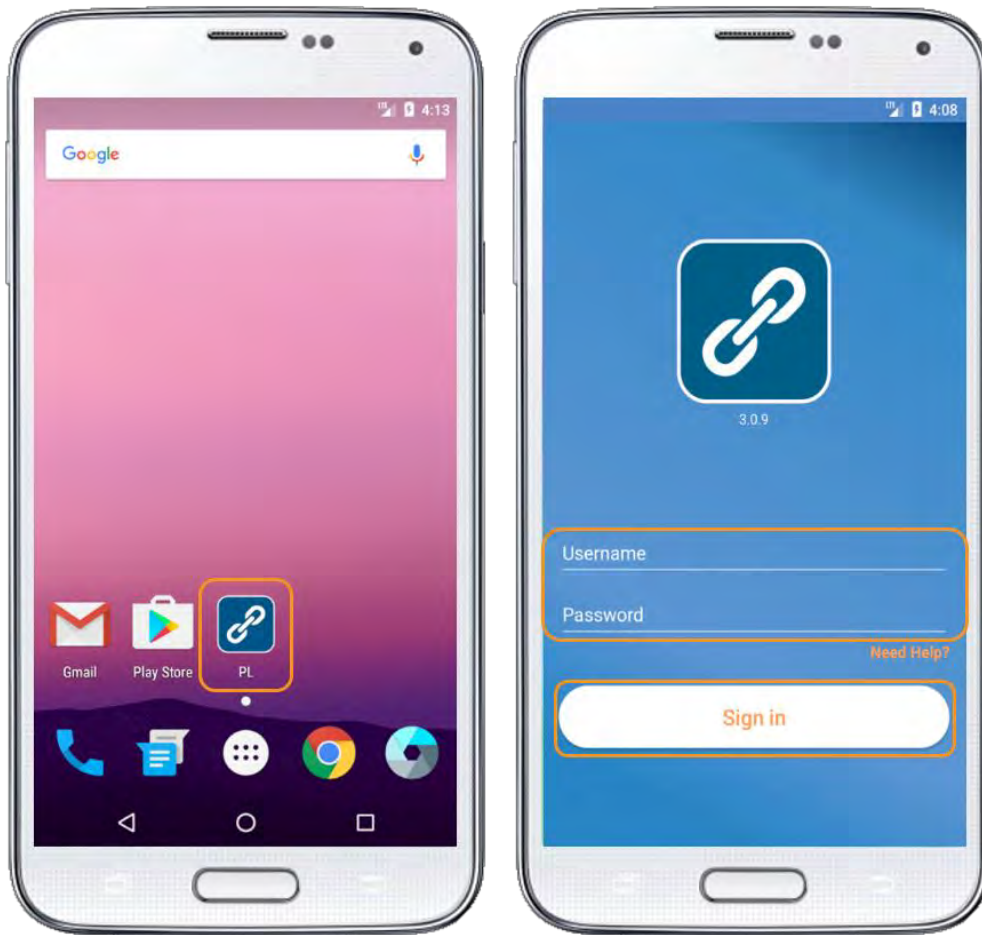
<b>Decision and Task Checklist for Using PositiveLinks App</b>	
✓	<b>Decisions and Tasks</b>
	Consider how you will use PositiveLinks App Member training materials at your Site.
	Determine Site's protocol for Site Administrators posting on the Community board. Type of messages? When will posts take place?
	Consider how Messages will be distributed among the Site Care Team.
	Based on your site's specific Community board observation protocols, consider additional training for staff
	Decide whether or not to implement a raffle.

## Downloading PositiveLinks App

### Downloading PositiveLinks App

1	Open the Internet browser on Member's smartphone
2	Go <a href="http://uva.positivelinks.info">uva.positivelinks.info</a> (site specific URL)
3	Click 'Download Mobile App', then 'Download Version 3.0.X for Android' (the X changes based on most recent version number). If prompted, click 'OK' and 'Replace Existing'.
4	Go to Settings, Security, and make sure the box next to 'Unknown Sources' is checked. Or, locate the advance app permissions and approve app installs by your device's web browser.
5	Locate the downloads folder and click on the most recent file with the PositiveLinks.apk name.
6	The PositiveLinks App icon (Titled 'PL') will appear either on one of the home screens or under 'all apps' on the phone.

## Accessing PositiveLinks App



### Accessing PositiveLinks App

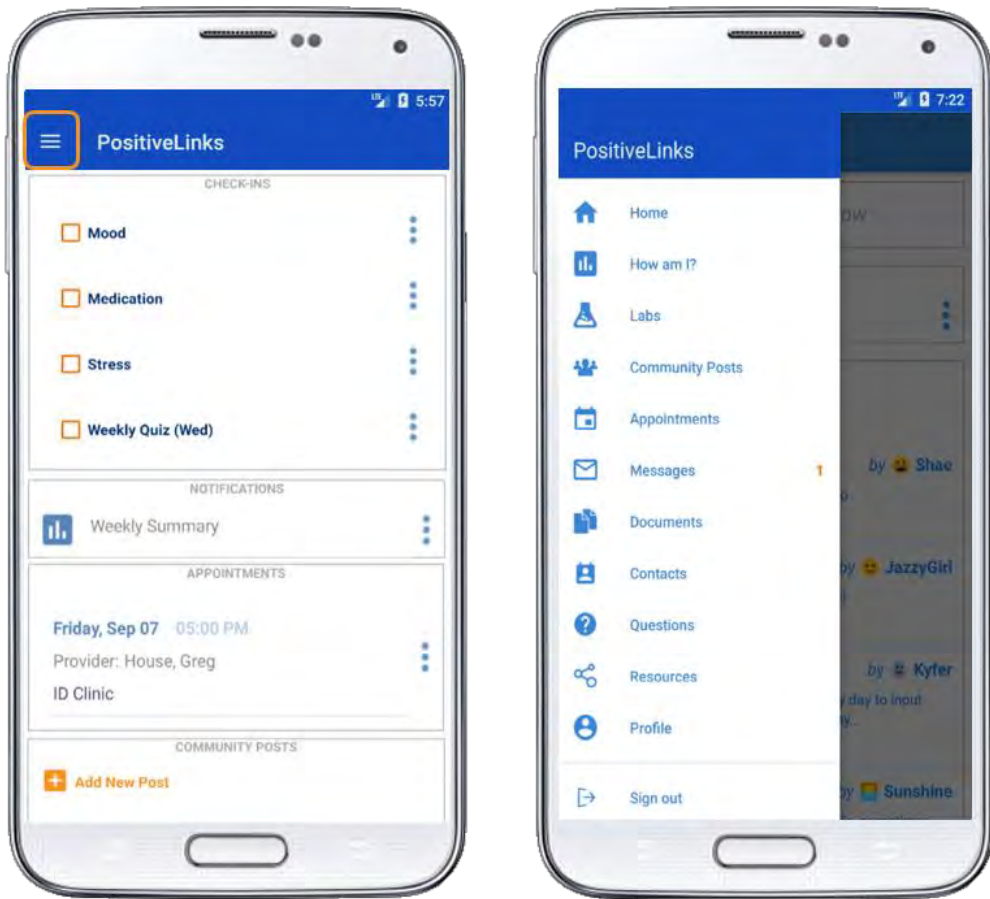
1	Click the PositiveLinks icon. The PositiveLinks App icon is an image of a linked chain set on a blue background.
2	The sign in screen will appear prompting Members to enter their Username and password. The app will store the Member Username after the first login.
★	Members create a unique Username and password combination during enrollment. Administrators can use the portal to disable Member access as needed.

## PositiveLinks Member App Features

### Menu

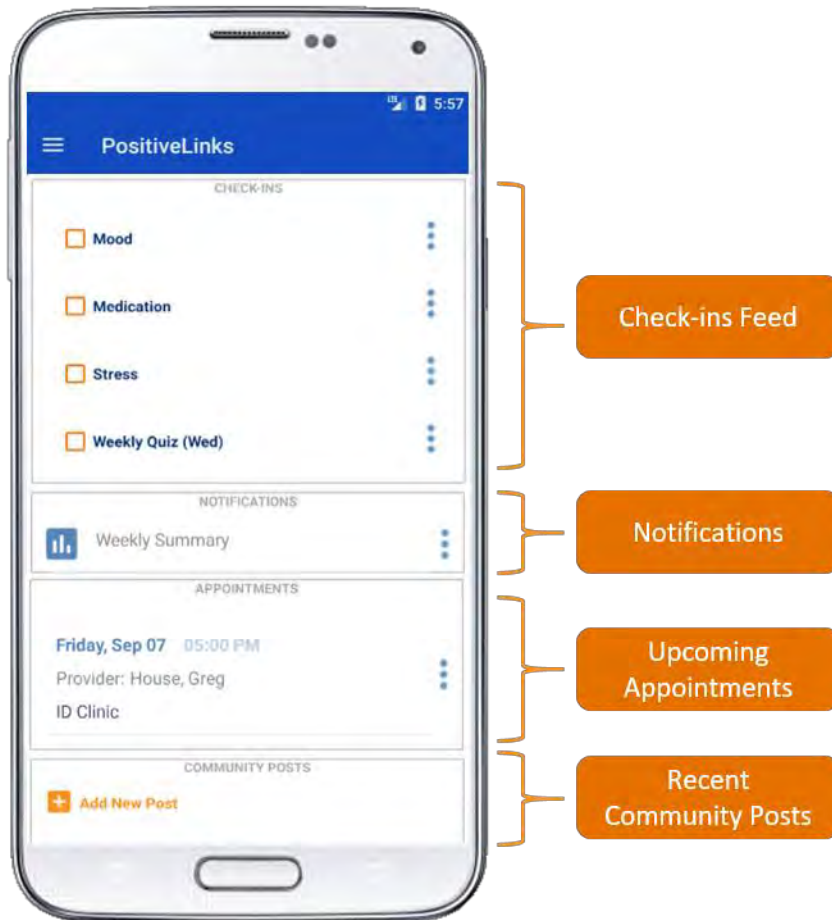
The PositiveLinks **Menu** button is comprised of three small lines, located at the top left corner of the app. Members access all app features from the Menu. The Menu is available from all pages of the app.





## Home Screen

Members navigate to the **Home** screen using the PositiveLinks Menu. The PositiveLinks Home screen displays 'Check-Ins', notifications, upcoming appointments, and recent posts on the community board.



### Check-Ins Feed

The Home screen displays **Check-ins** in the top portion of the screen. Members tap check-ins listed in the feed and respond to the prompt. After Members complete a check-in it is cleared from the feed. Read the sections below for more details on the purpose and types of Check-ins.

Push Notifications pop up on a Member’s smartphone whenever there is a new check-in or content in the Check-ins Feed. If desired, members are able to turn off notifications in their phone settings. Push Notifications are discreet, simply labeled with ‘PL’ and the app icon.



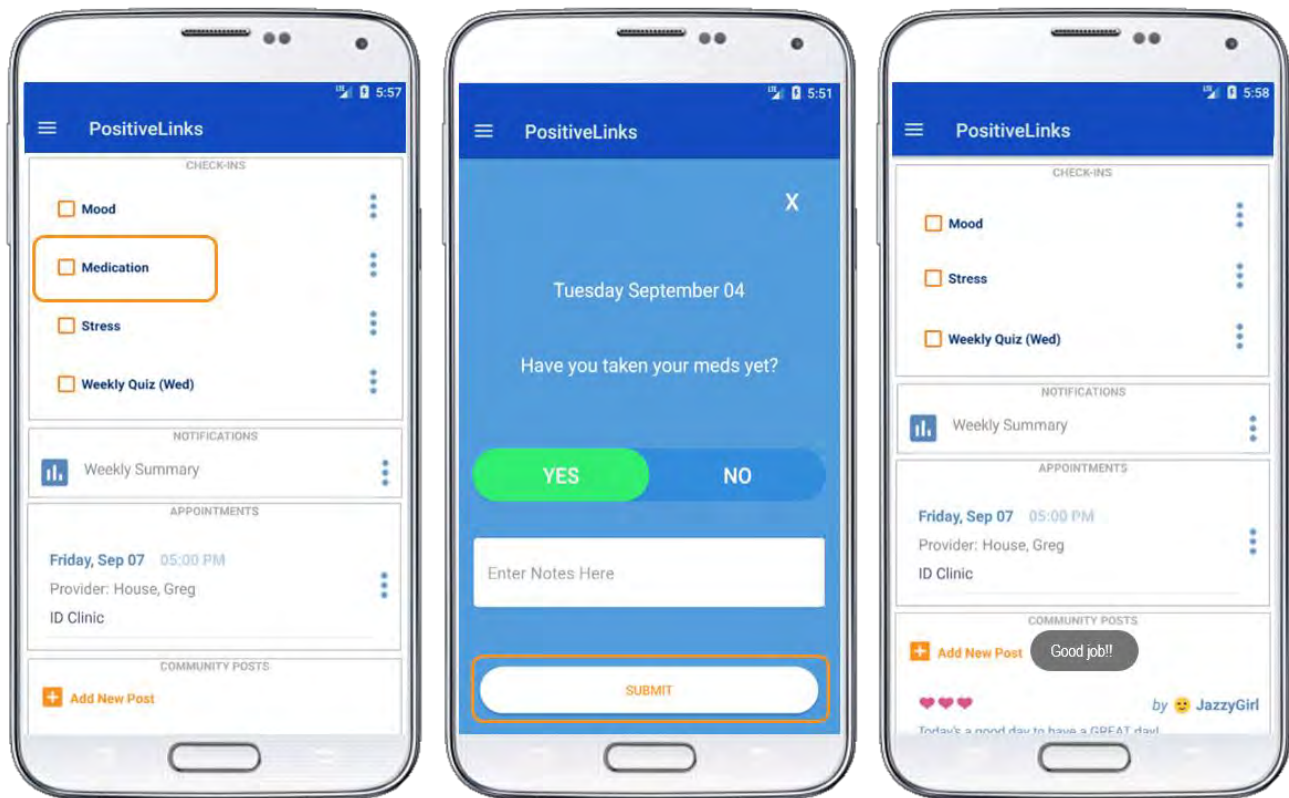
**Check-Ins Feed**  
*See daily self-monitoring queries on medication adherence, stress, and mood. See weekly quizzes & feedback*



EMAs are Ecological Momentary Assessments that gather data about people's behaviors or feelings in real-time, over a period of time. PositiveLinks uses EMA check-ins to track Medication, Mood, and Stress levels over time. Each day Members receive three questions or check-ins about their medication adherence, mood, and stress. When Members select an answer or rating they also have the option to enter a comment about anything they'd like to track or remember. Keep in mind that when Members reflect on their medication adherence, mood, and stress levels, it can help them identify and work toward goals.

### Medication Check-In

**Medication Check-In** is a daily, regularly recurring check-in that serves to remind Members about their medications and collects Member responses regarding medication adherence.



The scheduled time of the medication check-in is customizable using PositiveLinks Portal. The default replies may be changed to the preference of each Member.

Each medication check-in displays in the Check-ins Feed and consists of the following elements:

- Medication Adherence question
- Message Date (date of check-in)
- Affirmative reply ('Awesome! Keep up the good work!')
- Negative reply ('You can do it. It is really important to keep up!')

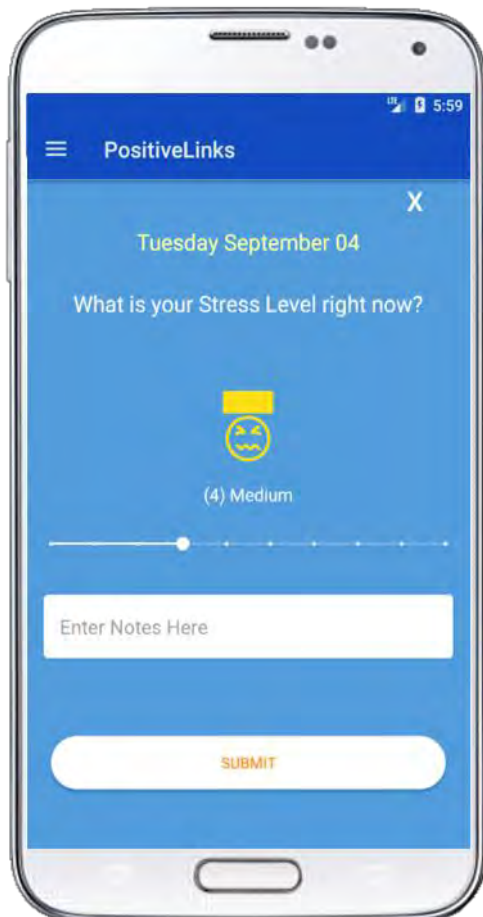
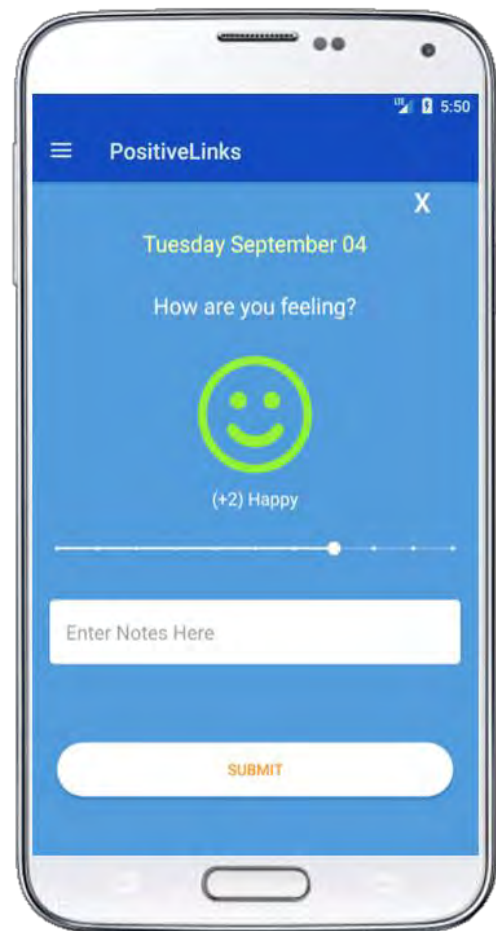
Medication Adherence responses display in the **How am I?** section of PositiveLinks allowing Members and the Site Care Team to track Medication Adherence over time.

### Mood Check-In

A **Mood Check-In** occurs daily. The Mood Check-In is bundled with the Stress Check-In and is randomized daily to capture mood at different times of the day. Members use a slider control to indicate their Mood level. When Members track their Mood over time, they can gain insight into the factors and behaviors that influence their moods.

Each Mood Check-In asks ‘How are you feeling?’

- Members respond on a scale from -5 (Very Unhappy) to +5 (Very Happy)
- Emoticons demonstrate the mood level on the scale
- Positive Mood Reply (‘Great!’ or ‘Excellent!’)
- Negative Mood Reply (‘Hang in there!’ or ‘Help is here!’)
- Neutral Mood Reply (‘Thanks for letting us know!’)



### Stress Check-In

A **Stress Check-In** occurs daily. The Stress Check-In is bundled with the Mood Check-In and is randomized daily to capture stress at different times of the day. Members use a slider control to indicate their Stress level. When Members track how their Stress changes over time, they can gain insight into the factors and behaviors that influence their stress.

Each Stress Check-In consists of ‘What is your Stress Level right now?’

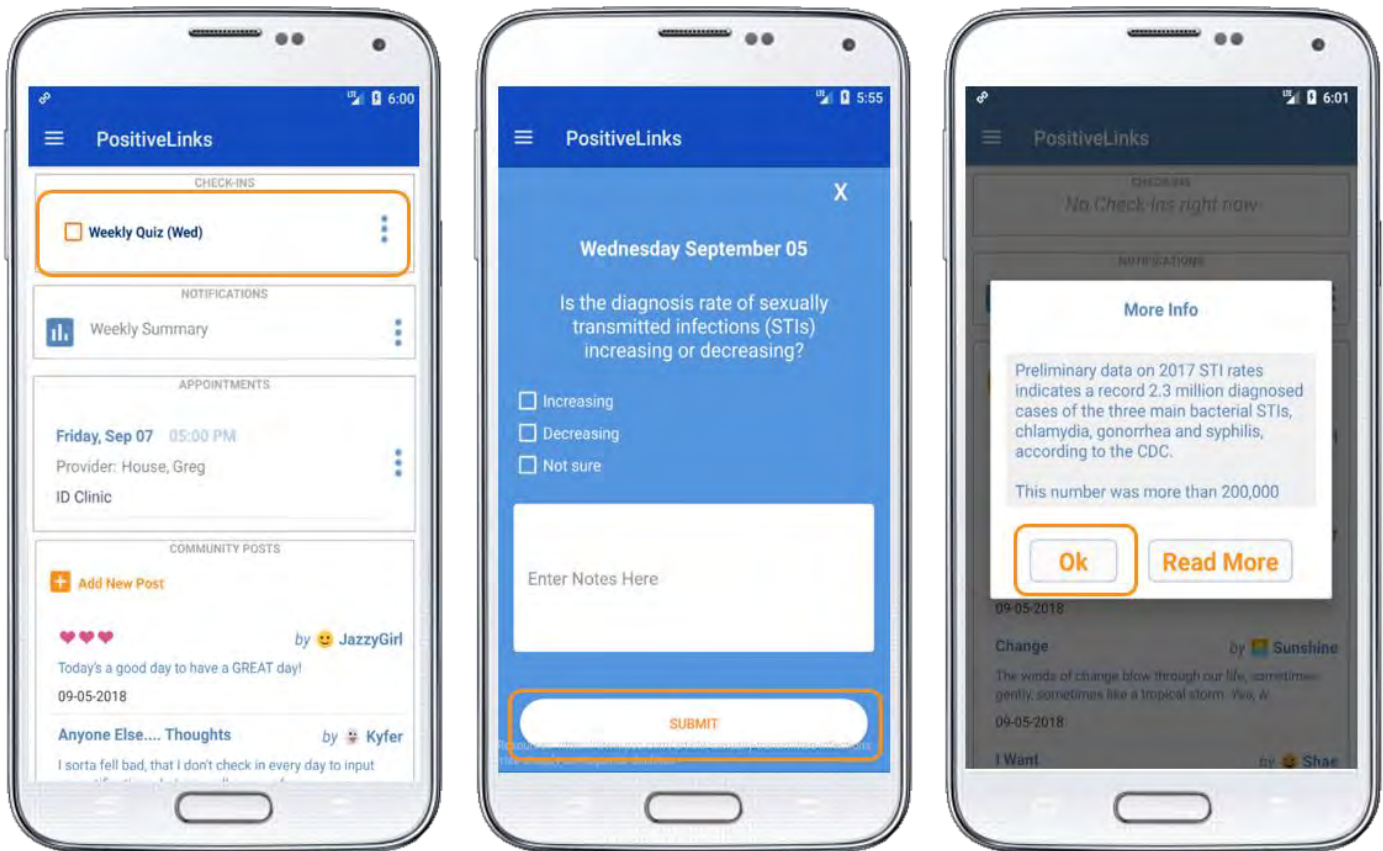
- Members respond on a scale from +1 (Low Stress) to +10 (High Stress)
- High Stress Reply (‘Hang in there!’)
- Medium Stress Reply (‘Thanks for letting us know!’)
- Low Stress Reply (‘Awesome!’)



### Quizzes

PositiveLinks **Quizzes** are educational, informational, or entertaining questions that promote Member engagement in care and positive behaviors. Quizzes appear as push notifications on Member smartphones and in the Check-Ins Feed on the Home screen. When Members click the Quiz check-in, the question or message is displayed. After Members submit a response, immediate feedback is provided. Quizzes are meant to encourage participation and therefore are not scored as correct or incorrect.

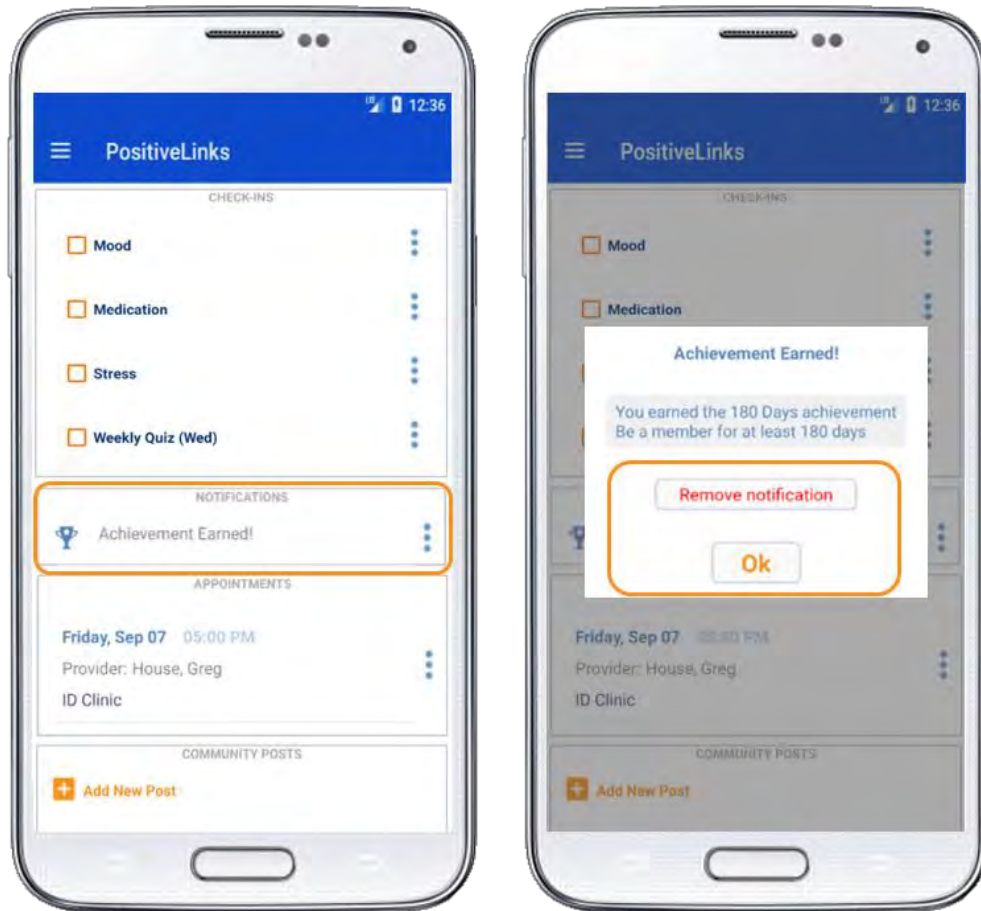
Members receive their Quiz participation rates in Weekly Summaries. Quizzes are typically issued weekly, at a pre-determined time. Quiz questions may be fact-based, related to living with HIV, specific to a particular Site topic, or survey based where Member opinions or feelings are solicited on specific topics.



## Notifications Feed

### Achievements

Members can earn **Achievements** for their participation in the program. A full description of this feature can be seen under the **Profile** section of this manual. When a member receives a new achievement, released on Friday's, a notification will display on their home screen. They can click on the notification to view the achievement and clear the alert.



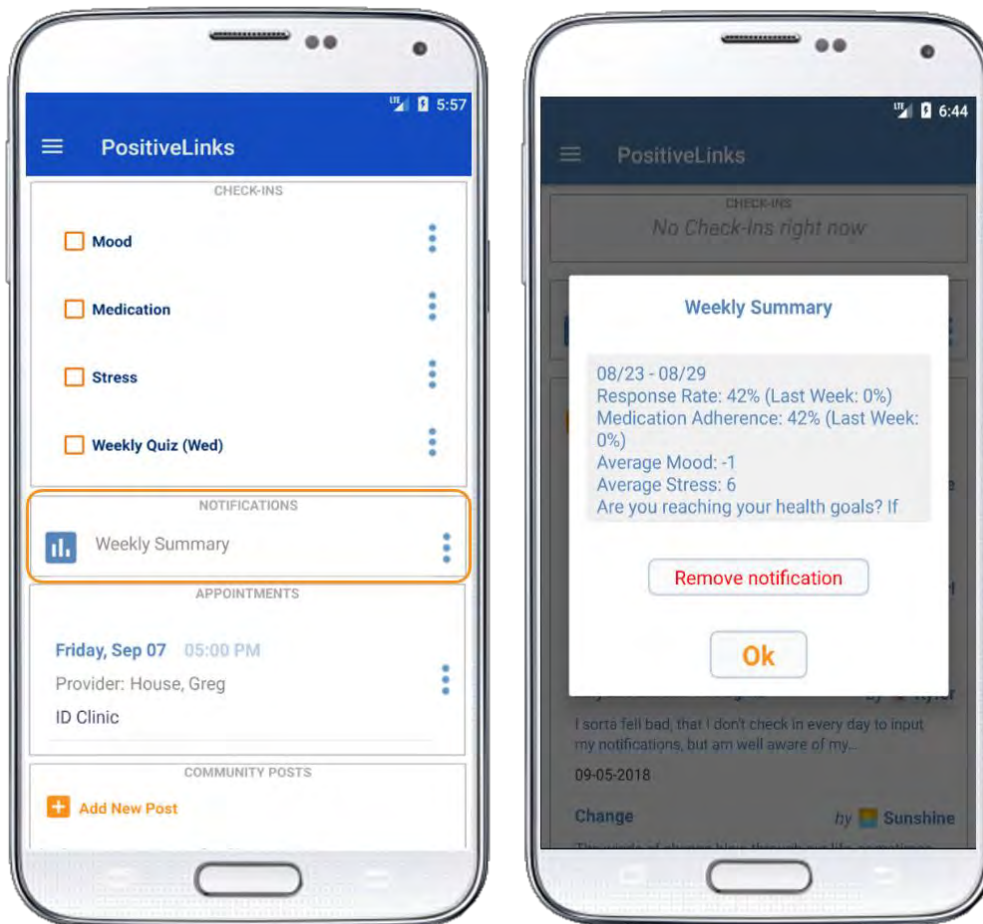


### Weekly Summary

**Weekly summaries** display on the home page. Members receive a push notification when they are available. They outline Member usage during the past 7 days. The summaries can be used to provide a snapshot of self-monitoring for Members.

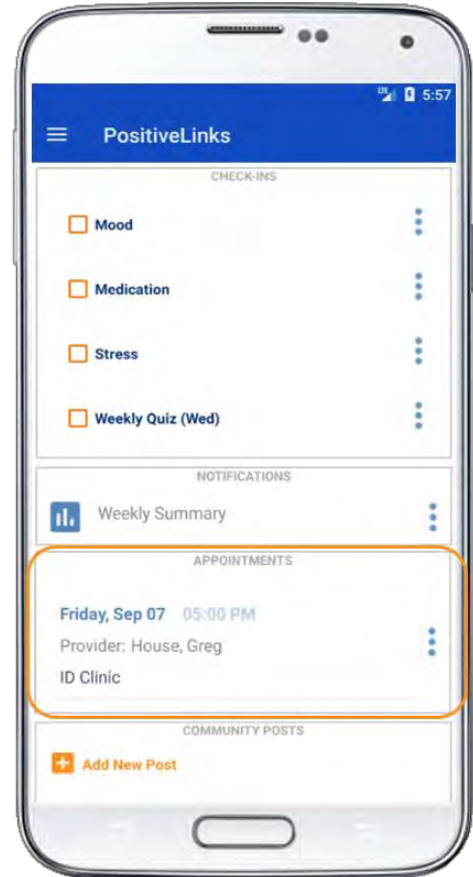
Weekly Summaries display on a set date for all Members, and contain the following information:

- Meds Calculated adherence x%
- Meds previous week adherence x%
- Stress average rating
- Stress previous week average rating
- Mood calculated rating
- Mood previous week rating
- Summary message to Members: ‘Are you reaching your health goals? If not, let the PositiveLinks Team know how we can help’



### Appointments Feed

The Home page of the app also displays an **Appointment feed** for upcoming appointments for the Member. These appointments will appear on the Appointments feed within 72 hours of the appointment time. Members can click on the notification to view the details of the appointment or can view the information from the full appointments page.



### Community Feed

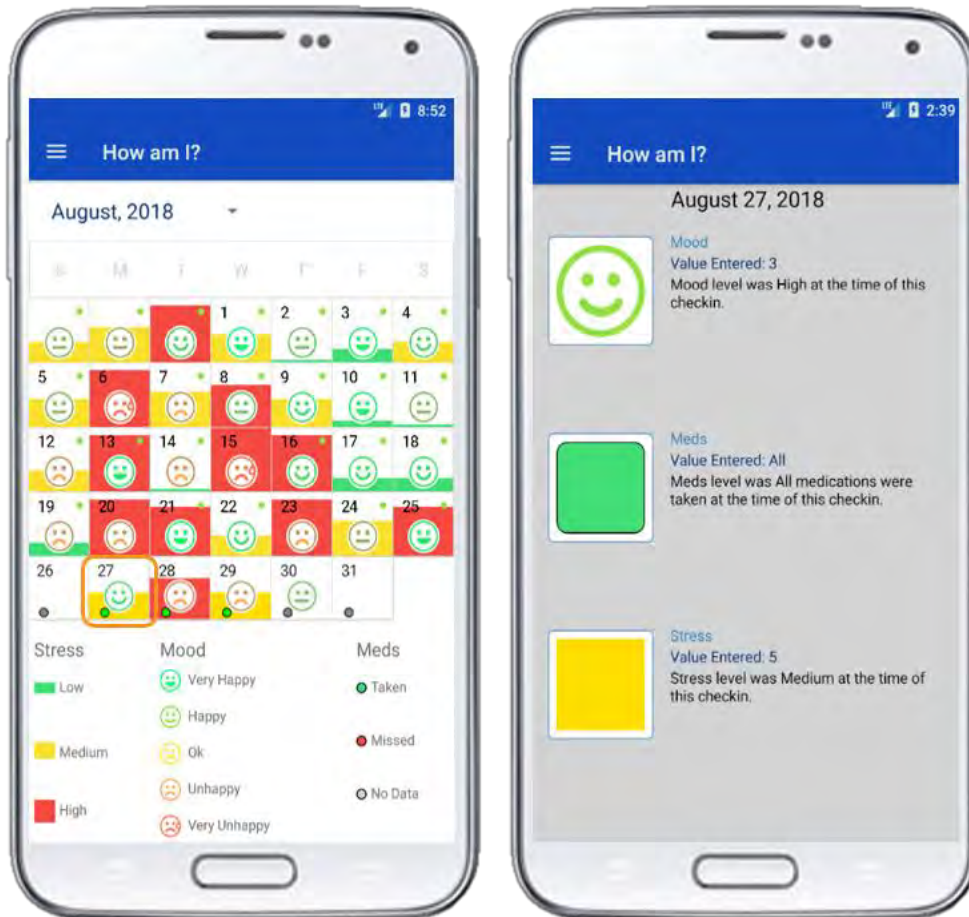
The Home screen also displays the most recent posts from the **Community** board. The **Community Feed** serves as a window to the Community board. The Community Feed displays the most recent posts on top. This feature helps Members quickly see what is being discussed in the PositiveLinks community.



Community Feed  
See recent posts to the  
community board





## How am I?

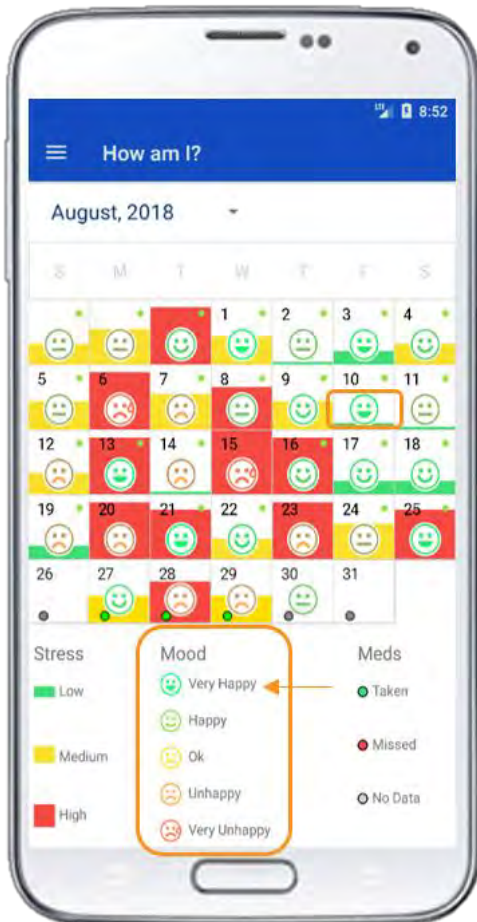
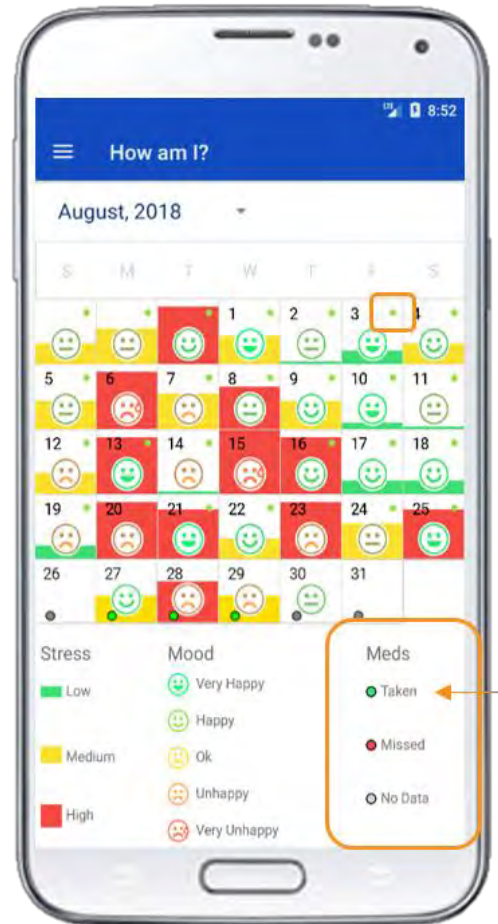
The **How am I?** page shows Member responses to Medication Adherence, Mood, and Stress check-ins on a monthly calendar view. A drop down menu is available on the calendar for Members to navigate between months. This display lets Members and Site Care Team members track these factors over time. This feature helps Members adhere to medication and monitor their mood and stress levels. It can also facilitate conversations with Site Care Team members that lead to shared decision making and greater engagement by Members in their medical care. Tapping a day brings up a screen with any notes the Member may have recorded for that day.



### Medication Adherence






Medication adherence is shown as a color-coded dot in the upper right hand corner of each day. A green dot represents a 'Yes' (or all) response to a Medication check-in, red represents a 'No' (or none) response, and grey indicates no response was received for that date. A yellow dot also displays for sites that enable an all, some, or none response system. Members can reference a legend below the calendar that explains the color-coding system. Tapping a day brings up a screen with any notes the Member may have recorded for that day.

Calendar Display	Medication Answer
	All
	Some
	None
	No Response



### Mood

The monthly calendar also displays Member mood responses. Each day is populated with an emoticon that corresponds to the reported mood score. If a mood score is not reported for the day, there will not be an emoticon. Members can reference a legend below the calendar that explains what each emoticon represents. The mood emoticons and their corresponding values are detailed below:




Calendar Display	Description	Mood Score
	Very Unhappy	-4, -5
	Unhappy	-3, -2
	Neutral	-1, 0, 1
	Happy	2, 3
	Very Happy	4, 5

When Members consider their mood response over time it helps them recognize patterns and trends. Encourage Members to think about triggers that lead to good or bad moods.

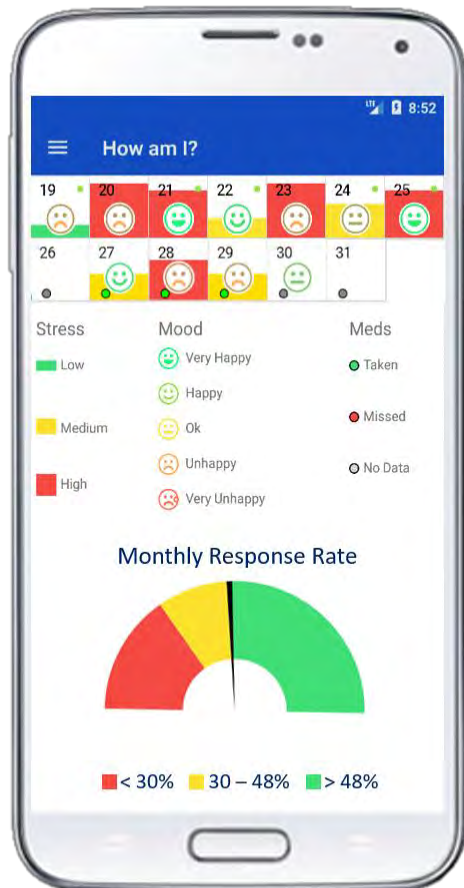
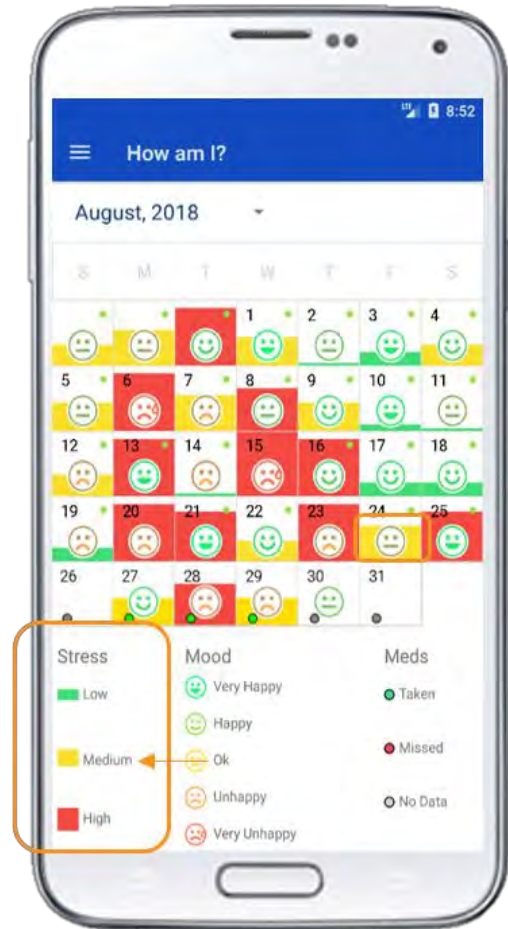


### Stress

The monthly calendar also displays Member stress levels. Each day displays a bar with color and height that corresponds to the members reported stress score for that day. Members can reference a legend below the calendar that explains what each colored bar represents. The bar color and their corresponding values are as follows:

Calendar Display	Description	Stress Score
	Low Stress	1-3
	Medium Stress	4-6
	High Stress	7-10

Looking at Member stress response over time helps them recognize patterns and trends and may also help identify triggers that cause high stress or activities that help you maintain low stress.



### Response Rate Meter

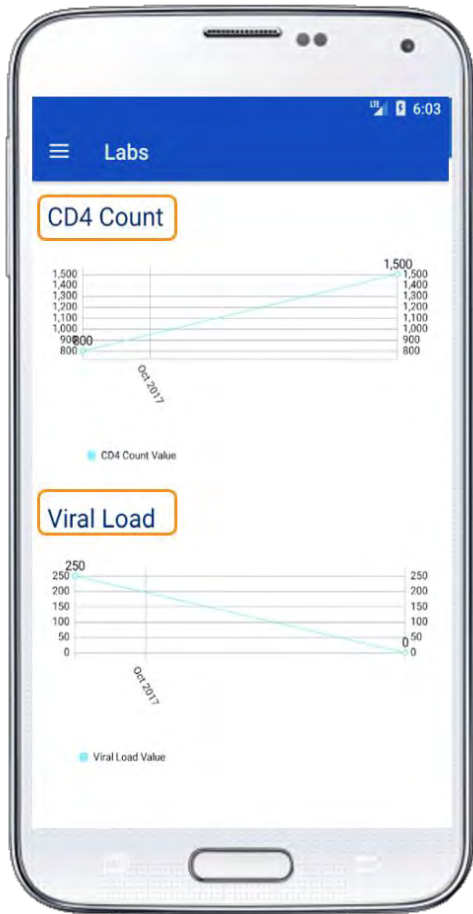
Below the How am I? calendar display is a **Response Rate** meter indicating to the member their response rate for the past 30 days. This meter allows members to know if their usage is sufficient to earn their phone credit each month. The green section indicates the members' usage is above 48% and they are in an appropriate range for their credit, yellow indicates a response rate between 30-48%, and red indicates a response rate below 30%.

### Labs: CD4 & Viral Load

The Labs page displays **CD4** and **Viral Load** in two separate line graphs. Data for these charts is not self-reported. It is entered manually by Site PLC, or automatically via EMR.

Unlike the other dashboards, which use fixed y-axis scales, the CD4 and Viral Load charts will have a dynamic y-axis that will ‘adjust’ based on the Member’s values. The chart will not use a logarithmic y-axis. Both charts use a line graph format, with ‘get in the green’ plot banding for target value ranges.

Because CD4 and Viral Load are checked only a few times per year, there are fewer x-axis data points than the medication, mood, and stress charts display.



## Community Board

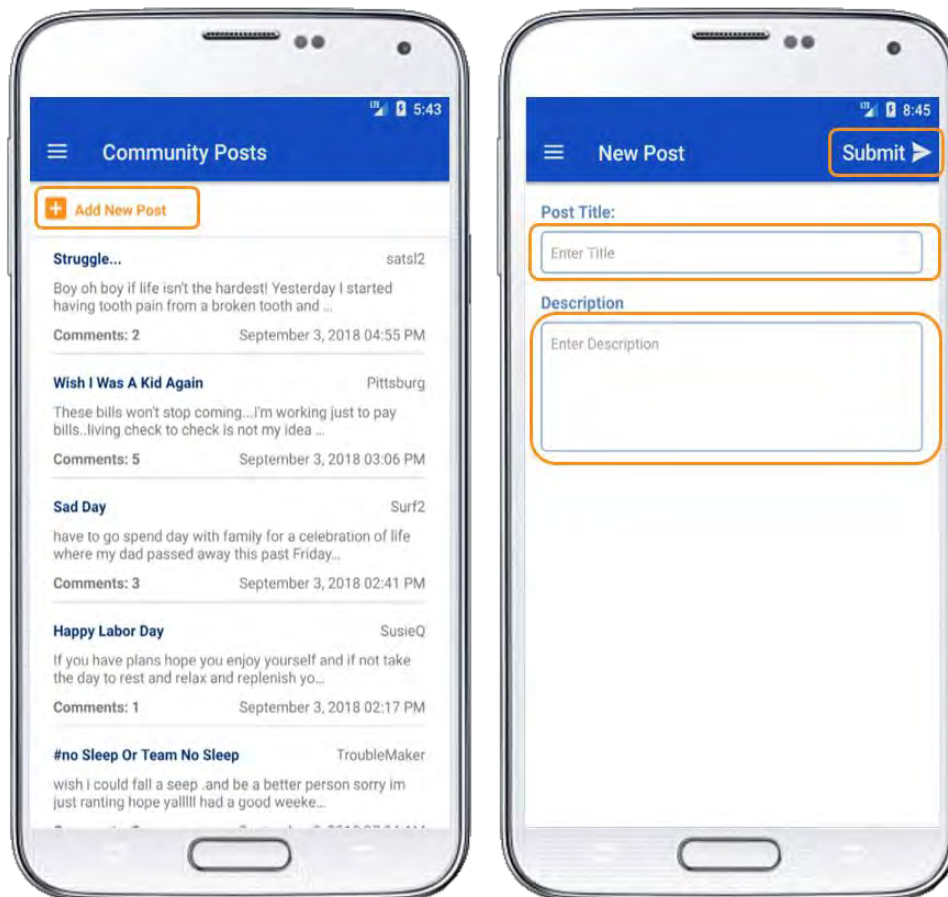
Community posts display in chronological order (newest on top) in the **Community** section of the PositiveLinks Member App. PositiveLinks Members can also view the latest community posts in the Recent Community Posts Feed on the PositiveLinks home screen. Site Administrators can choose to ‘Pin’ posts to the top of the Community to ensure members have access to important information on clinic events, PL app updates, and other program news.

The Community allows Members to anonymously share and interact with other PositiveLinks Member App Members in a digital social support community. The Community uses a threaded, topic-based discussion board structure that allows Members to post thoughts or ideas, share experiences, or ask questions in a safe protected environment, and to view and respond to items posted by other Members.

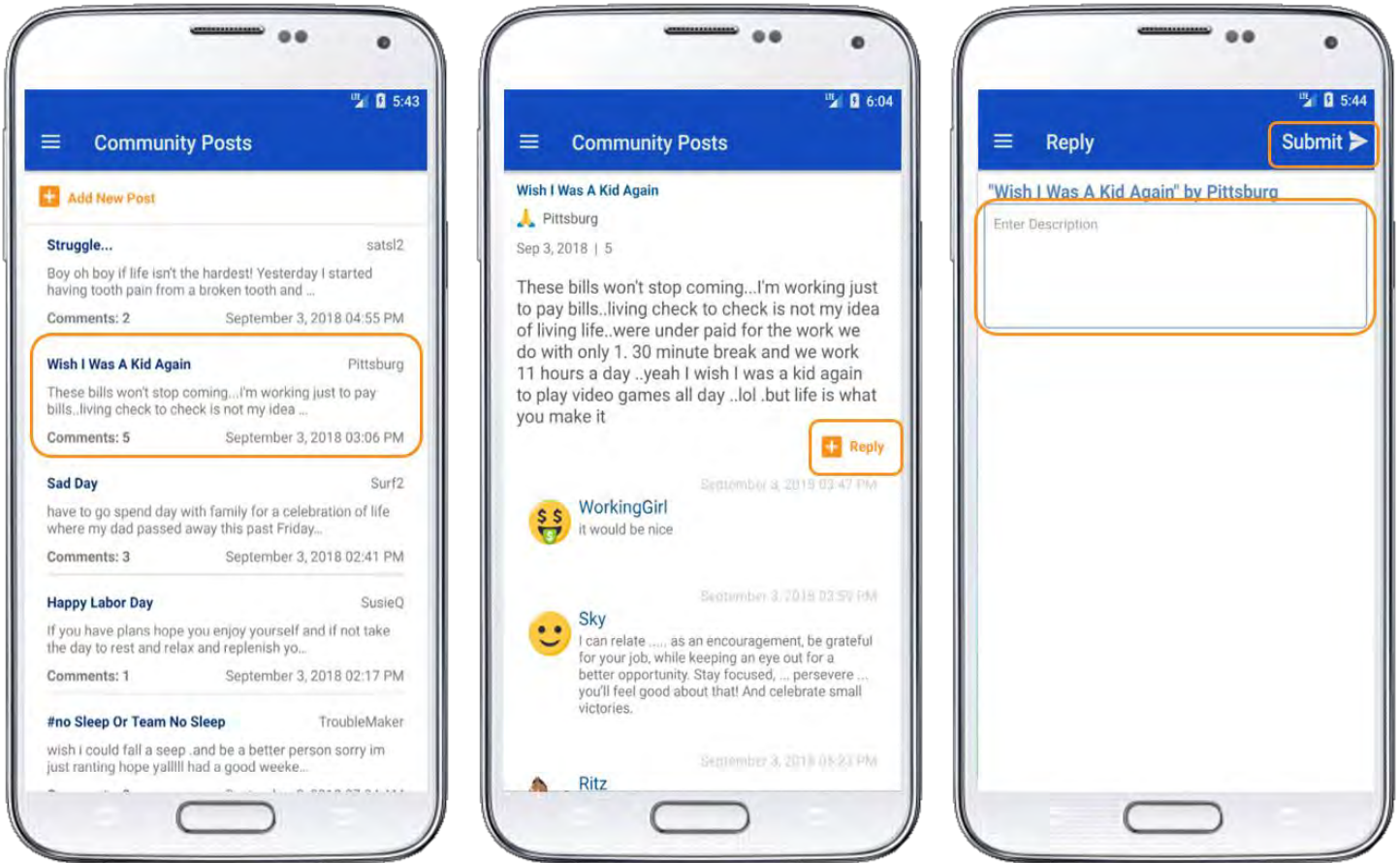
The Site PLC observes the Community, minimally intervening only to remove posts that do not comply with PositiveLinks policies. This set up encourages candid discussion among Members.

During enrollment Members agree to be respectful of others on Community and not to disclose their identity. This protects Member privacy and respects the comfort level of other Members who wish to be anonymous.

Members may start a new topic on the Community using the ‘+ Add New Post’ button. When creating a new post Members enter a post title and description and then click Submit. Members may reply to conversation threads by clicking on a conversation then clicking the ‘+Reply’ button. New Members are encouraged to introduce themselves on the Community so that current Members can offer a warm welcome.





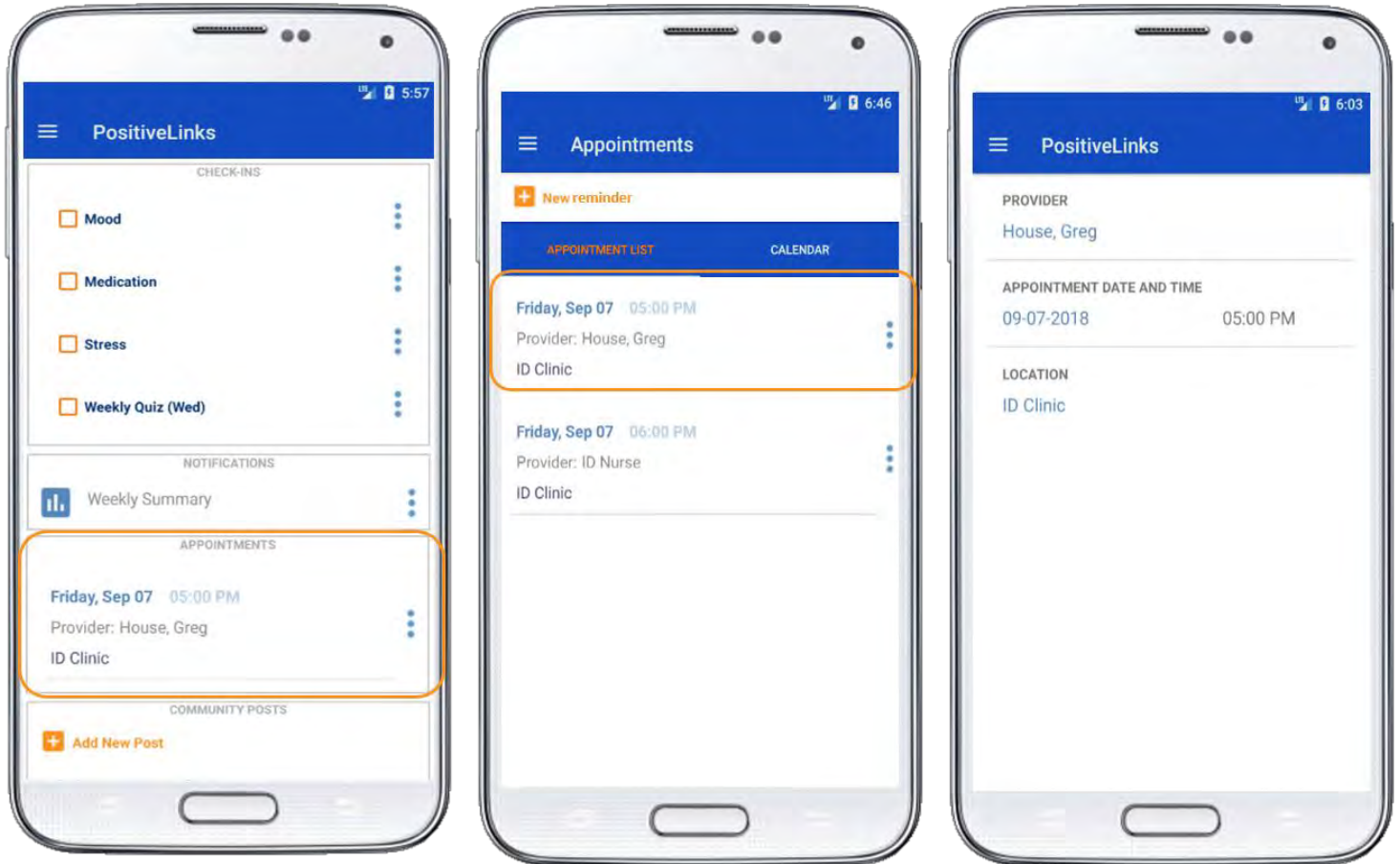


During enrollment, Members agree to call 911, privately contact their Site Provider/PLC, or contact family or friends for support during emergencies rather than make that request on the Community.

The Site PLC does not typically engage with Community conversation threads, however, they may periodically share informational or uplifting posts. They will also post Your Weekly Achievements and Raffle winners on the Community.

## Appointments

The PositiveLinks Member App keeps track of Member appointments, such as medical care visits. In order to protect Member privacy, PositiveLinks does not use the smartphone’s native calendar system. The PositiveLinks **Appointment** feature displays upcoming appointments in chronological order. The Site Administrators can enter appointment information using the PositiveLinks Portal or appointments can be fed in from the EMR. Members can enter their own appointments and reminders whenever they wish.



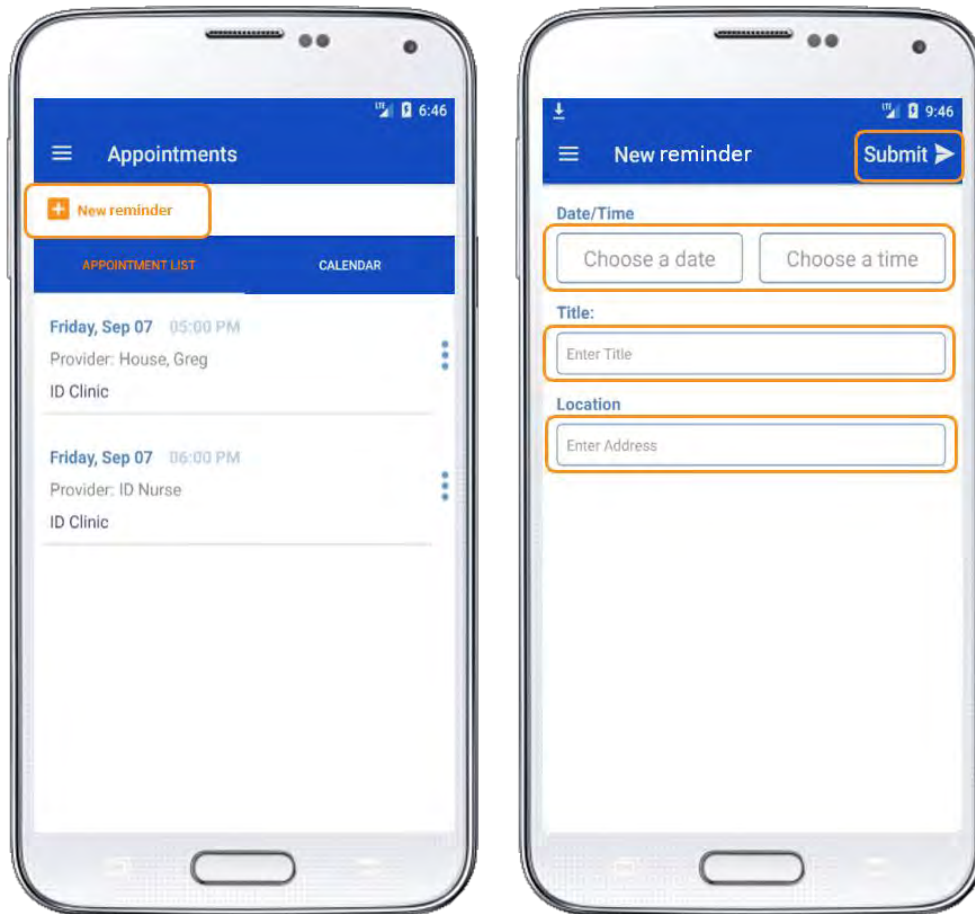
Upcoming appointments will display on the home screen 72 hours before the scheduled appointment to allow members time to arrange transportation if needed. Clicking the appointment record opens appointment information including provider name, location, and previous appointment if applicable.

## RECOMMENDED Manual Data Entry

**Manual entry of appointments and Labs.** Sites start by entering appointments and labs manually through PositiveLinks Portal. Sites can then choose to continue manual entry or explore EMR integration once they are familiar with administering PositiveLinks.

### *New Reminder*

To enter a new reminder the Member selects '+ New Reminder' from the Appointments page of the app. Here the Member is able to enter the date, time, title, and location information for the reminder. Once submitted, the Member will receive a reminder notification 72 hours before the scheduled event the same way they do with clinic or provider entered appointments. The self-created reminders allow Members to track important reminders like medication refills or document deadlines as well as appointments that may not have been added by the Site PLC.

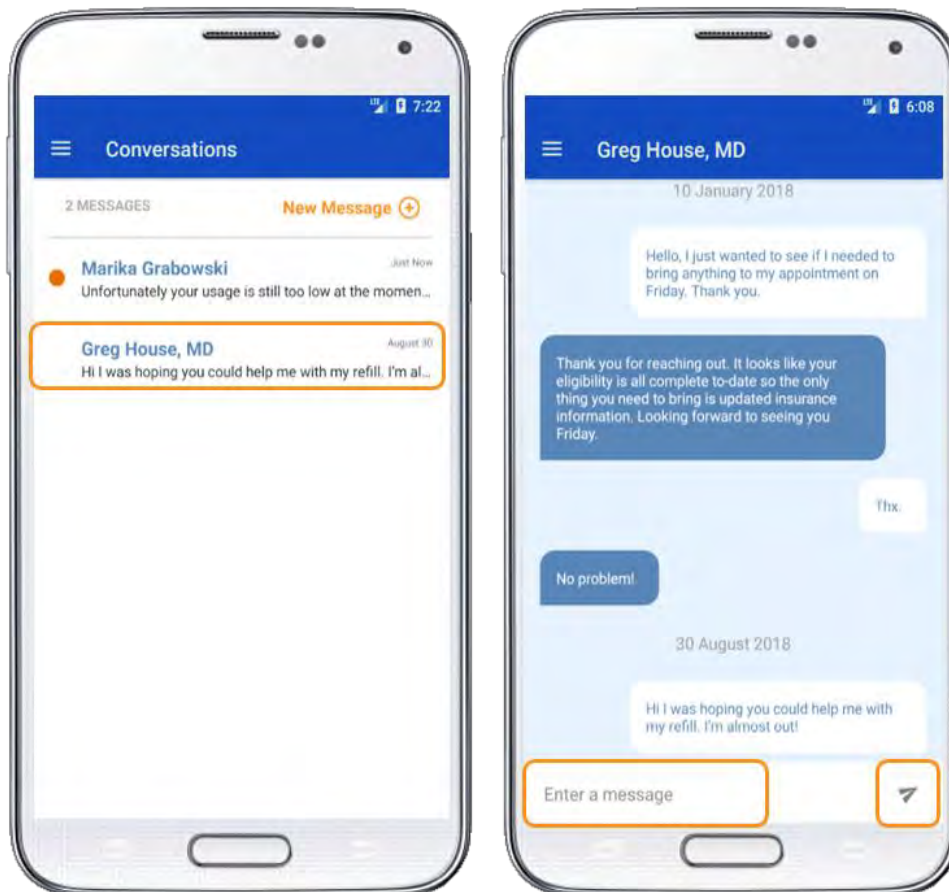


## Messages

The **Messaging** feature in PositiveLinks is a cross between email and SMS text messaging—and is a secure alternative to both. Communication between Members and the Site Care Team via SMS text or email is not HIPAA-compliant, and can lead to inadvertent disclosure because email and SMS apps may not be password protected on a smartphone or tablet. Integrated messaging within PositiveLinks is more secure than text and email communications with staff and is HIPAA compliant. Messaging allows secure communication between PositiveLinks App Members and the Site Care Team. This feature does not allow for private messaging between Members.

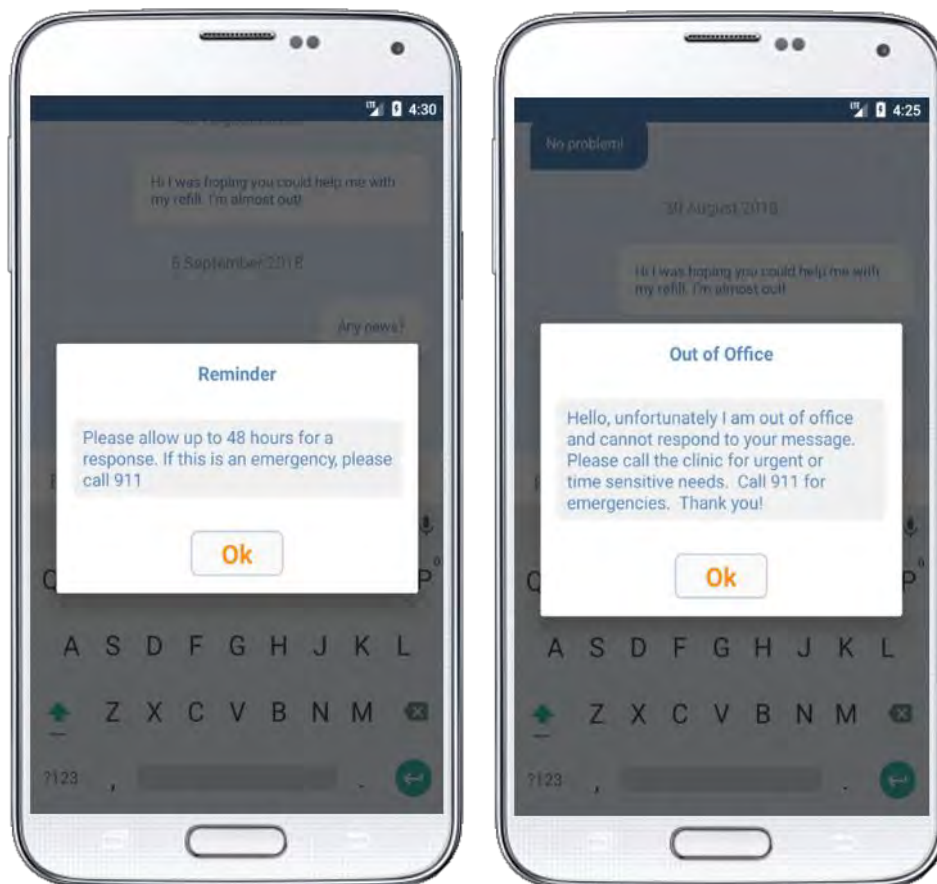
- PositiveLinks messages display as conversation bubbles with a single thread per Member-Site Provider conversation.
- Messages are not stored on Member smartphones, but are securely retrieved from the server when logged into the Member app.
- PositiveLinks messages do not have rich formatting capability such as bold, italic, tables or lists. They do support inclusion of hyperlinks.

The Site PLC or Site Care Team listed in the Contacts section of the app receives PositiveLinks messages along with notification of the message through email. Full descriptions of this process are included in section 7, Using PositiveLinks Portal.



Members can compose and send messages and view and reply to received messages from the PositiveLinks Member App Messages feature. In order to protect Member privacy, messaging notifications do not contain the message content. Members receive a Push Notification 'You have a new message.' Members navigate to the Messages feature using the Menu button. Once on the Menu, an orange number next to the Messages icon indicates the number of unread messages. In the message inbox, unread messages are highlighted with an orange dot to the left of the message.

Each Site Care Team can choose how they wish to distribute PositiveLinks messages. Messages may be routed directly to PLC or to individual Site Care Team members. During enrollments Members are informed that outside of regular business hours or if a Provider is out of the office or with another patient, they may not get an immediate response. Members are reminded by an automated message popup to expect a 48 hour response time to their messages. This popup displays once per app login. When Providers set their availability to 'out of office,' Members receive a similar automated message that informs them of the potential delayed response.

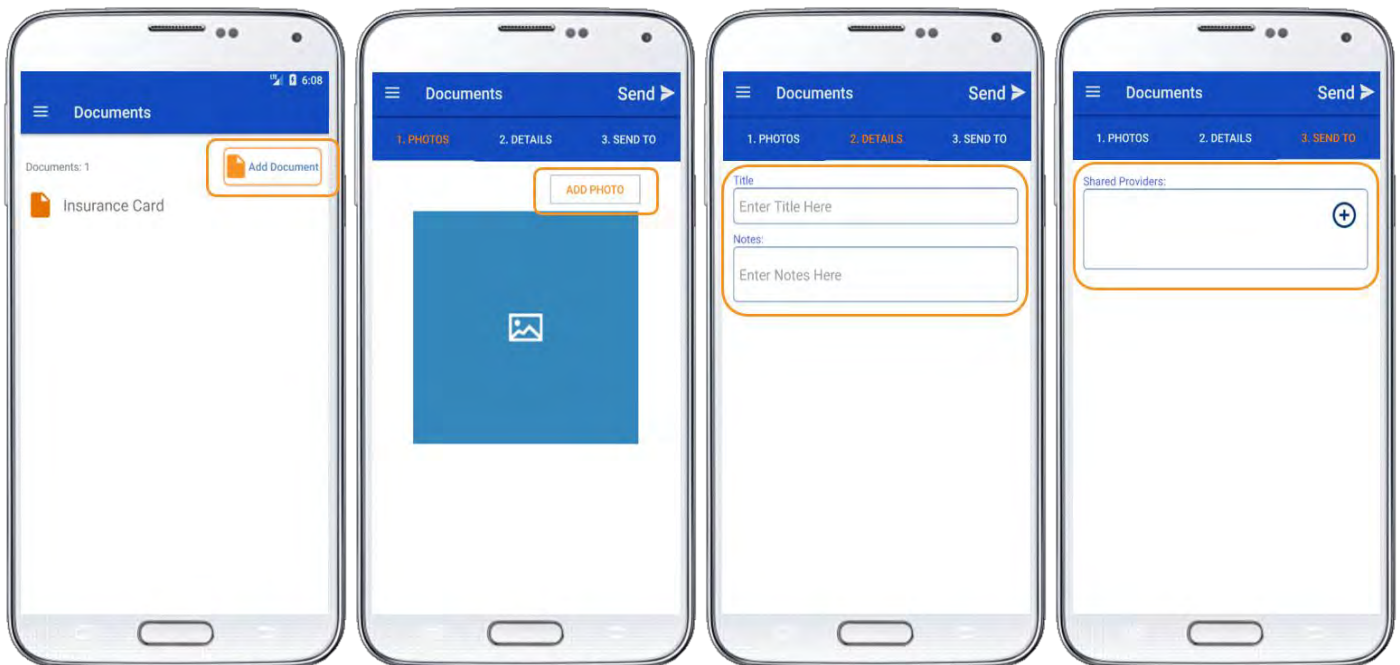




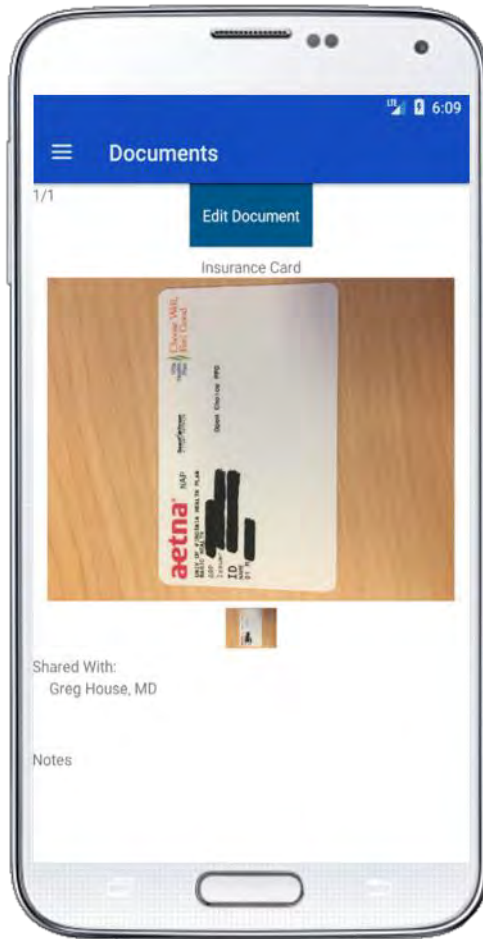
## Documents

The **Documents** feature of the PositiveLinks app allows Members to capture images of the documentation they may need to provide to clinic staff. Documents may include information required for clinic eligibility or insurance purposes including housing status, photo ID, and paystubs. To upload a new document Members use the following steps:

- Select 'Add Document'
- On the Photos tab: Select 'Add photo'
- Take a photo of the document to upload
- Select the check-mark to verify
  - Members can 'Retake photo' or 'Delete photo' to replace the current image
- On the Details tab: Add the desired title and notes
- On the Send To tab: Select '+' to choose the Site Care Team members to share the document with
- Select 'Send' to finish



Members can view files they have uploaded previously and files uploaded by Site Care Team members to their account from the main page of the Documents feature.



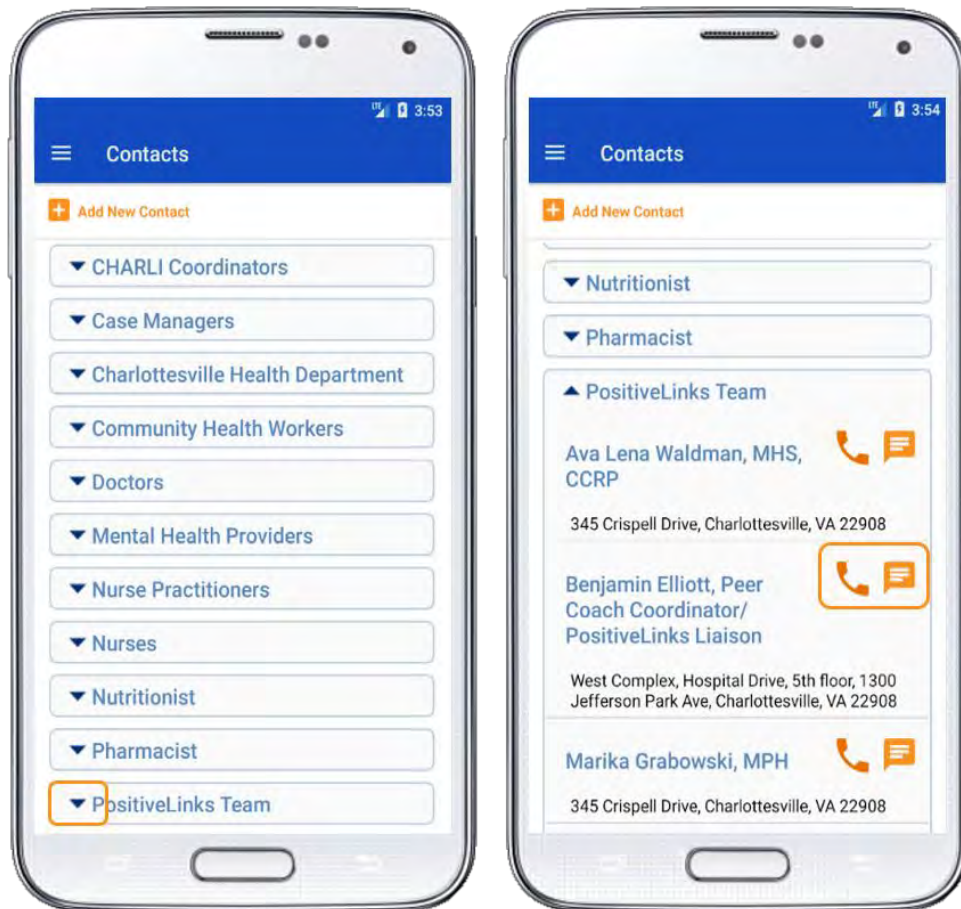


## Contacts

The PositiveLinks Member App contains contact information for key personnel that Members may need to reach. The PositiveLinks **Contact** list is contained within the PositiveLinks Member App in order to protect Member privacy. Contact information for each site is entered during initial set up by the PositiveLinks Coordinator. Contacts are grouped by provider type such as Case Manager, Mental Health, and Site Team.

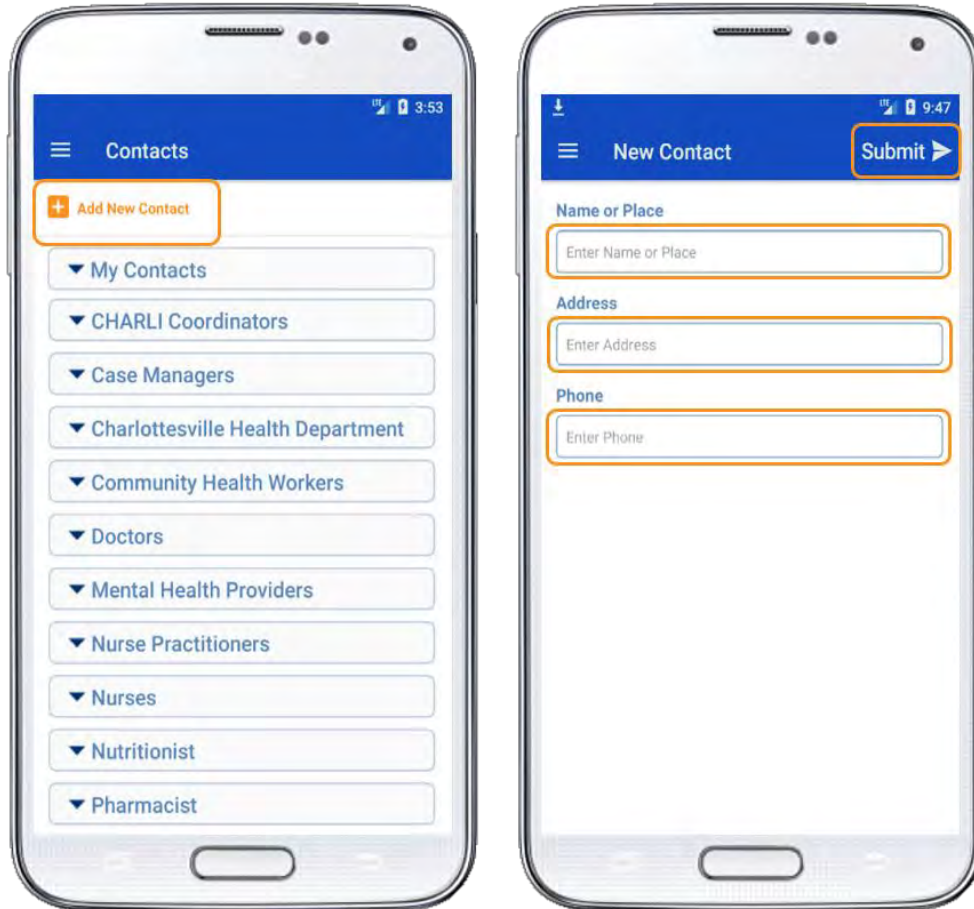
Contact list items can include information such as:

- Provider name
- Provider phone number
- Private message link
- Provider address



### Add New Contact

Members can add additional contacts to the Contacts page of the app. This allows members to privately store contact information for additional providers or pharmacies that may not be included or affiliated with the PositiveLinks program. To add a new contact simply click ‘+Add New Contact’ and the Member can enter the name or place, address, and phone number. Once added, the new contact stores under the ‘My Contacts’ drop-down section of the Contacts page.

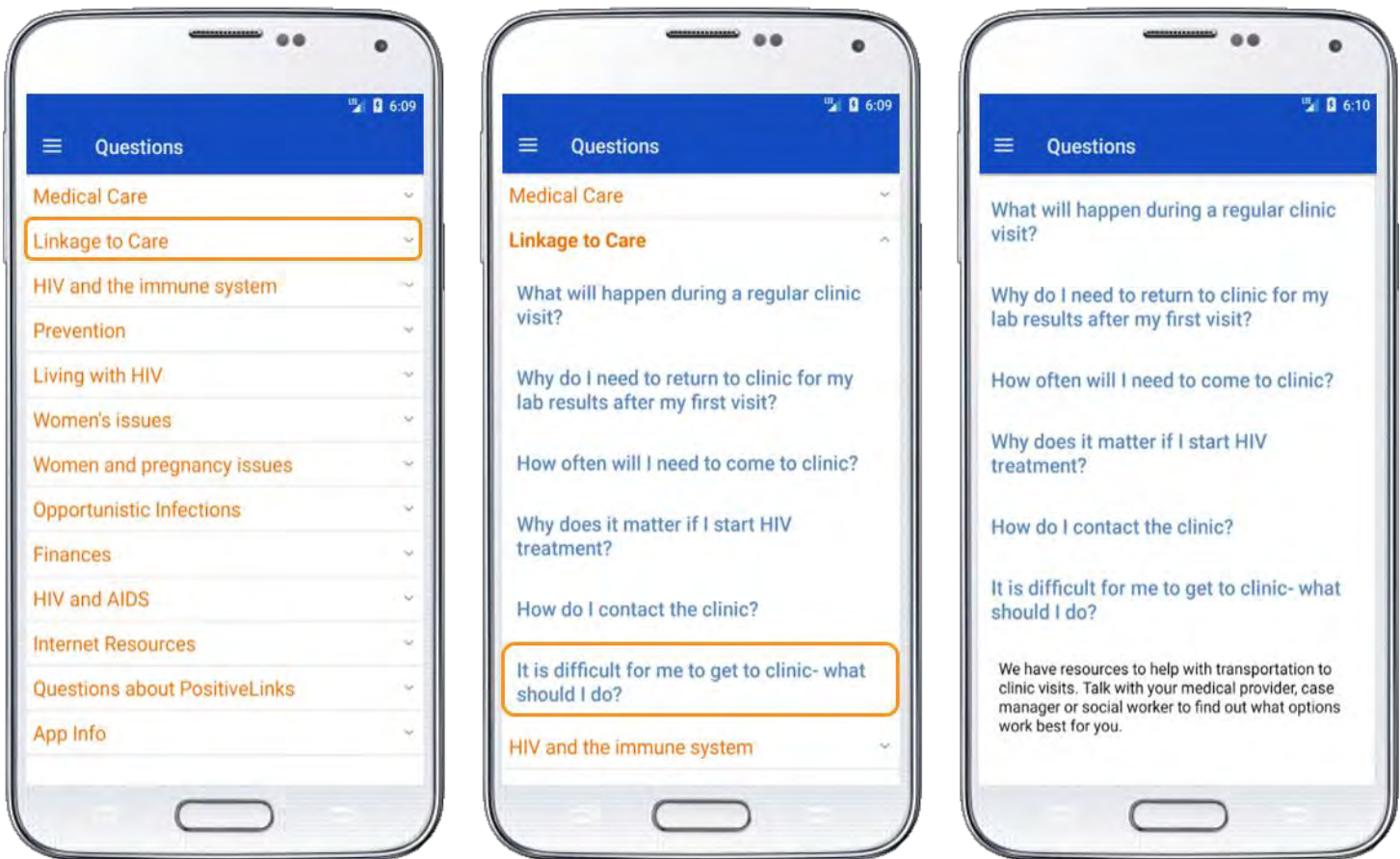


## Questions

**Questions** are text based questions with responses created by the PositiveLinks Team. Questions cover a range of topics, from 'Questions about PositiveLinks' to 'HIV and AIDS' to 'Opportunistic Infections.' Questions and answers in this section are grouped by category to allow members to easily locate the answers they need.

The Question section provides information on questions that many people living with HIV have when they are initially diagnosed. Each category may have multiple entries with additional text answers or links to high quality content about living with HIV. Links open inside the secure PositiveLinks Member App rather than in an unsecure browser.

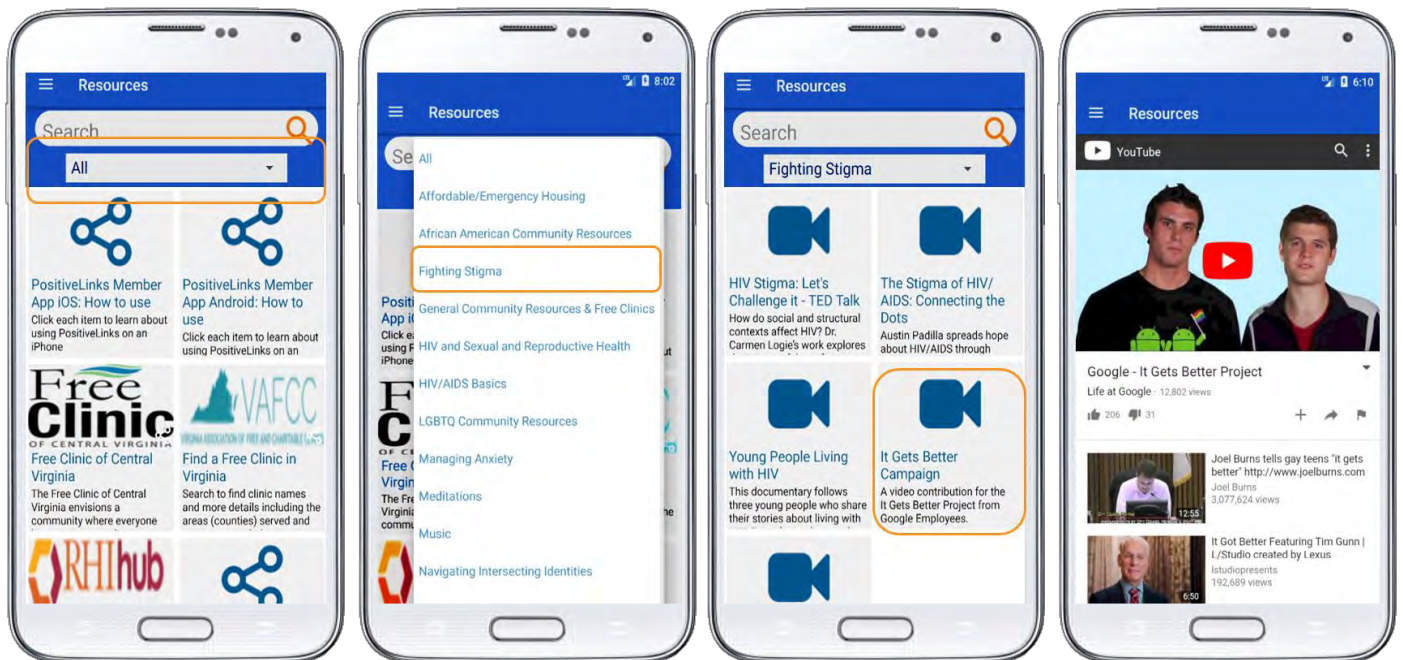
Site Administrators can use the PositiveLinks Portal to edit existing Question content or add their own custom Question content.



## Resources

The **Resources** section of PositiveLinks contains educational content in multimedia format to further support Members. Resources are available in Video, Audio, and Link format. Current content includes audio files for guided meditation, videos for dealing with stress and stigma, and links on legal rights and basic HIV information. Resources are sorted by content to allow members to quickly search for the desired topics. Members can select a topic from the drop down list and then choose from the resources available. Alternatively, members can search for a particular resource using the available search bar.

Site Administrators may customize the Resources using the PositiveLinks Portal, to include their own educational content and site specific information. All resource content are displayed in an App Browser overlay so Members do not need to leave the app to view the material. When finished viewing a resource members simply press the back button on the phone or access the Menu to return to other app features.





## Profile

Members may modify their PositiveLinks Avatar in **Profile**. At enrollment, Site PLCs can demonstrate the avatar feature to Members and they can change their avatar whenever they wish.



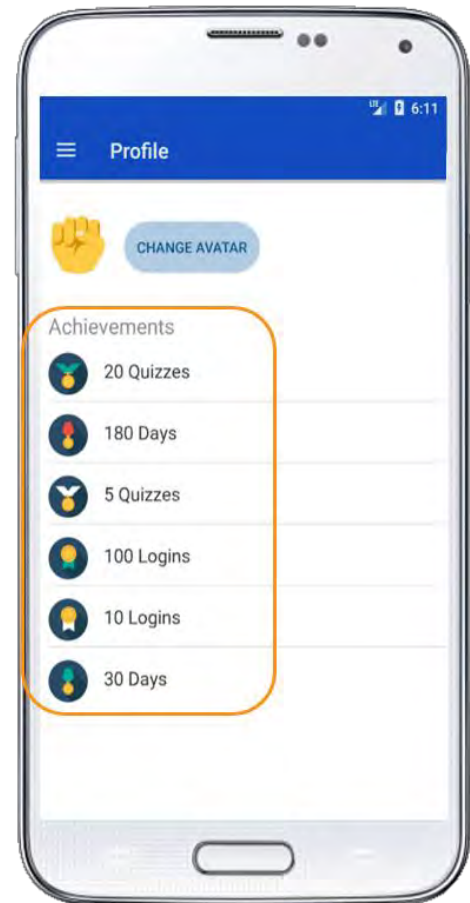
## Achievements

The PositiveLinks Member App includes an achievement recognition system. The purpose of the system is to reward and reinforce app use among Members. **Achievements** also offer a snapshot of PositiveLinks engagement for Site Administrators.

Achievements are graphical representations of trophies, certificates, and ribbons. They appear on the Member home screen at the time they are awarded in the **Notifications Feed**. Click an award notification to see a popup with details about the award. After initial notification, Achievements are displayed on Member Profile screen.

Achievements are awarded for a mix of ‘earned’ activities -- such as number of Community posts, or maintaining a desired adherence level -- and ‘time based’ activities -- such as number of days in the program. The aim of Achievements is to further reinforce and encourage using PositiveLinks Member App. Achievements are awarded in the following instances:

- Time-based Achievements
  - 30 day PositiveLinks Member
  - 90 day PositiveLinks Member
  - 180 day PositiveLinks Member
- Earned Achievements
  - 100% Monthly Meds Adherence Rate
  - 1 Post on Community
  - 10 Posts on Community
  - 40 Posts on Community
  - 1 App launch
  - 10 App launches
  - 100 App launches
  - 5 Quizzes answered
  - 20 Quizzes answered



## UVA Case Study

### *Recognizing Achievements*

#### COMMUNITY RECOGNITION

The UVA Site PLC prepares a post for the Community, 'Your Weekly Achievements!' The post appears in the Community Feed on the Home screen. It summarizes key achievements for Members during the previous 7 days. Members can respond to the post to show support for those Members who are recognized. This type of recognition has helped motivate and encourage use of PositiveLinks by Members at UVA.

#### RAFFLE

At the end of each month, UVA Site Members with the highest response rates are entered into a raffle for a small gift card prize. The winner is announced on the Community and via private message to the raffle winner. Members with high response rates are also acknowledged.

The raffle is a way to provide Members with data to facilitate setting short-term goals and measuring progress toward their goals. It also provides the UVA Site Care Team a way to encourage positive behavior. UVA found raffles increased response rates and offset some of the fall-off in response rate over time.

UVA found Raffles also serve to reinforce PositiveLinks App use awareness across all Members in the community. Seeing the number of Members eligible for the Raffle helps Members know they part of a larger community of PositiveLinks App users. This allows Members to better calibrate their PositiveLinks App activity level by providing a behavioral nudge.

## RECOMMENDED

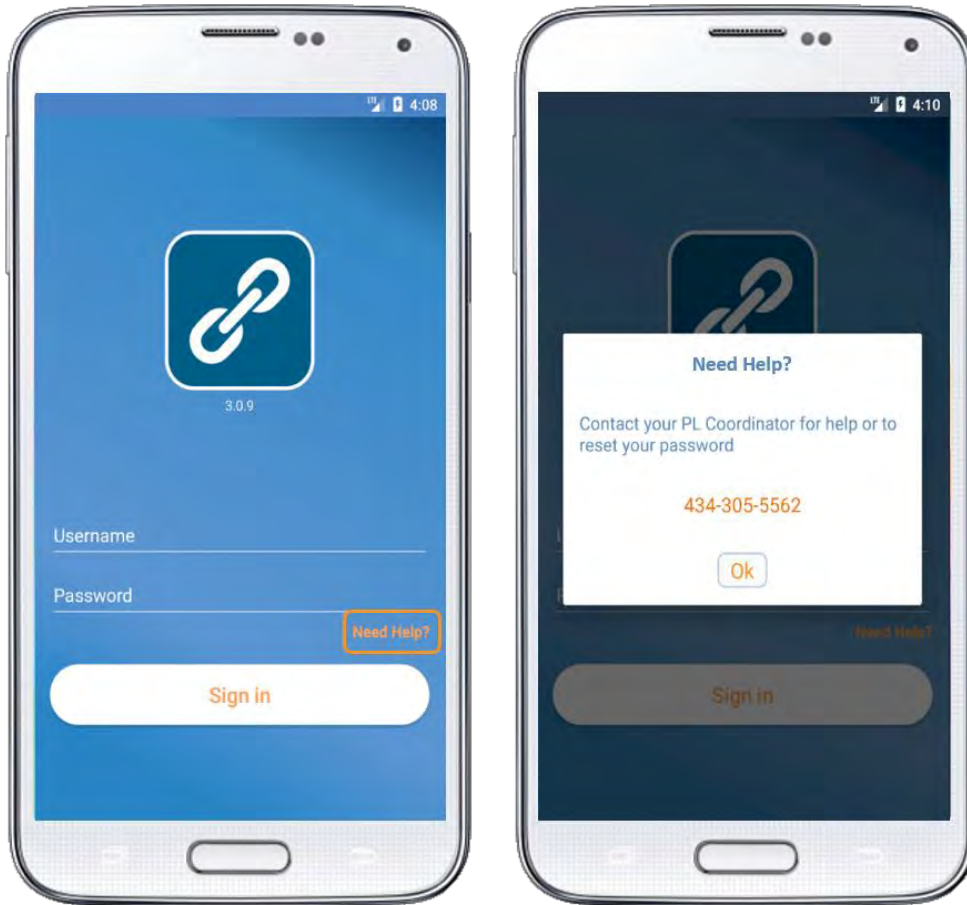
### Monthly Raffle

**Raffles reinforce positive behaviors.** It is recommended that Sites develop their own raffles to reinforce PositiveLinks App use and visibility across Site Members.



## Need Help? Feature

The PositiveLinks App has a feature that allows Members who are having difficulty accessing the app to connect directly to a member of the PositiveLinks team. A ‘Need Help?’ icon on the app Login screen pulls up the phone number of the PositiveLinks Coordinator (or another pre-determined team member) and allows them to call to get help with their concern.



## 4b. Using PositiveLinks Member App – for iOS Users

This section provides detailed information about using the PositiveLinks Member App for iOS users. It helps prepare PLC and the Site Care Team for using PositiveLinks.

Before implementing PositiveLinks Program, the Site PLC and Site Care Team will need to know how to use the features and administrative components of PositiveLinks. The Site Care Team will receive in person training by the PositiveLinks Team. This is supplemented by online learning modules and resources within this manual.

This section is a guide for the Site Care Team on using the PositiveLinks Member App for iOS users. Section 4a provides guidance for using the PositiveLinks Member App for Android users.

*This section is organized as follows:*

*Decision and Task Checklist for Using PositiveLinks App*

*Downloading PositiveLinks App*

*Accessing PositiveLinks App*

*PositiveLinks Member App Features*

*Menu*

*Home Screen*

*Check-Ins Feed*

*Medication Check-In*

*Mood Check-In*

*Stress Check-In*

*Quizzes*

*Notifications Feed*

*Achievements*

*Weekly Summary*

*Appointments Feed*

*Community Feed*

*How am I?*

*Medication Adherence*

*Mood*

*Stress*

*Response Rate Meter*

*Labs: CD4 & Viral Load View*

*Community Board*

*Appointments*

*Messages*

*Documents*

*Contacts*

*Questions*

*Resources*

*Profile*

*Achievements*

*Need Help? Feature*

### Decision and Task Checklist for Using PositiveLinks App

✓	<b>Decisions and Tasks</b>
	Consider how you will use PositiveLinks App Member training materials at your Site.
	Determine Site's protocol for Site Administrators posting on the Community board. Type of messages? When will posts take place?
	Consider how Messages will be distributed among the Site Care Team.
	Based on your site's specific Community board observation protocols, consider additional training for staff
	Decide whether or not to implement a raffle.

## Downloading PositiveLinks App

### Downloading PositiveLinks App

1	Open the Internet browser on Member's smartphone
2	Go <a href="http://uva.positivelinks.info">uva.positivelinks.info</a> (site specific URL)
3	Click 'Download Mobile App', then 'Download Version 3.0.X for iOS' (the X changes based on most recent version number), and click 'Install' when prompted.
4	Once download has completed, go to Settings, General, Profiles and Device Management, and click on 'University of Virginia Medical Center'. Click 'Trust this developer.'
5	The PositiveLinks App icon (Titled 'PL') will appear along with your other apps on one of the home screens.

## Accessing PositiveLinks App



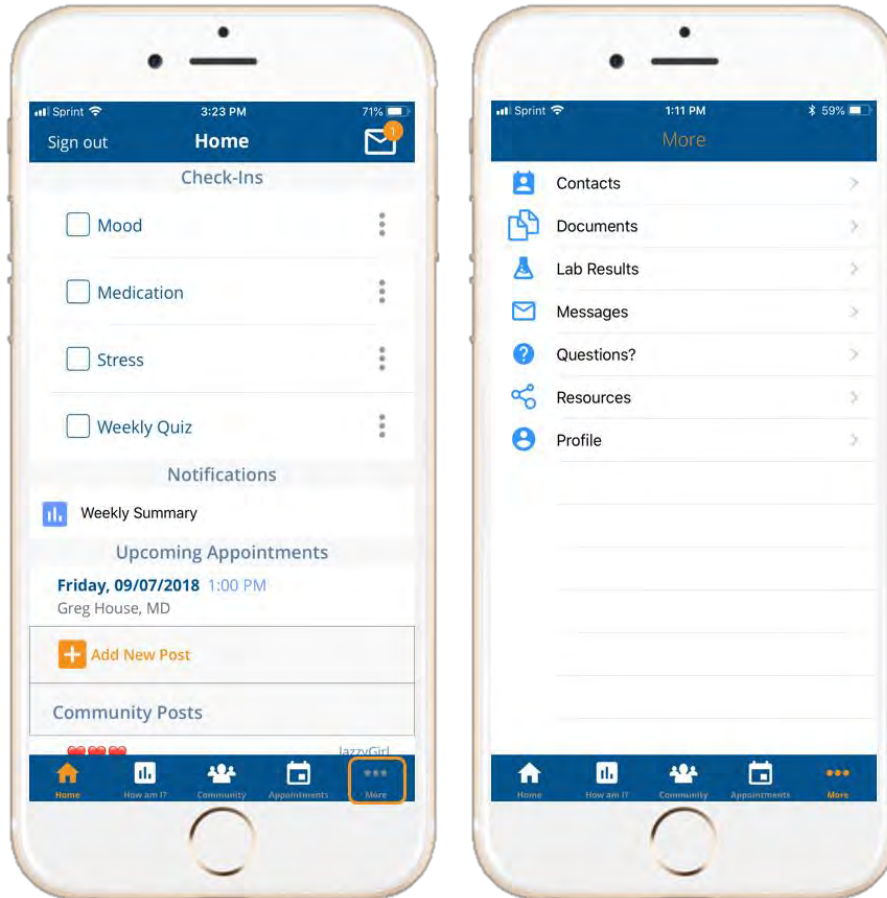
### Accessing PositiveLinks App

1	Click the PositiveLinks icon. The PositiveLinks App icon is an image of a linked chain set on a blue background.
2	The sign in screen will appear prompting Members to enter their Username and password. The app will store the Member Username after the first login.
★	Members create a unique Username and password combination during enrollment. Administrators can use the portal to disable Member access as needed.

## PositiveLinks Member App Features

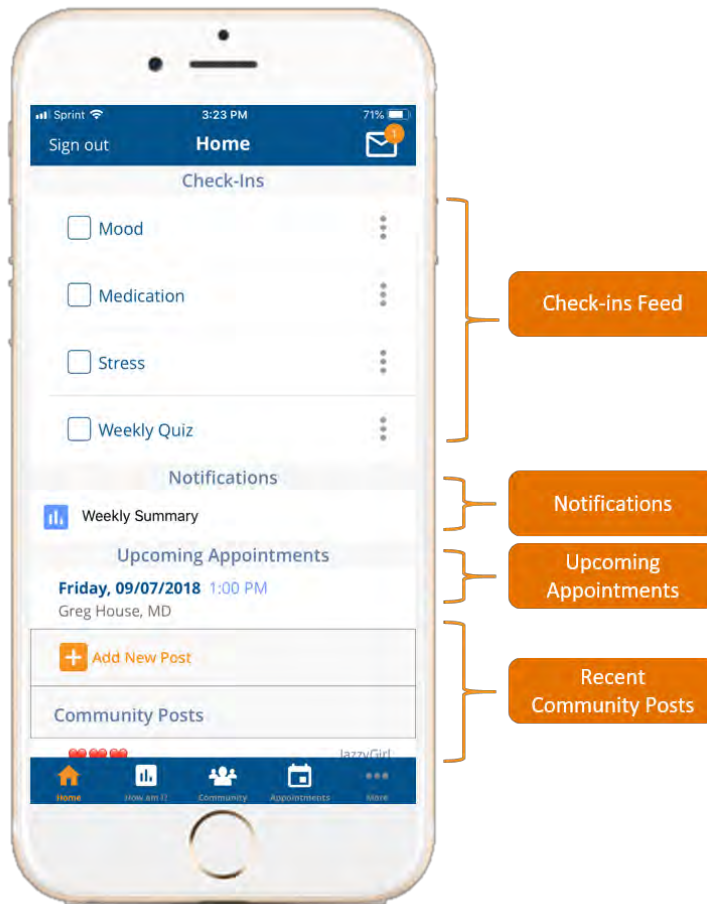
### Menu

The PositiveLinks **Menu** is located at the bottom of the app page. Features that are not immediately available from the bottom bar are available in the **'More'** section of the menu.



## Home Screen

Members navigate to the **Home** screen using the PositiveLinks Menu. PositiveLinks Home screen displays 'Check-Ins', notifications, upcoming appointments, and recent posts on the community board.

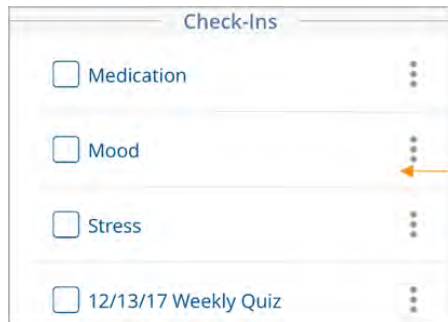




### Check-Ins Feed

The Home screen displays **Check-ins** in the top portion of the screen. Members tap check-ins in the feed and select the day they would like to respond to. After Members complete a check-in it is cleared from the feed. Read the sections below for more details on the purpose and types of Check-ins. to see the check-in or content displayed.

Push Notifications pop up on Member smartphones whenever there is a new check-in or content in the Check-ins feed. Members have the opportunity to turn off notifications in their phone settings. Push Notifications are discreet, simply labeled with 'PL' and the app icon.



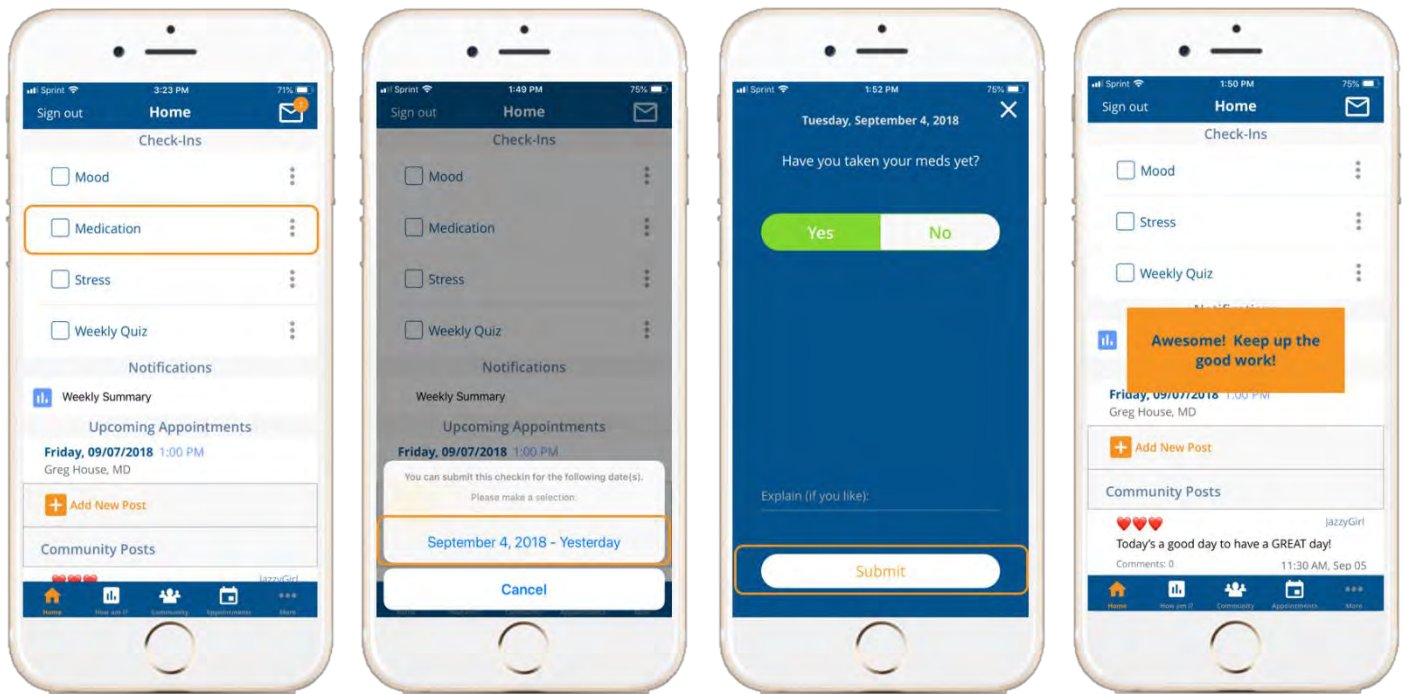
**Check-Ins Feed**  
*See daily self-monitoring queries on medication adherence, stress, and mood. See weekly quizzes & feedback*



EMAs are Ecological Momentary Assessments that gather data about people's behaviors or feelings in real-time, over a period of time. PositiveLinks uses EMA check-ins to track Medication, Mood, and Stress levels over time. Each day Members receive three questions or check-ins about their medication adherence, mood, and stress. When Members select an answer or rating they also have the option to enter a comment about anything they'd like to track or remember. Keep in mind that when Members reflect on their medication adherence, mood, and stress levels, it can help them identify and work toward goals.

### Medication Check-In

**Medication Check-In** is a daily, regularly recurring check-in that serves to remind Members about their medications and collects Member responses regarding medication adherence.



The scheduled time of the medication adherence check-in is customizable using PositiveLinks Portal. The default replies may be changed to the preference of each Member.

Each medication check-in displays in the Check-ins Feed and consists of the following elements:

- Medication Adherence question
- Message Time (time of Notification)
- Affirmative reply ('Awesome! Keep up the great work')
- Negative reply ('You can do it. It is really important to keep up!')

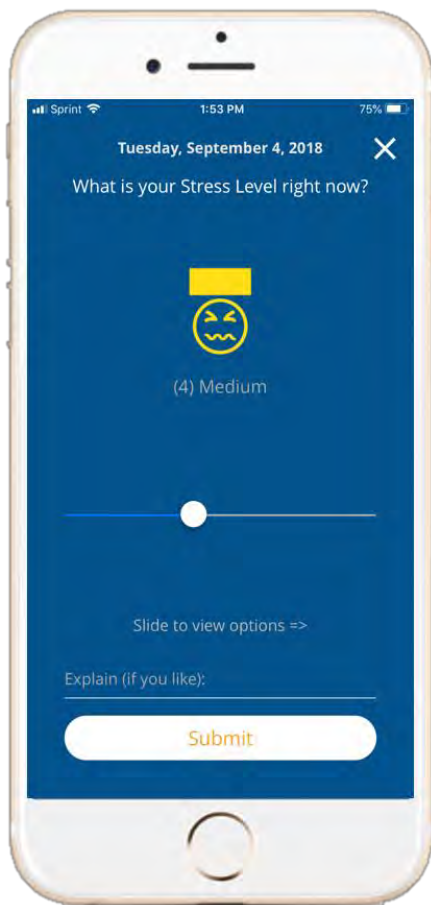
Medication Adherence responses display in the **How am I?** section of PositiveLinks allowing Members and the Site Care Team to track Medication Adherence over time.

### Mood Check-In

A **Mood Check-In** occurs daily. The Mood Check-In is bundled with the Stress Check-In and is randomized daily to capture mood at different times of the day. Members use a slider control to indicate their Mood level. When Members track their Mood is over time, they can gain insight into the factors and behaviors that influence their moods.

Each Mood Check-In asks ‘How are you feeling?’

- Members respond on a scale from -5 (Very Unhappy) to +5 (Very Happy)
- Emoticons demonstrate the mood level on the scale
- Positive Mood Reply (‘Great!’ or ‘Excellent!’)
- Negative Mood Reply (‘Hang in there!’ or ‘Help is here!’)
- Neutral Mood Reply (‘Thanks for letting us know!’)



### Stress Check-In

A **Stress Check-In** occurs daily.

The Stress Check-In is bundled with the Mood Check-In and is randomized daily to capture stress at different times of the day. Members use a slider control to indicate their Stress level. When Members track how their Stress changes over time, they can gain insight into the factors and behaviors that influence their stress.

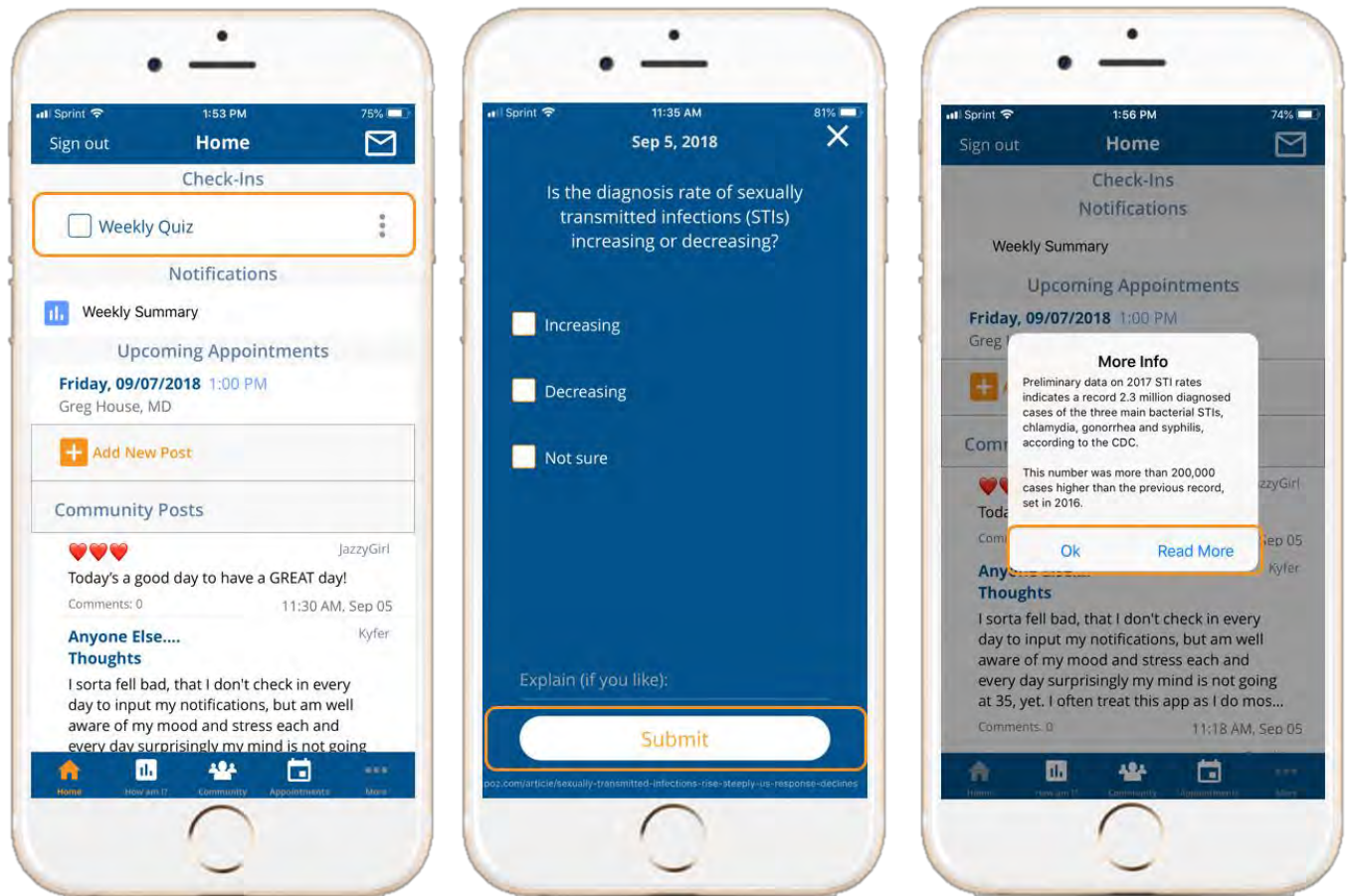
Each Stress Check-In consists of ‘What is your Stress Level right now?’

- Members respond on a scale from +1 (Low Stress) to +10 (High Stress)
- High Stress Reply (‘Hang in there!’)
- Medium Stress Reply (‘Thanks for letting us know!’)
- Low Stress Reply (‘Awesome!’)

### Quizzes

PositiveLinks **Quizzes** are educational, informational, or entertaining questions that promote Member engagement in care and positive behaviors. Quizzes appear as push notifications on Member smartphones and in the Check-Ins Feed on the Home screen. When Members click the Quiz check-in, the question or message is displayed. After Members submit a response, immediate feedback is provided. Quizzes are meant to encourage participation and therefore are not scored as correct or incorrect.

Members receive their Quiz participation rates in Weekly Summaries. Quizzes are typically issued weekly, at a pre-determined time. Quiz questions may be fact-based, related to living with HIV, specific to a particular Site topic, or survey based where Member opinions or feelings are solicited on specific topics.

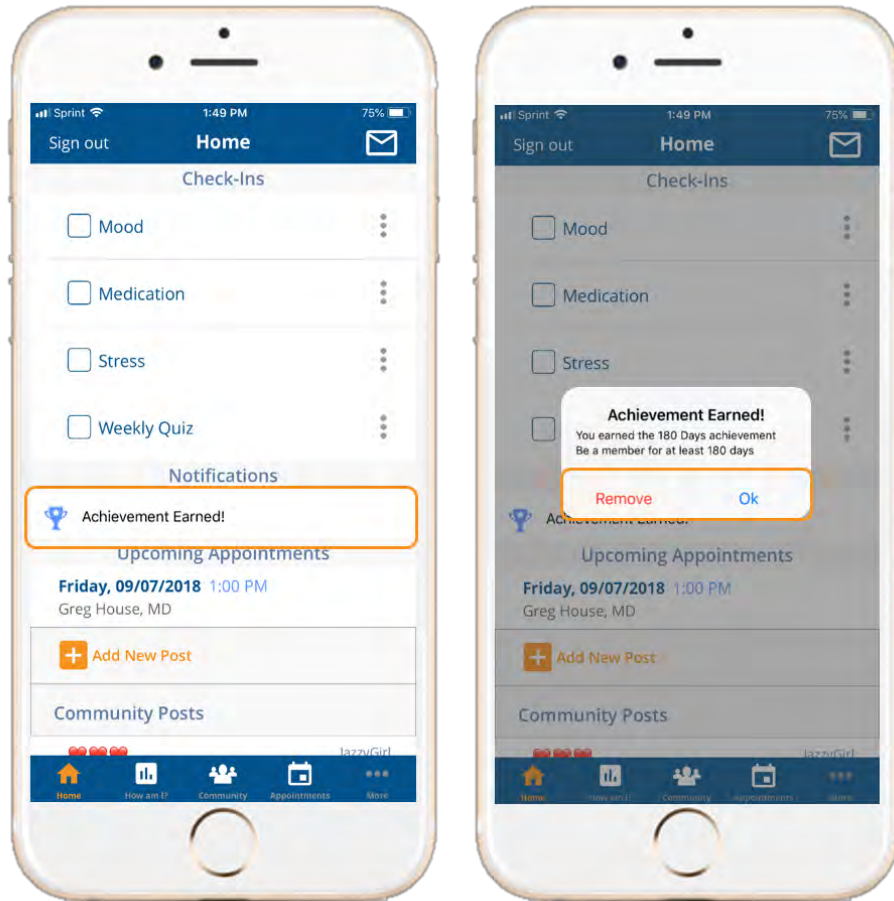




## Notifications Feed

### Achievements

Members can earn **Achievements** for their participation in the program. A full description of this feature can be seen under the **Profile** section of this manual. When a member receives a new achievement, released on Friday's, a notification will display on their home screen. They can click on the notification to view the achievement and clear the alert.

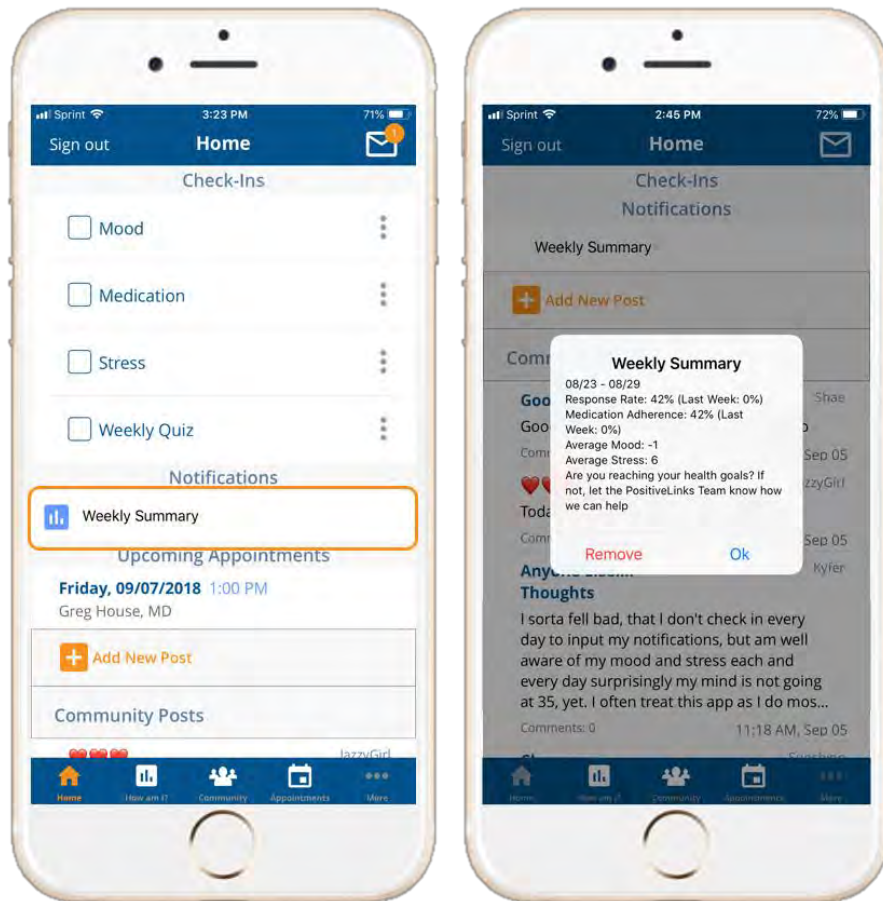


### Weekly Summary

**Weekly summaries** display on the home page. Members receive a push notification when they are available. They outline Member usage during the past 7 days. These summaries can be used to provide a snapshot of self-monitoring for Members.

Weekly Summaries display on a set date for all Members, and contain the following information:

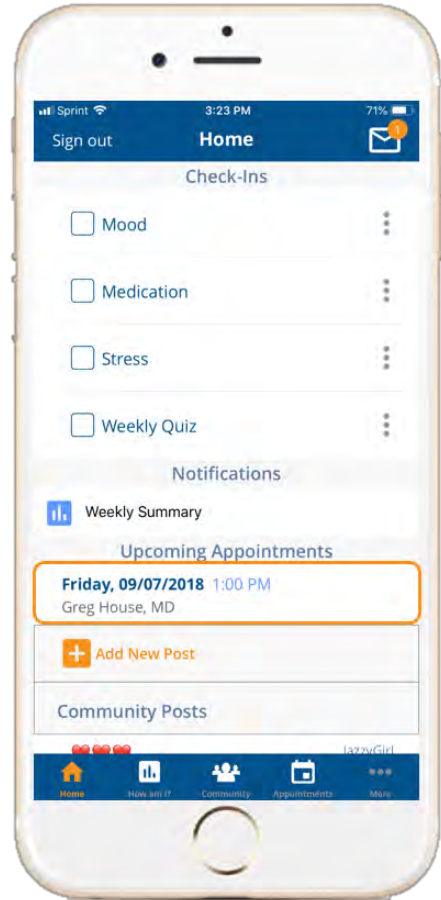
- Meds Calculated adherence x%
- Meds previous week adherence x%
- Stress average rating
- Stress previous week average rating
- Mood calculated rating
- Mood previous week rating
- Summary message to Members: Are you reaching your health goal? If not, let the PositiveLinks Team know how we can help'





### Appointments Feed

The Home page of the app also displays an **Appointment feed** for upcoming appointments for the Member. These appointments will appear on the Appointments feed within 72 hours of the appointment time. Members can click on the notification to view the details of the appointment or can view the information from the full appointments page.



### Community Feed

The Home screen also displays the most recent posts from the **Community** board. The **Community Feed** serves as a window to the Community board. The Community Feed displays the most recent posts on top. This feature helps Members quickly see what is being discussed in the PositiveLinks community.



Community Feed  
See recent posts to the community board





## How am I?

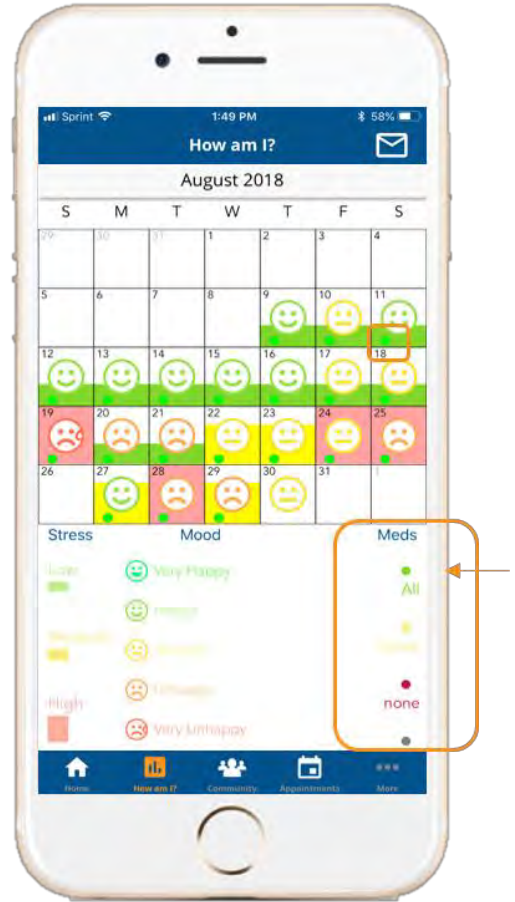
The **How am I?** page shows Member responses to Medication Adherence, Mood, and Stress check-ins on a monthly calendar view. Members can swipe left or right on the calendar to navigate between months. This display lets Members and Site Care Team members track these factors over time. This feature helps Members adhere to medication and monitor their mood and stress levels. It can also facilitate conversations with Site Care Team members that lead to shared decision making and greater engagement by Members in their medical care. Tapping a day brings up a screen with any notes the Member may have recorded for that day.



### Medication Adherence






Medication adherence is shown as a color-coded dot in the upper right hand corner of each day. A green dot represents a 'Yes' (or all) response to a Medication check-in, red represents a 'No' (or none) response, and grey indicates no response was received for that date. A yellow dot also displays for sites that enable an all, some, or none response system. Members can reference a legend below the calendar that explains the color-coding system. Tapping a day brings up a screen with any notes the Member may have recorded for that day.

Calendar Display	Medication Answer
	All
	Some
	None
	No Response



### Mood




The monthly calendar also displays Member mood responses. Each day is populated with an emoticon that corresponds to the reported mood score. If a mood score is not reported for the day, there will not be an emoticon. Members can reference a legend below the calendar that explains what each emoticon represents. The mood emoticons and their corresponding values are detailed below:

Calendar Display	Description	Mood Score
	Very Unhappy	-4, -5
	Unhappy	-3, -2
	Neutral	-1, 0, 1
	Happy	2, 3
	Very Happy	4, 5

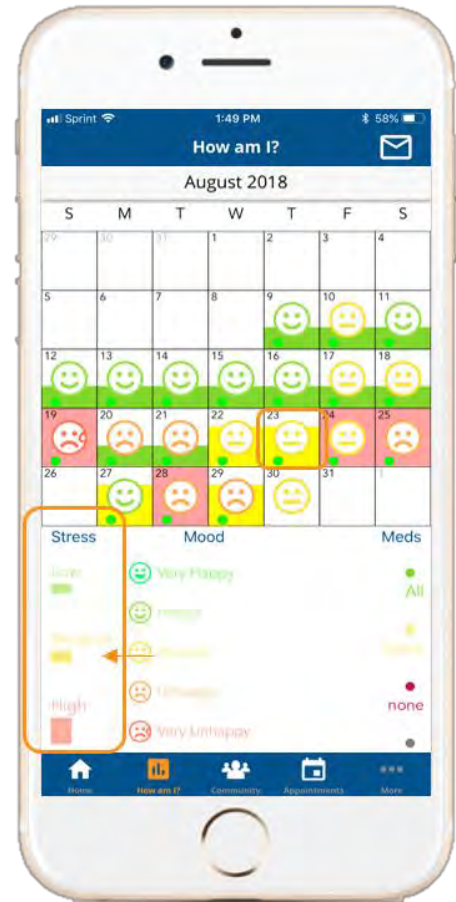
When Members consider their mood response over time it helps them recognize patterns and trends. Encourage Members to think about triggers that lead to good or bad moods.

### Stress

The monthly calendar also displays Member stress levels. Each day displays a bar with color and height that corresponds to the members reported stress score for that day. Members can reference a legend below the calendar that explains what each colored bar represents. The bar color and their corresponding values are as follows:

Calendar Display	Description	Stress Score
	Low Stress	1-3
	Medium Stress	4-6
	High Stress	7-10

Looking at Member stress response over time helps them recognize patterns and trends and may also help identify triggers that cause high stress or activities that help you maintain low stress.



### Response Rate Meter

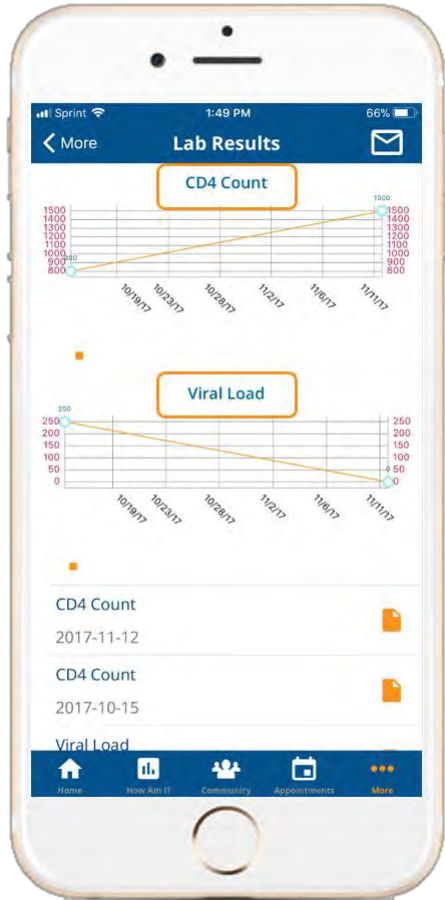
Below the How am I? calendar display is a **Response Rate** meter indicating to the member their response rate for the past 30 days. This meter allows members to know if their usage is sufficient to earn their phone credit each month. The green section indicates the members' usage is above 48% and they are in an appropriate range for their credit, yellow indicates a response rate between 30-48%, and red indicates a response rate below 30%.

### Labs: CD4 & Viral Load

The Labs page displays **CD4** and **Viral Load** in two separate line graphs. Data for these charts is not self-reported. It is entered manually by Site PLC, or automatically via EMR.

Unlike the other dashboards, which use fixed y-axis scales, the CD4 and Viral Load charts will have a dynamic y-axis that will ‘adjust’ based on the Member’s values. The chart will not use a logarithmic y-axis. Both charts use a line graph format, with ‘get in the green’ plot banding for target value ranges.

Because CD4 and Viral Load are checked only a few times per year, there are fewer x-axis data points than the medication, mood, and stress charts display.





## Community Board

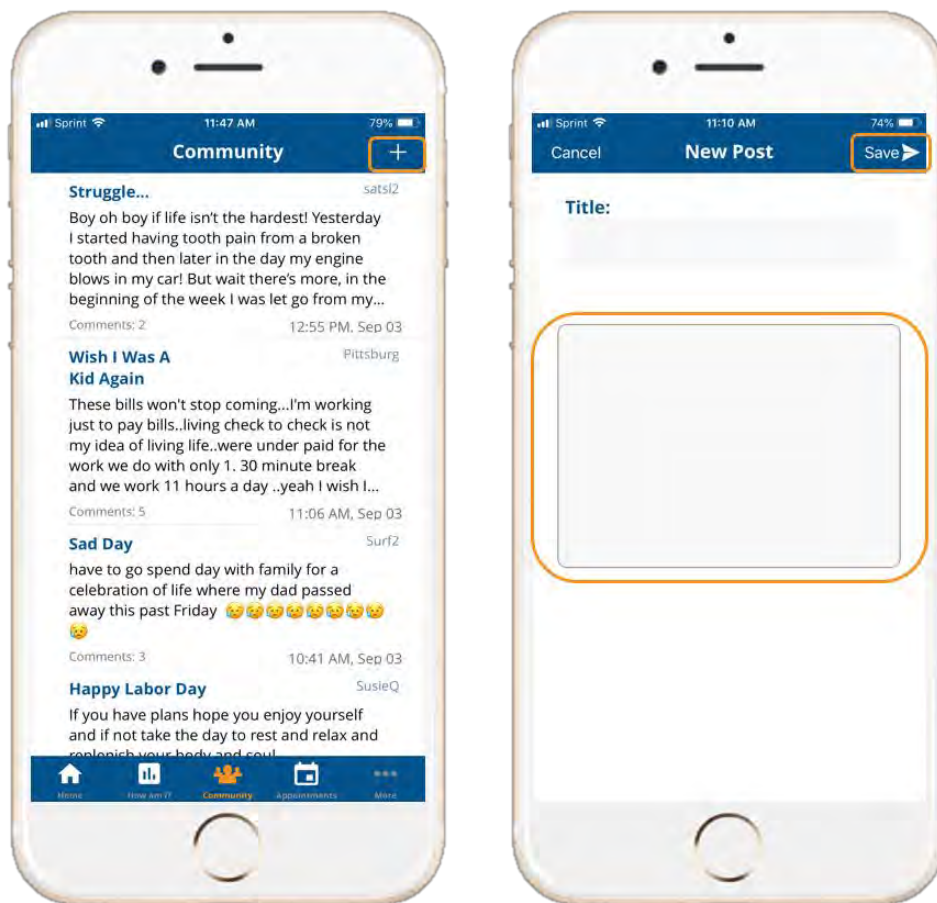
Community posts display in chronological order (newest on top) in the **Community** section of the PositiveLinks Member App. PositiveLinks Members can also view the latest community posts in the Recent Community Posts Feed on the PositiveLinks home screen. Site Administrators can choose to ‘Pin’ posts to the top of the Community to ensure members have access to important information on clinic events, PL app updates, and other program news.

The Community allows Members to anonymously share and interact with other PositiveLinks Member App Members in a digital social support community. The Community uses a threaded, topic-based discussion board structure that allows Members to post thoughts or ideas, share experiences, or ask questions in a safe protected environment, and to view and respond to items posted by other Members.

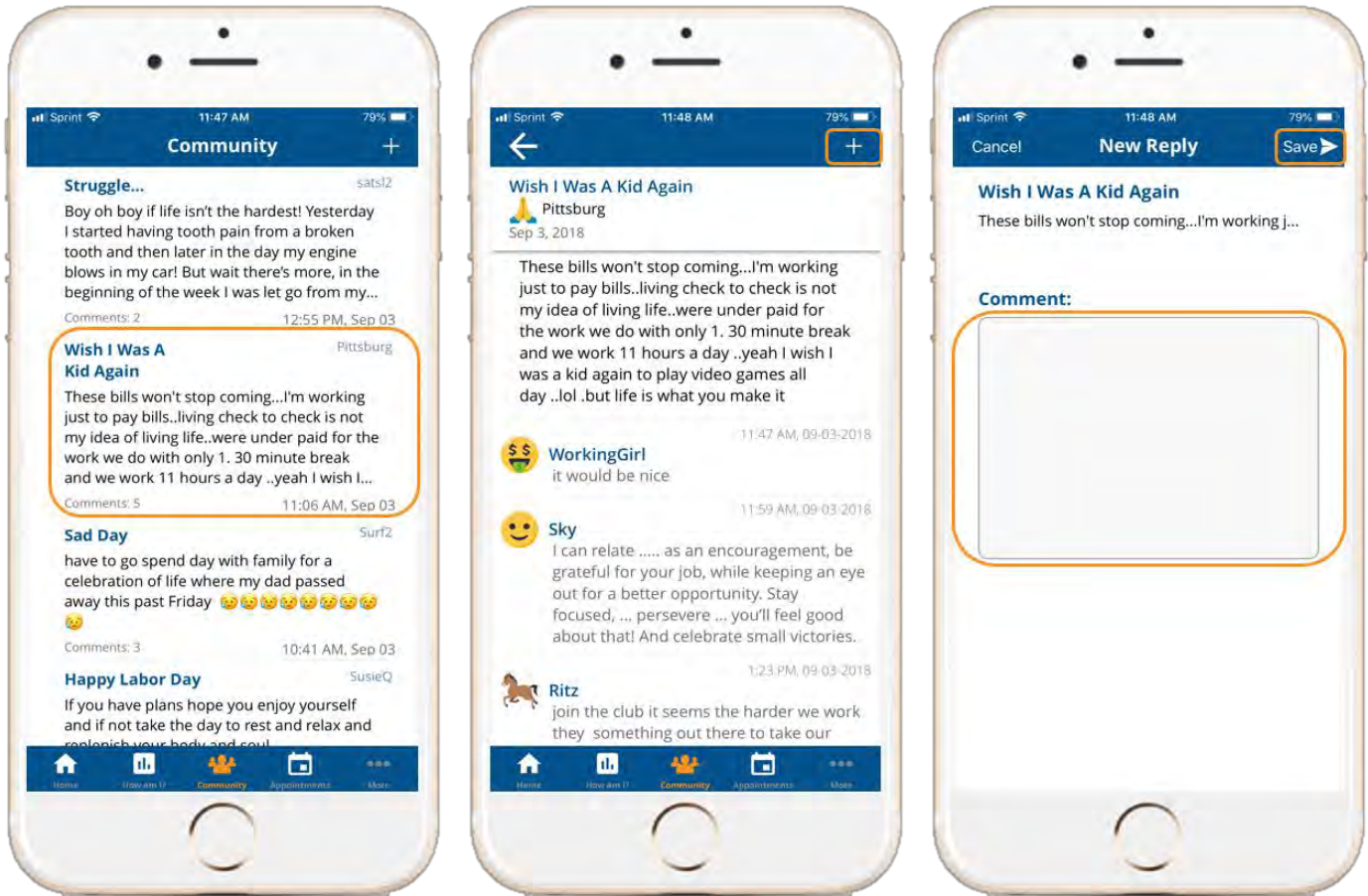
The Site PLC observes the Community, minimally intervening only to remove posts that do not comply with PositiveLinks policies. This set up encourages candid discussion among Members.

During enrollment Members agree to be respectful of others on Community and not to disclose their identity. This protects Member privacy and respects the comfort level of other Members who wish to be anonymous.

Members may start a new topic on the Community by clicking the ‘+’ button in the upper right hand corner. When creating a new post Members enter a post title and content and then click Save. Members may reply to conversation threads by clicking on a conversation then clicking the ‘+’ button in the upper right hand corner of the screen. New Members are encouraged to introduce themselves on the Community so that current Members can offer a warm welcome.





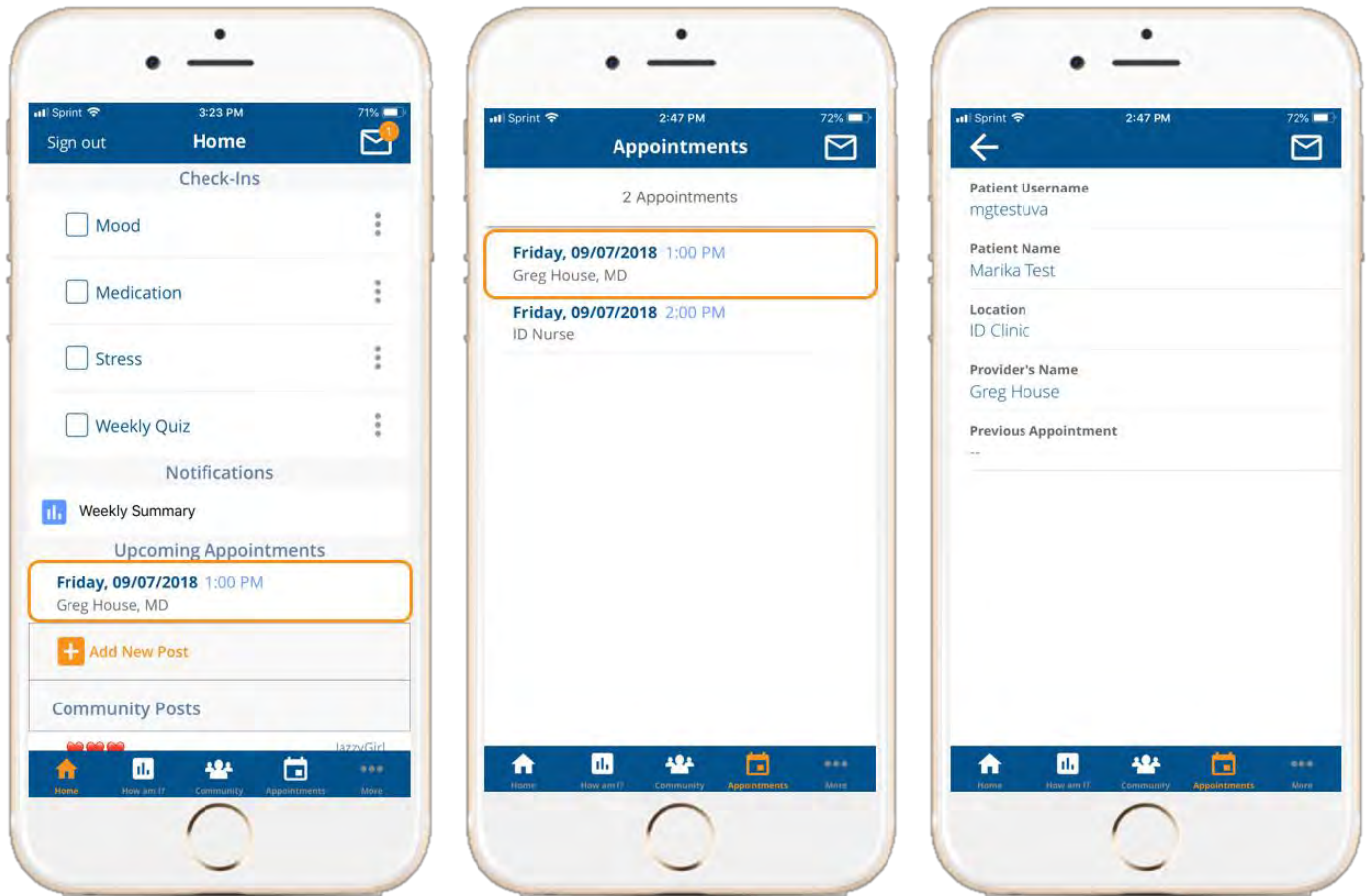


During enrollment, Members agree to call 911, privately contact their Site Provider/PLC, or contact family or friends for support during emergencies rather than make that request on the Community.

The Site PLC does not typically engage with Community conversation threads, however, they may periodically share informational or uplifting posts. They will also post Your Weekly Achievements and Raffle winners on the Community.

## Appointments

The PositiveLinks Member App keeps track of Member appointments, such as medical care visits. In order to protect Member privacy, PositiveLinks does not use the smartphone’s native calendar system. The PositiveLinks **Appointment** feature displays upcoming appointments in chronological order. The Site Administrators can enter appointment information using the PositiveLinks Portal or appointments can be pulled fed in from the EMR. Members can enter their own appointments and reminders whenever they wish.



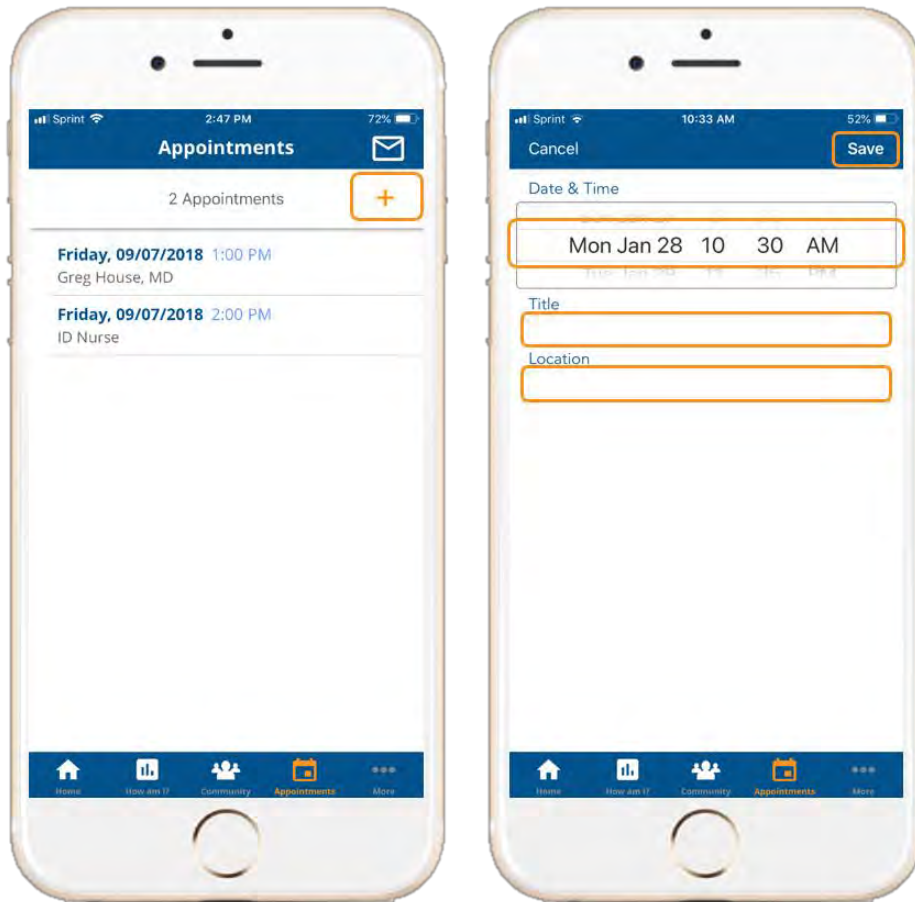
Upcoming appointments will display on the home screen 72 hours before the scheduled appointment to allow members time to arrange transportation if needed. Clicking the appointment record opens appointment information including provider, location, and previous appointment if applicable.

## RECOMMENDED Manual Data Entry

**Manual entry of appointments and Labs.** Sites start by entering appointments and labs manually through PositiveLinks Portal. Sites can then choose to continue manual entry or explore EMR integration once they are familiar with administering PositiveLinks.

### *New Reminder*

To enter a new reminder the Member selects '+' from the Appointments page of the app. Here the Member is able to enter the date, time, title, and location information for the reminder. Once submitted, the Member will receive a reminder notification 72 hours before the scheduled event the same way they do with clinic or provider entered appointments. The self-created reminders allow Members to track important reminders like medication refills or document deadlines as well as appointments that may not have been added by the Site PLC.

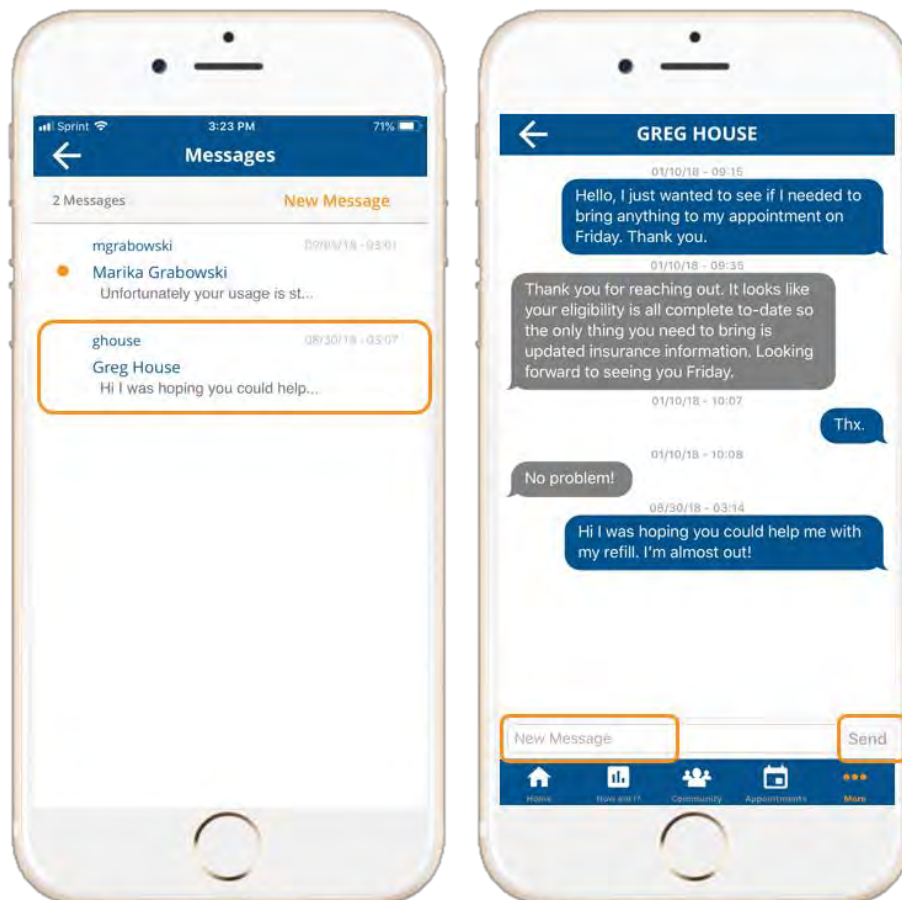


## Messages

The **Messaging** feature in PositiveLinks is a cross between email and SMS text messaging—and is a secure alternative to both. Communication between Members and the Site Care Team via SMS text or email is not HIPAA-compliant, and can lead to inadvertent disclosure because email and SMS apps may not be password protected on a smartphone or tablet. Integrated messaging within PositiveLinks is more secure than text and email communications with staff and is HIPAA compliant. Messaging allows secure communication between PositiveLinks App Members and the Site Care Team. This feature does not allow for private messaging between Members.

- PositiveLinks messages display as conversation bubbles with a single thread per Member-Site Provider conversation.
- Messages are not stored on Member smartphones, but are securely retrieved from the server when logged into the Member app.
- PositiveLinks messages do not have rich formatting capability such as bold, italic, tables or lists. They do support inclusion of hyperlinks.

The Site PLC or Site Care Team listed in the Contacts section of the app receives PositiveLinks messages along with notification of the message through email. Full descriptions of this process are included in section 7, Using PositiveLinks Portal.

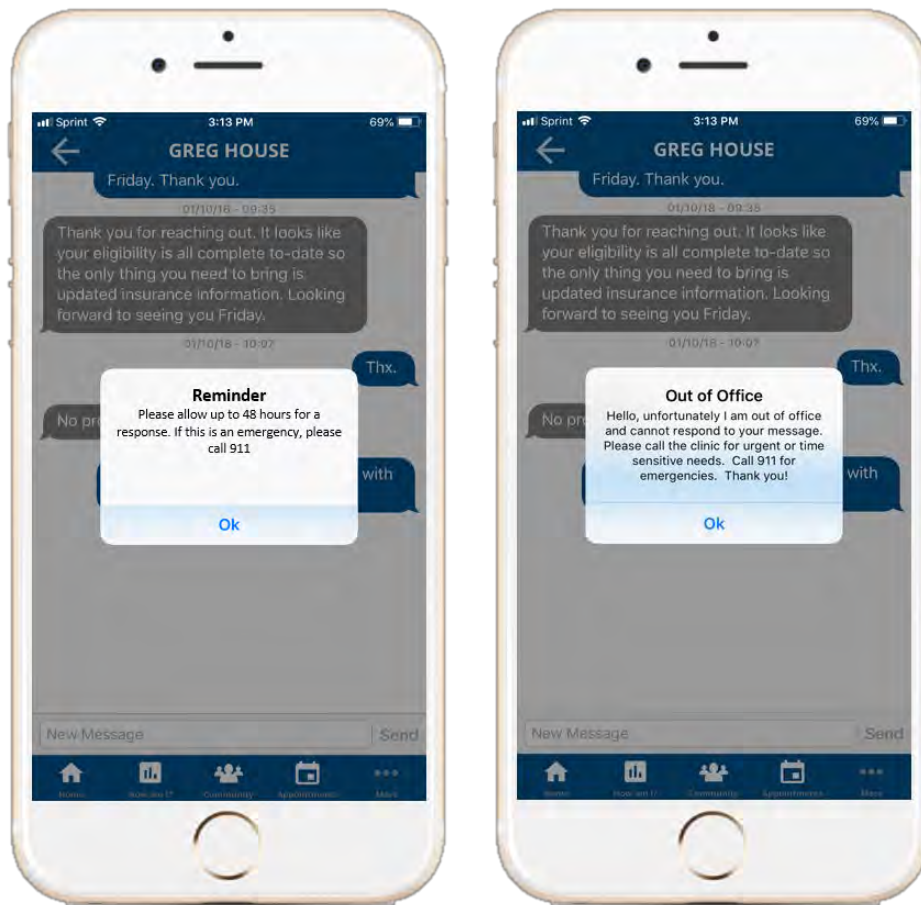


Members can compose and send messages and view and reply to received messages from the PositiveLinks Member App Messages feature. In order to protect Member privacy, messaging notifications do not message content.



Members receive a Push Notification ‘You have a new message.’ The Home screen of the Member app displays a messaging icon in the upper right corner of the screen. Members tap the Message icon or access the Message page from the menu to see the messages. On the Home screen an orange badge number on the Messages icon indicates the number of unread messages. In the message inbox, unread messages are highlighted with an orange dot to the left of the message.

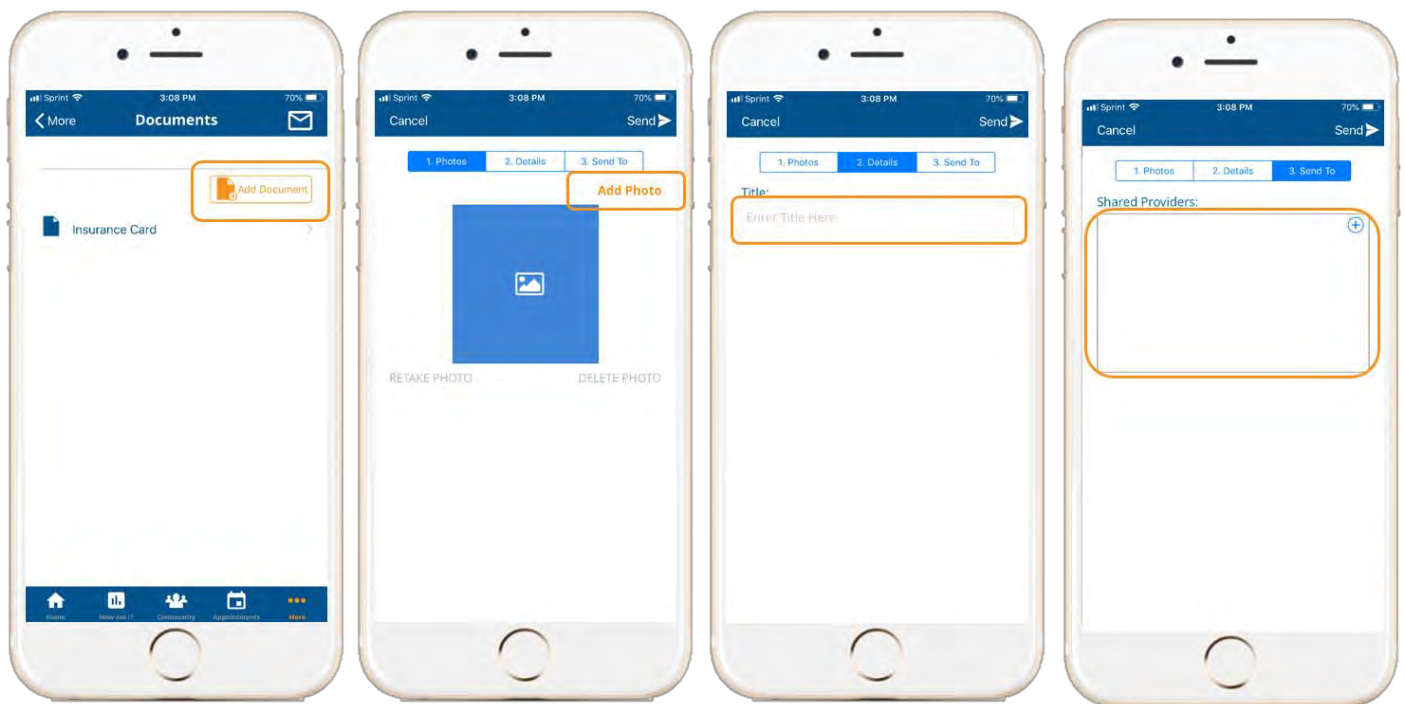
Each Site Care Team can choose how they wish to distribute PositiveLinks messages. Messages may be routed directly to PositiveLinks Coordinator, or to individual Site Care Team members. During enrollments Members are informed that outside of regular business hours or if a Provider is out of the office or with another patient, they may not get an immediate response. Members are reminded by an automated message popup to expect a 48 hour response time to their messages. This popup displays once per app login. When Providers set their availability to ‘out of office,’ Members receive a similar automated message that informs them of the potential delayed response.



## Documents

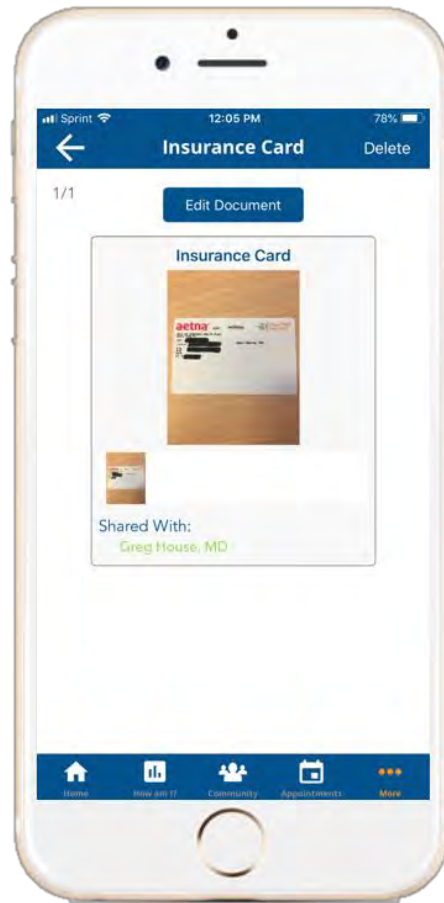
The **Documents** feature of the PositiveLinks app allows Members to capture images of the documentation they may need to provide to clinic staff. Documents may include information required for clinic eligibility or insurance purposes including housing status, photo ID, and paystubs. To upload a new document Members use the following steps:

- Select 'Add Document'
- On the Photos tab: Select 'Add photo'
- Take a photo or choose from photo library
- Select the check-mark to verify
  - Members can 'Retake photo' or 'Delete photo' to replace the current image
- On the Details tab: Add the desired title
- On the Send To tab: Select '+' to choose the Site Care Team members to share the document with
- Select 'Send' to finish





Members can view files they have uploaded previously and files uploaded by Site Care Team members to their account from the main page of the Documents feature.

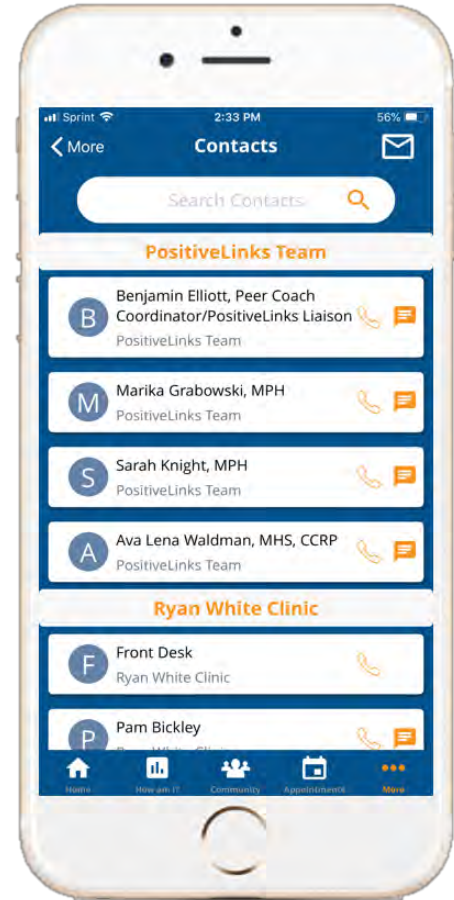


## Contacts

The PositiveLinks Member App contains contact information for key personnel that Members may need to reach. The PositiveLinks **Contact** list is contained within the PositiveLinks Member App in order to protect Member privacy. Contact information for each site is entered during initial set up by the PositiveLinks Coordinator. Contacts are grouped by provider type such as Case Manager, Mental Health, and Site Team.

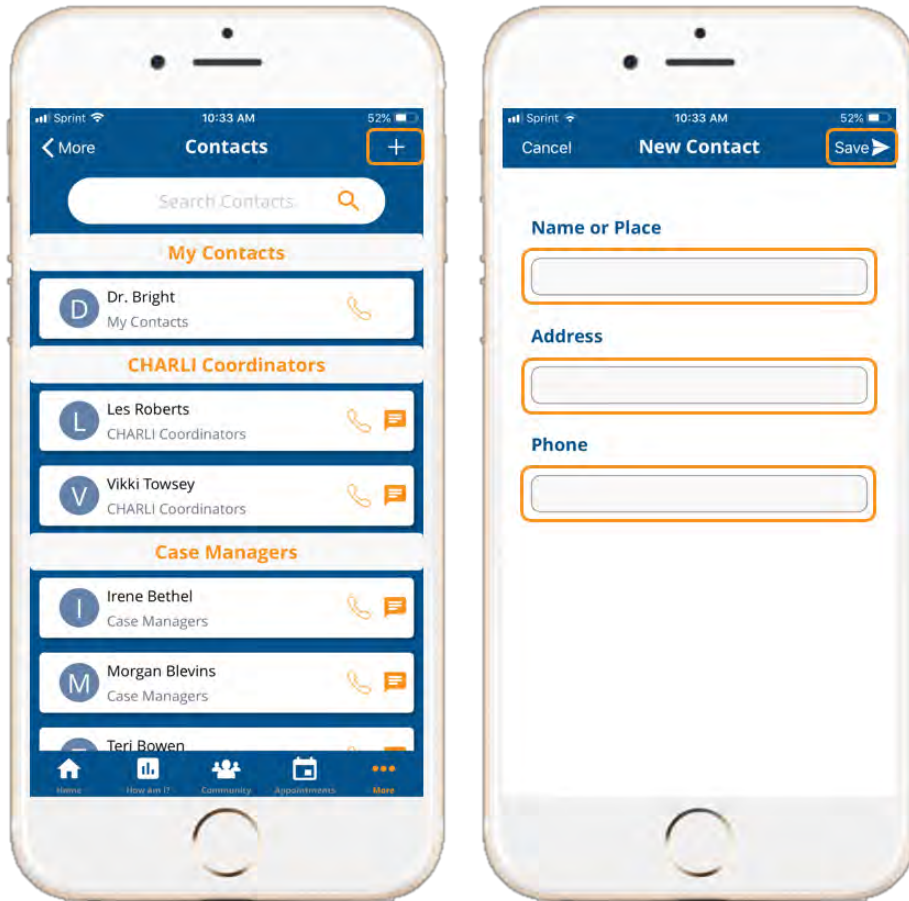
Contact list items can include information such as:

- Provider name
- Provider phone number
- Private message link
- Provider address



### Add New Contact

Members can add additional contacts to the Contacts page of the app. This allows members to privately store contact information for additional providers or pharmacies that may not be included or affiliated with the PositiveLinks program. To add a new contact simply click ‘+’ and the Member can enter the name or place, address, and phone number. Once added, the new contact stores under the ‘My Contacts’ section of the Contacts page.

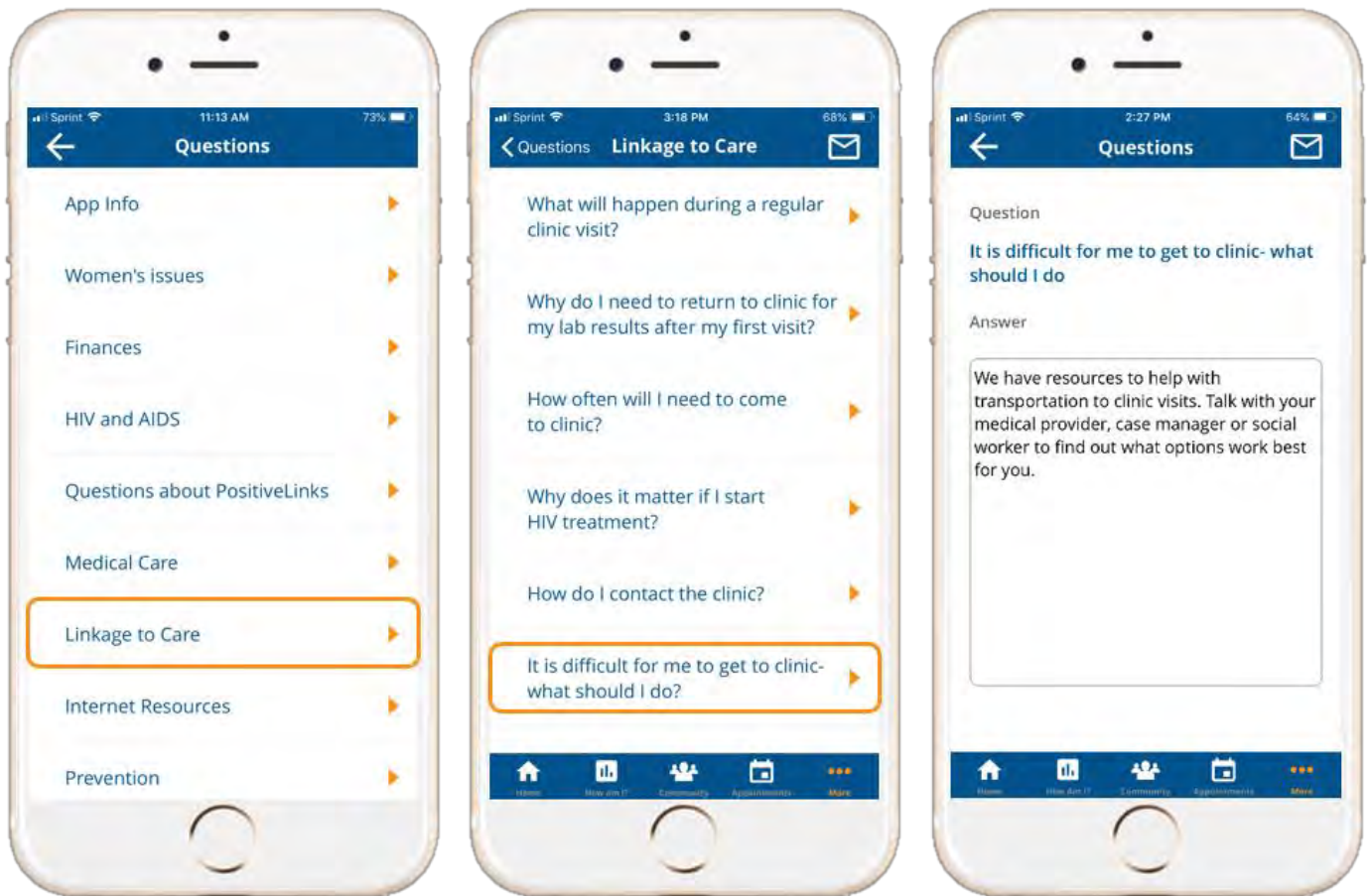


## Questions

**Questions** are text based questions with responses created by the PositiveLinks Team. Questions cover a range of topics, from 'Questions about PositiveLinks' to 'HIV and AIDS' to 'Opportunistic Infections.' Questions and answers in this section are grouped by category to allow members to easily locate the answers they need.

The Question section provides information on questions that many people living with HIV have when they are initially diagnosed. Each category may have multiple entries with additional text answers or links to high quality content about living with HIV. Links open inside the secure PositiveLinks Member App rather than in an unsecure browser.

Site Administrators can use the PositiveLinks Portal to edit existing Question content or add their own custom Question content.



## Resources

The **Resources** section of PositiveLinks contains educational content in multimedia format to further support Members. Resources are available in Video, Audio, and Link format. Current content includes audio files for guided meditation, videos for dealing with stress and stigma, and links on legal rights and basic HIV information. Resources are sorted by content to allow members to quickly search for the desired topics. Members can select a topic from the drop down list and then choose from the resources available. Alternatively, members can search for a particular resource using the available search bar.

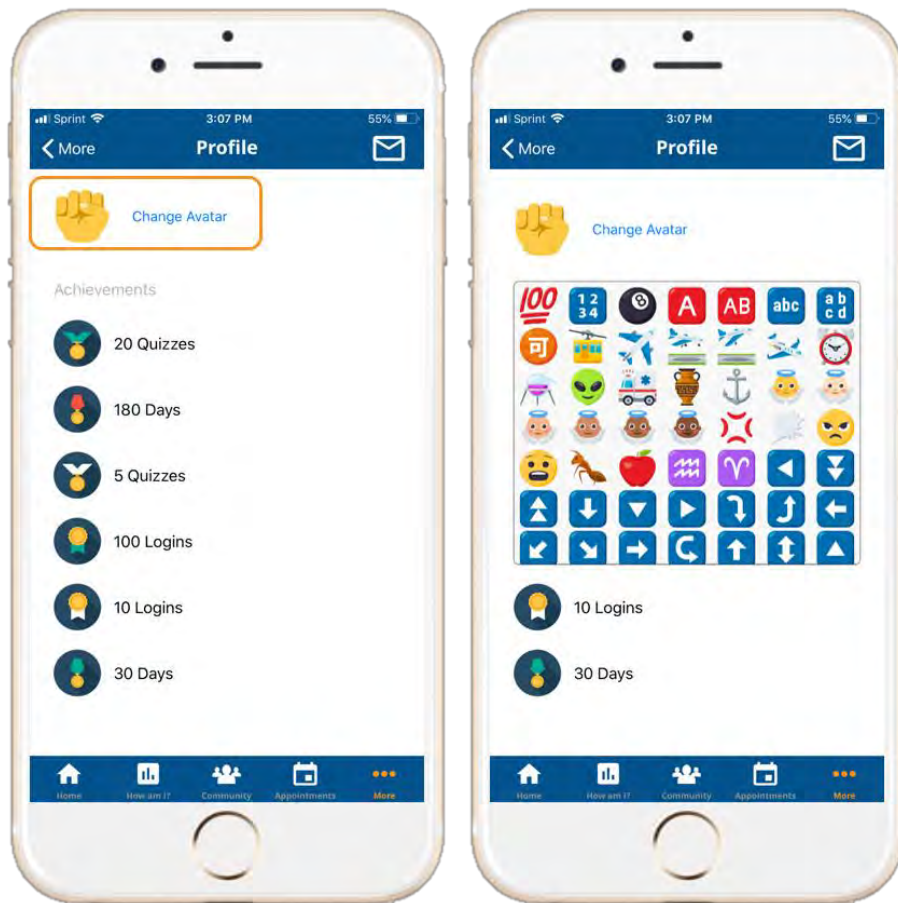
Site Administrators may customize the Resources using the PositiveLinks Portal, to include their own educational content and site specific information. All resource content are displayed in an App Browser overlay so Members do not need to leave the app to view the material. When finished viewing a resource members simply press the back arrow in the upper left corner of the screen to return to other app features.





## Profile

Members may modify their PositiveLinks Avatar in **Profile**. At enrollment, Site PLCs can demonstrate the avatar feature to Members and they can change their avatar whenever they wish.





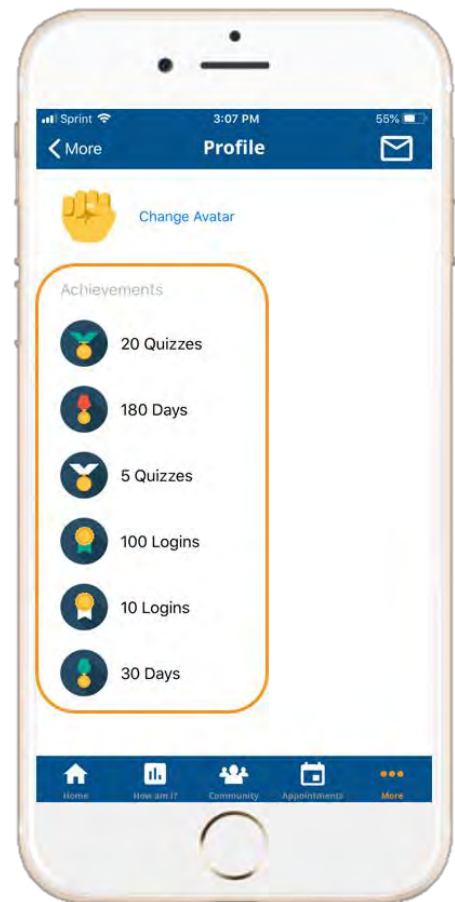
## Achievements

The PositiveLinks Member App includes an achievement recognition system. The purpose of the system is to reward and reinforce app use among Members. **Achievements** also offer a snapshot of PositiveLinks engagement for Site Administrators.

Achievements are graphical representations of trophies, certificates, and ribbons. They appear on the Member home screen at the time they are awarded in the **Notifications Feed**. Click an award notification to see a popup with details about the award. After initial notification, Achievements are displayed on Member Profile screen.

Achievements are awarded for a mix of ‘earned’ activities -- such as number of Community posts, or maintaining a desired adherence level -- and ‘time based’ activities -- such as number of days in the program. The aim of Achievements is to further reinforce and encourage using PositiveLinks Member App. Achievements are awarded in the following instances:

- Time-based Achievements
  - 30 day PositiveLinks Member
  - 90 day PositiveLinks Member
  - 180 day PositiveLinks Member
- Earned Achievements
  - 100% Monthly Meds Adherence Rate
  - 1 Post on Community
  - 10 Posts on Community
  - 40 Posts on Community
  - 1 App launch
  - 10 App launches
  - 100 App launches
  - 5 Quizzes answered
  - 20 Quizzes answered



## UVA Case Study

### *Recognizing Achievements*

#### COMMUNITY RECOGNITION

The UVA Site PLC prepares a post for the Community, 'Your Weekly Achievements!' The post appears in the Community Feed on the Home screen. It summarizes key achievements for Members during the previous 7 days. Members can respond to the post to show support for those Members who are recognized. This type of recognition has helped motivate and encourage use of PositiveLinks by Members at UVA.

#### RAFFLE

At the end of each month, UVA Site Members with the highest response rates are entered into a raffle for a small gift card prize. The winner is announced on the Community and via private message to the raffle winner. Members with high response rates are also acknowledged.

The raffle is a way to provide Members with data to facilitate setting short-term goals and measuring progress toward their goals. It also provides the UVA Site Care Team a way to encourage positive behavior. UVA found raffles increased response rates and offset some of the fall-off in response rate over time.

UVA found Raffles also serve to reinforce PositiveLinks App use awareness across all Members in the community. Seeing the number of Members eligible for the Raffle helps Members know they part of a larger community of PositiveLinks App users. This allows Members to better calibrate their PositiveLinks App activity level by providing a behavioral nudge.

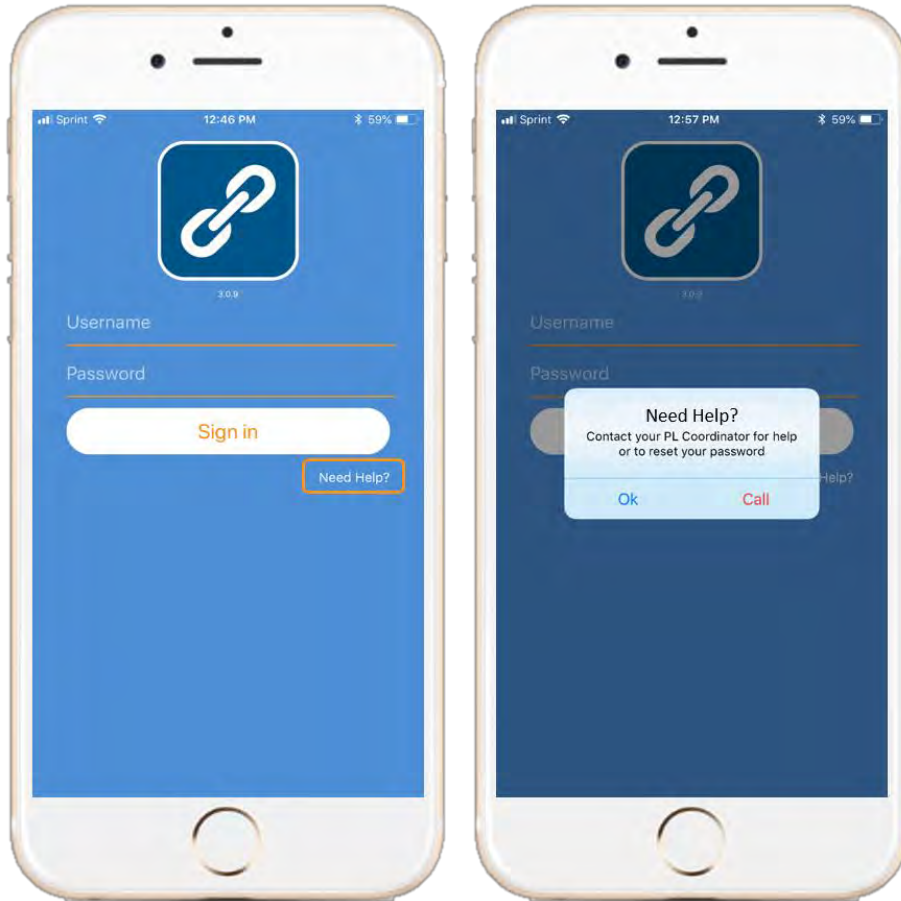
## RECOMMENDED

### Monthly Raffle

**Raffles reinforce positive behaviors.** It is recommended that Sites develop their own raffles to reinforce PositiveLinks App use and visibility across Site Members.

## Need Help? Feature

The PositiveLinks App has a feature that allows Members who are having difficulty accessing the app to connect directly to a member of the PositiveLinks team. A ‘Need Help?’ icon on the app Login screen pulls up the phone number of the PositiveLinks Coordinator (or another pre-determined team member) and allows them to call to get help with their concern.



## 4c. Training Members to use PositiveLinks Member App

When planning to train Members to use PositiveLinks Sites should consider whether or not they will be providing smartphones to Members. When smartphones are being provided, or when a Member is new to using a smartphone it may be necessary to include a general introduction to using the smartphone.

It is good practice to have Members try out features with the PLC during training to demonstrate understanding and mastery of navigating to different features in the PositiveLinks Member App.

### UVA Case Study *Training Members*

#### SMARTPHONE TRAINING

UVA PLC used in-person training to help Members learn to use PositiveLinks App. The training included hands on learning. Members performed key app functions with the PLC to confirm understanding. UVA found having Members show the PLC how they were using PositiveLinks App gave the PLC a better idea of whether the Member understood how to get the most out of each feature. This also gave an opportunity to reinforce the PositiveLinks approach and to strengthen the personal connection between the PLC and the Member, thus increasing their link to care.

The UVA Site found many Members knew how to use a smartphone. There were Members, however, that were unfamiliar with smartphones and needed smartphone training. UVA provided instructions on how to operate their smartphone on an as-needed basis.

UVA offered Members printed instructions for using their smartphone and PositiveLinks to take with them after the training. Some Members refused the materials because they mentioned HIV. Materials were modified for future use to remove all mention of HIV.

## CORE

### Member Training

**Helping Members learn to use PositiveLinks.** Personalized training is critical to successful implementation of PositiveLinks. Members must have one-on-one support while learning to use PositiveLinks.

## TRAINING TIPS

**Keep it simple.** It is best to keep Member training straightforward and to tailor it to your Member's needs. This can be accomplished in a one-on-one session using the Member's smartphone to demonstrate PositiveLinks Member App features and actions, then having the Member try them out.

**Communicate protocols throughout training.** Key common issues such as Member forgetting PositiveLinks password and what to do if their smartphone is broken, lost, or stolen should be made clear several times. If your Site has specific protocols that Members must follow, provide those in a handout to the Member. Be sure Members understand how you will contact them if you cannot reach them by smartphone.

**Use the 'Teach-Back' method.** This is a great way to confirm whether or not Members understand what they are learning. It involves having Members show you how to use the PositiveLinks Member App features, or tell you the steps in a protocol. If they get stuck when trying to teach-back, you know they need more support and help in that area.

**End training on a fun note!** Be sure Members understand that using PositiveLinks and their smartphone will be an enjoyable experience and that the PositiveLinks Site Care Team is supportive of their efforts.

## 5a. Using PositiveLinks Provider App – for iOS users

---

This section provides detailed information about using the PositiveLinks Provider App. It helps prepare the Site Providers for using the PositiveLinks mobile platform to engage with their Members. Please refer to Section 4, Using PositiveLinks Member App, for detailed instructions on downloading and accessing the PositiveLinks App.

*This section is organized as follows:*

### *PositiveLinks Provider App Features*

*Menu*

*Availability*

*Members*

*Summary Page*

*Dashboard*

*Chat*

*Documents*

*Appointments*

*Lab Results*

*Services (Restricted Access)*

*Messages*

*Appointments*

*Resources*

*Questions*

*Services (Restricted Access)*



## PositiveLinks Provider App Features

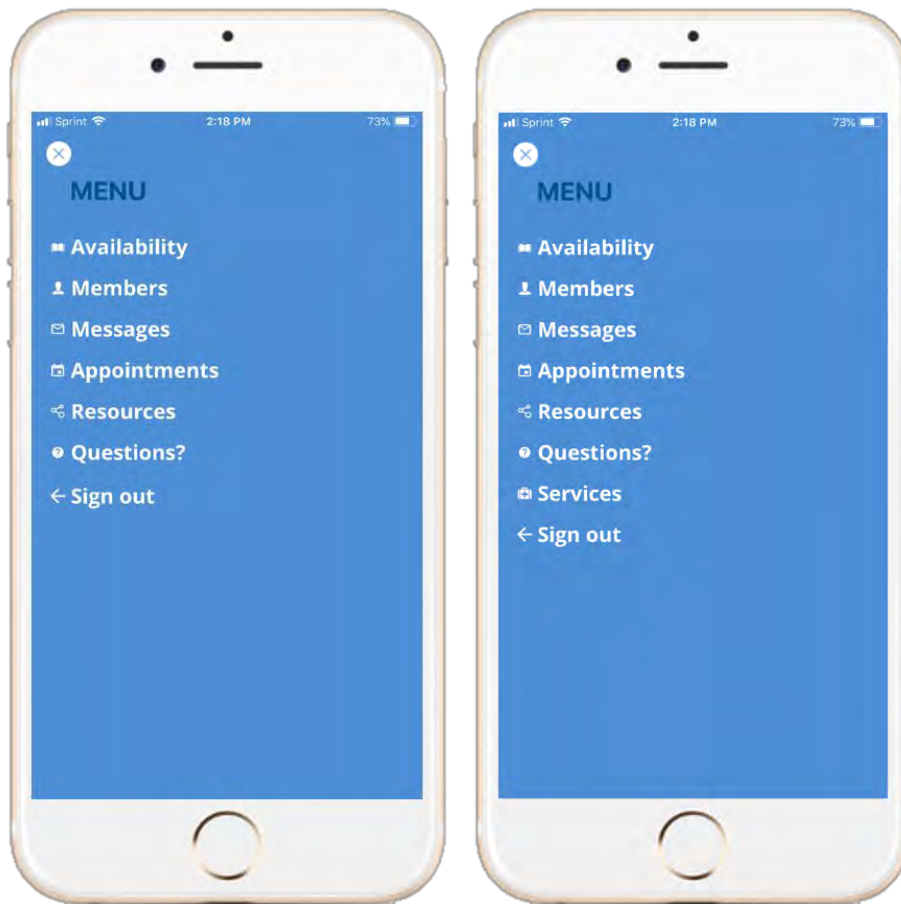
### Menu

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Menu options include:

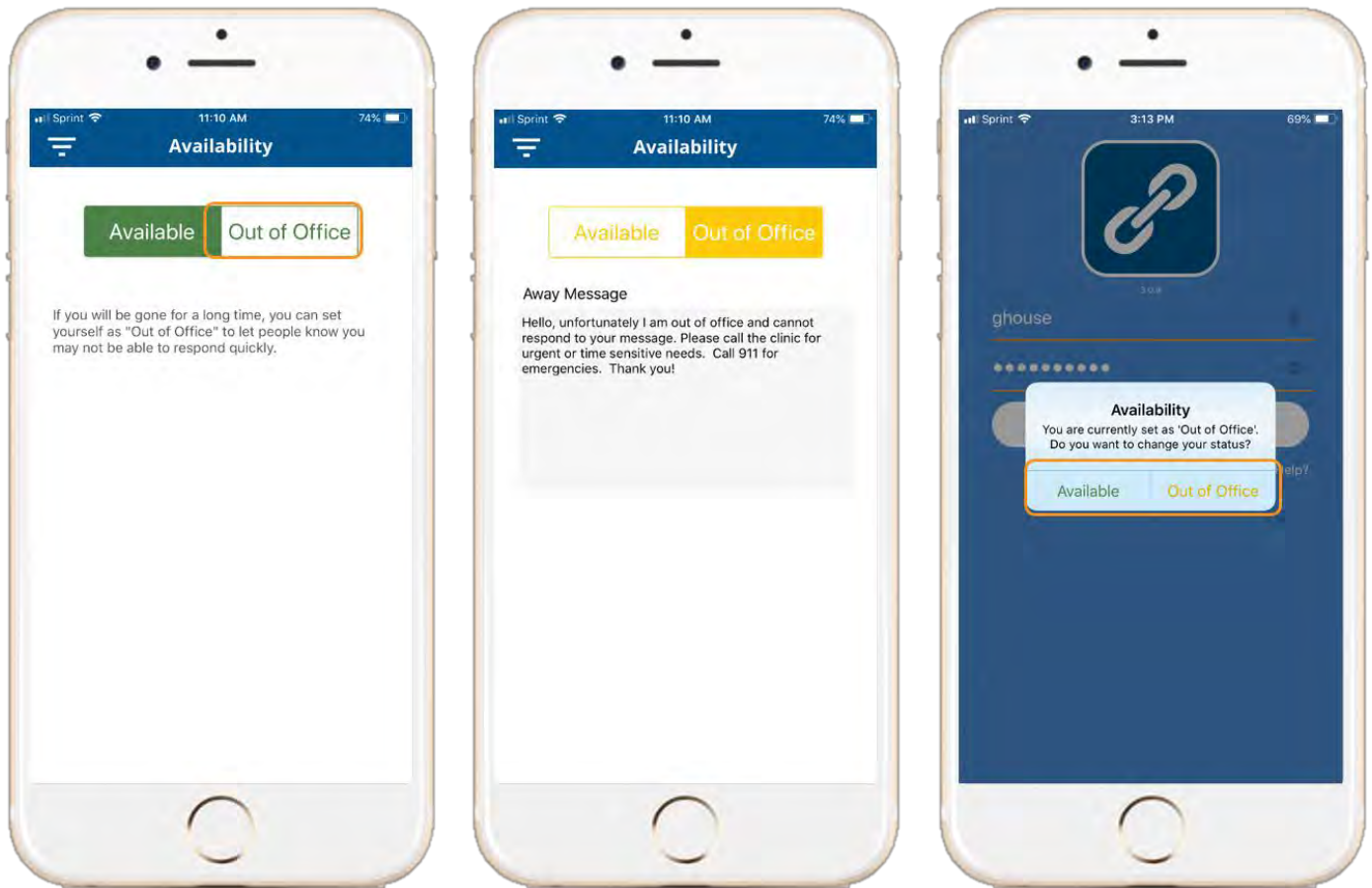
- Availability
- Members
- Messages
- Appointments
- Resources
- Questions?
- Services (Restricted Access)
- Sign out

Note: the two different **Menu** screenshots displayed below; one with the **Services** feature active and one without.



## Availability

The **Availability** feature allows Site Providers to share their availability with Members. Site Providers can, at any time, turn off and on a personalized out-of-office reply. Each time the Site Provider logs in when they are listed as out-of-office they are prompted to review their out-of-office status. Messages sent to a Site Provider when they are listed as unavailable will send the out-of-office reply to the sender (see section 4 for details). This feature helps Members know when they can expect replies from a provider.



## Members





The **Members** page is the default display when logging into the app. The Members page of the Provider App displays the search feature as well as a complete list of Members enrolled in PositiveLinks. Site Providers can search for Members by their Username or last name. From here, Site Providers can open the Member's page to access the Member information.








### Summary Page

The **Summary** page is the default screen when a Site Provider opens a Member page. It displays the Member’s first name and their Monthly Calendar view of check-in responses. Providers can view other months by swiping left and right on the calendar view.




Medication adherence is shown as a color-coded dot in the upper right-hand corner of each day. A green dot represents a ‘Yes’ (or all) response to a Medication check-in, red represents a ‘No’ (or none) response, and grey indicates no response was received for that date. A yellow dot also displays for sites that enable an all, some, or none response system. Providers can reference a legend below the calendar that explains the color-coding system. Scrolling down on this page allows providers to see the Member’s weekly medication adherence over time.

Calendar Display	Medication Answer
	All
	Some
	None
	No Response

The monthly calendar also displays Member mood responses. Each day is populated with an emoticon that corresponds to the reported mood score. If a mood score is not reported for the day, there will not be an emoticon. Providers can reference a legend below the calendar that explains what each emoticon represents. The mood emoticons and their corresponding values are detailed below:

Calendar Display	Description	Mood Score
	Very Unhappy	-4, -5
	Unhappy	-3, -2
	Neutral	-1, 0, 1
	Happy	2, 3
	Very Happy	4, 5

The monthly calendar also displays Member stress levels. Each day displays a bar with color and height that corresponds to the members reported stress score for that day. Providers can reference a legend below the calendar that explains what each colored bar represents. The bar color and their corresponding values are as follows:

Calendar Display	Description	Stress Score
	Low Stress	1-3
	Medium Stress	4-6
	High Stress	7-10

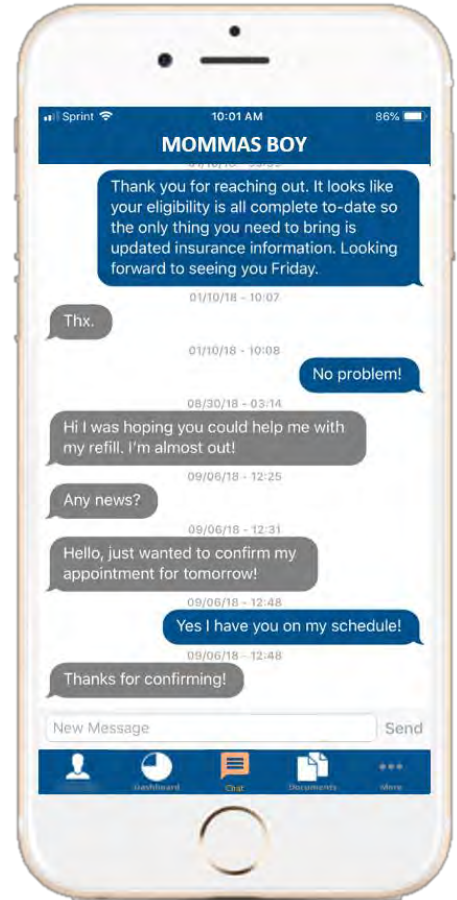
### Dashboard

Site Providers can access a **Member Dashboard** to view full legal name and MRN from the individual member page. The dashboard displays the graphical versions of mood and stress. This page also displays medication adherence as a percentage. All features are viewable by a week, a month, or all time.



### Chat

Providers can message Members using the **Chat** feature from their individual pages. Opening this Chat feature allows Providers to begin a message thread or view previous conversations with that Member. Providers can also access their conversations with Members from the **Messages** section of the app.





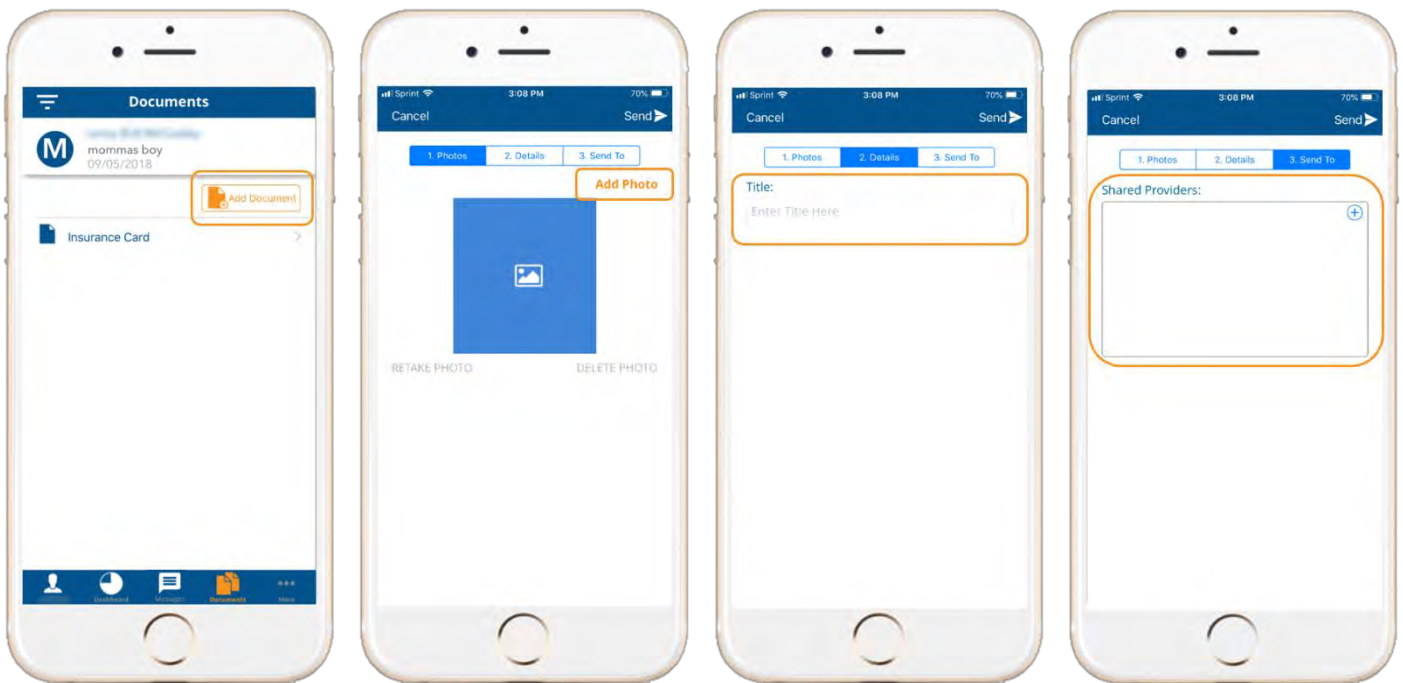
## Documents

Site Providers can use the **Documents** feature to upload documents relevant to patient care and access documents Members upload (for ADAP or other eligibility or insurance issues).

To create a new document:

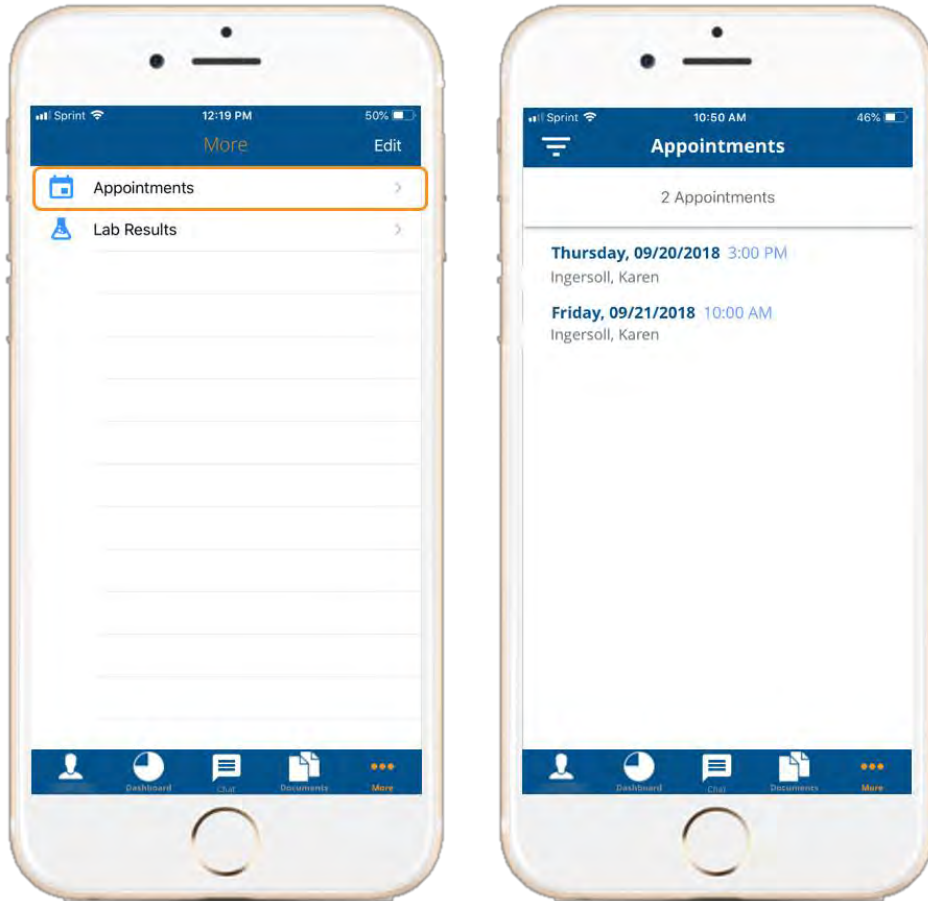
- Select 'Add Document'
- On the Photos tab: Select 'Add photo'
- Take a photo or choose from photo library
- Select the check-mark to verify
  - Providers can 'Retake photo' or 'Delete photo' to replace the current image
- On the Details tab: Add the desired title
- On the Send To tab: Select '+' to choose other Site Care Team members to share the document with
- Select 'Send' to finish
- Once created, documents can be edited or deleted.

Documents uploaded by the Member will be displayed in list view. Click on the document to view.



### Appointments

Providers can view Member specific appointments from the **Appointments** tab of the Member profile. This page displays any upcoming appointments that Member has with the Provider viewing the page. Providers identified with additional privileges, based on provider category level permissions, have access to the full list of appointments for the Member of interest.

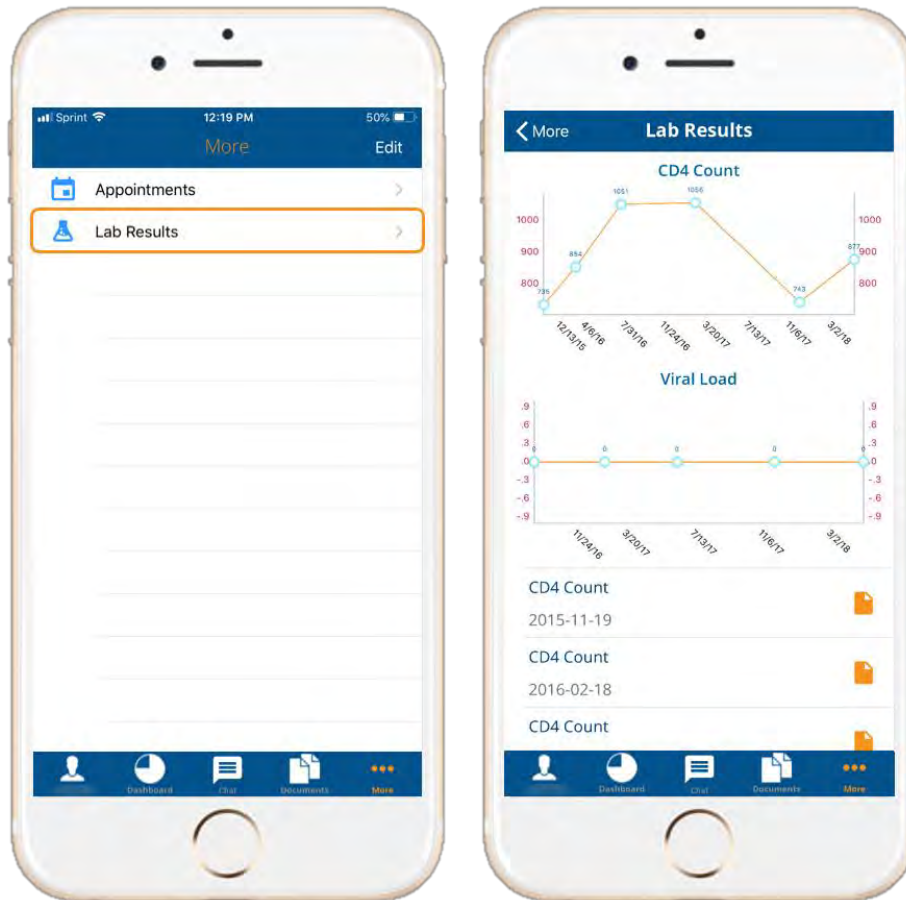


### Lab Results

To access the **Lab Results** feature, select 'More' on the button of the individual member's page. The Lab Results page displays CD4 and Viral Load in two separate line graphs. Data for these charts is not self-reported. It is entered manually by Site PLC, or automatically via EMR.

Unlike the other dashboards, which use fixed y-axis scales, the CD4 and Viral Load charts has a dynamic y-axis that will 'adjust' based on the Member's values. The chart does not use a logarithmic y-axis.

Lab results are also available in list view at the bottom of the page, labeled by date and lab type. You can click on an individual lab result to access full details including lab value, test name, date, and notes if applicable.

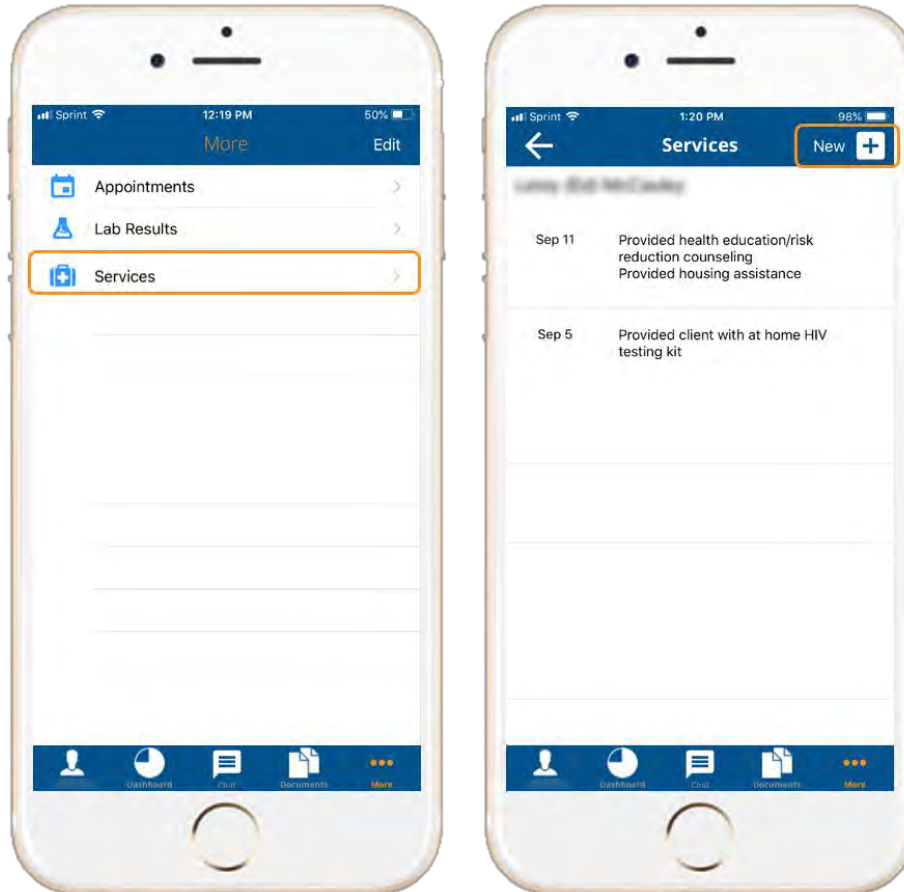


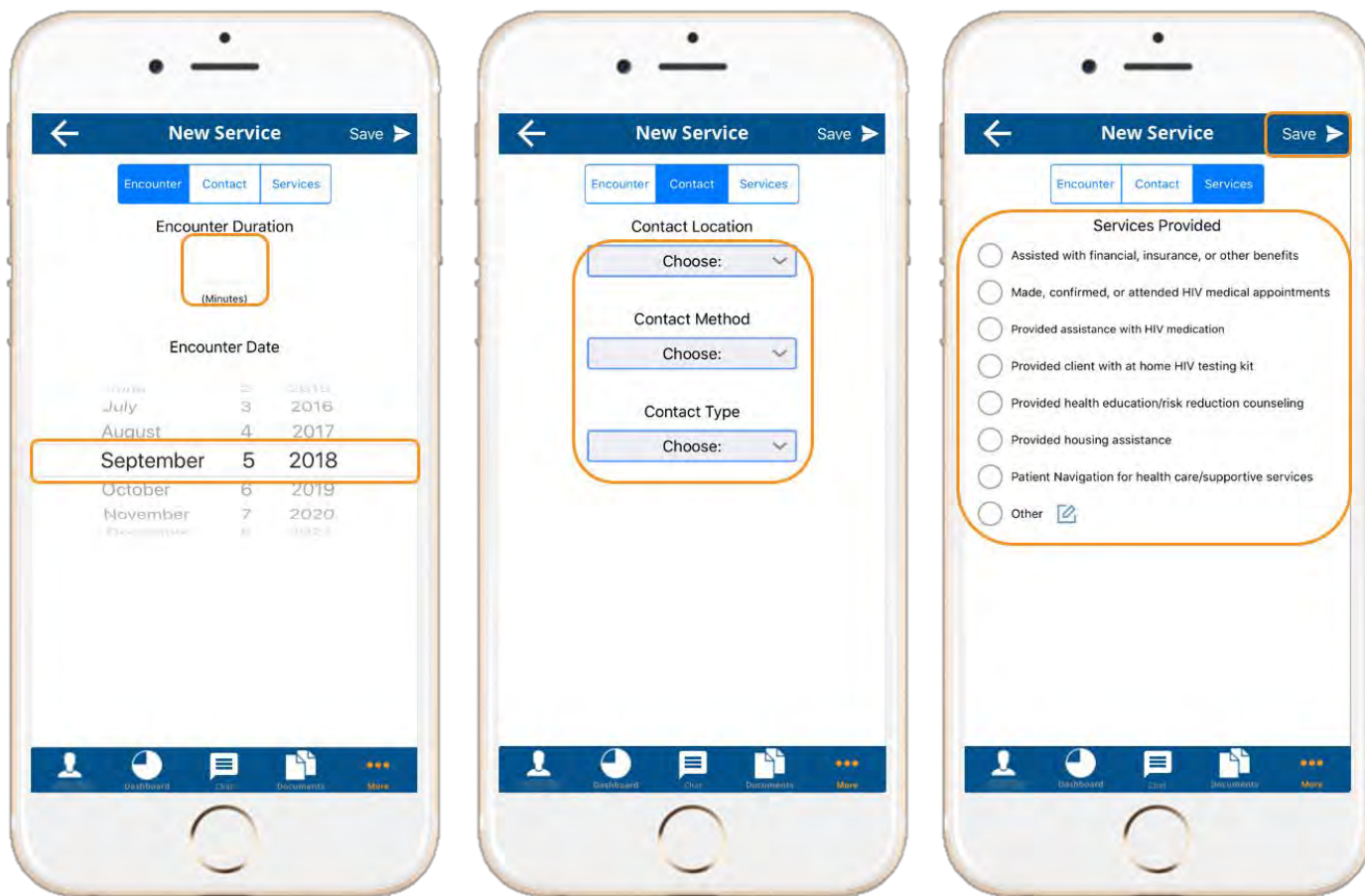
### *Services (Restricted Access)*

Site Providers who routinely track encounters and services provided to their clients are able to use the **Services** feature to track these contacts within PositiveLinks. The ability to report services is by default only available to Site Administrators and Community Health Workers but Sites can coordinate with the technical team to modify these permissions to include other provider categories.

To create a new service, Providers navigate to the Member page for whom they provided services. Then follow the instructions below:

- Locate the 'More' menu
- Select 'Services'
- Select 'New +'
- On the Encounter tab: Enter the duration and date of the encounter
- On the Contact tab: Enter the Location, Method, and Type of encounter
- On the Services tab: Select the services provided and enter notes if needed
- Click 'Save' to add the service provided to the Member page

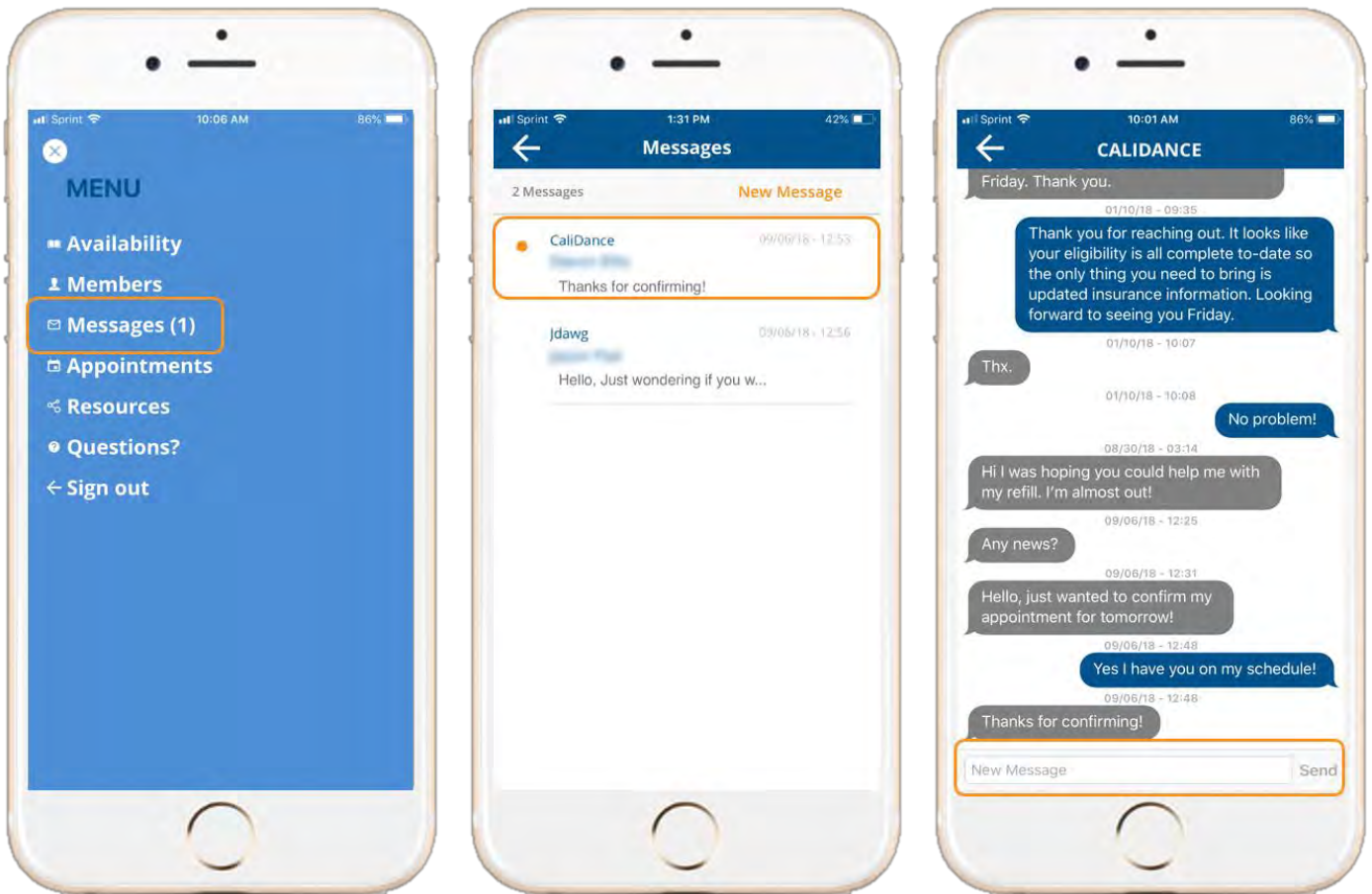




## Messages

The **Messages** feature displays all of the Provider’s conversation threads. Messages are ordered by the conversation with the most recent response. Prior to opening a message, the Username and legal name both are displayed. ‘You’ or the first letter of the Member Username display to indicate the most recent respondent. When the Site Provider opens the message, only the Member Username displays. This was done to protect patient privacy when the full text of the message is displayed.

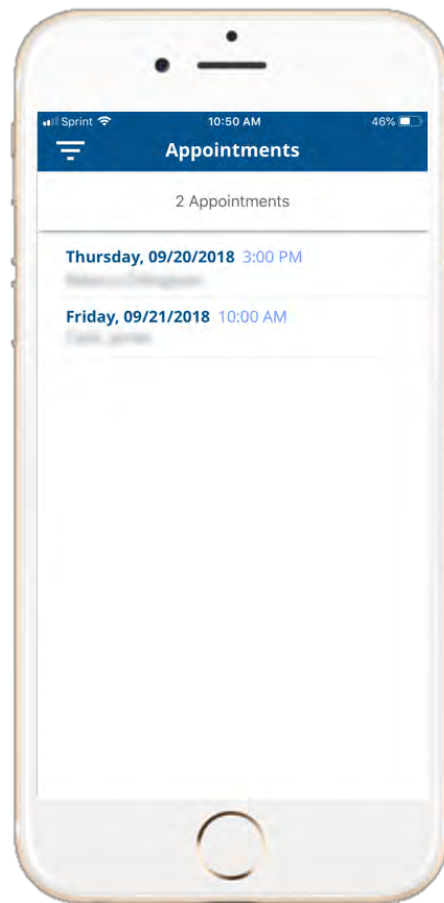
Site Providers are also able to create a new message to a Member from this page as well. When creating a new message Site Providers click ‘New Message’ in the top right corner and can select a Member using the provided list.





## Appointments

The **Appointments** page displays Providers' upcoming appointments with PositiveLinks Members. . Appointments are displayed in list view and show Member Username, date, time, and provider. Click on an appointment to view Member legal name, location, and previous appointment if applicable. Providers identified with additional privileges, based on provider category level permissions, have access to the full list of appointments for the PositiveLinks Cohort.



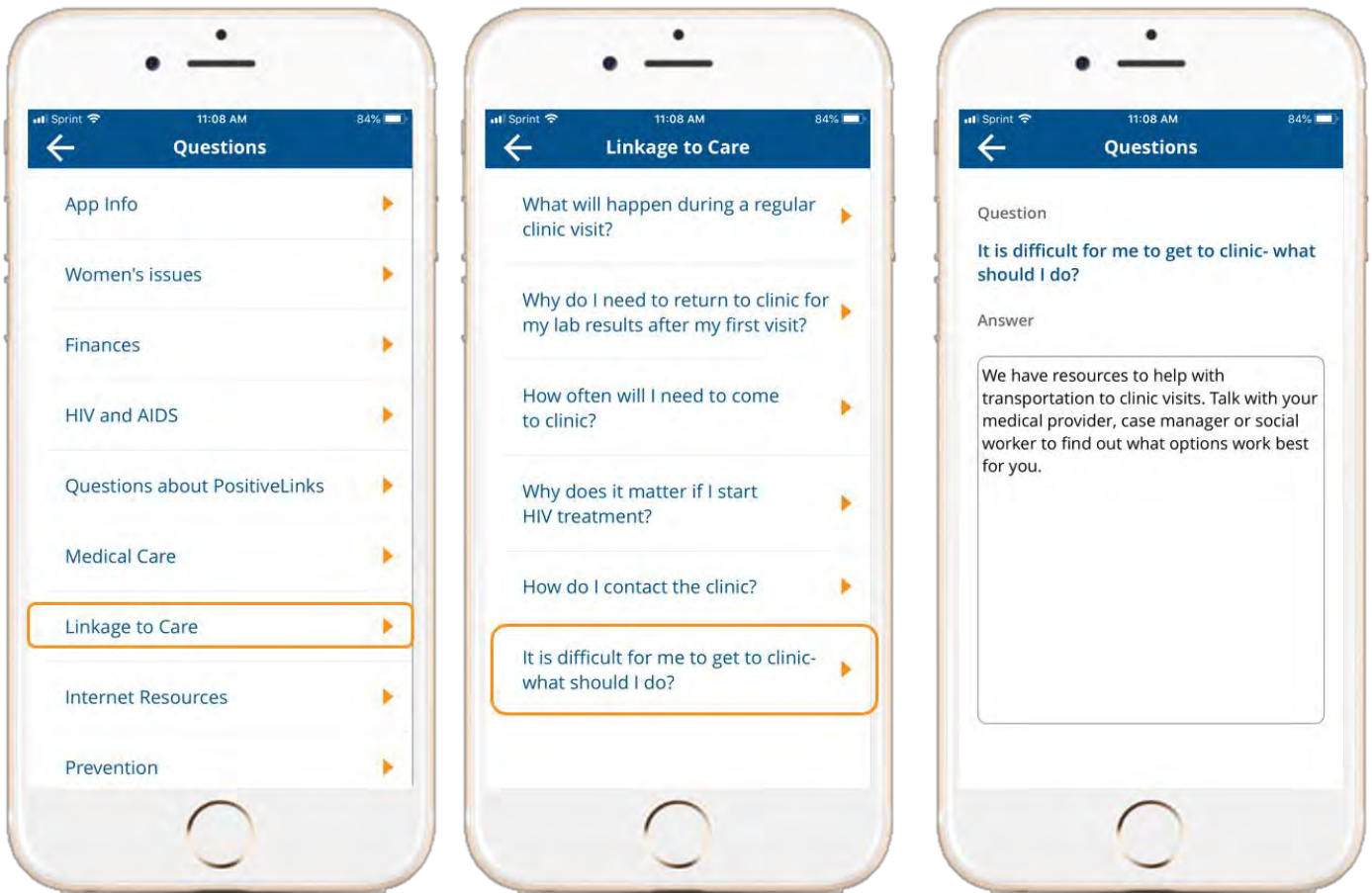
## Resources

Site Providers have access to a **Resources** list including video, audio, and links provided to Members from this tab. Please refer to section 4 for more information on the available resources.



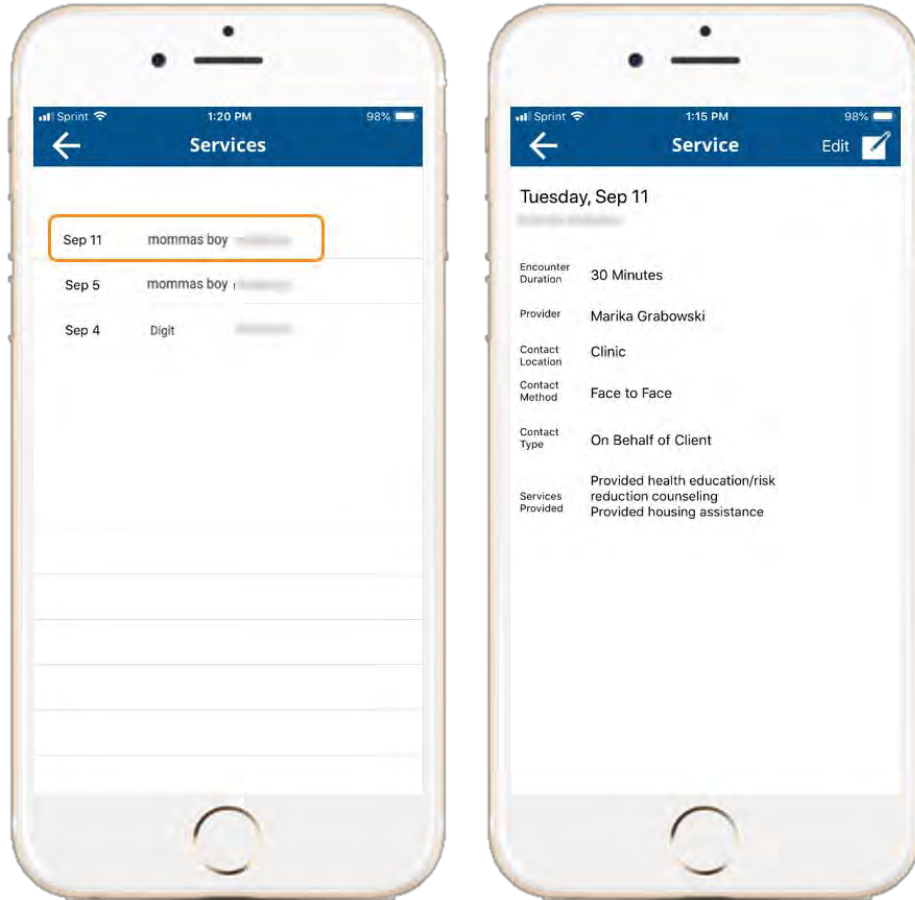
## Questions

Site Providers have access to frequently asked **Questions** and answers provided to members in their app access. Please refer to section 4 for more information on available questions.



## Services (Restricted Access)

The **Services** page accessible from the main menu allows previously identified provider types to view and edit a full list of services they have provided to all PL Members. Providers have to go to the member specific services page to create a new service.



## 5b. Using PositiveLinks Provider App – for Android users

---

This section provides detailed information about using the PositiveLinks Provider App. It helps prepare the Site Providers for using the PositiveLinks mobile platform to engage with their Members. Please refer to Section 4, Using PositiveLinks Member App, for detailed instructions on downloading and accessing the PositiveLinks App.

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*Chat*

*Documents*

*Appointments*

*Lab Results*

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*Appointments*

*Resources*

*Questions*

*Services (Restricted Access)*

## PositiveLinks Provider App Features

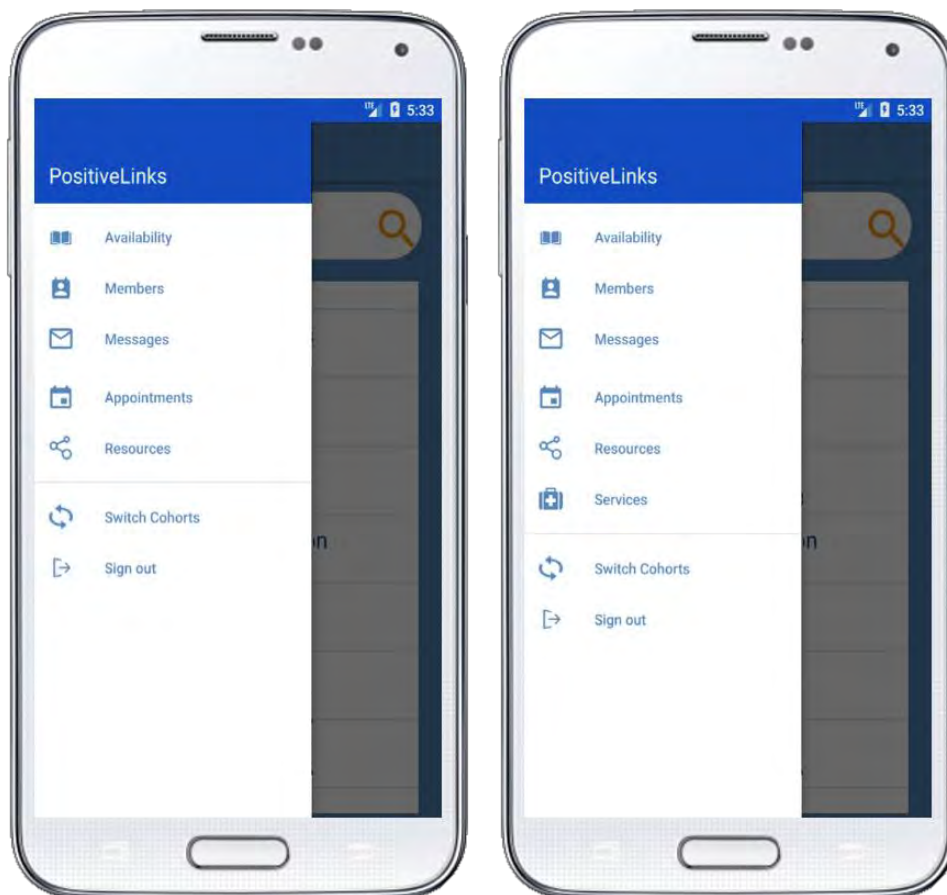
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- Resources
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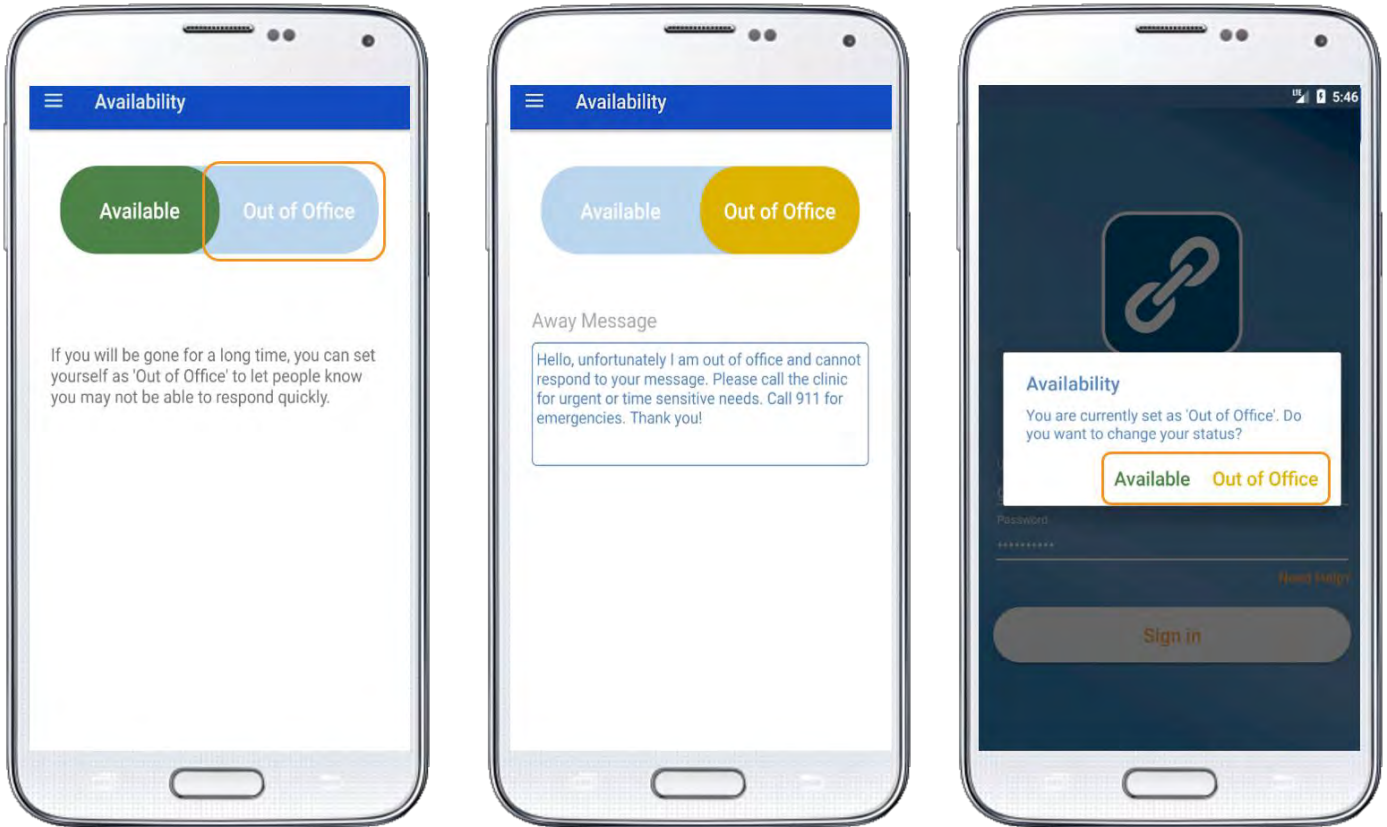
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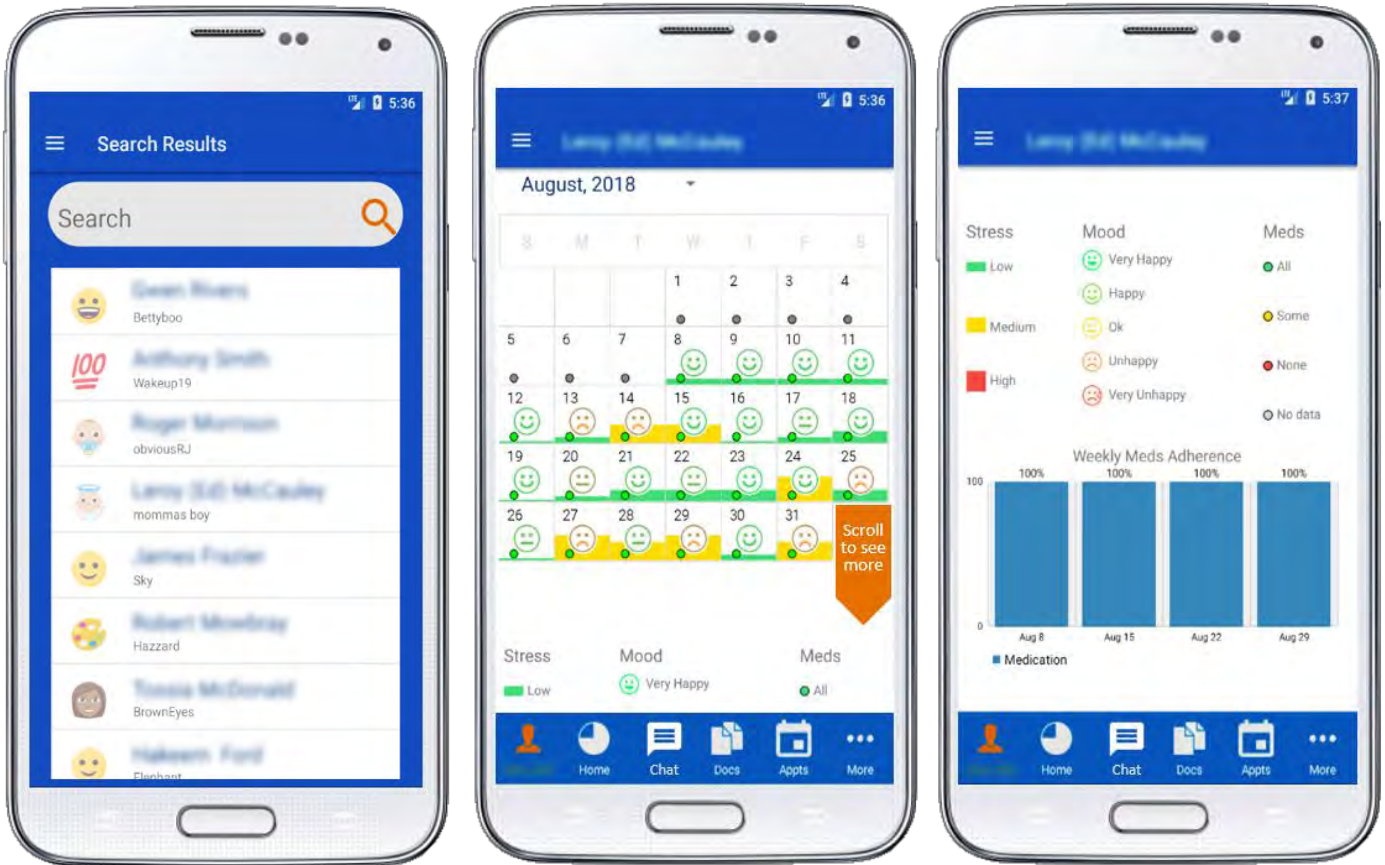
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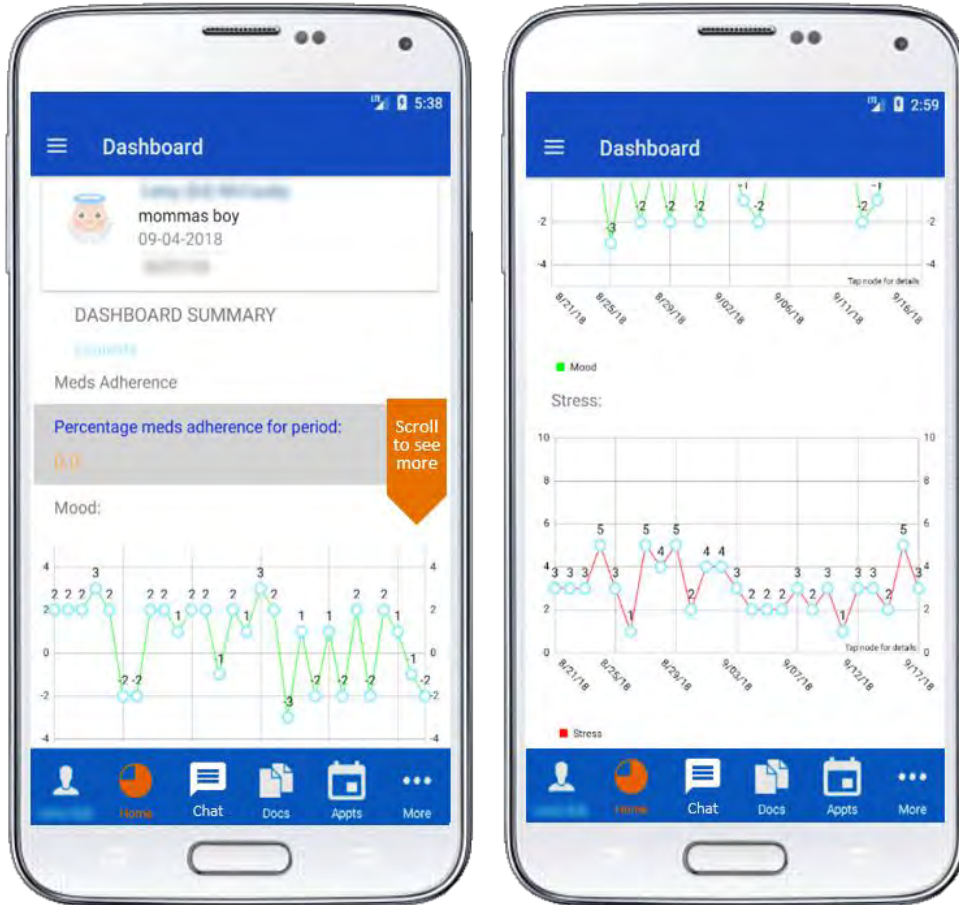
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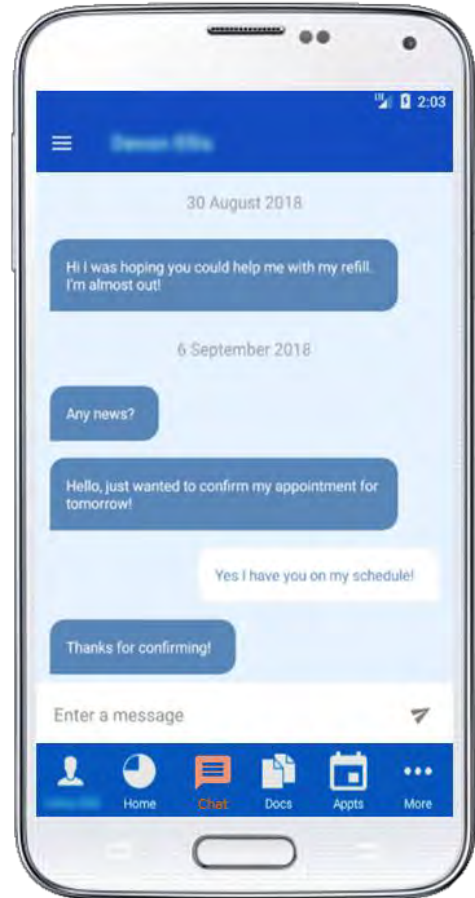
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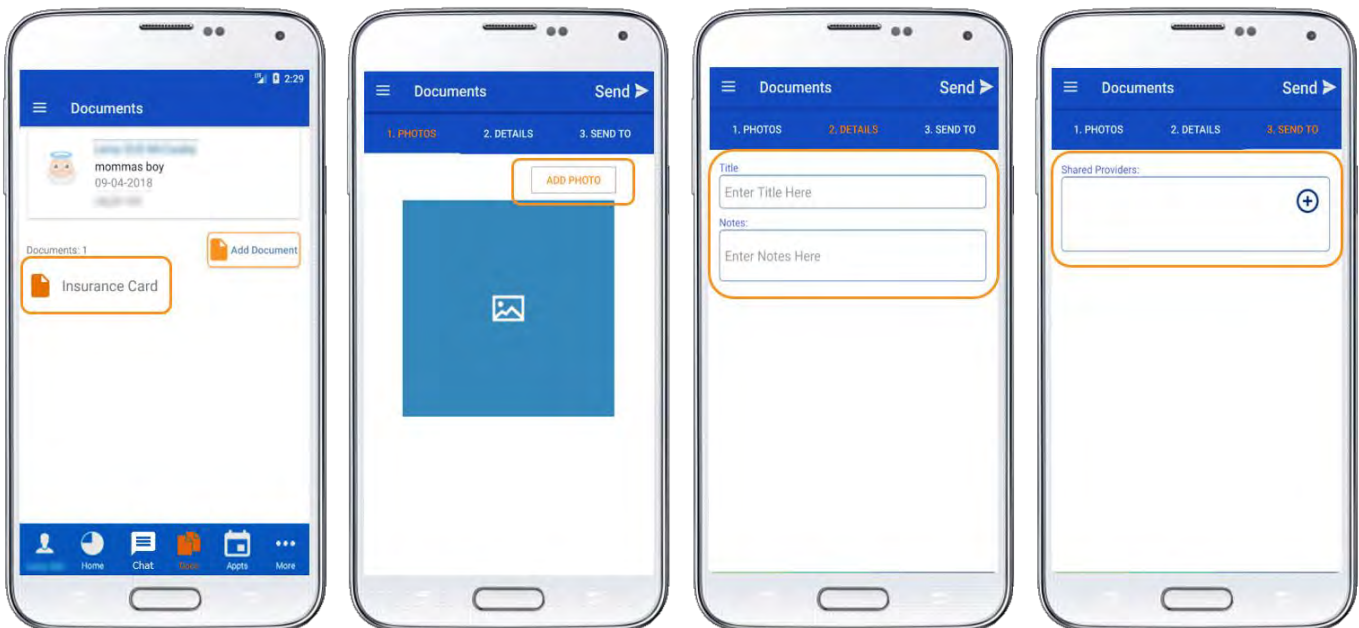
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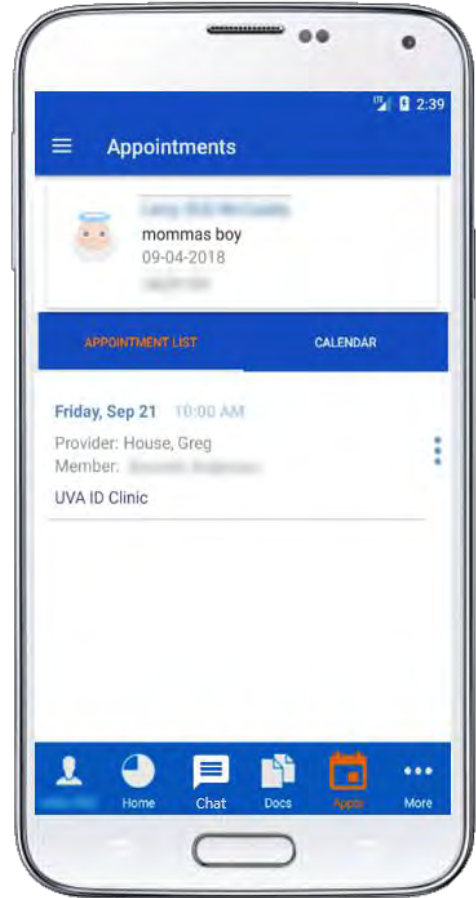
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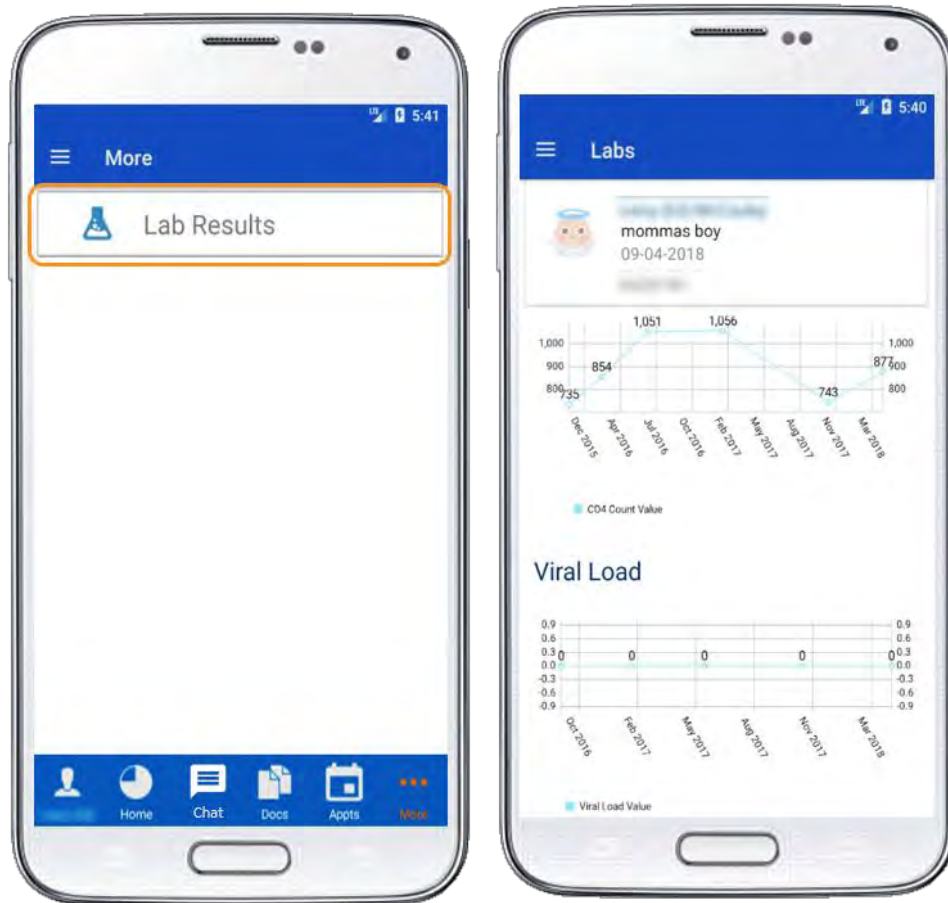


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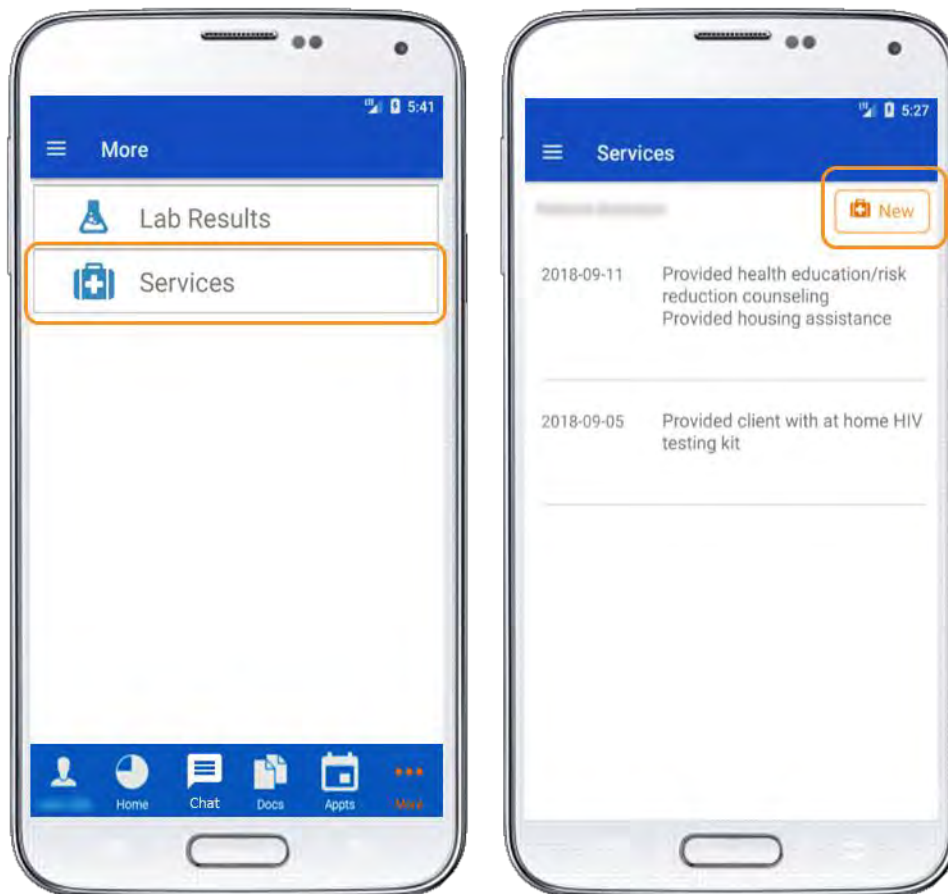


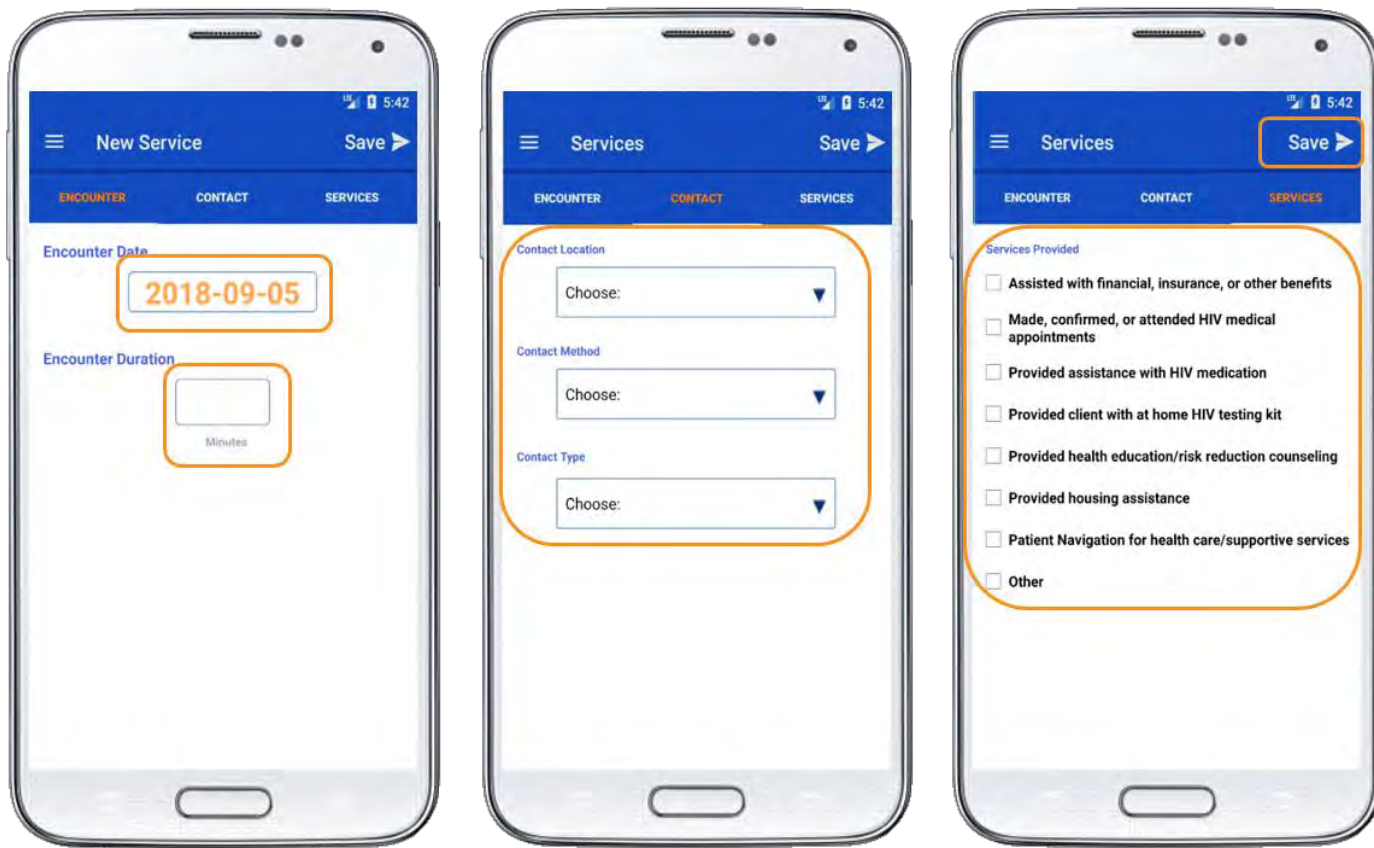
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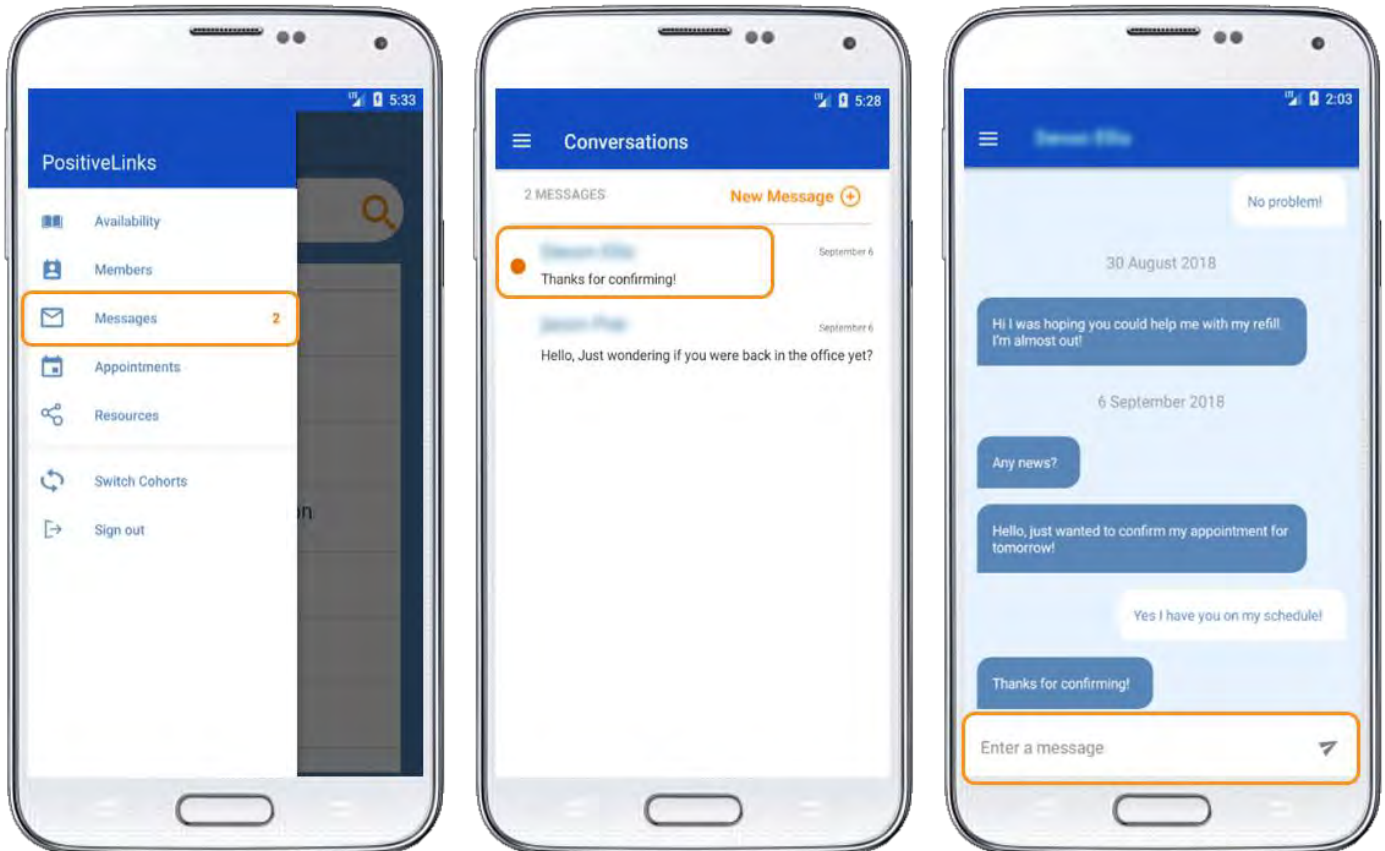




## Messages

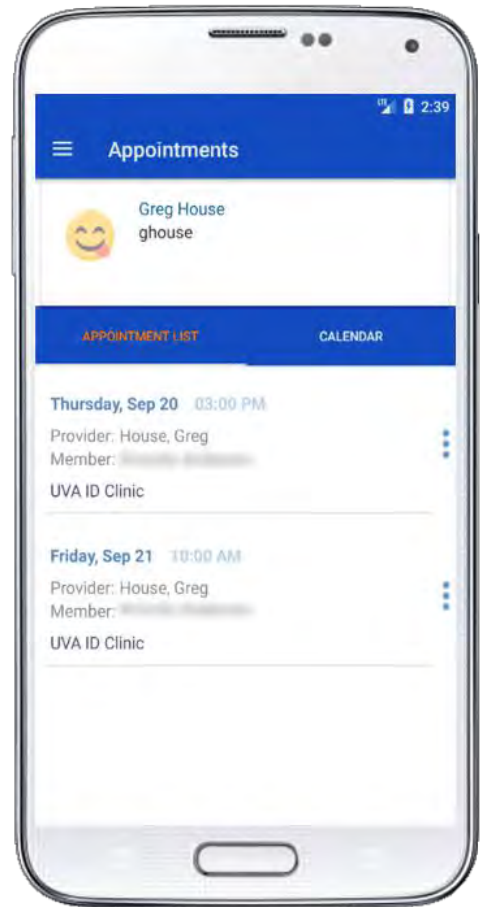
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## Appointments

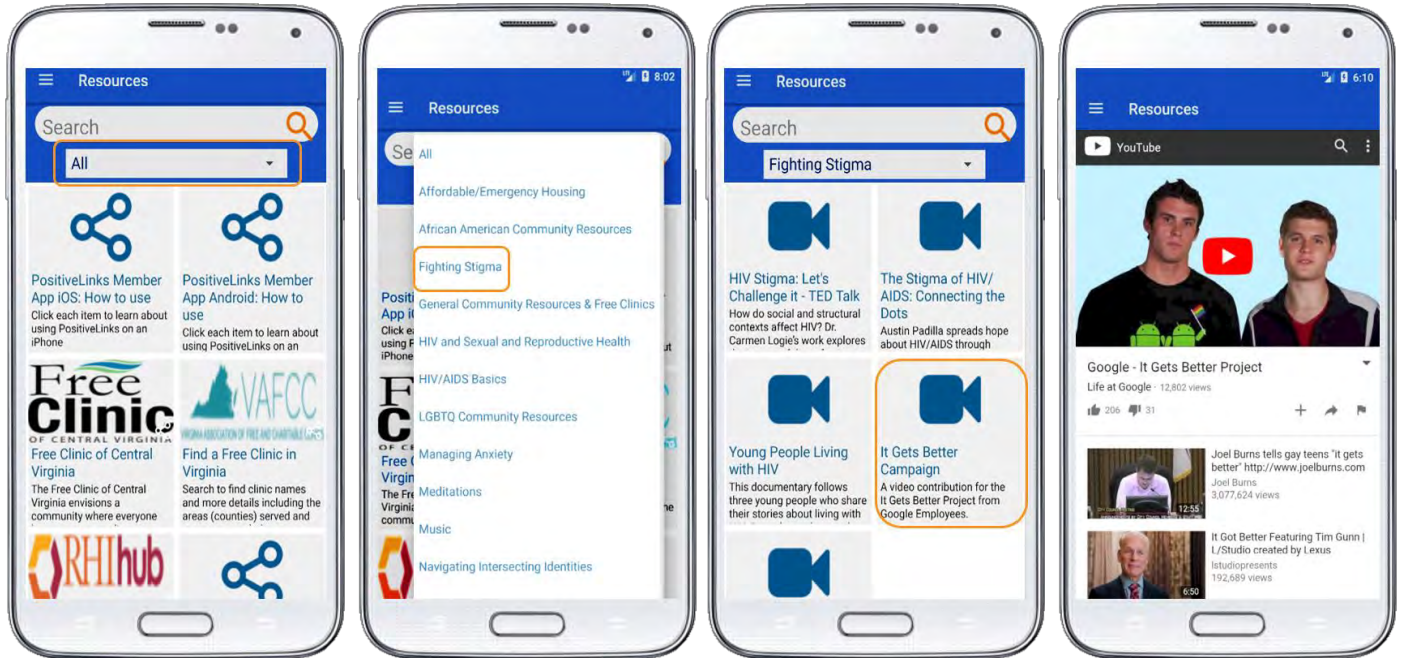
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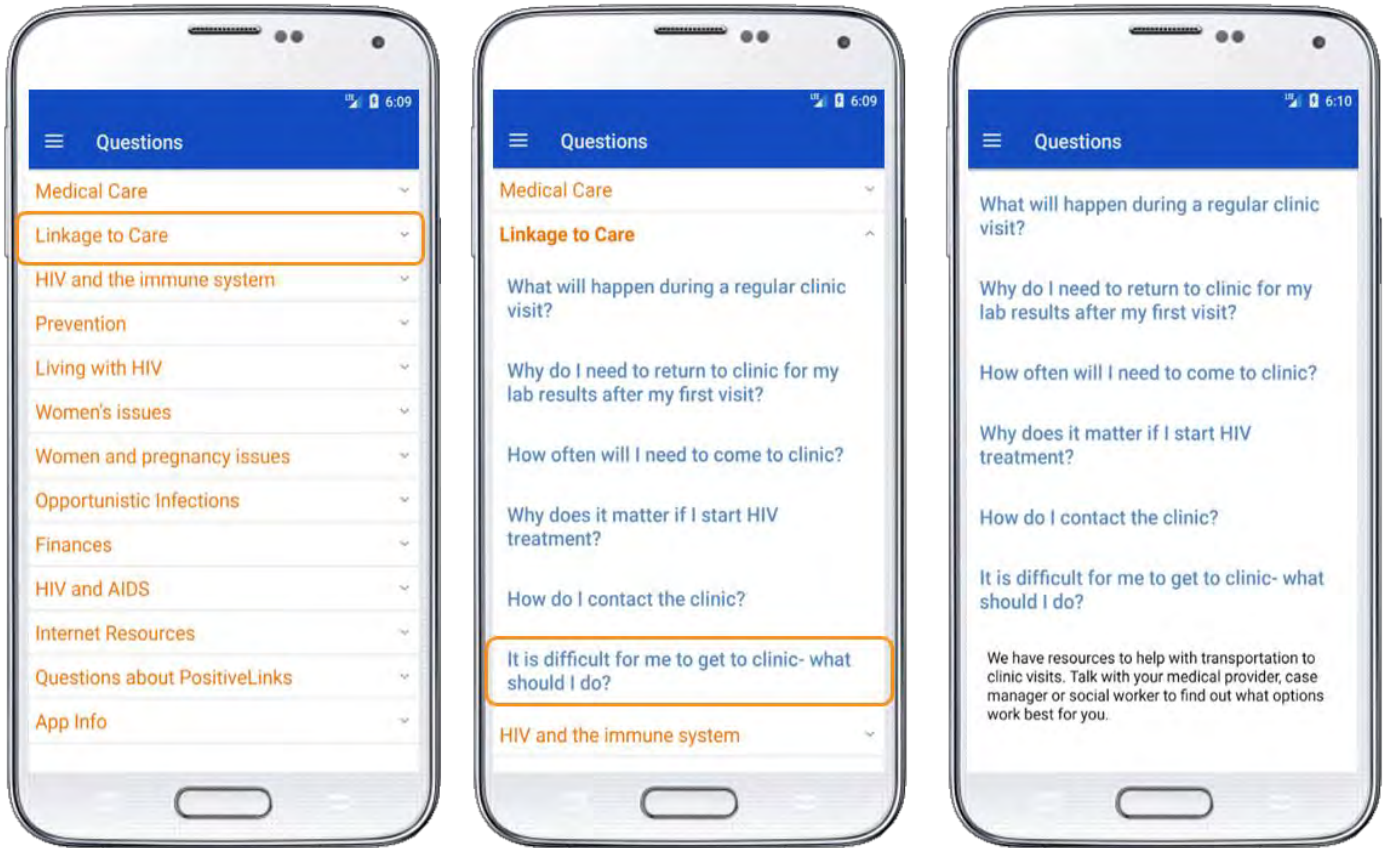
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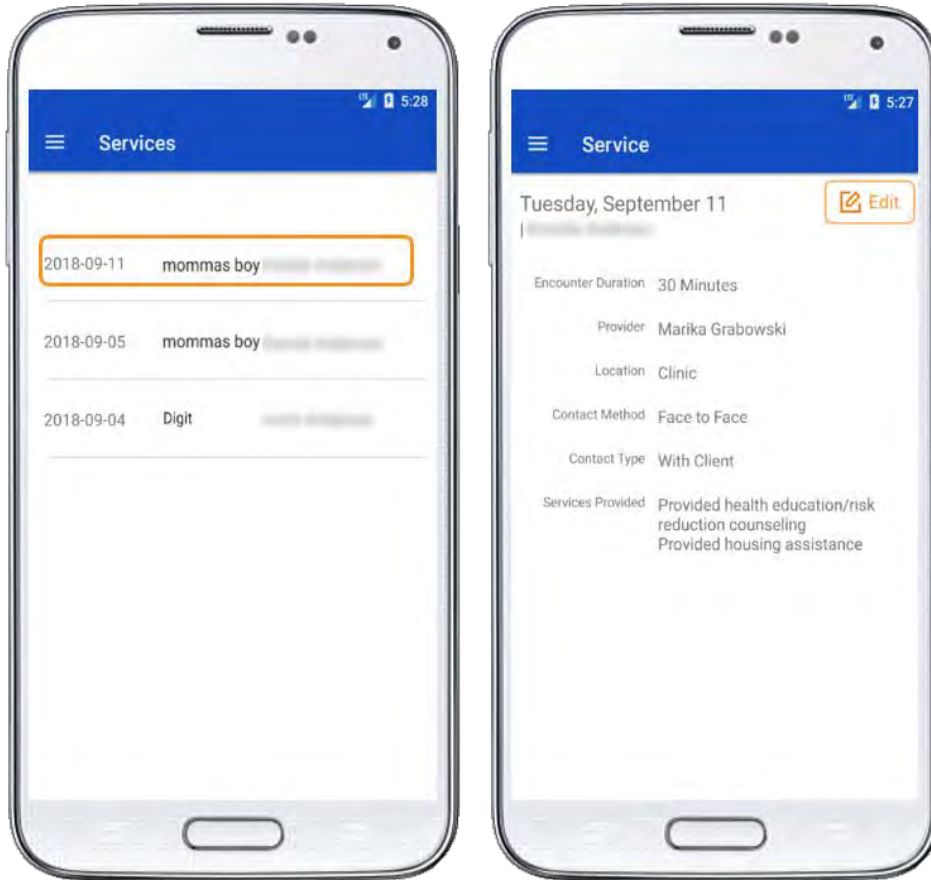
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## Services (Restricted Access)

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## 6a. Using PositiveLinks Administrator App – for iOS users

---

This section provides detailed information about using the PositiveLinks Administrator App. It helps prepare PLC for using the PositiveLinks mobile platform to engage with their Members. Please refer to Section 4, Using PositiveLinks Member App, for detailed instructions on downloading and accessing the PositiveLinks App.

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*Community Posts*

*Messages*

*Appointments*

*Resources*

*Questions*

*Services*

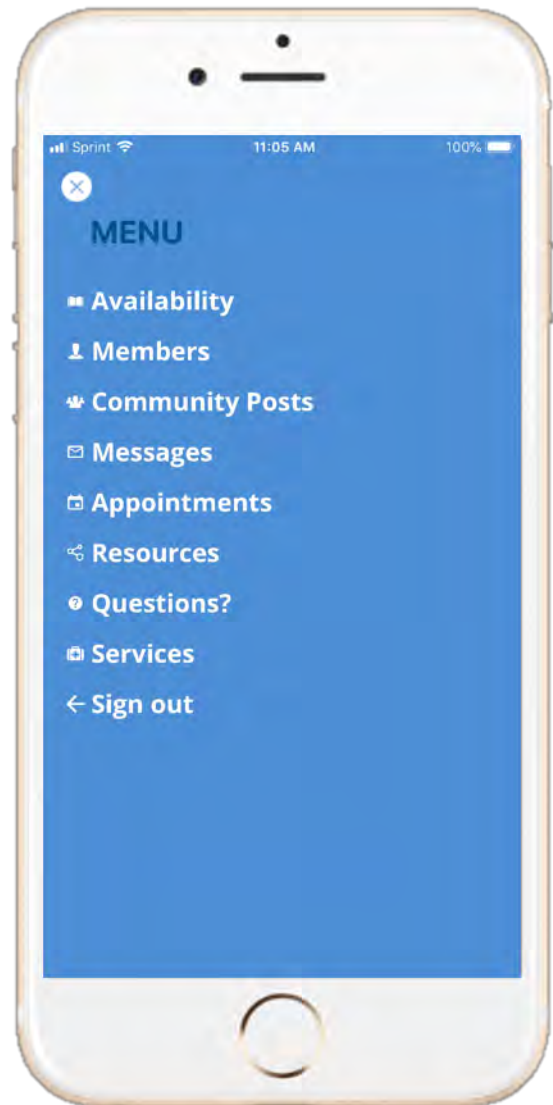
## PositiveLinks Admin App Features

### Menu

The PositiveLinks **Menu** is accessible from the top left corner of the app and is indicated by three small lines. All app features are listed here for Administrators to access. The Menu is available from all pages of the app.

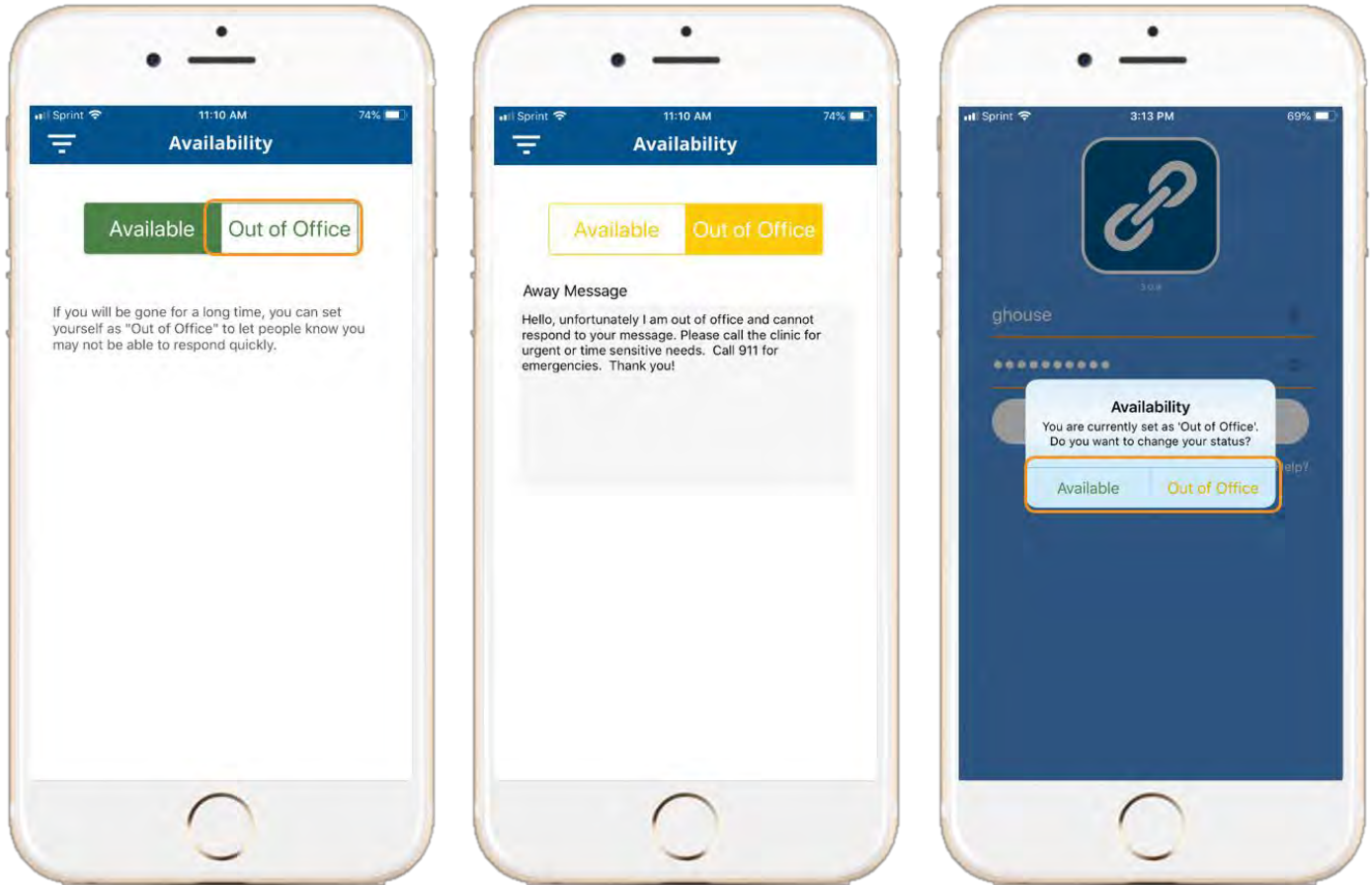
Menu options include:

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- Resources
- Questions?
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- Logout



## Availability

The **Availability** feature allows Administrators to share their availability with Members. Administrators can, at any time, turn off and on a personalized out-of-office reply. Each time the Administrator logs in when they are listed as out-of-office they are prompted to review their out-of-office status. Messages sent to an Administrator when they are listed as unavailable will send the out-of-office reply to the sender (see section 4 for details). This feature helps Members know when they can expect replies from a provider.





## Members





The **Members** page is the default display when logging into the app. The Members page of the Admin App displays the search feature as well as a complete list of Members enrolled in PositiveLinks. Administrators can search for Members by their Username or last name. From here, Administrators can open the Member's page to access the Member information.








### Summary Page

The **Summary** page is the default screen when an Administrator opens a Member page. It displays the Member’s first name and their Monthly Calendar view of check-in responses. Administrators can view other months by swiping left and right on the calendar view.




Medication adherence is shown as a color-coded dot in the upper right-hand corner of each day. A green dot represents a ‘Yes’ (or all) response to a Medication check-in, red represents a ‘No’ (or none) response, and grey indicates no response was received for that date. A yellow dot also displays for sites that enable an all, some, or none response system. Providers can reference a legend below the calendar that explains the color-coding system. Scrolling down on this page allows providers to see the Member’s weekly medication adherence over time.

Calendar Display	Medication Answer
	All
	Some
	None
	No Response

The monthly calendar also displays Member mood responses. Each day is populated with an emoticon that corresponds to the reported mood score. If a mood score is not reported for the day, there will not be an emoticon. Administrators can reference a legend below the calendar that explains what each emoticon represents. The mood emoticons and their corresponding values are detailed below:

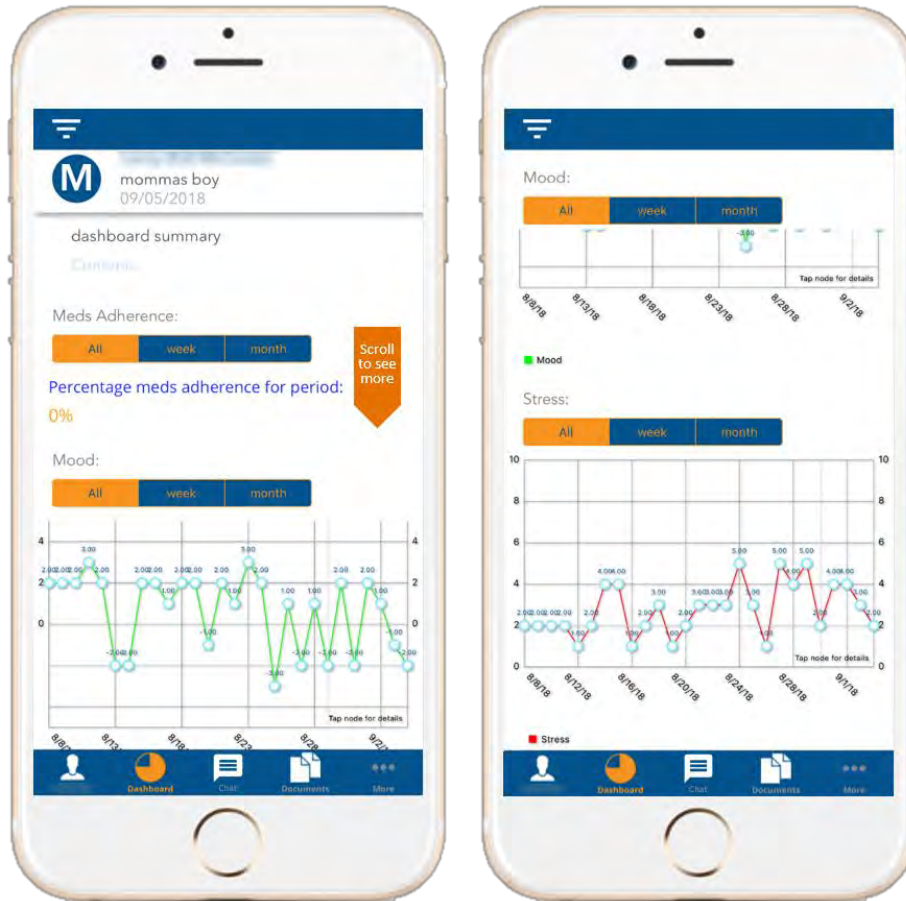
Calendar Display	Description	Mood Score
	Very Unhappy	-4, -5
	Unhappy	-3, -2
	Neutral	-1, 0, 1
	Happy	2, 3
	Very Happy	4, 5

The monthly calendar also displays Member stress levels. Each day displays a bar with color and height that corresponds to the members reported stress score for that day. Administrators can reference a legend below the calendar that explains what each colored bar represents. The bar color and their corresponding values are as follows:

Calendar Display	Description	Stress Score
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	Medium Stress	4-6
	High Stress	7-10

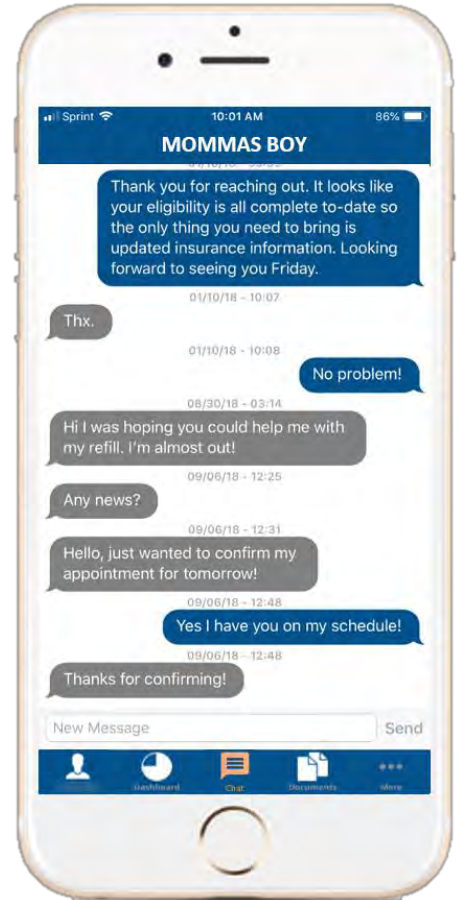
### Dashboard

Administrators can access a **Member Dashboard** to view full legal name and MRN from the individual member page. The dashboard displays the graphical versions of mood and stress. This page also displays medication adherence as a percentage. All features are viewable by a week, a month, or all time.



### Chat

Administrators can message Members using the **Chat** feature from their individual pages. Opening this Chat feature allows Administrators to begin a message thread or view previous conversations with that Member. Administrators can also access their conversations with Members from the **Messages** section of the app.



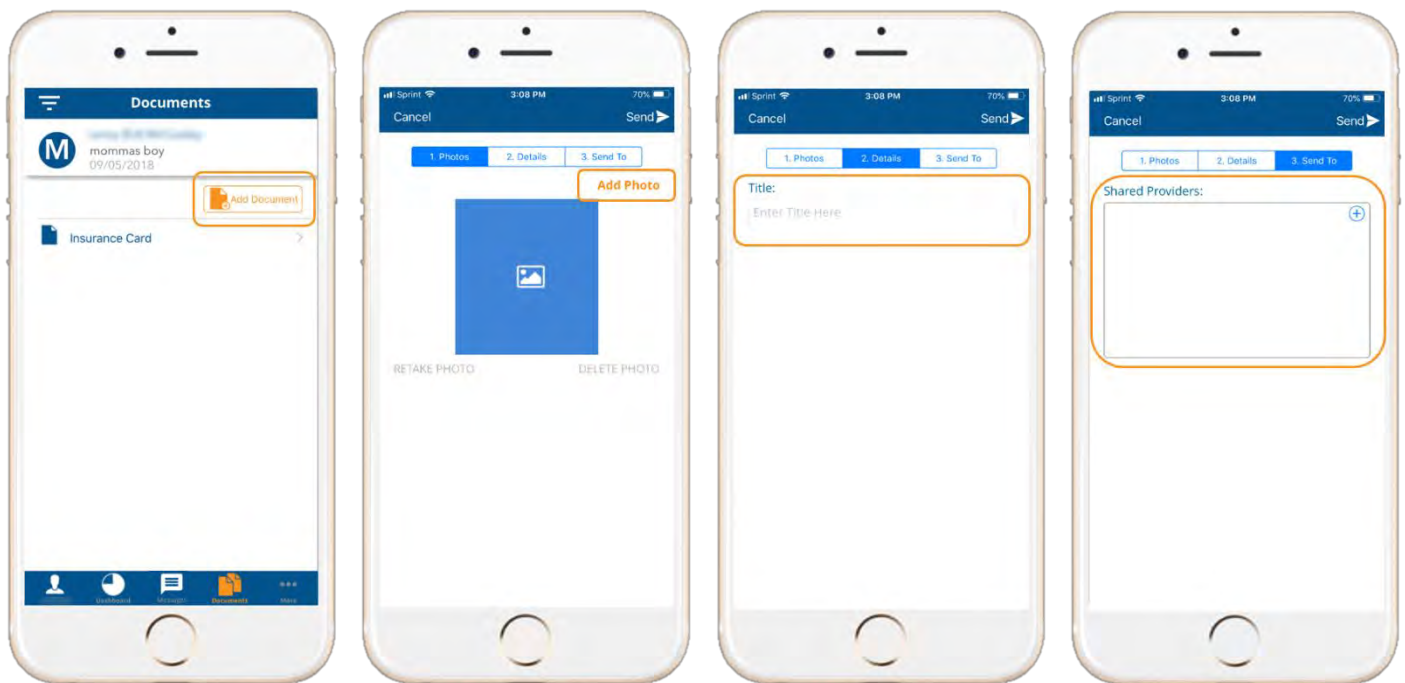
## Documents

Administrators can use the **Documents** feature to upload documents relevant to patient care and access documents Members upload (for ADAP or other eligibility or insurance issues).

To create a new document:

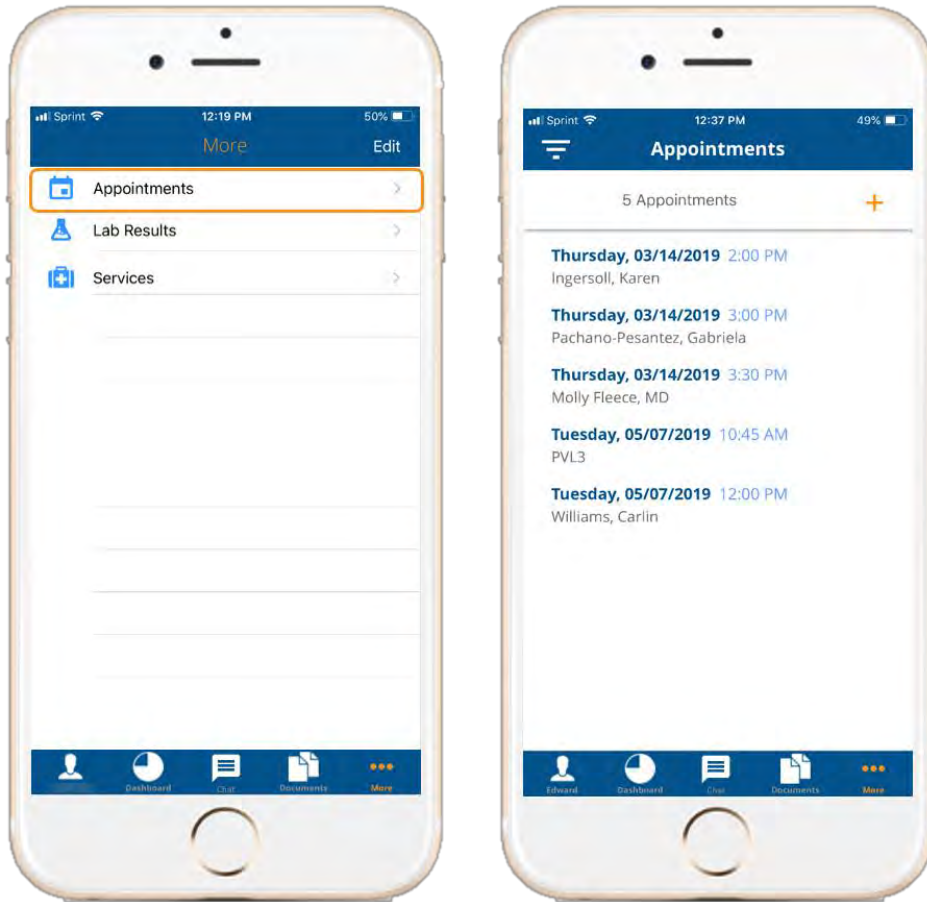
- Select 'Add Document'
- On the Photos tab: Select 'Add photo'
- Take a photo or choose from photo library
- Select the check-mark to verify
  - Administrators can 'Retake photo' or 'Delete photo' to replace the current image
- On the Details tab: Add the desired title
- On the Send To tab: Select '+' to choose other Providers to share the document with
- Select 'Send' to finish
- Once created, documents can be edited or deleted.

Documents uploaded by the Member will be displayed in list view. Click on the document to view.



### Appointments

Administrators can view Member specific appointments from the **Appointments** tab of the Member profile. This page displays all upcoming appointments for the Member. Providers identified with additional privileges, based on provider category level permissions, have access to this full list of appointments as well.



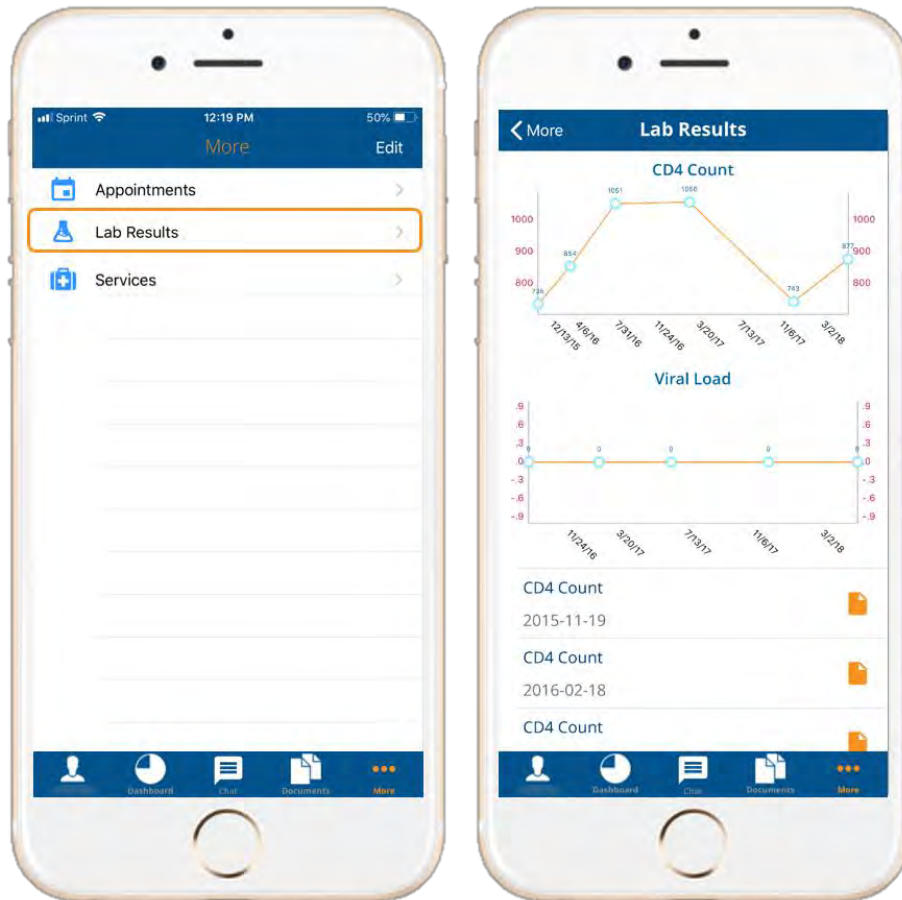


### Lab Results

To access the **Lab Results** feature, select 'More' on the button of the individual member's page. The Lab Results page displays CD4 and Viral Load in two separate line graphs. Data for these charts is not self-reported. It is entered manually by Site PLC, or automatically via EMR.

Unlike the other dashboards, which use fixed y-axis scales, the CD4 and Viral Load charts will have a dynamic y-axis that will 'adjust' based on the Member's values. The chart will not use a logarithmic y-axis.

Lab results are also available in list view at the bottom of the page, labeled by date and lab type. You can click on an individual lab result to access full details including lab value, test name, date, and notes if applicable.

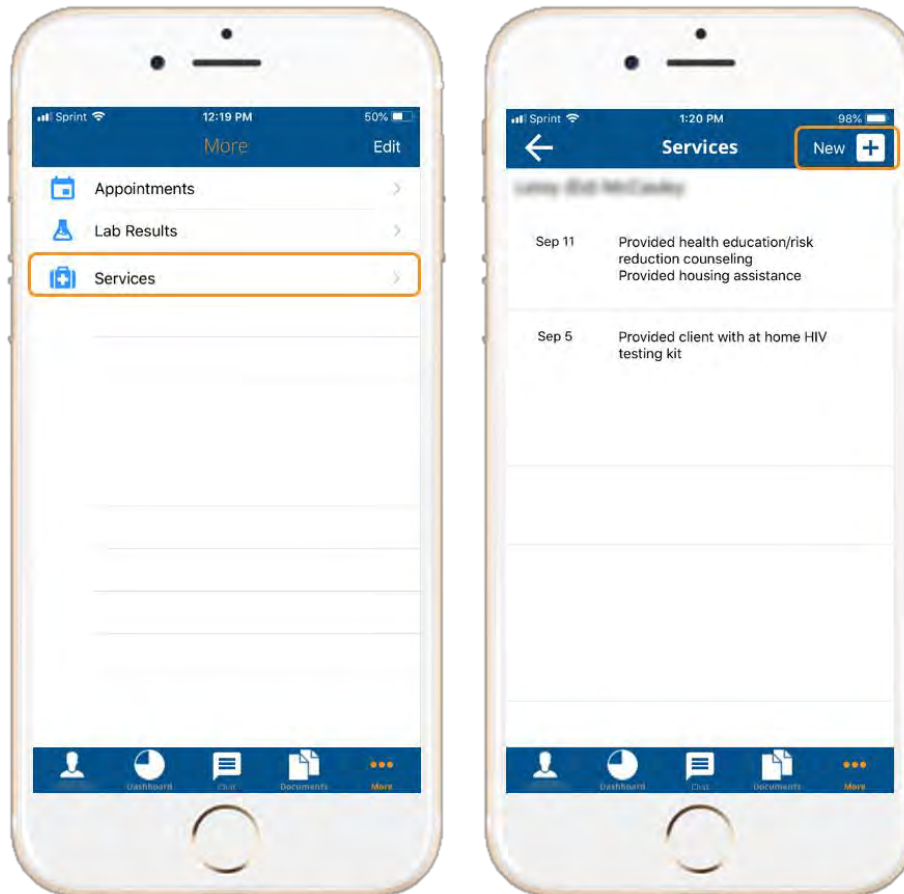


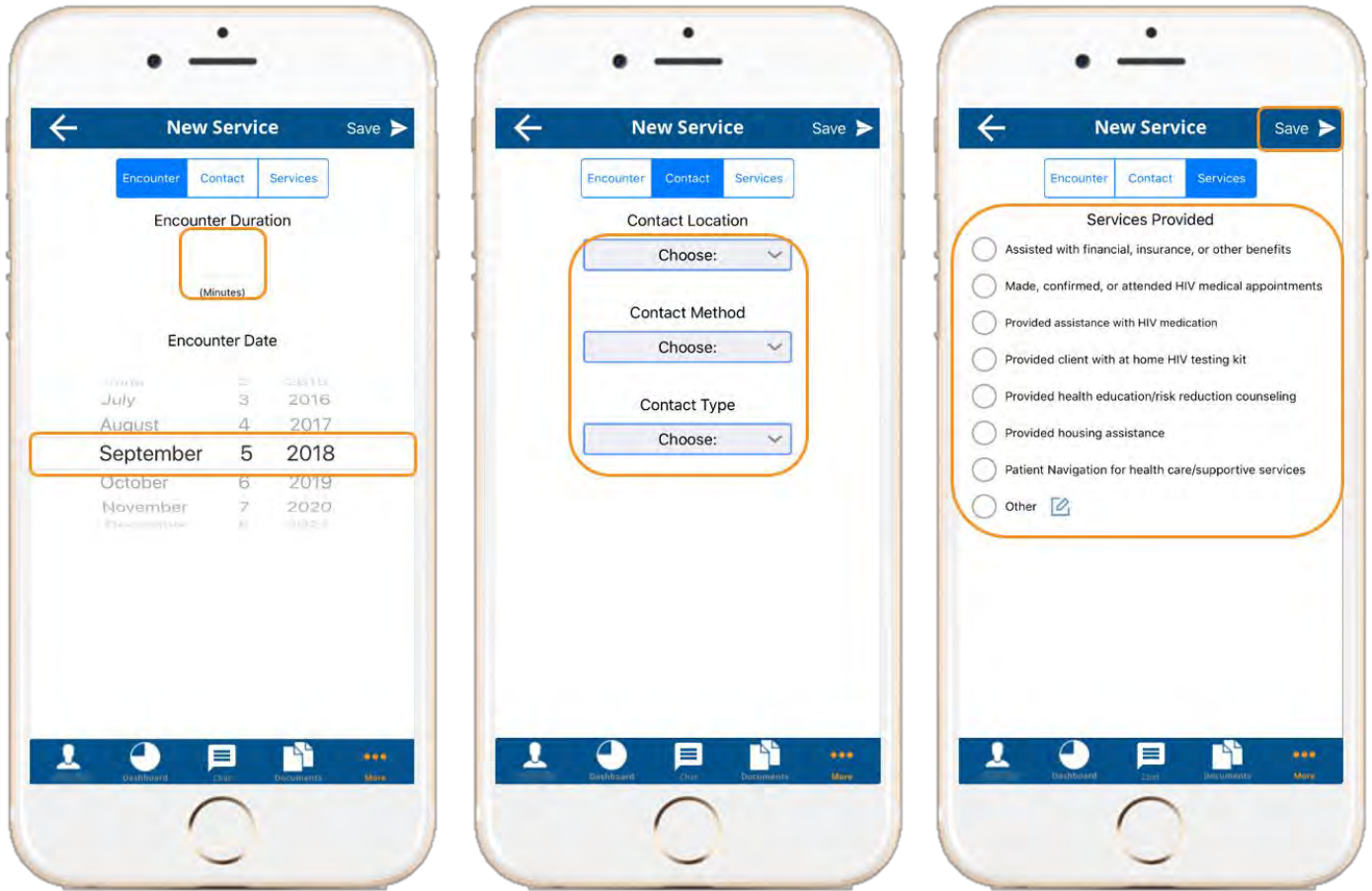
## Services

Administrators have access to the ability to use a **Services** feature to track encounters with Members within PositiveLinks. The ability to report services is by default only available to Site Administrators and Community Health Workers but Sites can coordinate with the technical team to modify these permissions to include other provider categories.

To create a new service, Administrators navigate to the Member page for whom they provided services. Then follow the instructions below:

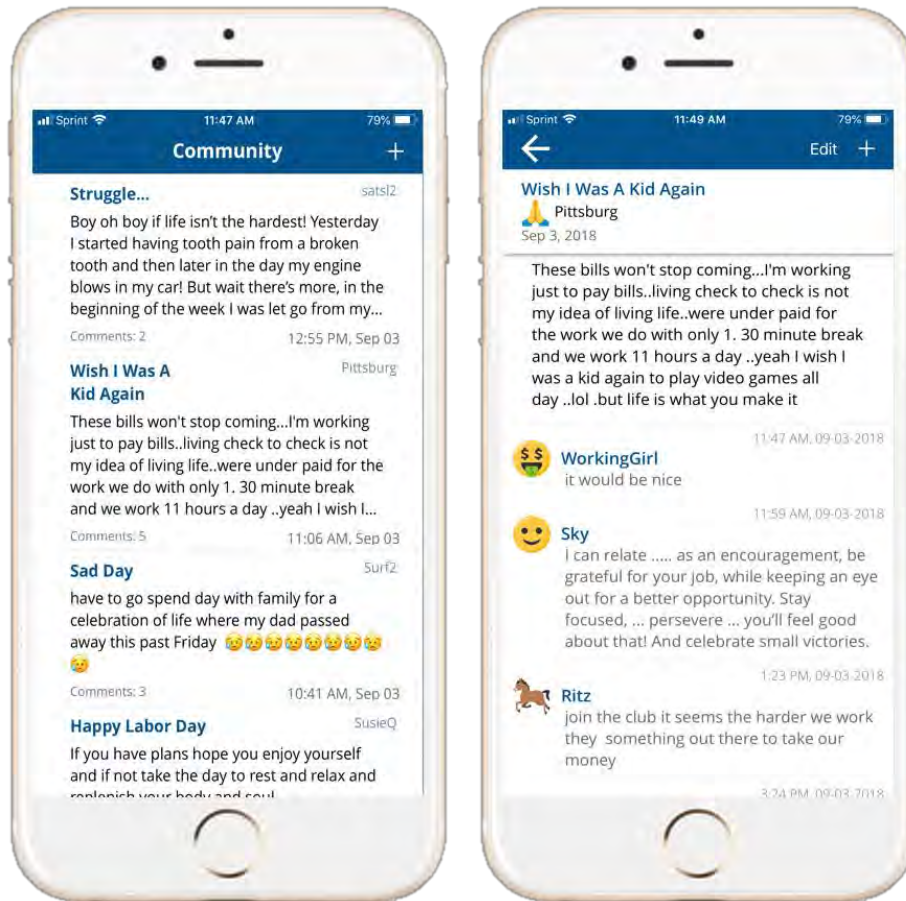
- Locate the 'More' menu
- Select 'Services'
- Select 'New +'
- On the Encounter tab: Enter the duration and date of the encounter
- On the Contact tab: Enter the Location, Method, and Type of encounter
- On the Services tab: Select the services provided and enter notes if needed
- Click 'Save' to add the service provided to the Member page



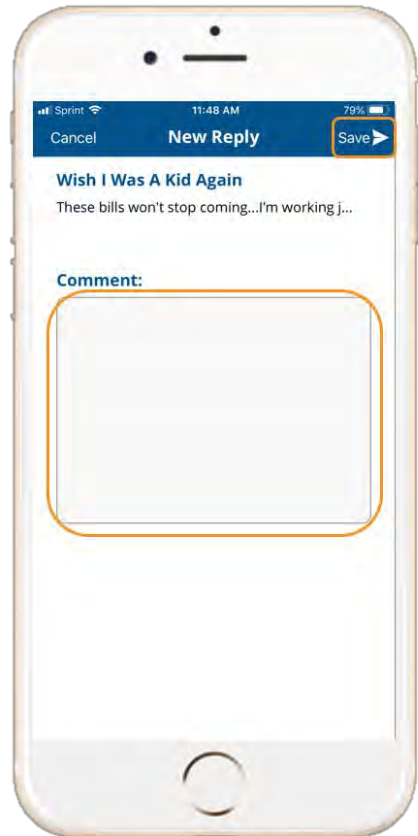
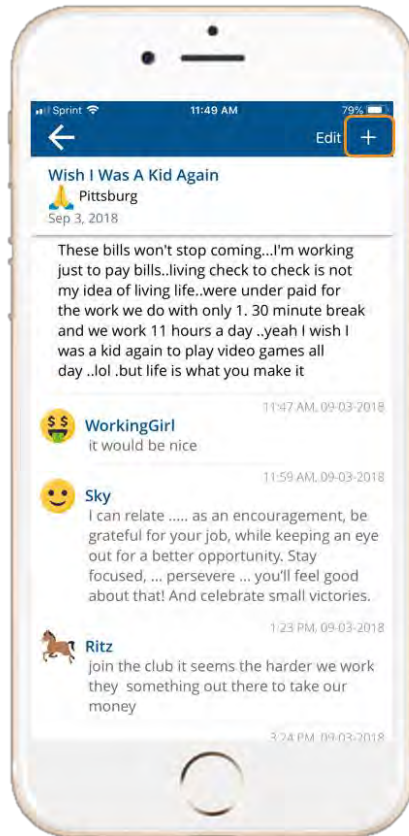
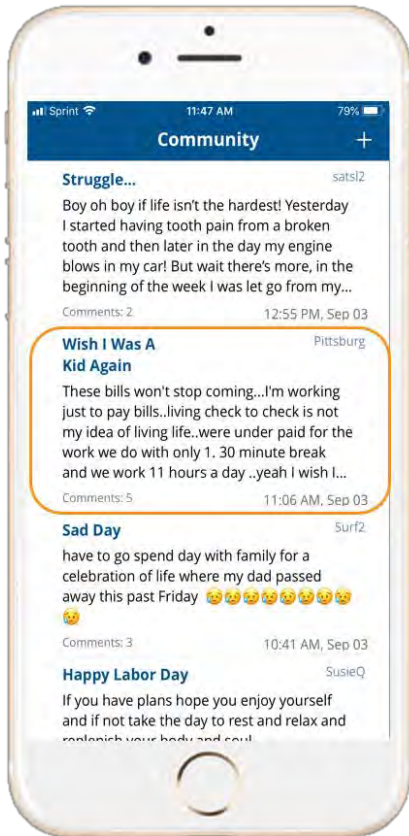
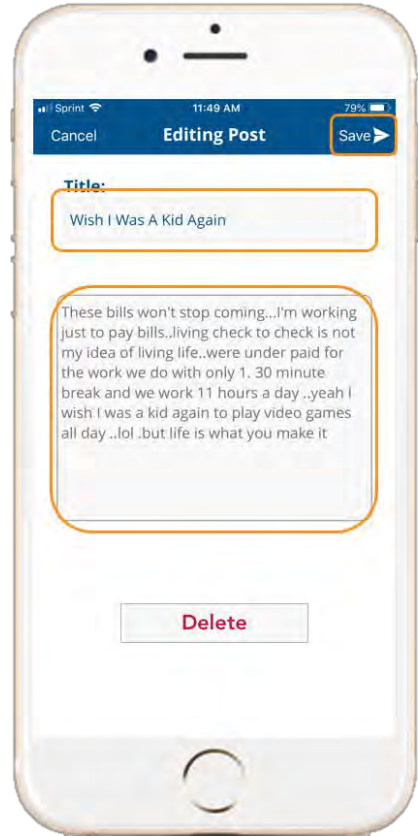
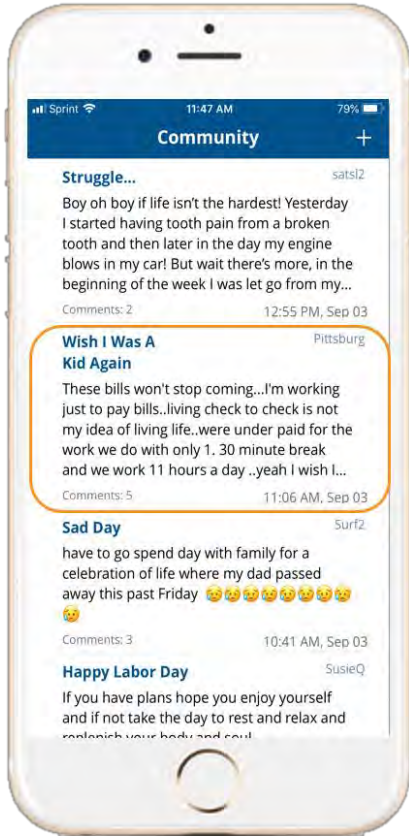


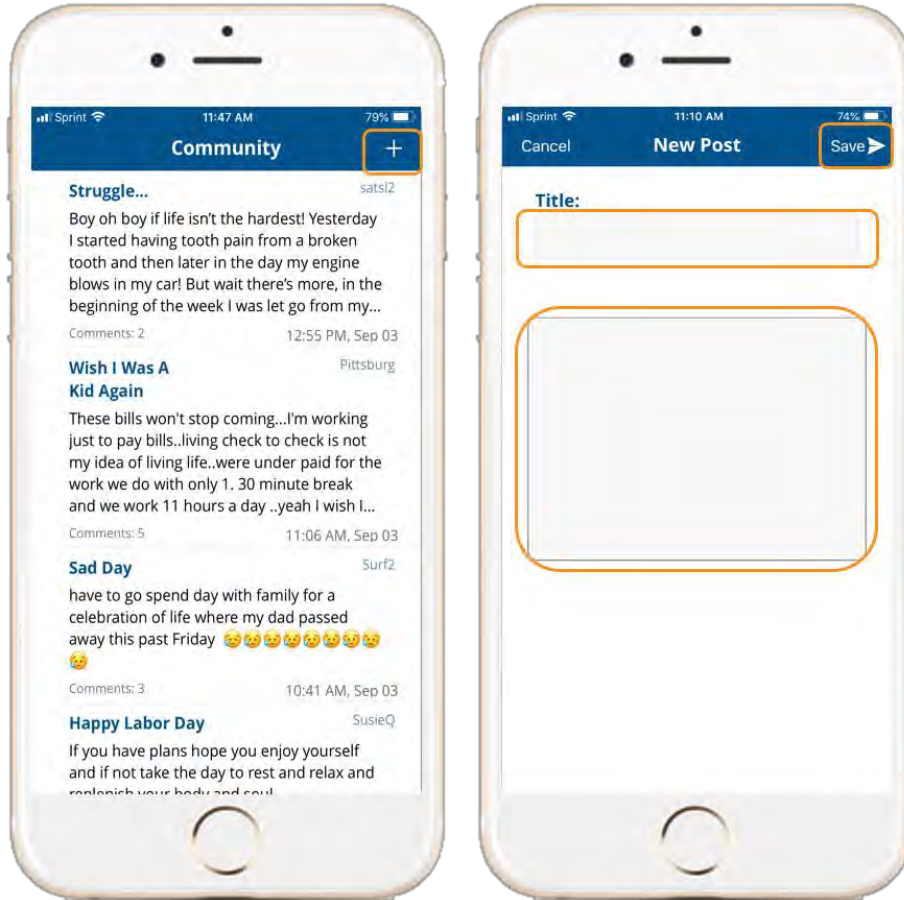
## Community Posts

Administrators are responsible for observing the **Community** board for any posts that indicate a Member is experiencing an emergency or is violating guidelines. Administrators can click on ‘Community Posts’ to view the full message board. Administrators can view comments by selecting an individual post. Administrators are able to edit, delete, and comment on existing posts. Administrators are able to create their own threads by clicking the ‘+’ button in the upper right corner of the screen. Please refer to section 8 for more information on how Administrators should engage with the Community and tips for observing posts.







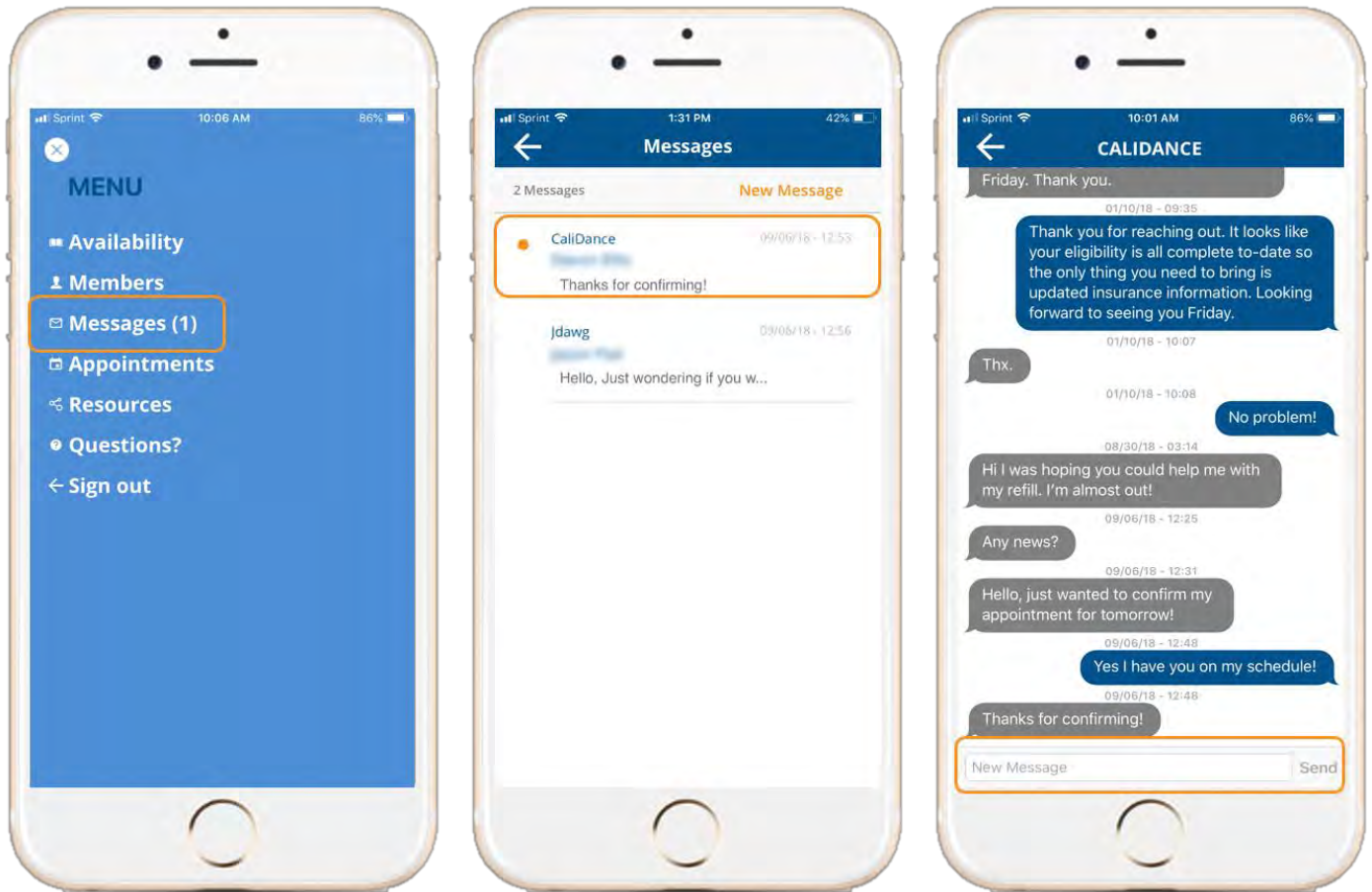




## Messages

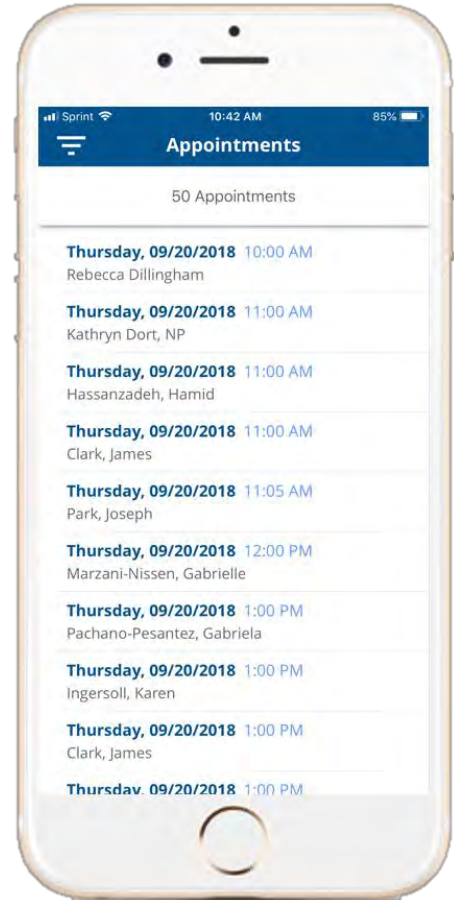
The **Messages** feature displays all of the Administrator’s conversation threads. Messages are ordered by the conversation with the most recent response. Prior to opening a message, the Username and legal name both are displayed. ‘You’ or the first letter of the Member Username display to indicate the most recent respondent. When the Administrator opens the message, only the Member Username displays. This was done to protect patient privacy when the full text of the message is displayed.

Administrators are also able to create a new message to a Member from this page as well. When creating a new message Administrators click ‘New Message’ in the top right corner and can select a Member using the provided list.



## Appointments

The **Appointments** page displays upcoming appointments for the whole PositiveLinks cohort. Appointments are displayed in list view and show Member Username, date, time, and provider. Click on an appointment to view Member legal name, location, and previous appointment if applicable. Administrators have access to this full list of appointments as well.



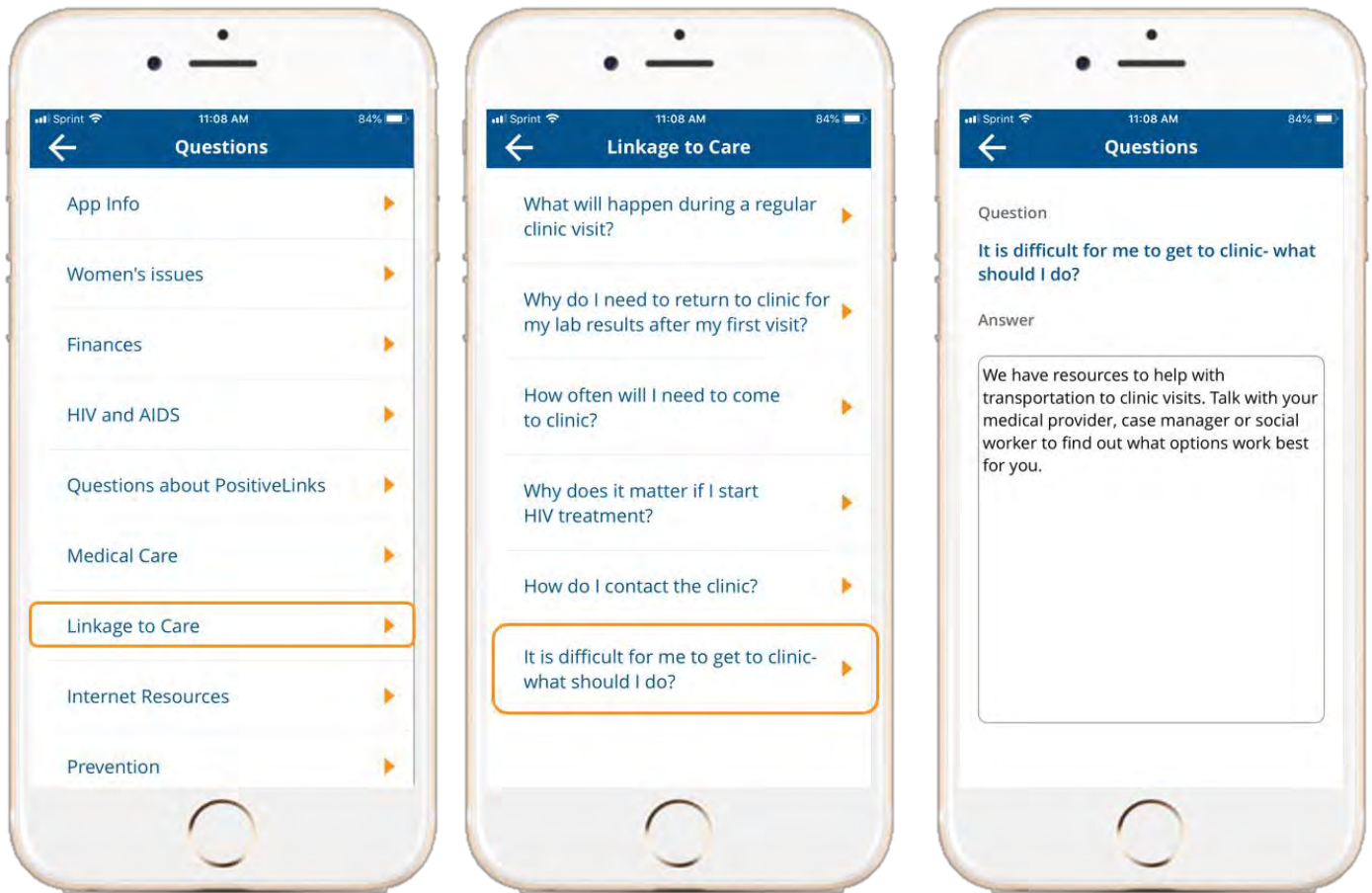
## Resources

Administrators have access to a **Resources** list including video, audio, and links provided to Members from this tab. Please refer to section 4 for more information on the available resources.



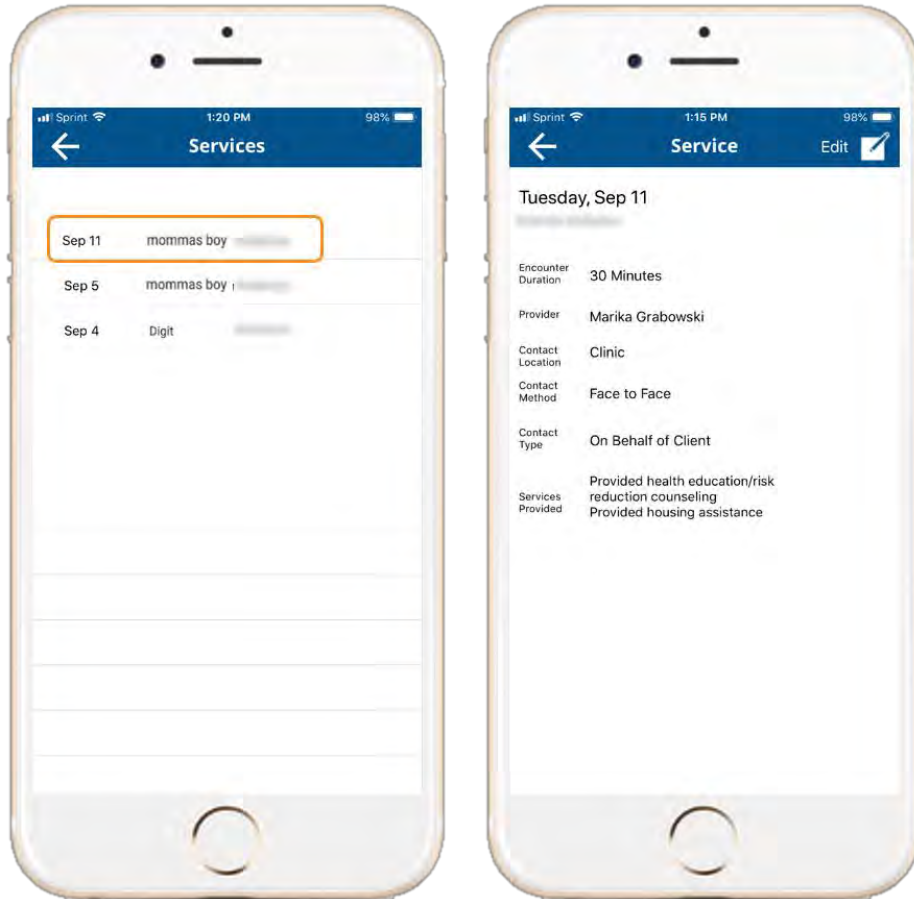
## Questions

Administrators have access to frequently asked **Questions** and answers provided to members in their app access. Please refer to section 4 for more information on available questions.



## Services

The **Services** page accessible from the main menu allows Administrators to view and edit a full list of services they have provided to all PL Members.



## 6b. Using PositiveLinks Administrator App – for Android users

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This section provides detailed information about using the PositiveLinks Administrator App. It helps prepare PLC for using the PositiveLinks mobile platform to engage with their Members. Please refer to Section 4, Using PositiveLinks Member App, for detailed instructions on downloading and accessing the PositiveLinks App.

*This section is organized as follows:*

### *PositiveLinks Provider App Features*

*Menu*

*Availability*

*Members*

*Summary Page*

*Dashboard*

*Chat*

*Documents*

*Appointments*

*Lab Results*

*Services*

*Community Posts*

*Messages*

*Appointments*

*Resources*

*Questions*

*Services*



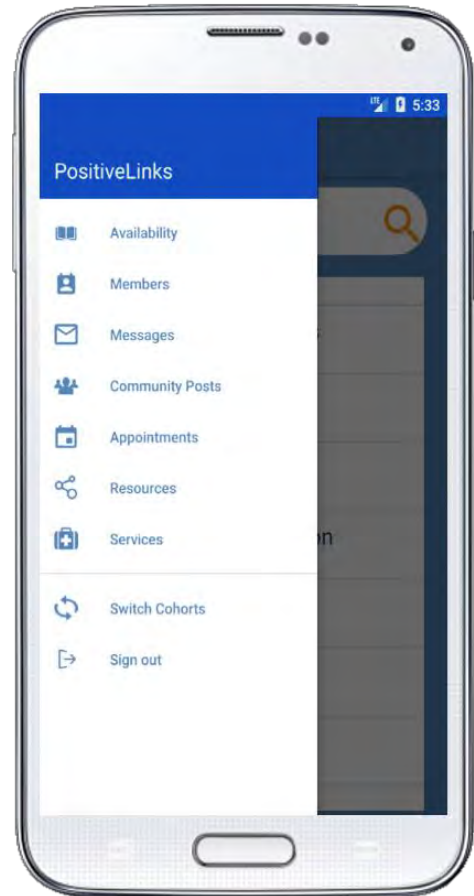
## PositiveLinks Admin App Features

### Menu

The PositiveLinks **Menu** is accessible from the top left corner of the app and is indicated by three small lines. All app features are listed here for Administrators to access. The Menu is available from all pages of the app.

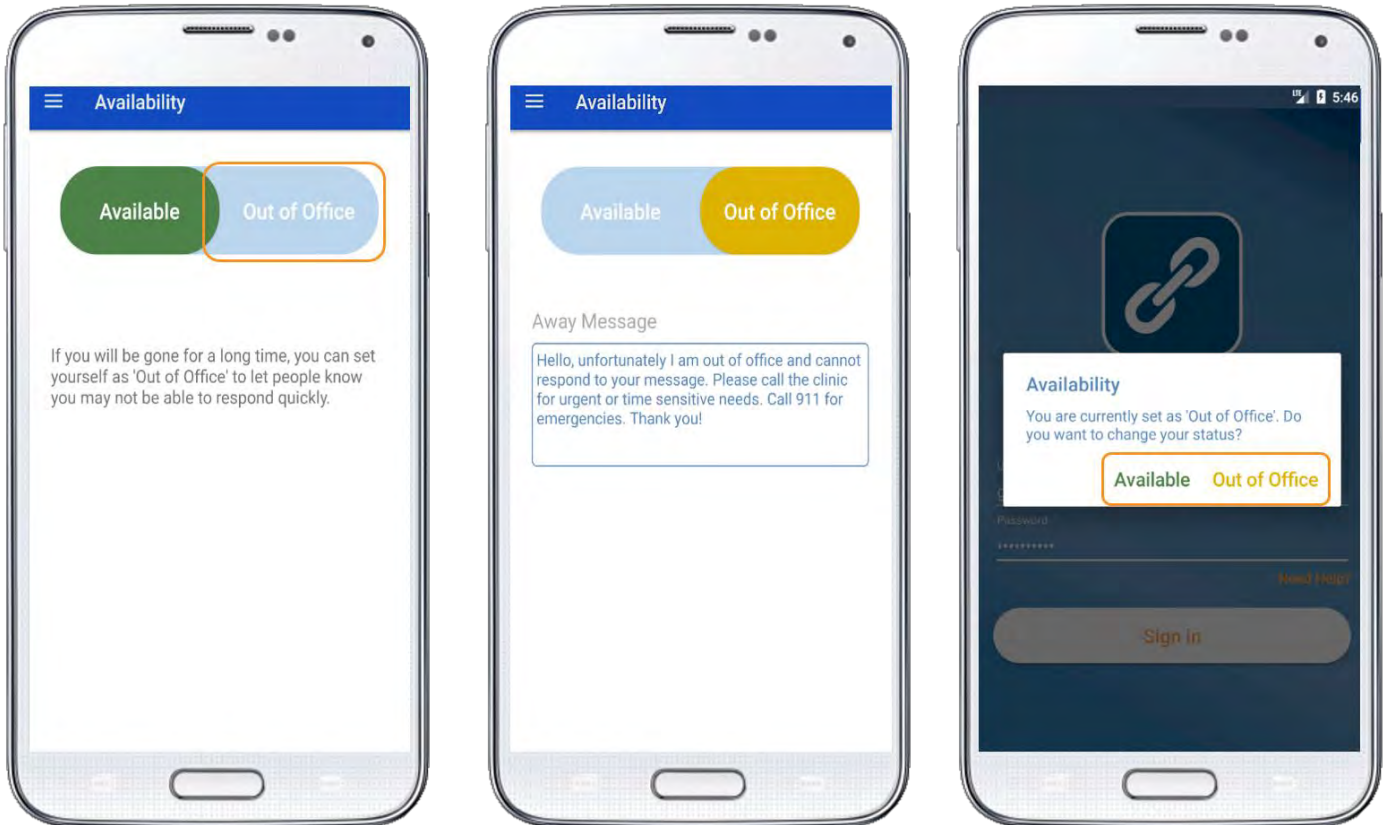
Menu options include:

- Availability
- Members
- Community Posts
- Messages
- Appointments
- Resources
- Questions?
- Services
- Logout



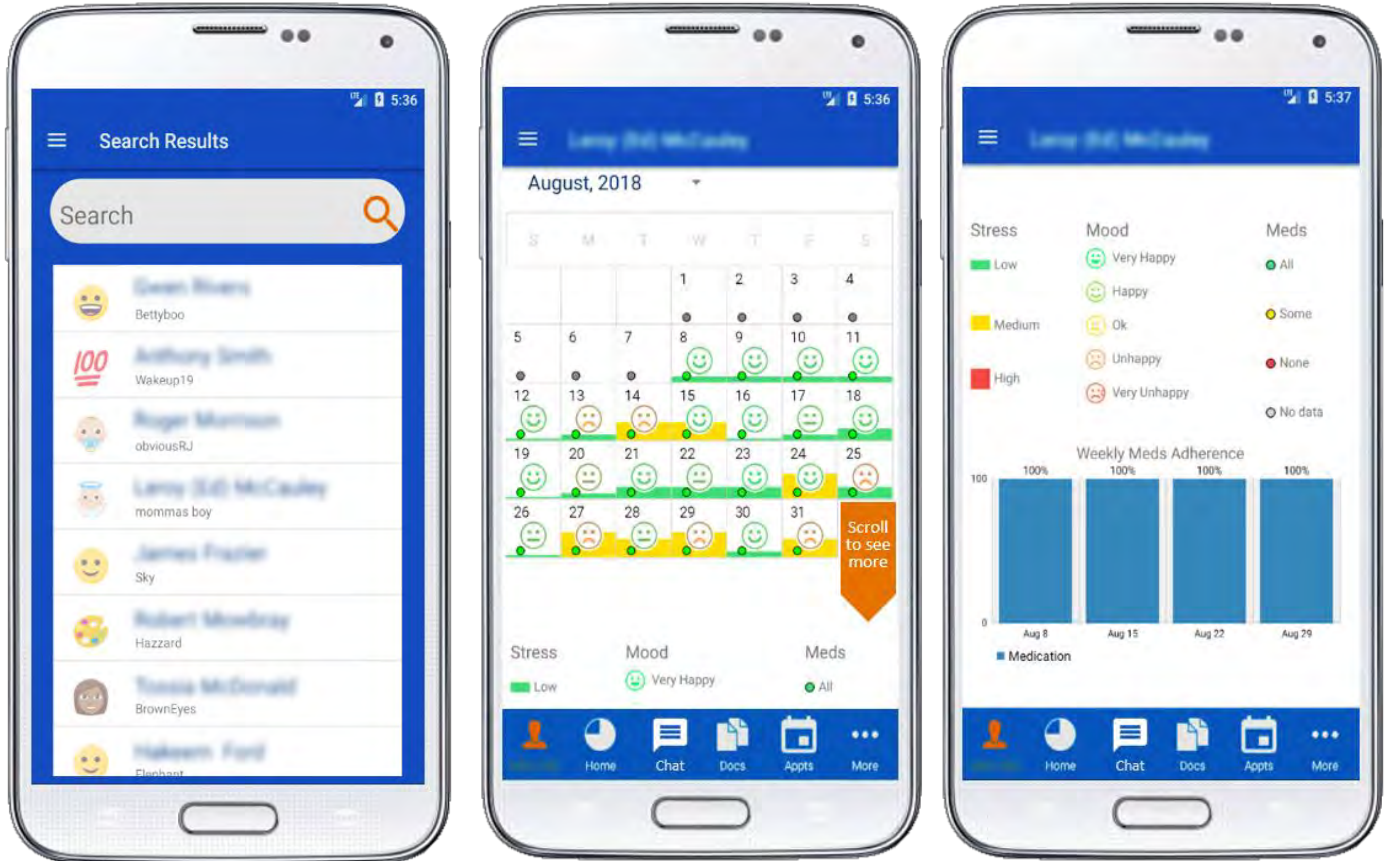
## Availability

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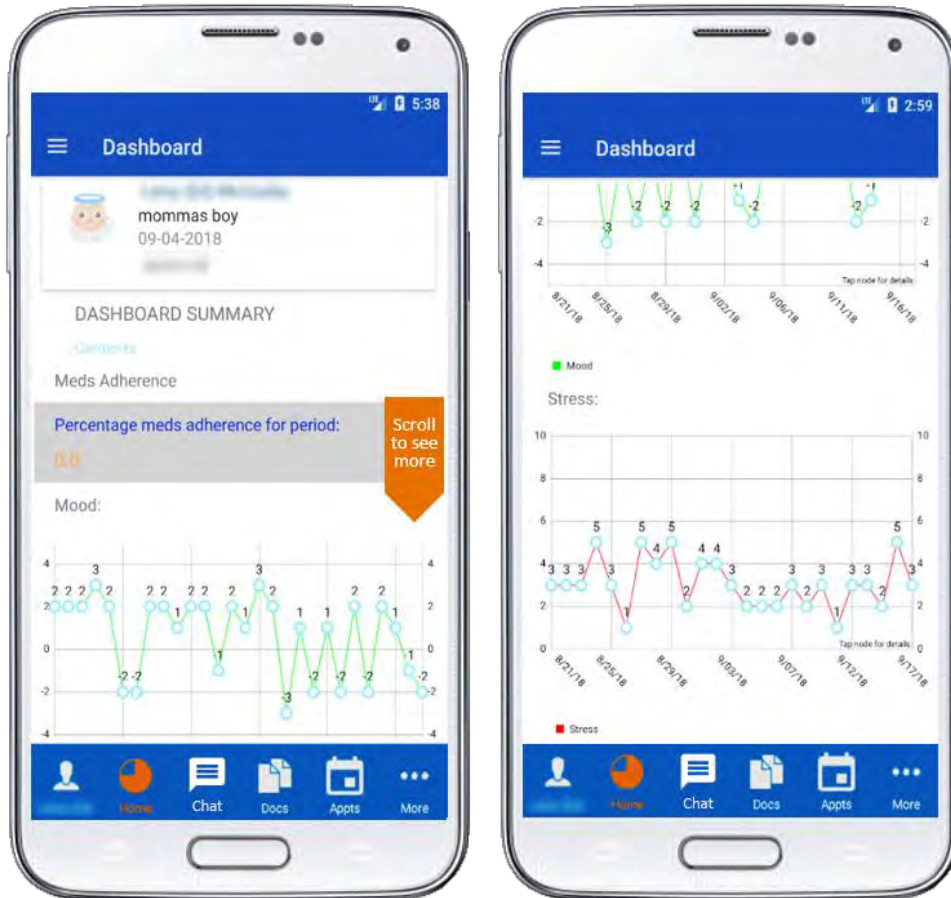
Calendar Display	Description	Mood Score
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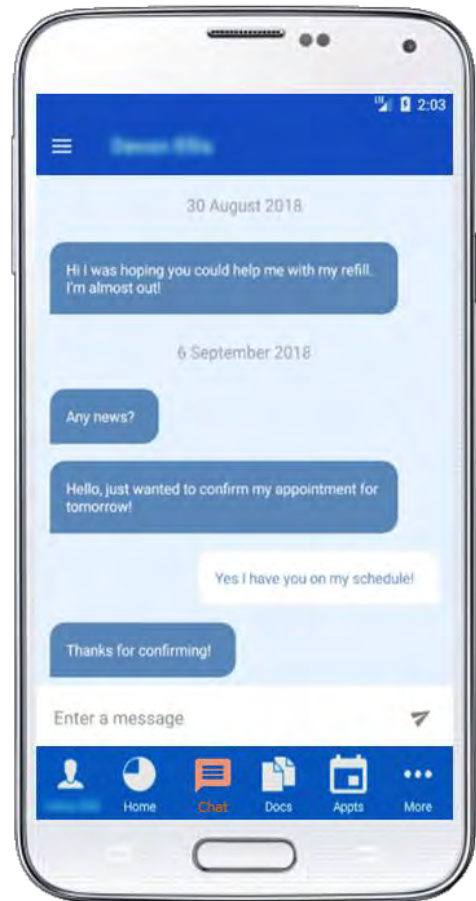
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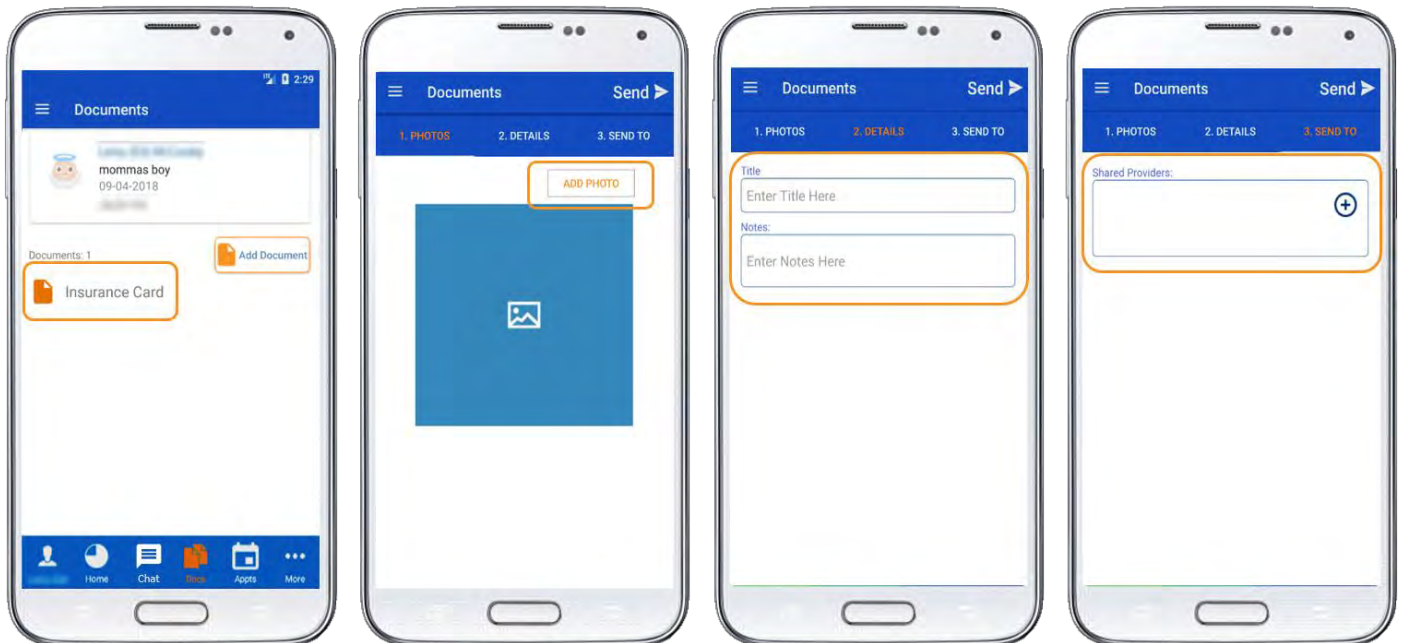
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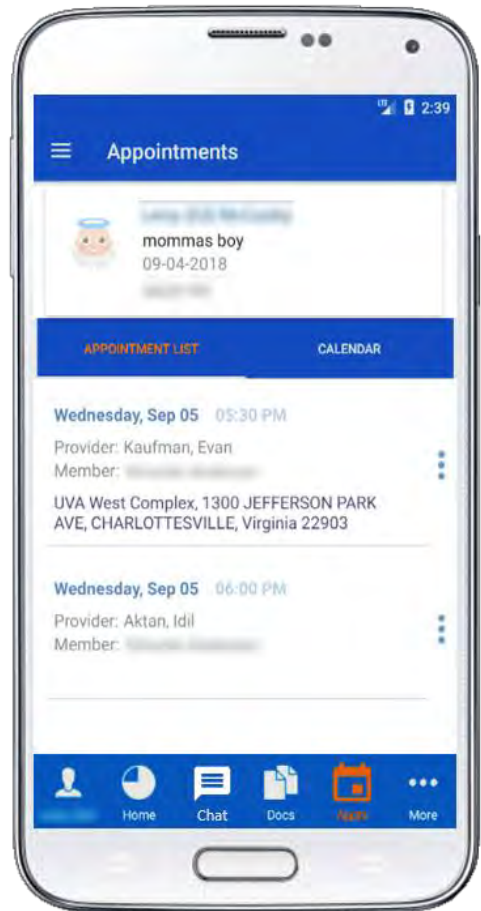
- Select 'Add Document'
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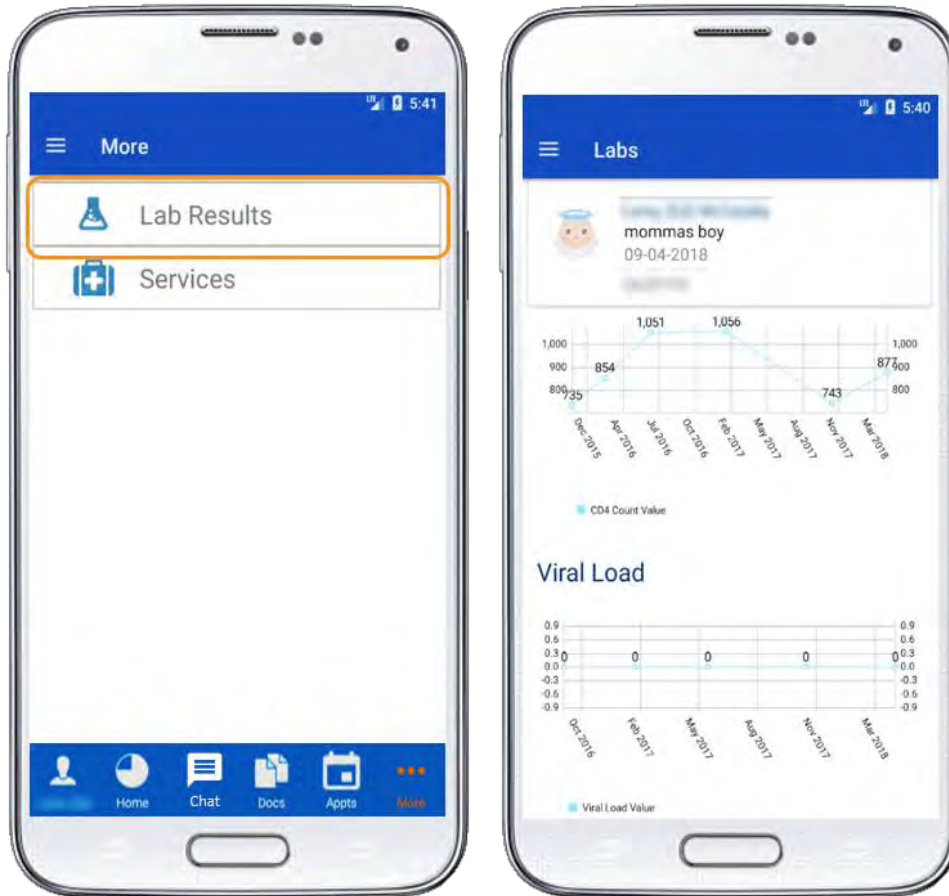


### Lab Results

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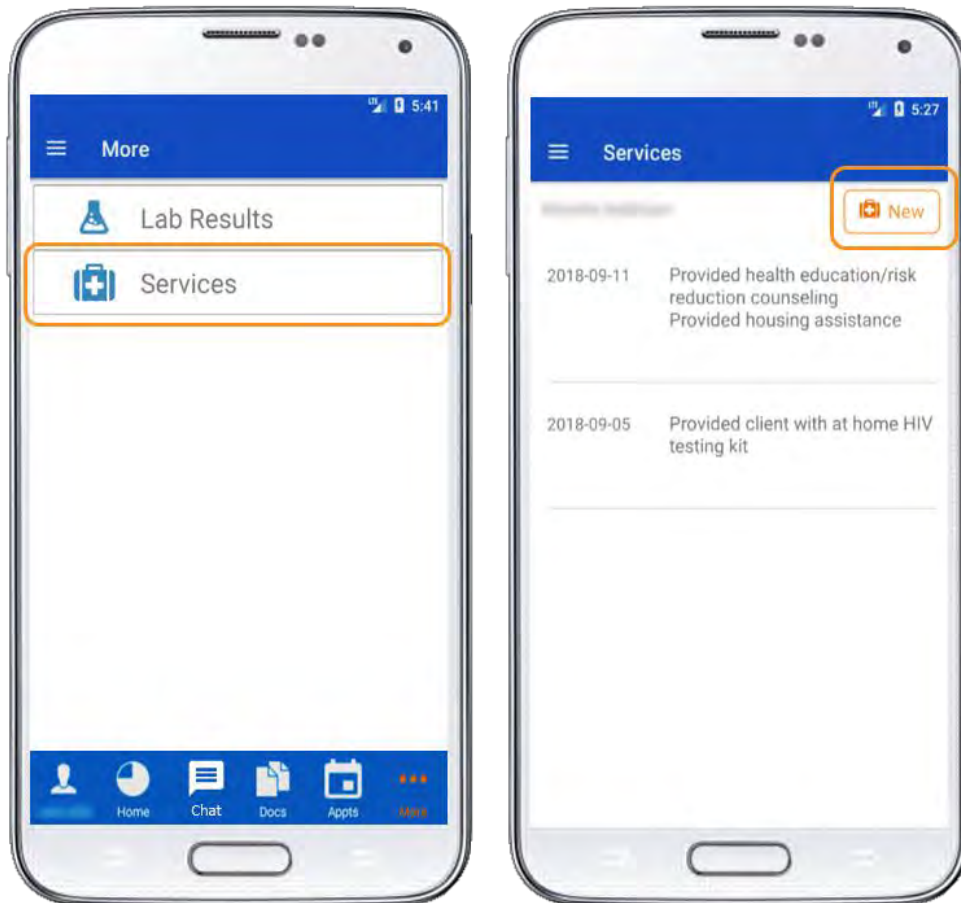


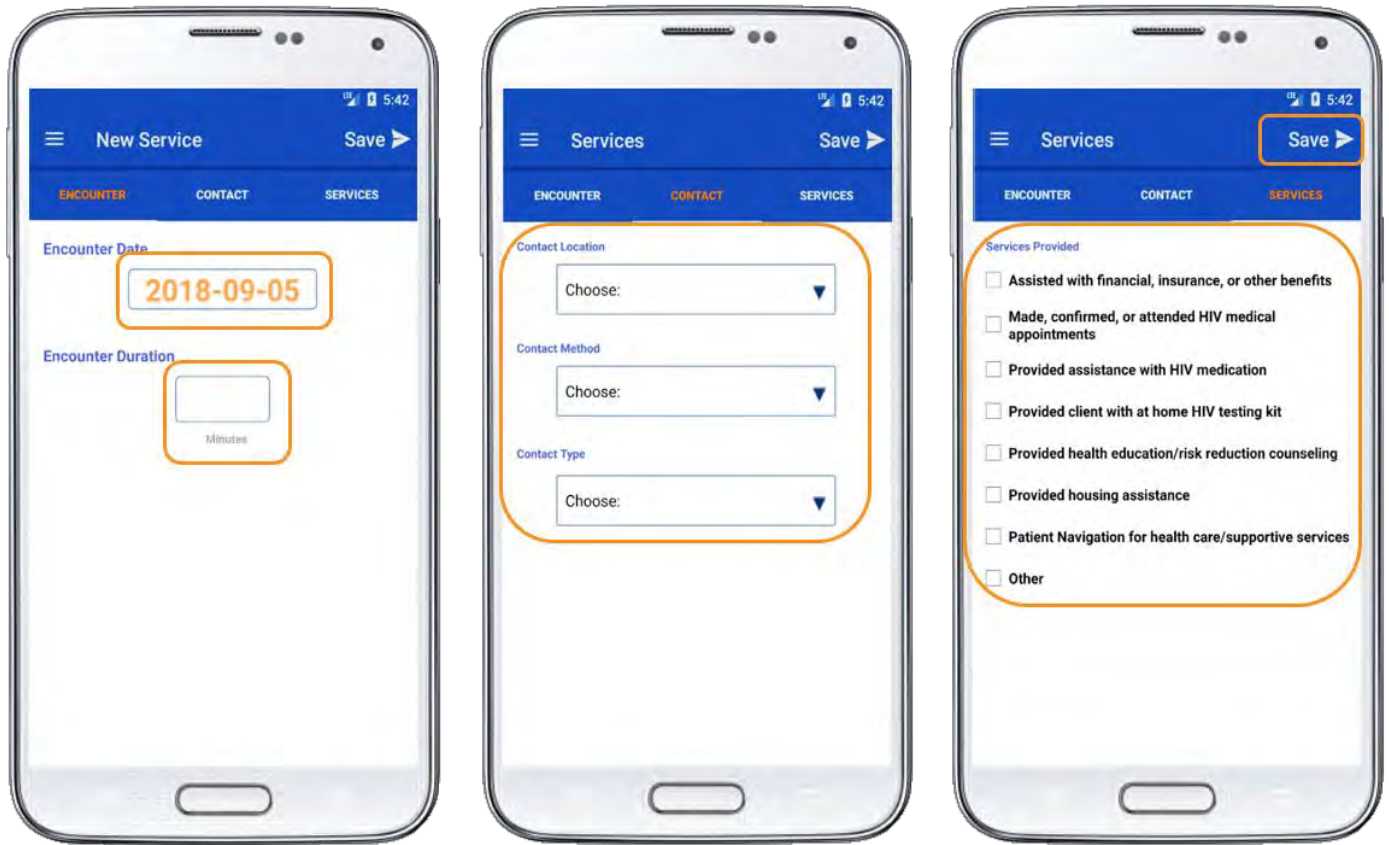
## Services

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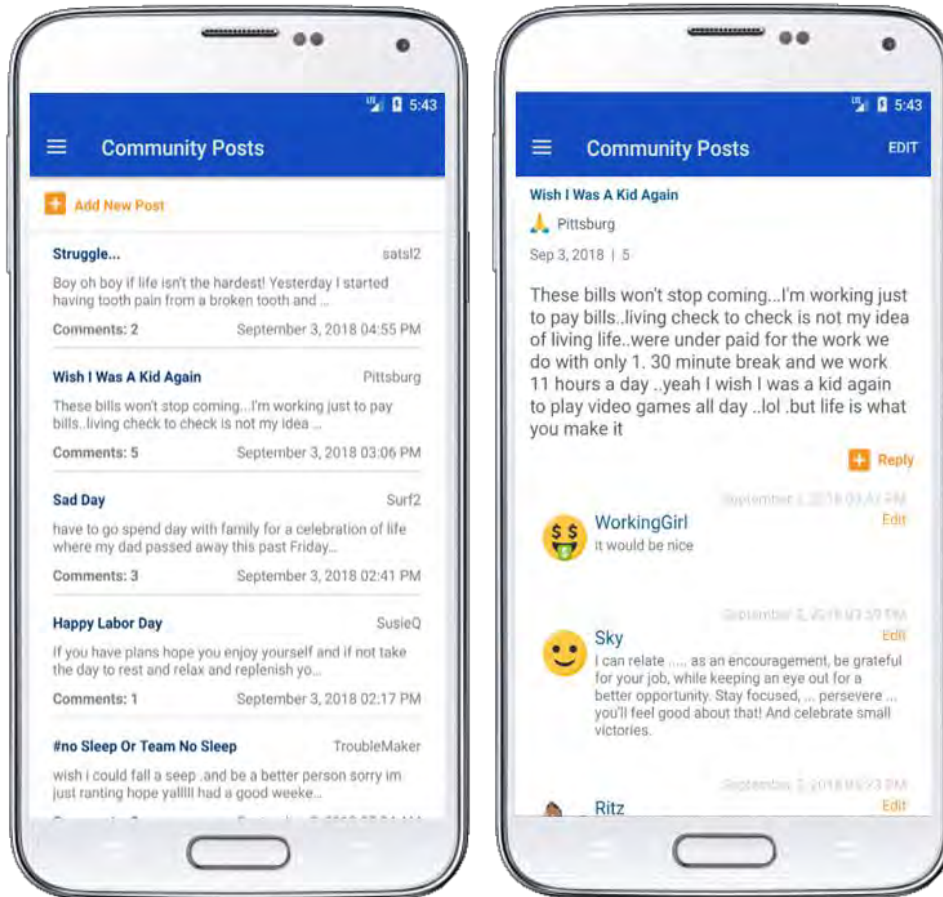
- Locate the 'More' menu
- Select 'Services'
- Select 'New +'
- On the Encounter tab: Enter the duration and date of the encounter
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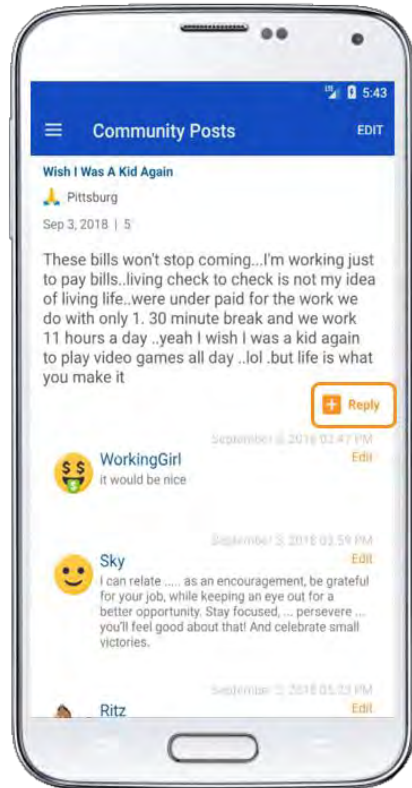
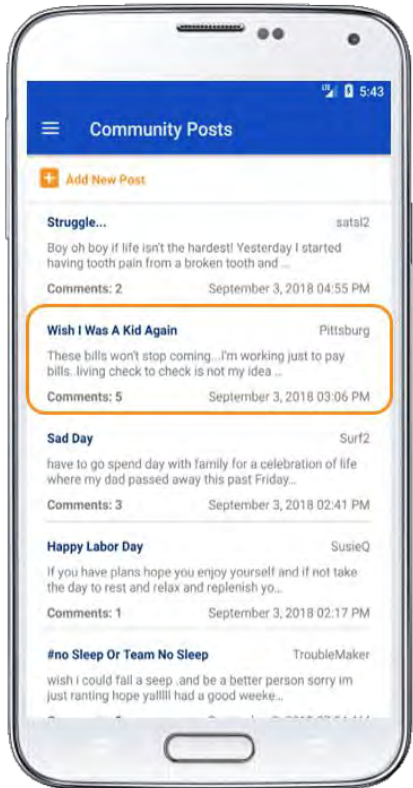
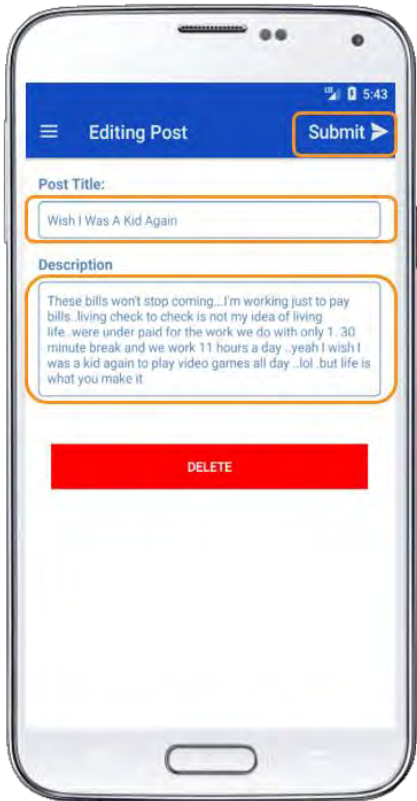
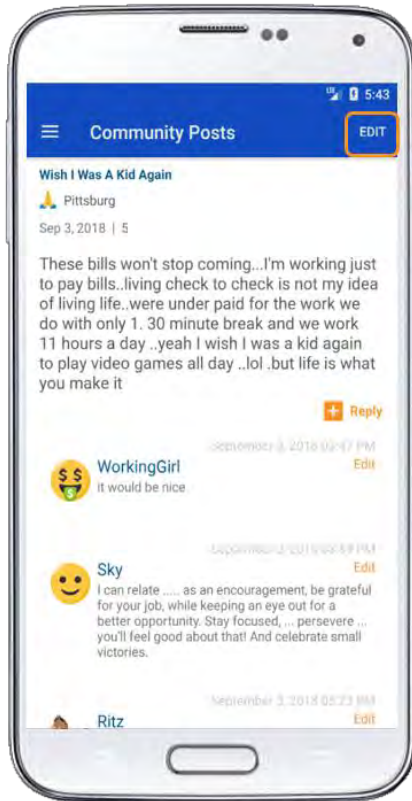
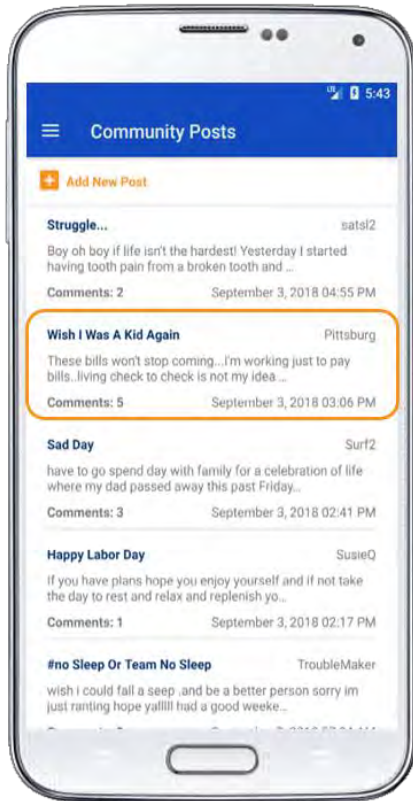


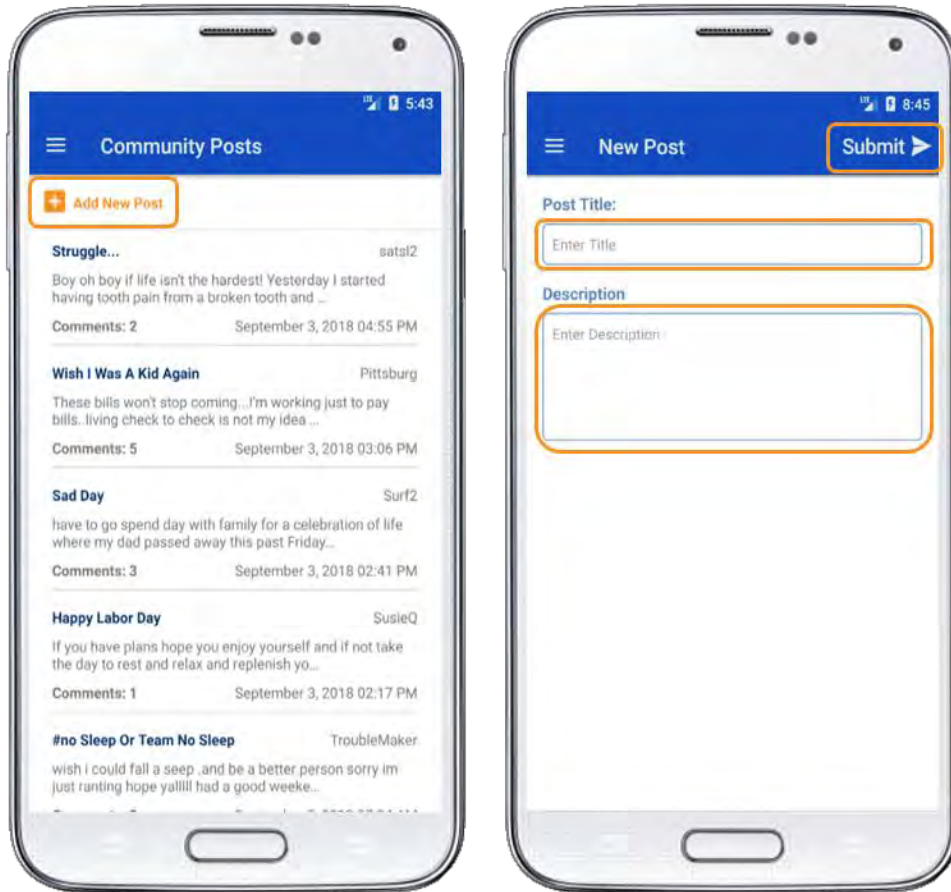
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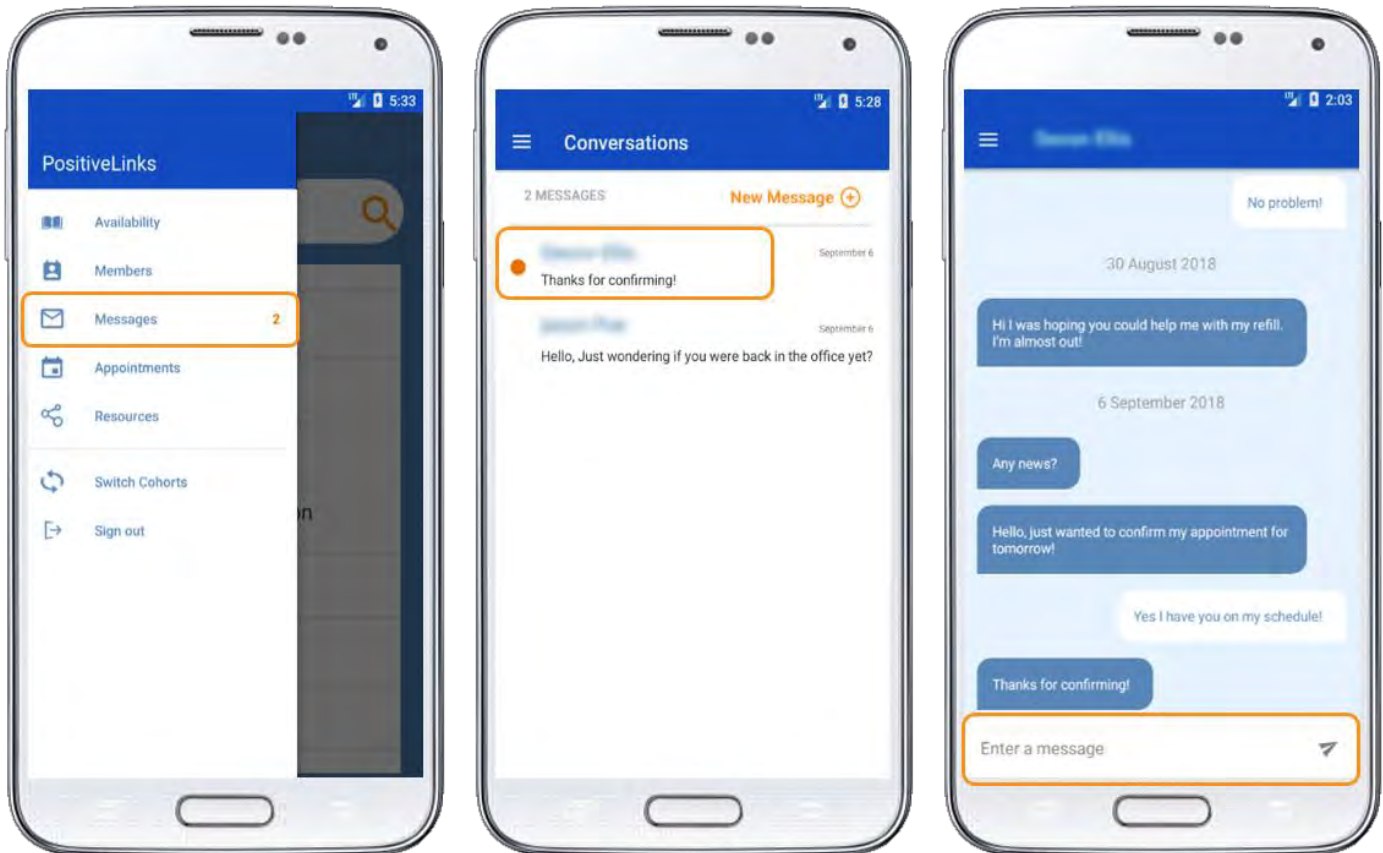




## Messages

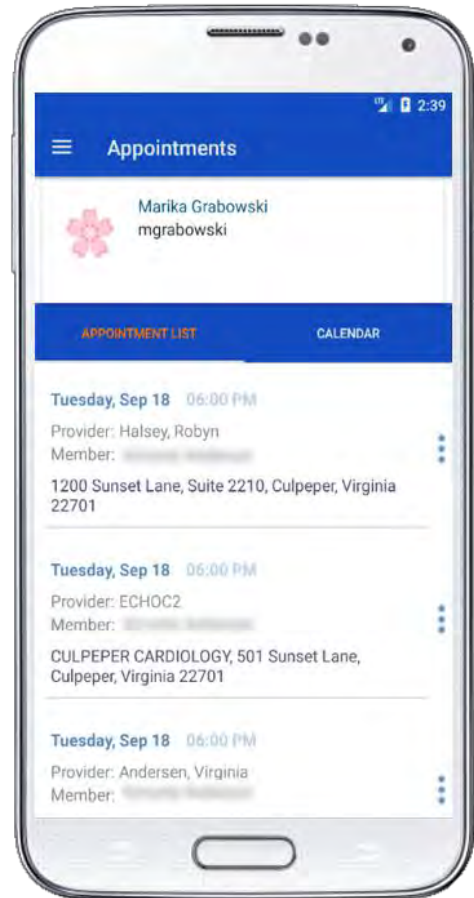
The **Messages** feature displays all of the Administrator's conversation threads. Messages are ordered by the conversation with the most recent response. Prior to opening a message, the Username and legal name both are displayed. 'You' or the first letter of the Member Username display to indicate the most recent respondent. When the Administrator opens the message, only the Member Username displays. This was done to protect patient privacy when the full text of the message is displayed.

Administrators are also able to create a new message to a Member from this page as well. When creating a new message Administrators click 'New Message' in the top right corner and can select a Member using the provided list.



## Appointments

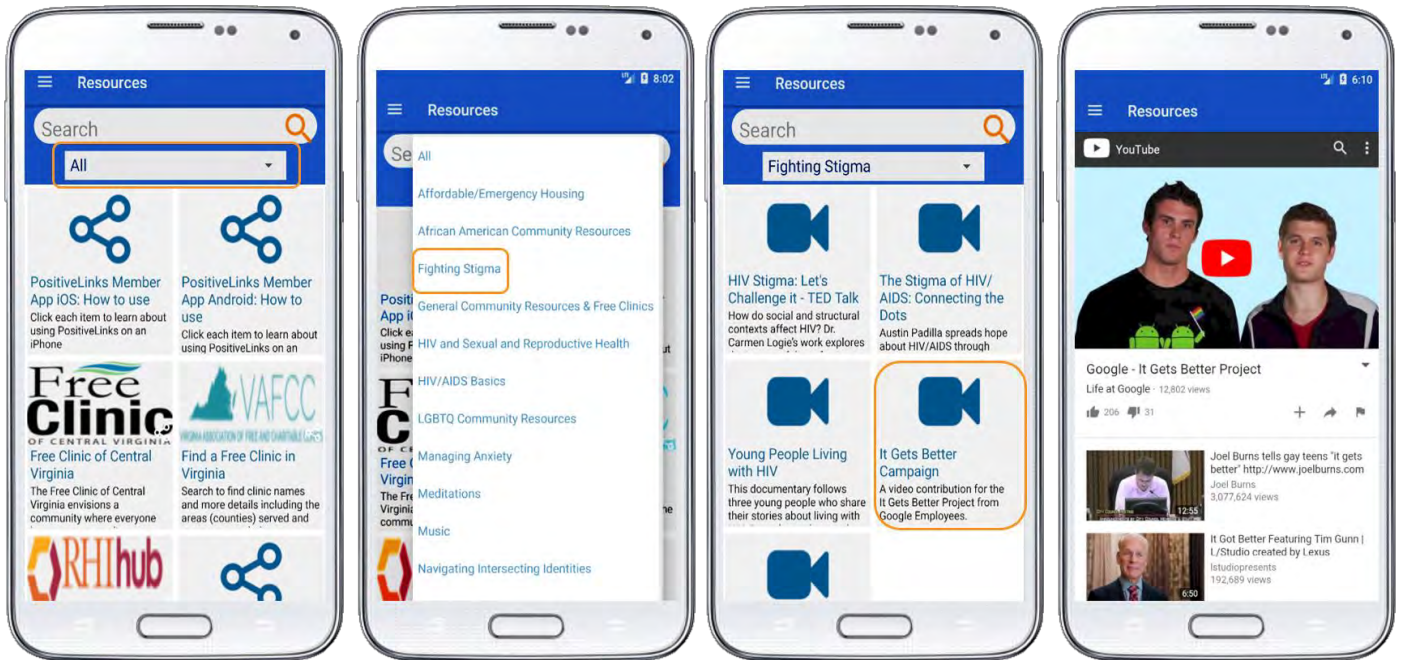
The **Appointments** page displays upcoming appointments for the whole PositiveLinks cohort. Appointments are displayed in list view and show Member Username, date, time, and provider. Click on an appointment to view Member legal name, location, and previous appointment if applicable. Administrators have access to this full list of appointments as well.





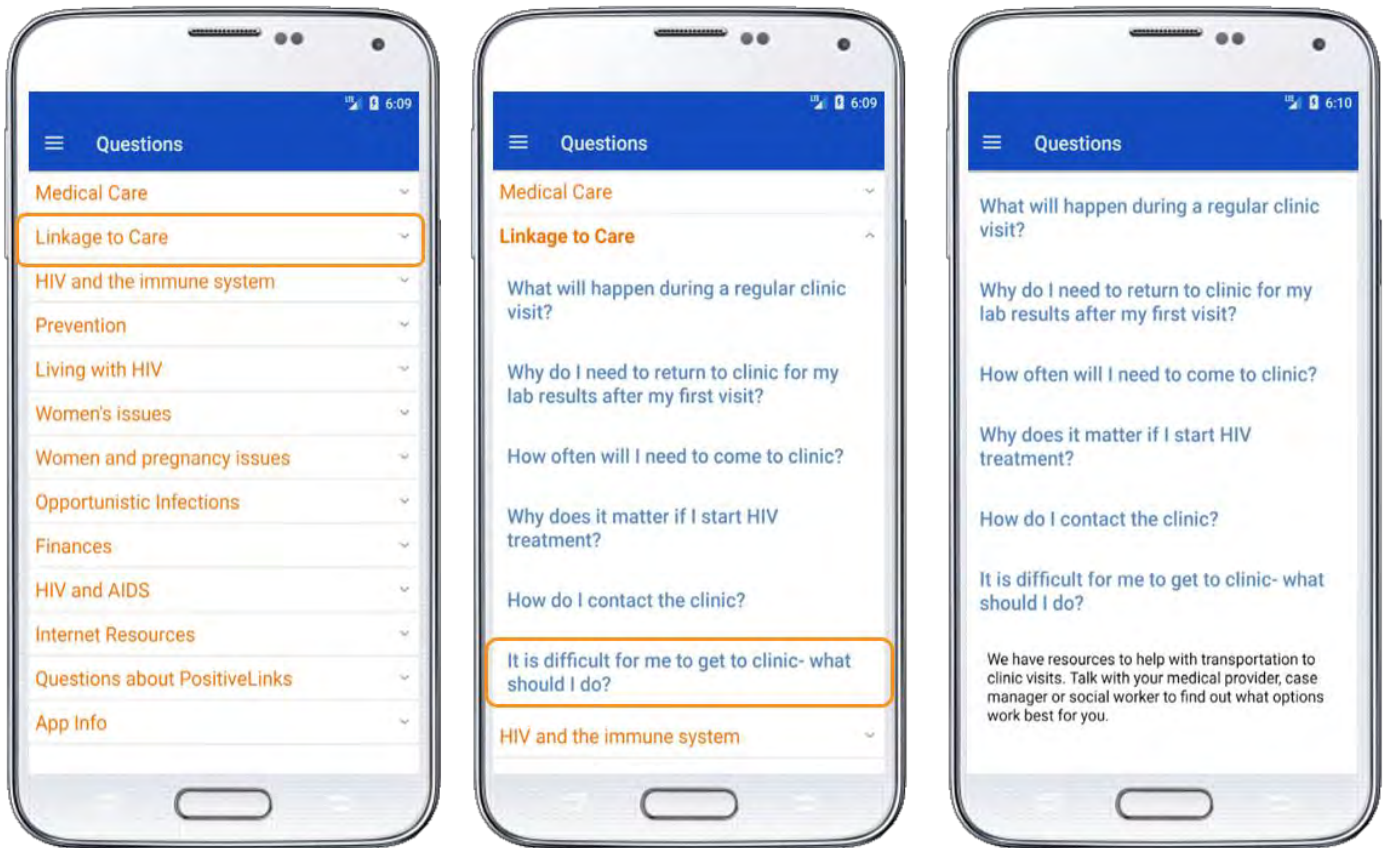
## Resources

Administrators have access to a **Resources** list including video, audio, and links provided to Members from this tab. Please refer to section 4 for more information on the available resources.



## Questions

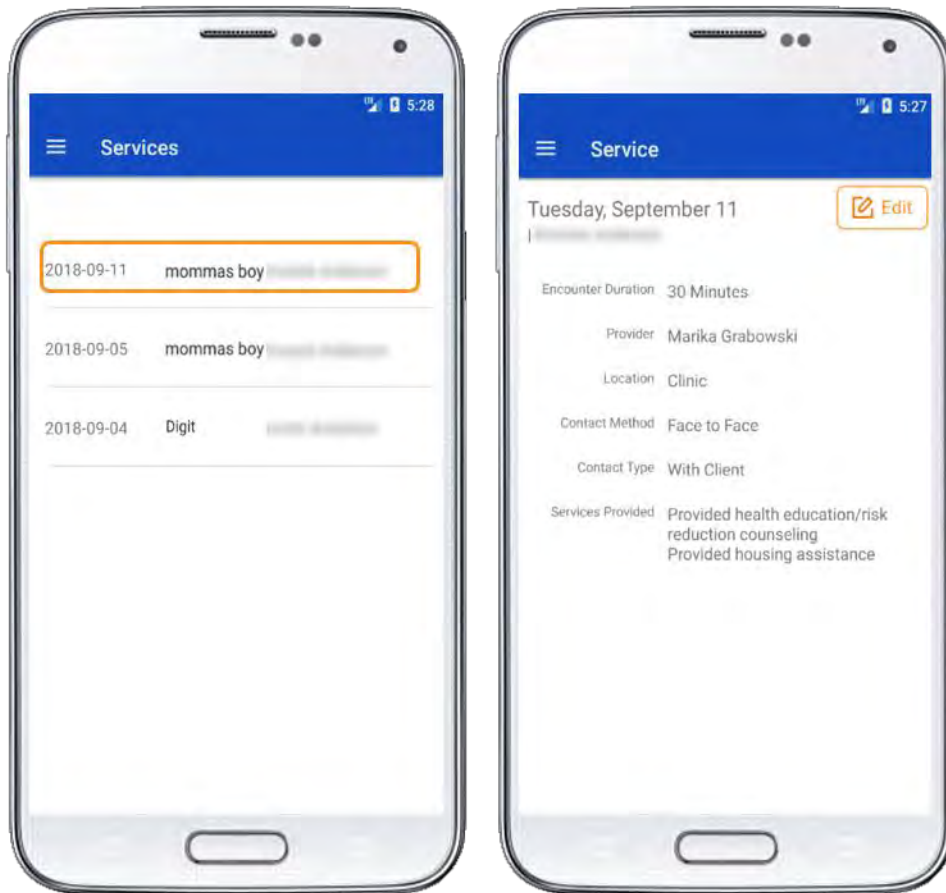
Administrators have access to frequently asked **Questions** and answers provided to members in their app access. Please refer to section 4 for more information on available questions.





## Services

The **Services** page accessible from the main menu allows Administrators to view and edit a full list of services they have provided to all PL Members.



## 7a. Using PositiveLinks Provider Portal

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This section provides detailed descriptions of how to use PositiveLinks Portal to administer the PositiveLinks Apps. The PositiveLinks Portal tools described in this section support the Site Care Team's monitoring, administering, accessing and reporting on data from the PositiveLinks Member and Provider Apps. This section provides guidance to Site PLC, Site Administrators, and Site Care Team for Portal functionality and intended use.

*This section is organized as follows:*

*Decision and Task Checklist*

*Portal Login*

*Portal Roles*

*PositiveLinks Provider Portal Features*

*Portal Summary Page*

*Provider Account*

*Availability*

*Appointments*

*Contacts*

*Members*

*Member Dashboard*

*Check-Ins*

*Documents*

*Upload New Document*

*Labs*

*Services (Restricted Access)*

*New Service*

*Messages*

*New Message*

*Message Notification*

*Questions*

*Resources*

*Services (Restricted Access)*

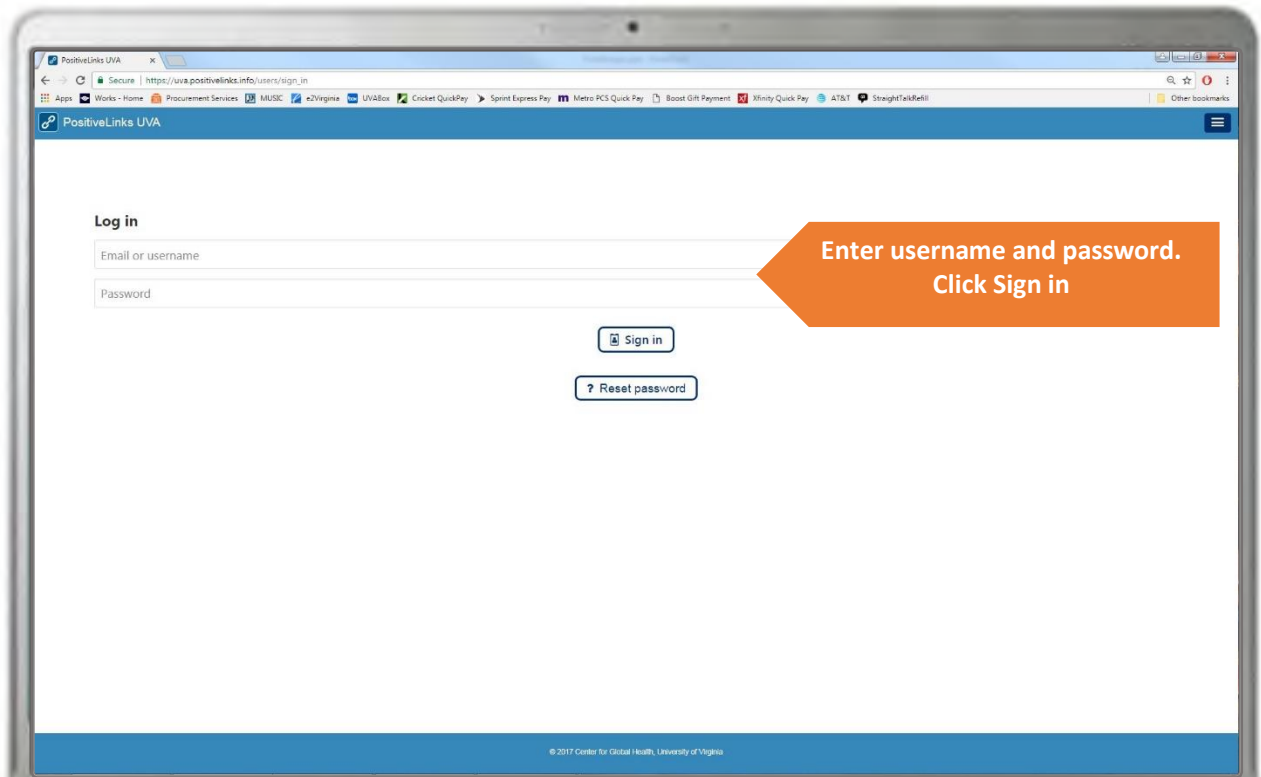
*Edit Service*

**Decision and Task Checklist for Using PositiveLinks Provider Portal**

✓	<b>Decisions and Tasks</b>
	Consider your Site Care Team's role assignments
	Finalize Site's Messaging protocol

## Portal Login

Providers and Administrators login to PositiveLinks Portal using this link <https://uva.positivelinks.info> (site specific URL).




## Portal Roles

To sign in to PositiveLinks Portal use this link <https://uva.positivelinks.info> (site specific URL)

There are two different types of roles for logging into the PositiveLinks Portal; Provider and Administrator. Each Site will determine the appropriate role for their Site Care Team members.

- Provider:* The Provider role in PositiveLinks includes anyone who provides services to Members. This includes Medical Case Managers, Community Health Workers, Nurses, Front Desk Staff, and Physicians providing HIV medical care. Those with Provider roles login to PositiveLinks Portal to see Member Dashboards, create and view Messages, and if desired, to review Member Resources. Provider roles do *not* see Community posts; are *not* able to create, edit, or deactivate Member accounts; do *not* have the ability to create or edit Member resources; do not have access to the report menu to run reports.
- Administrator:* The Administrator role in PositiveLinks includes anyone who provides administrative services to PositiveLinks Members and Providers. This includes the Site PositiveLinks Coordinator, those who will be creating Member and Provider accounts and performing Member enrollment and monitoring, and staff who will be observing the Community board. Administrators have access to all areas within PositiveLinks.

 Portal Roles		
	<i>Provider</i>	<i>Administrator</i>
View Member Dashboard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Send/View Messages	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Create/View Appointments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
View Member Resources	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Create/Edit/Deactivate Members		<input checked="" type="checkbox"/>
Create/View/Edit Appointments		<input checked="" type="checkbox"/>
Create/Add Member Resources		<input checked="" type="checkbox"/>
View the Community and Remove Posts		<input checked="" type="checkbox"/>
Run PositiveLinks Reports		<input checked="" type="checkbox"/>

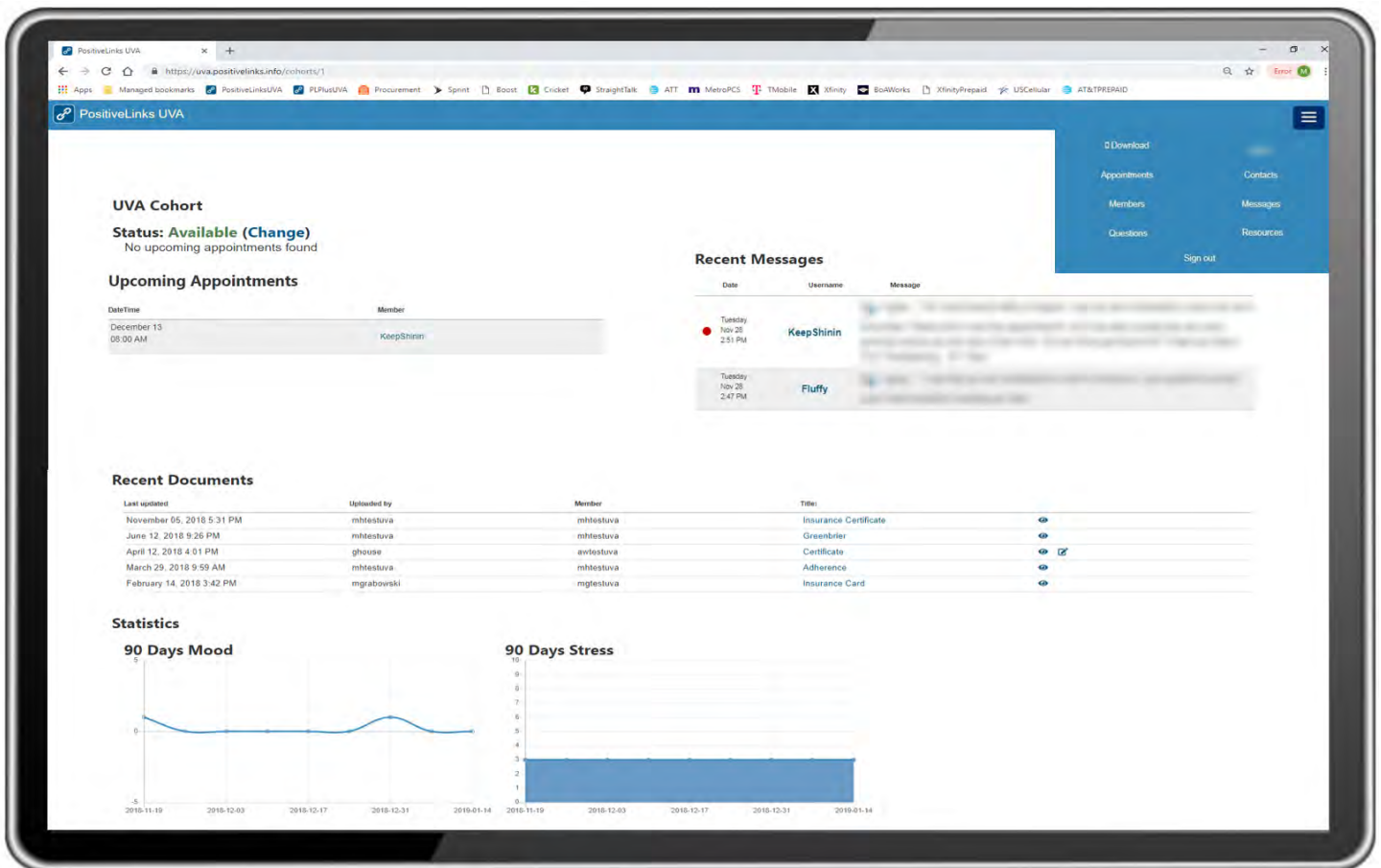
## PositiveLinks Provider Portal Features

### PositiveLinks Portal Summary Screen

The Summary screen is the default screen when Site Providers log in to the PositiveLinks Portal.

For Site Providers it displays the following information:

- Availability
- Upcoming Appointments: Provider specific appointment lists
- Recent Messages
- Reports (Restricted Access): Services Activity
- Recent Documents
- Cohort Statistics: Average Stress, Average Mood
- Menu with access to Appointments, Contacts, Members, Messages, Questions, and Resources

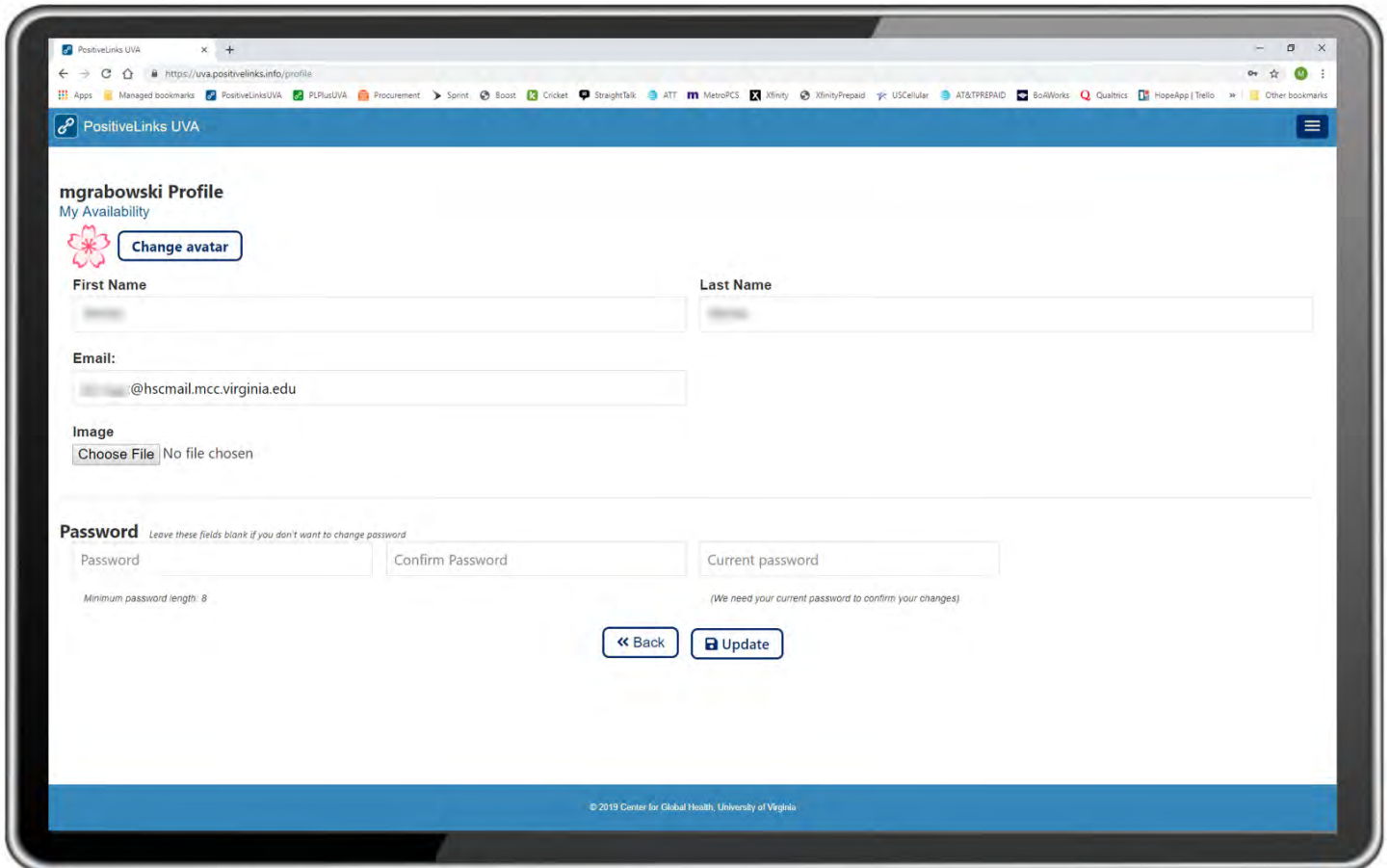




## Provider Account

### Menu, Username

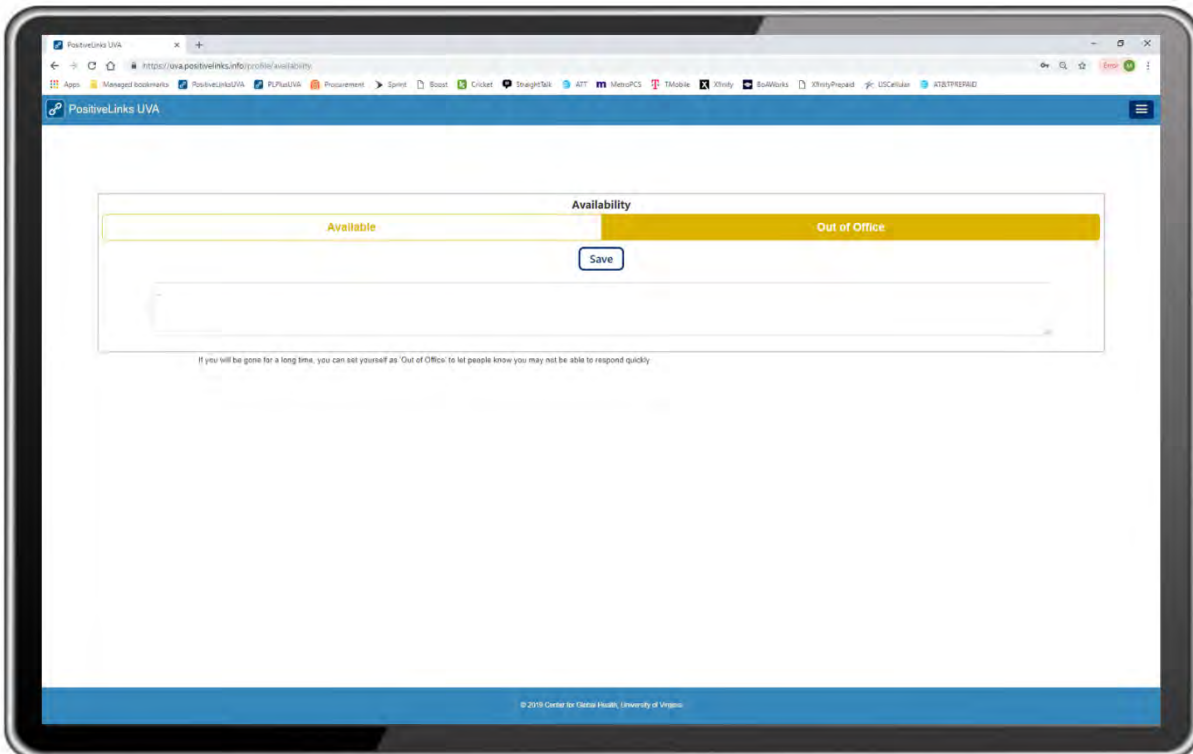
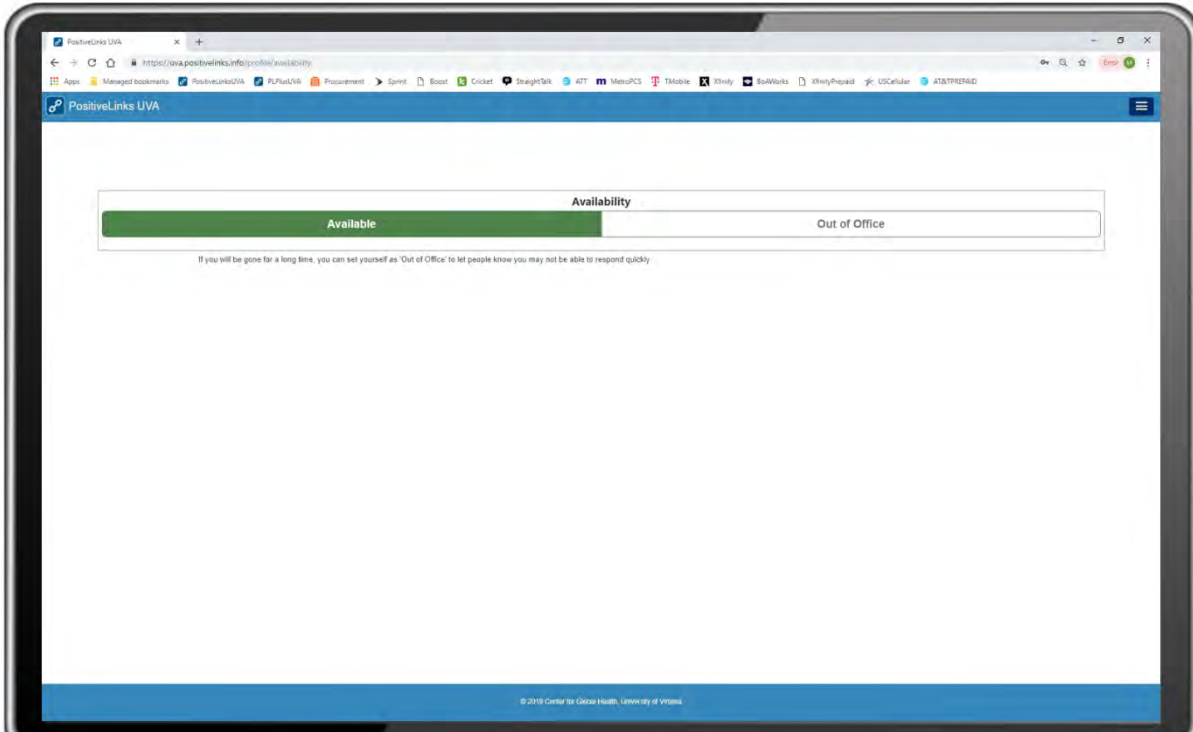
The **Accounts** section of the portal allows providers to update their password, avatar, add an image for the contact list, and change their availability status.



### Availability

Menu, Username, **Availability**

Providers can set their availability status to ‘Out of Office’ which generates an automated message notifying the Member that they may expected a delayed response. Providers select ‘Out of Office’ and then can enter a personalized message about their availability and expected return.

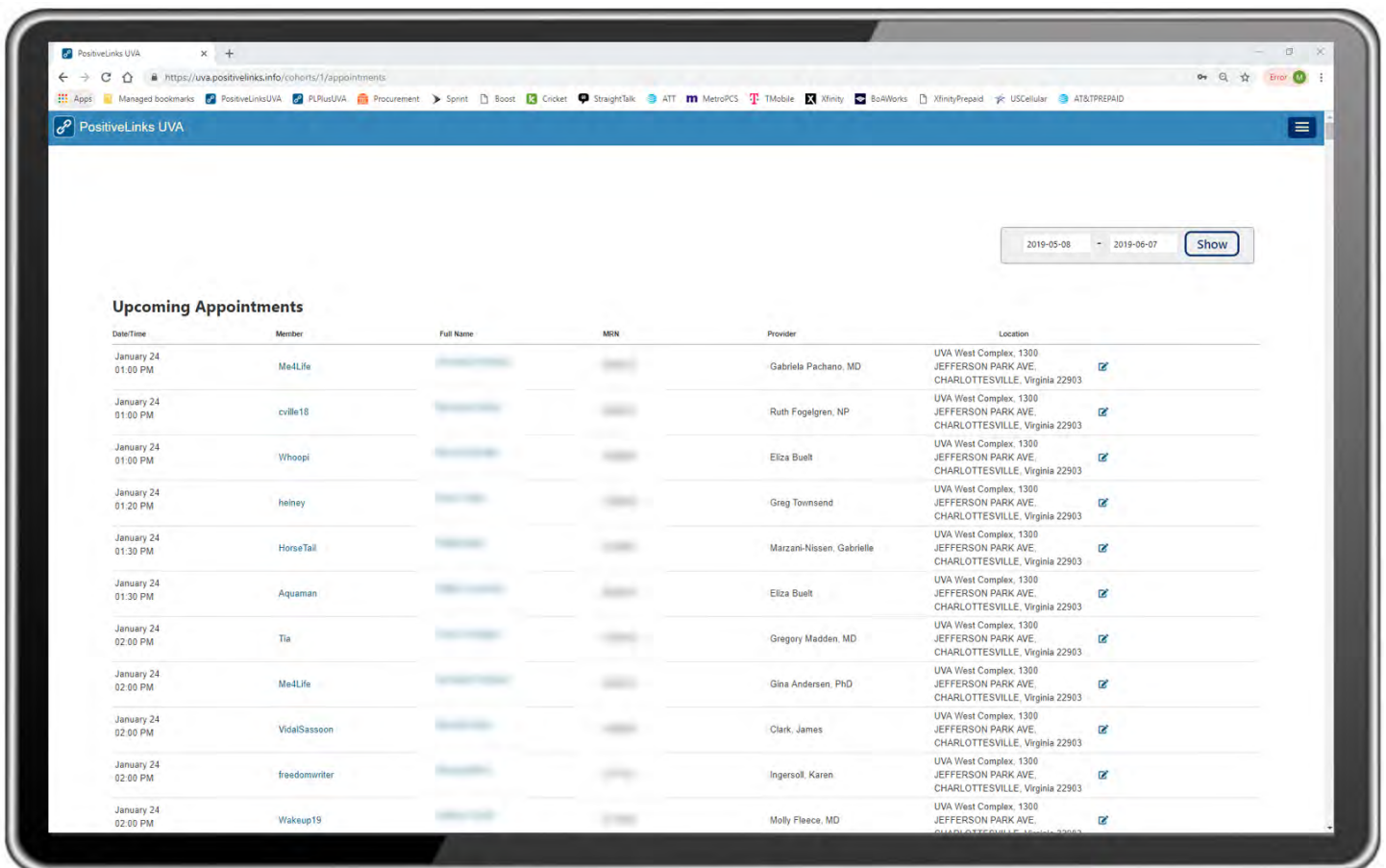


## Appointments

### Menu, Appointments.

The Appointments page allows the Site Providers to view appointments for the PositiveLinks Members. When viewing appointments, Site Providers see only their upcoming appointments listed. Site Providers with additional privileges can see all member appointments. Appointments are arranged chronologically by date created with newer Appointments on top. By default, only appointments for the next 30-days are displayed but the date filter can be adjusted as needed. Appointments may be sorted by any column. In addition to the Appointments List, Appointments for the next 3 days may be viewed on the Summary screen. Appointments listed on this page include the following information:

- Date/Time
- Username
- Name
- MRN
- Provider
- Location

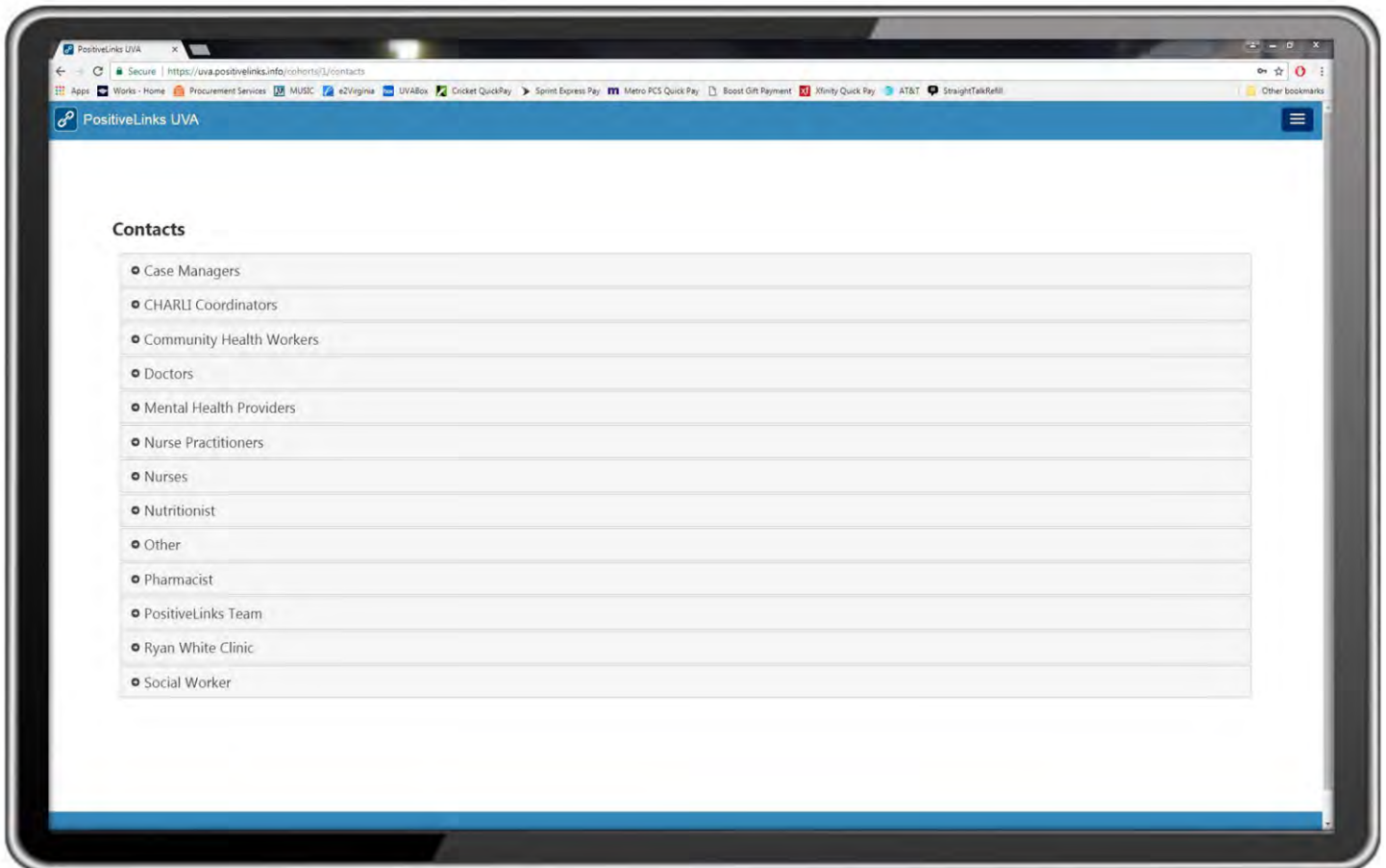


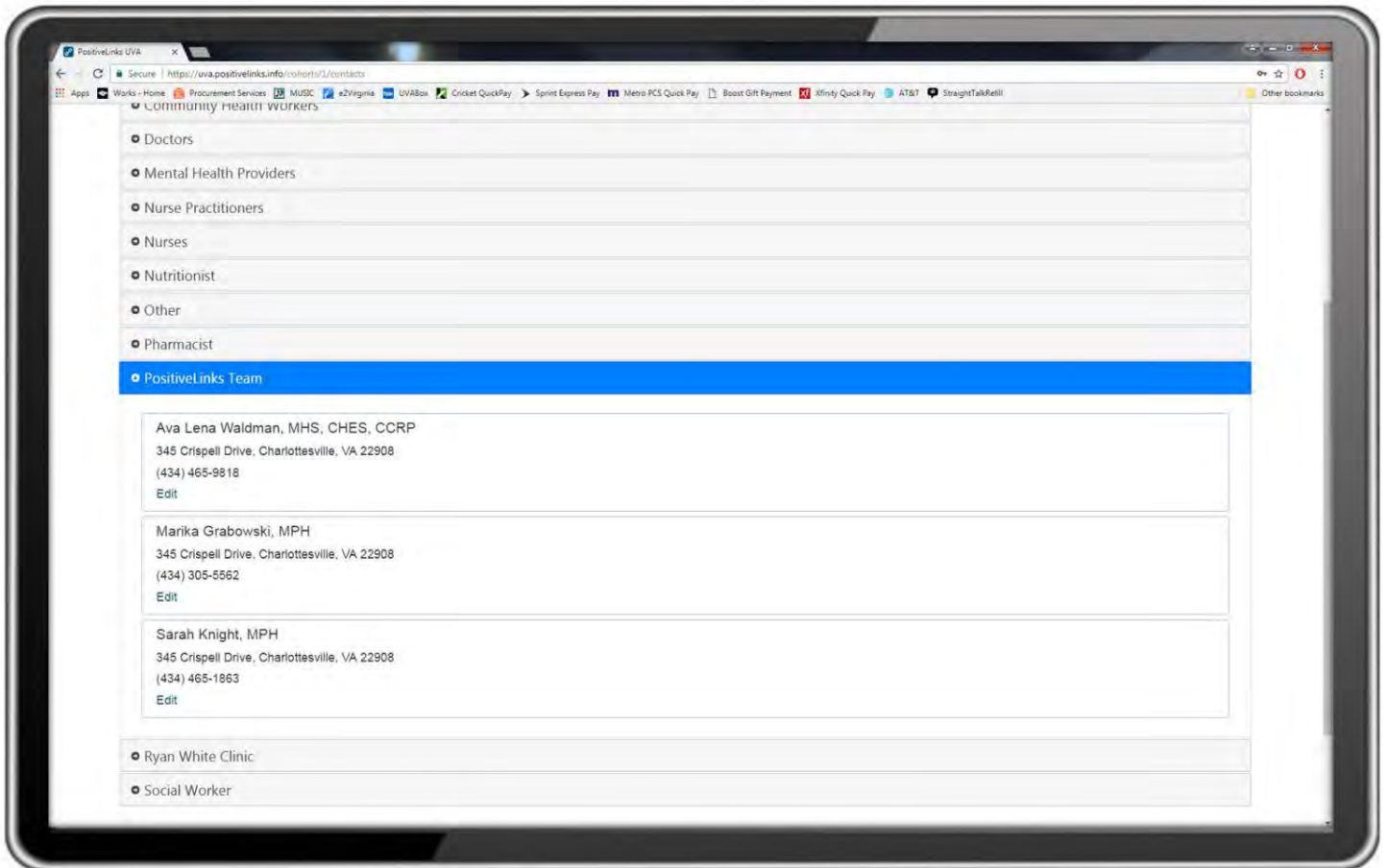
## Contacts

Menu, **Contacts**.

The Contacts section of the PositiveLinks Portal allows Site Providers to view contacts that display in the PositiveLinks Member App.

The Contacts list shows all the contact groups sorted alphabetically. Each group can be opened with a dropdown arrow to display all Site Providers within the category, sorted alphabetically by provider username.





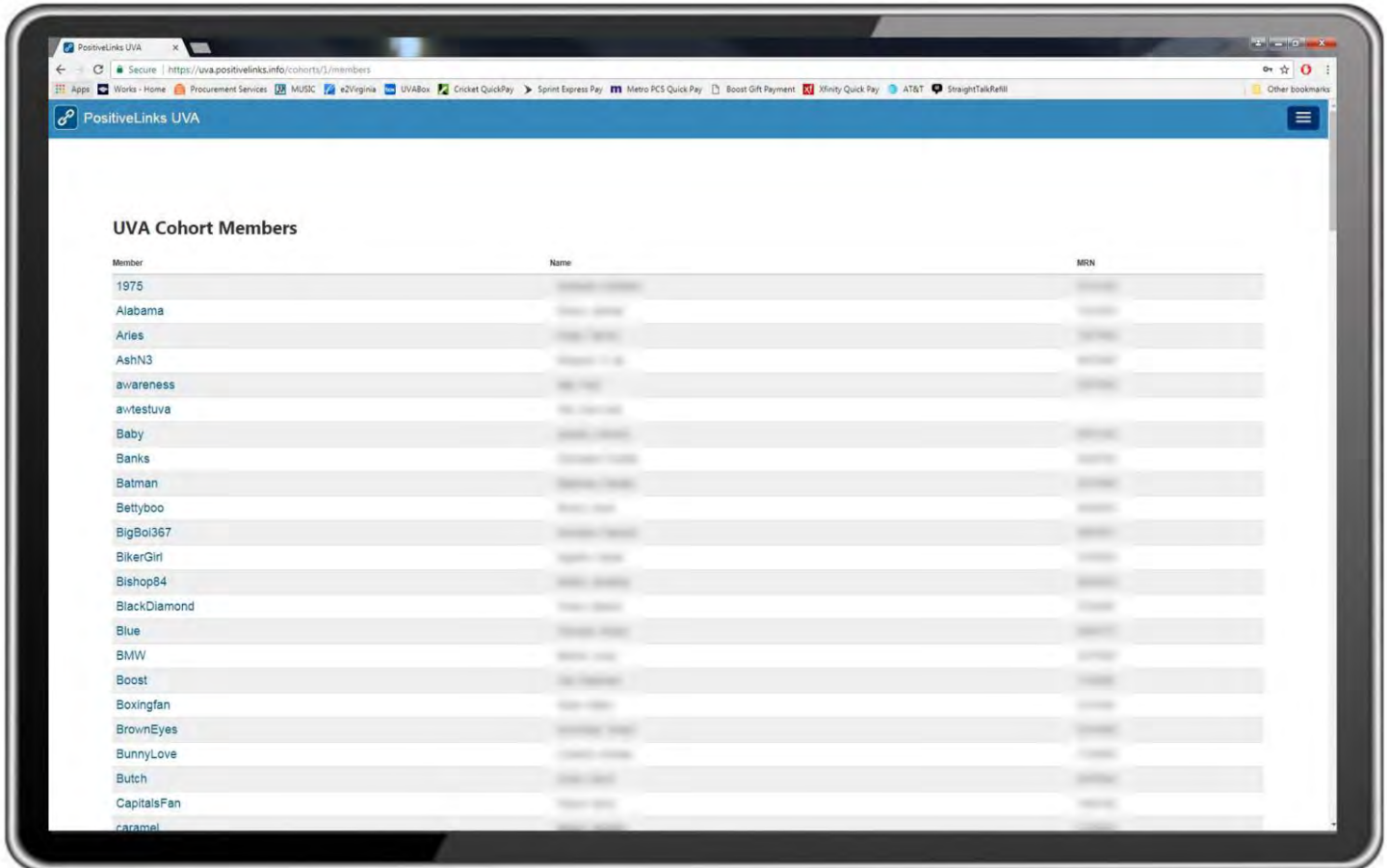
## Members

### Menu, **Members**

The Members screen displays all active members in the PositiveLinks cohort and allows access to the Member Dashboards.

Site Providers are able to view the following:

- Username
- Name (legal name)
- MRN



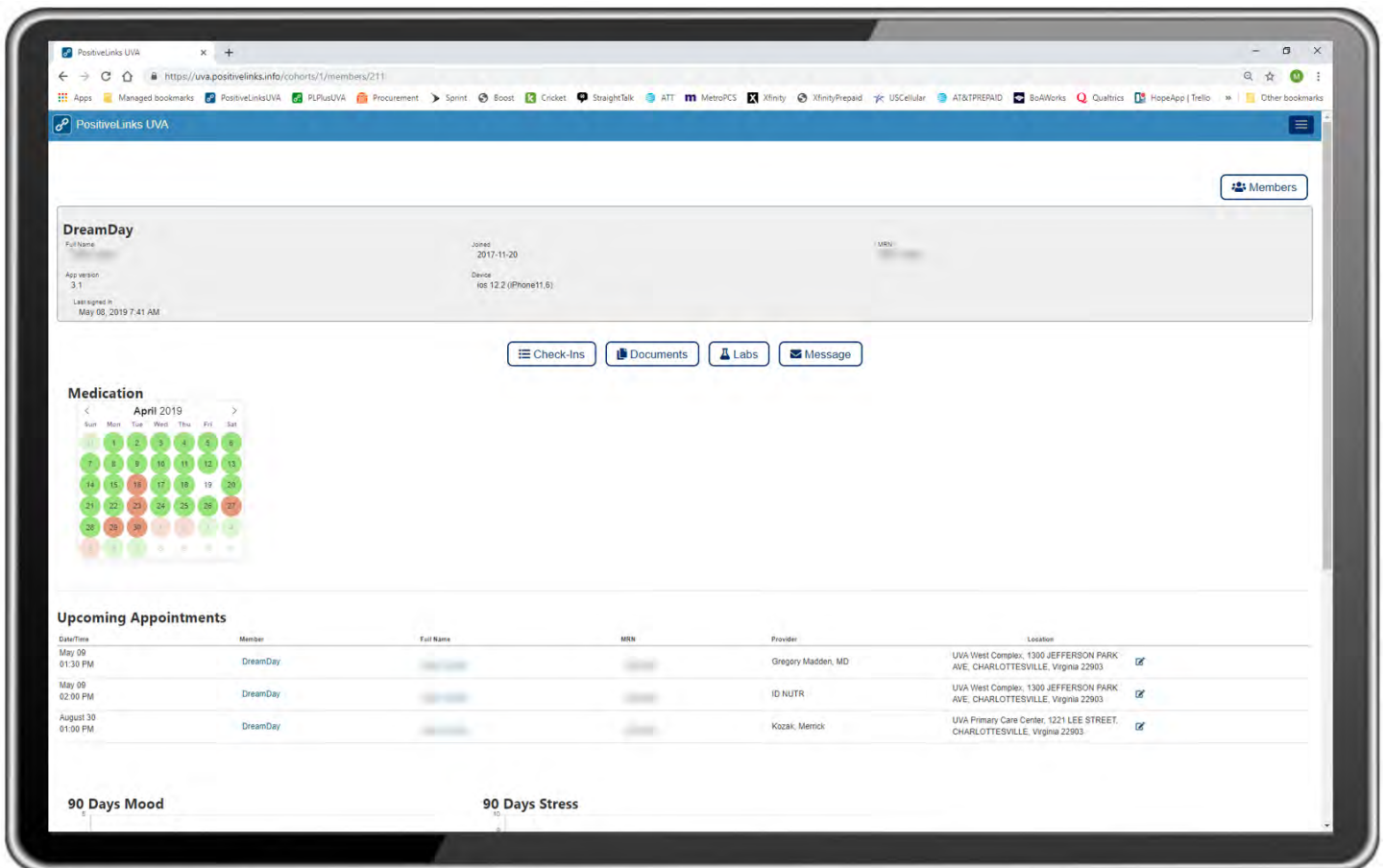


## Member Dashboard

Menu, Members, **Select Member**

Site Providers can view the Member Dashboard to do the following actions:

- Review summary check-in and lab data
- View detailed check-in responses
- View or add documents
- View labs
- View or start message conversation
- View or edit services (restricted access)



## Member Dashboard

1

**Menu, Members.** From the Member list, search or scroll to find desired Member record.

2

Click on the **Username** of the desired Member to open up their Dashboard.

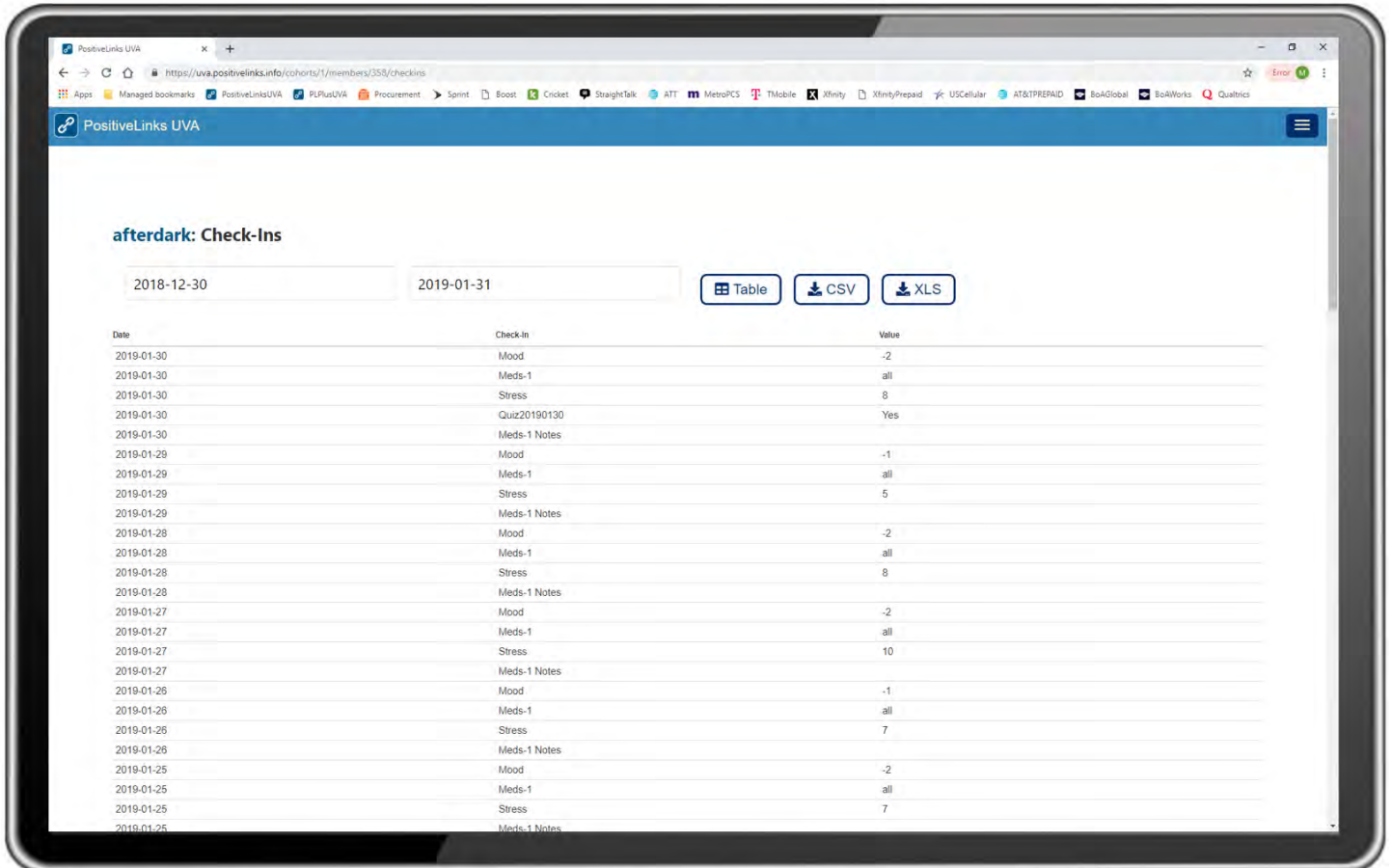


Dashboards provide a complete snapshot of Member response rate, reported meds adherence, mood and stress levels, achievements, and appointments.

### Check-Ins

Menu, Members, Select Member, **Check-Ins**

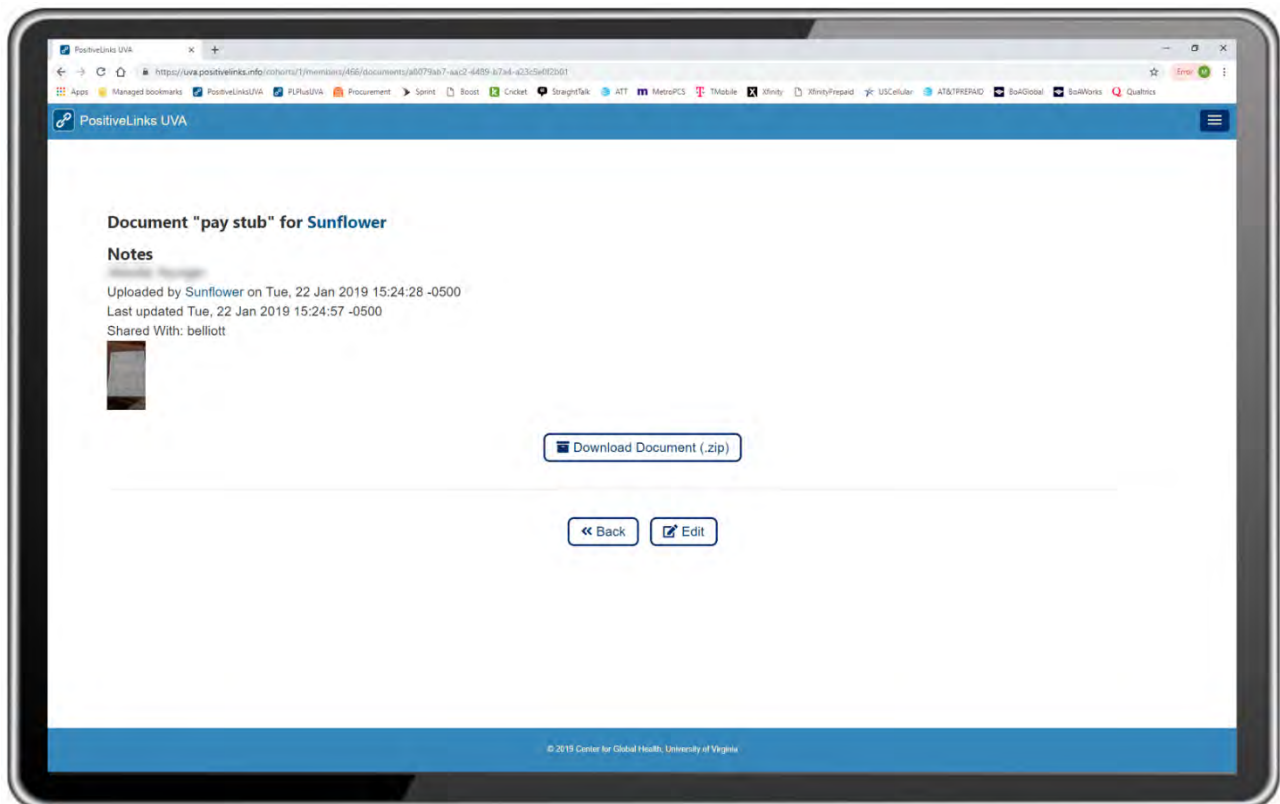
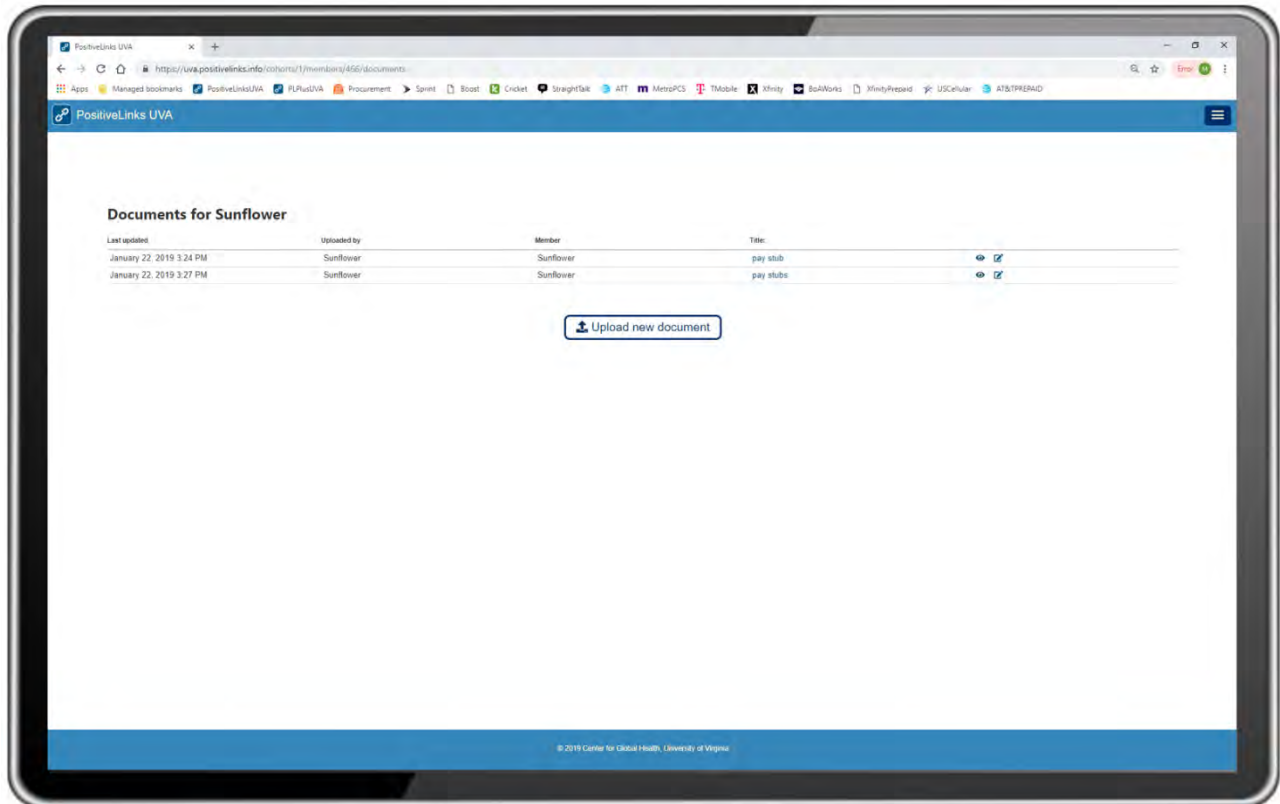
Site Providers can view detailed reports of member Check-In activity by selecting Check-Ins from the Member Dashboard. These reports can be exported or viewed in the web browser for the selected date range.



## Documents

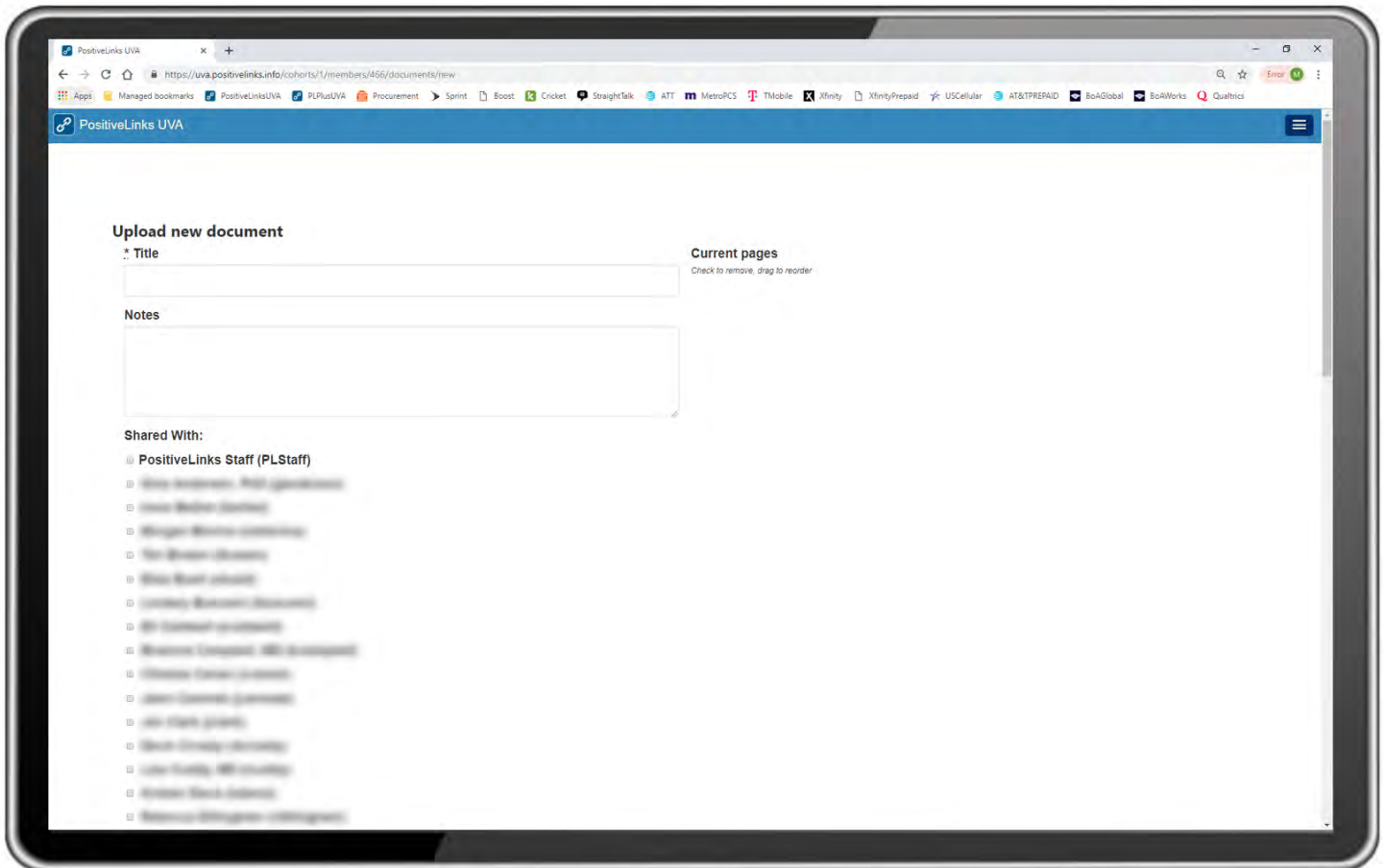
Menu, Members, Select Member, **Documents**

Sit Providers can view or add new documents for a specific member from the Documents page of the Member Dashboard.



### Upload New Document

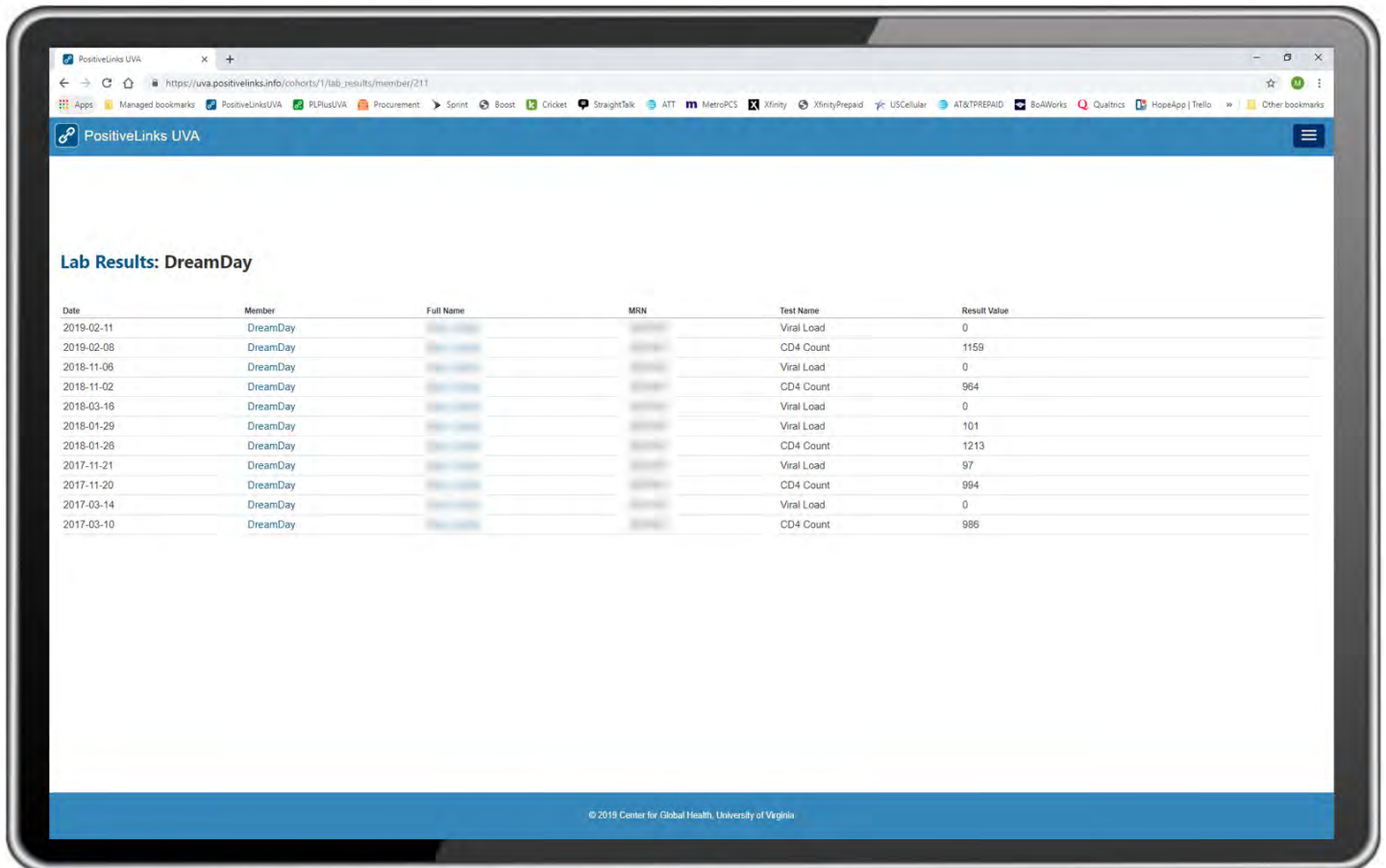
To upload a new document, Providers select 'Upload New Document' from the Member specific document page. Providers are then prompted to enter a title, notes, select providers to share the document with, and upload a file. Select 'Save' to complete the document upload.



### Labs

Menu, Members, Select Member, **Labs**

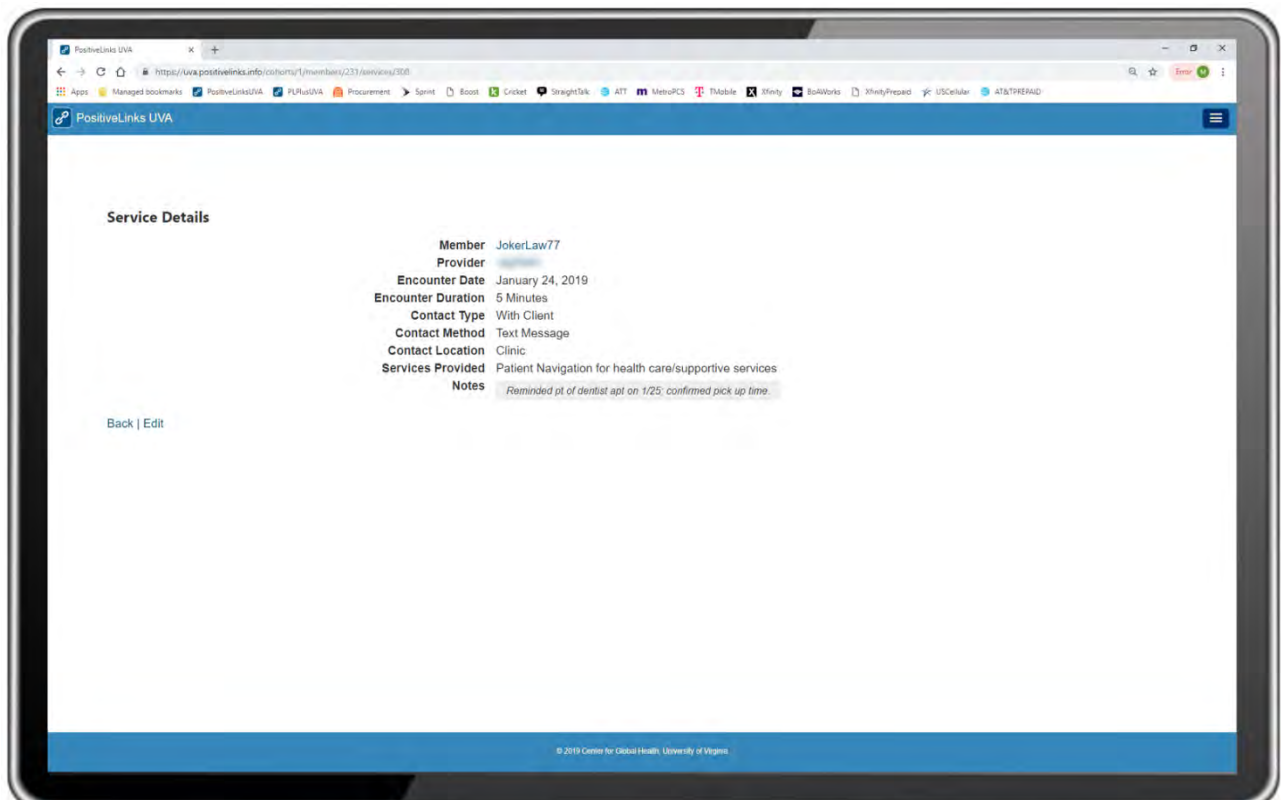
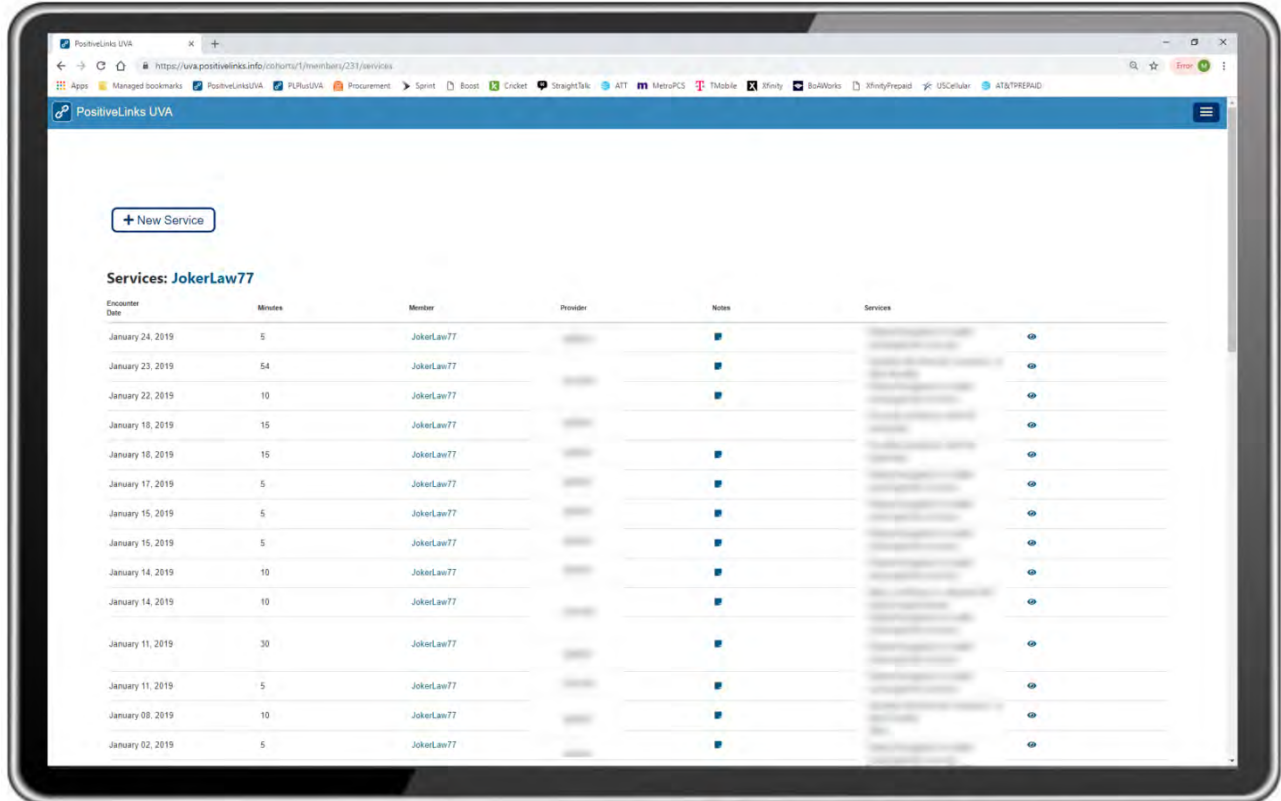
Site Providers can view labs for specific members from the Labs page of the Member Dashboard.



### Services (Restricted Access)

Menu, Members, Select Member, **Services**

The services section of the app allows certain providers types to track the services they provide for their clients. Site Providers with access to this feature can view, edit, and add new services for a specific member from the Services page of the Member Dashboard.

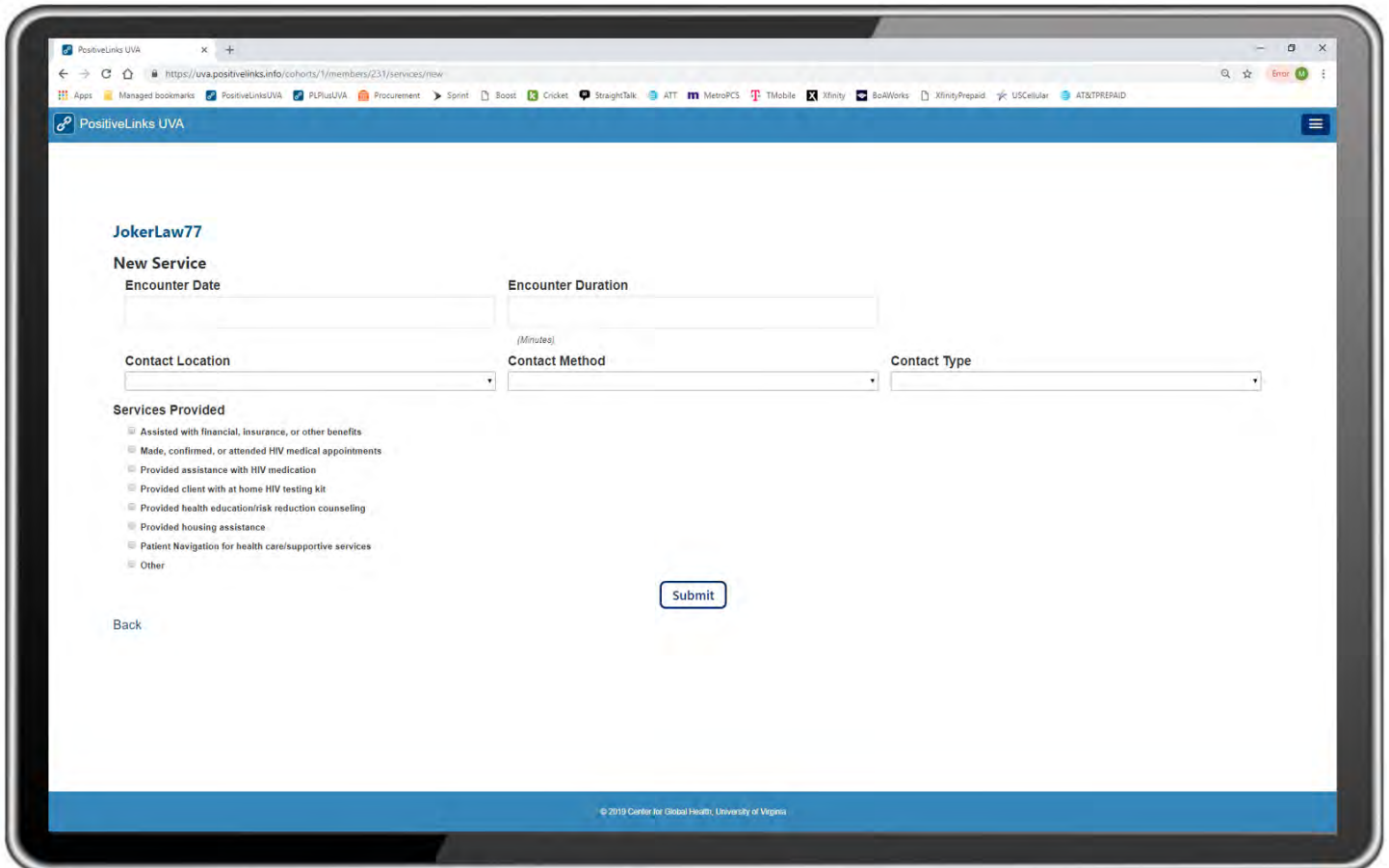




### New Service

To enter a new service, Providers select the ‘New Service’ icon on the Services page of the Member Dashboard. Providers are prompted to enter the following information:

- Encounter Date
- Encounter Duration
- Contact Location
- Contact Method
- Contact Type
- Services Provided

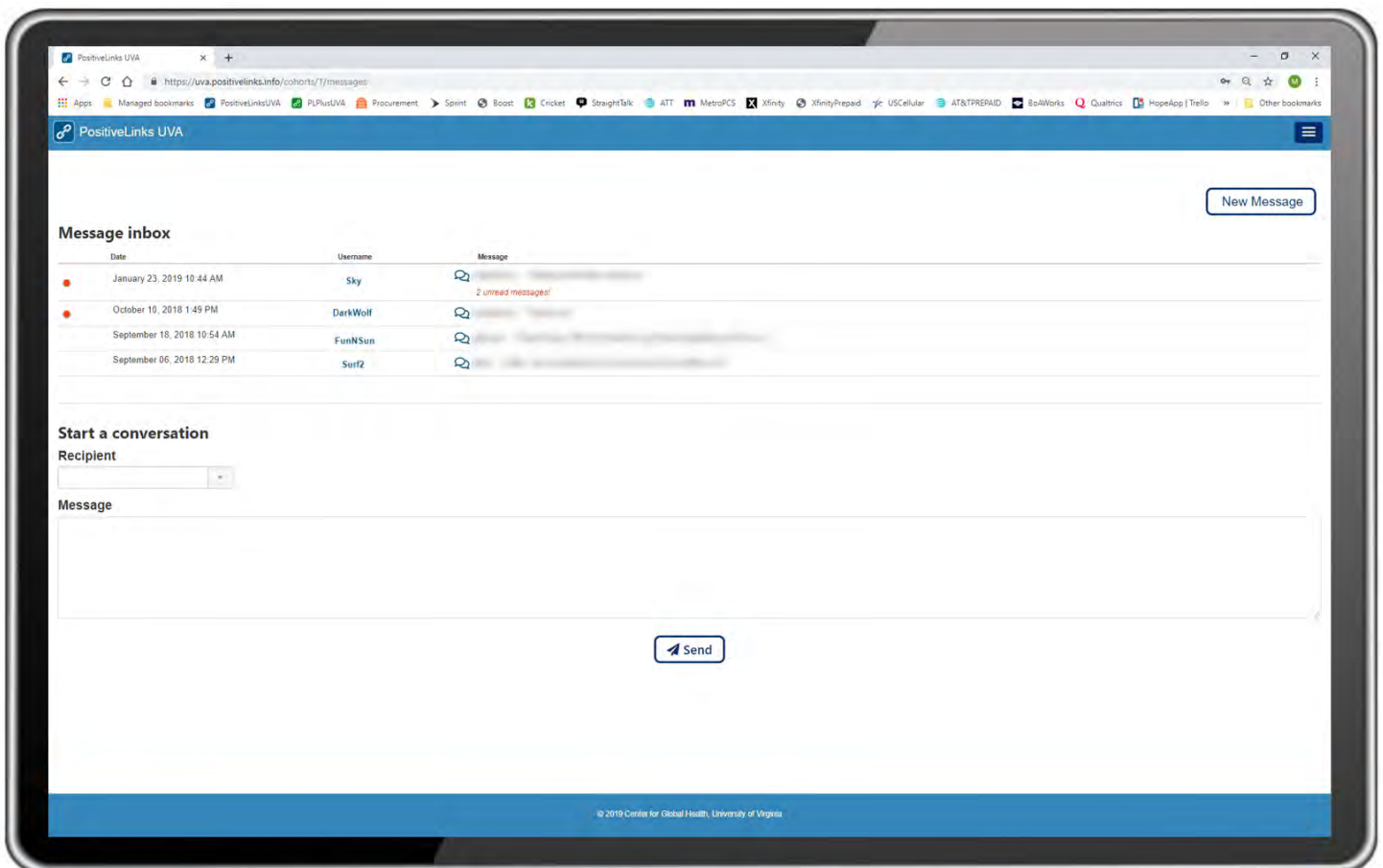


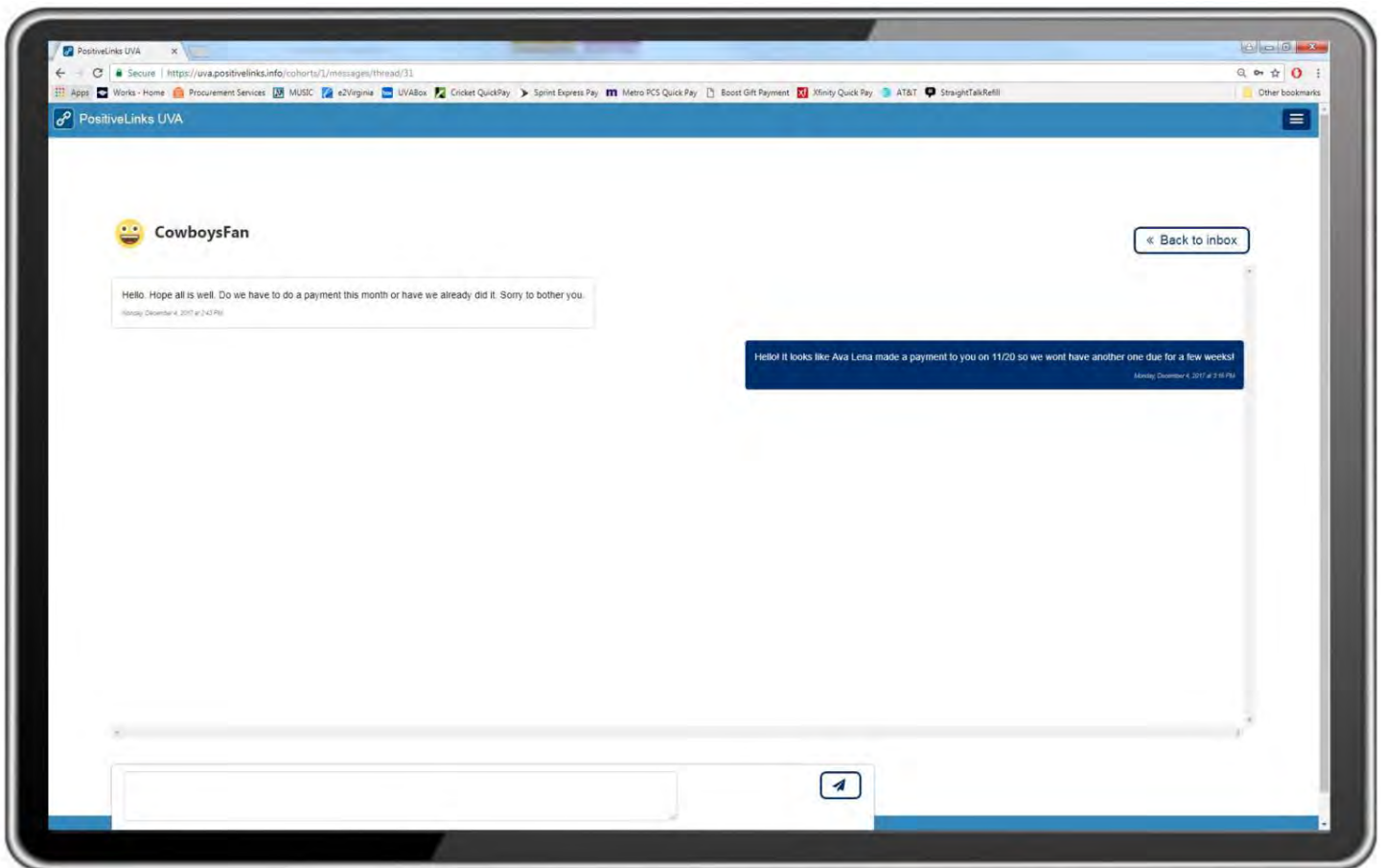
## Messages

### Menu, Messages

The Messages screen allows Site Providers to send and receive messages with Members. Messages sent by and to Members will be securely stored on the PositiveLinks server.

- *Message Inbox:* This is the default Message display and shows all message threads for the Site Provider. New messages can be created from this page. A red dot next to a message indicates the message is unread. If there is more than one unread message from a single patient, a text call out indicates the number of unread messages. The Message Inbox displays the following information sorted by Date and Time of message:
  - Date/Time of the most recent response
  - Username
  - Message





### New Message

Menu, Message, **New Message**


Site Providers may create new Messages to Members through PositiveLinks Portal. There are two ways to do this.

- Menu, Members. Selecting the Member from the PositiveLinks Member list and click the **Message button**. If there is no prior contact with that Member, a black chat will open. If the Site Provider has previously contacted that Member it will pull up their chat history.
- Menu, Messages, + **New Message** button. Username or legal name must be selected from a list.

#### Start a conversation

**Recipient**

  
**Message**



### Message Notification

Rather than transmit message content to another system, for example the Site's email system, PositiveLinks sends a **New PositiveLinks Message** email to the appropriate Site Provider registered in the system. The email's subject line is 'New PositiveLinks Message' and the message content is 'You have received a new message! You can view the message using the link below: <https://uva.positivelinks.info> (site specific URL)'

To view the Message, Site Providers may use the link in the email to access PositiveLinks Portal login screen, then login with their username and password. The email notification provides immediate heads-up of new Messages for Site Providers. Replying to the email notification, however, results in a failed message. Site Providers can also access new messages through the Provider App and details on that are located in the Section 5.



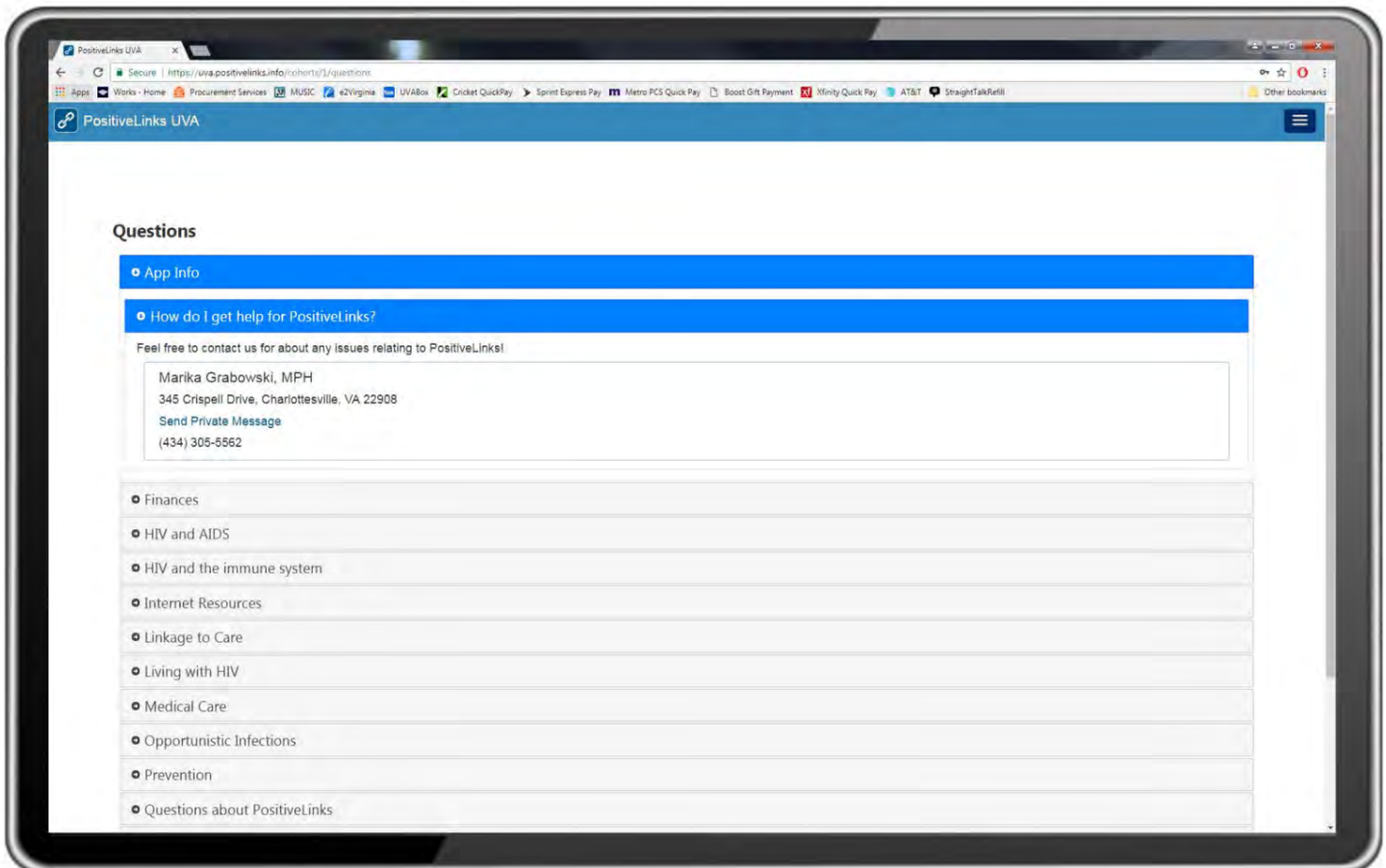
## Questions

Menu, **Questions**.

The Question section is a collection of common questions and responses. Questions are primarily text based, but may contain hyperlinks.

Questions consist of the following fields:

- Question
- Answer:
- Link (optional)
- Contact



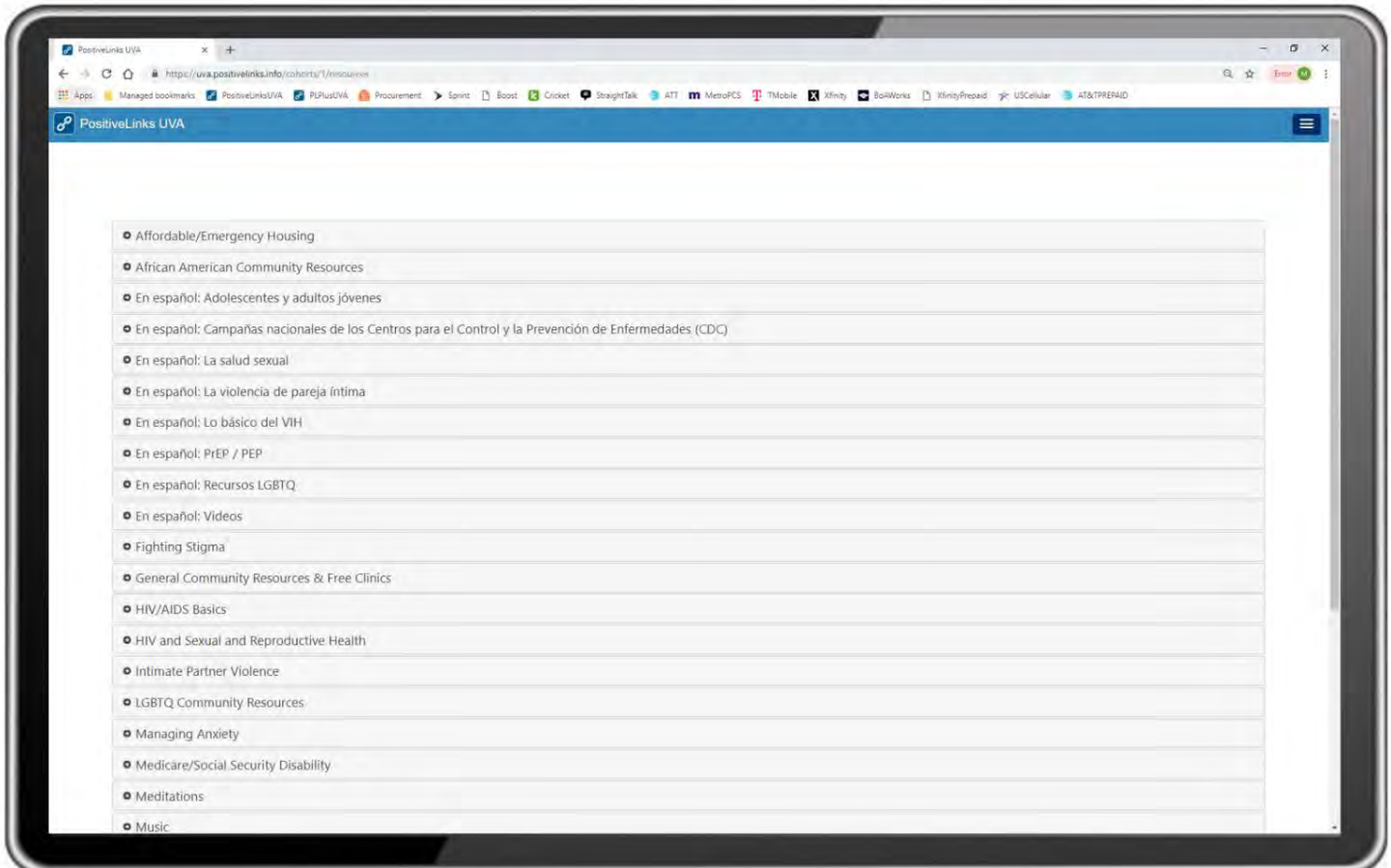


## Resources

### Menu, Resources.

This section allows Site Administrators members to view the content that displays in PositiveLinks Member App Resource section.

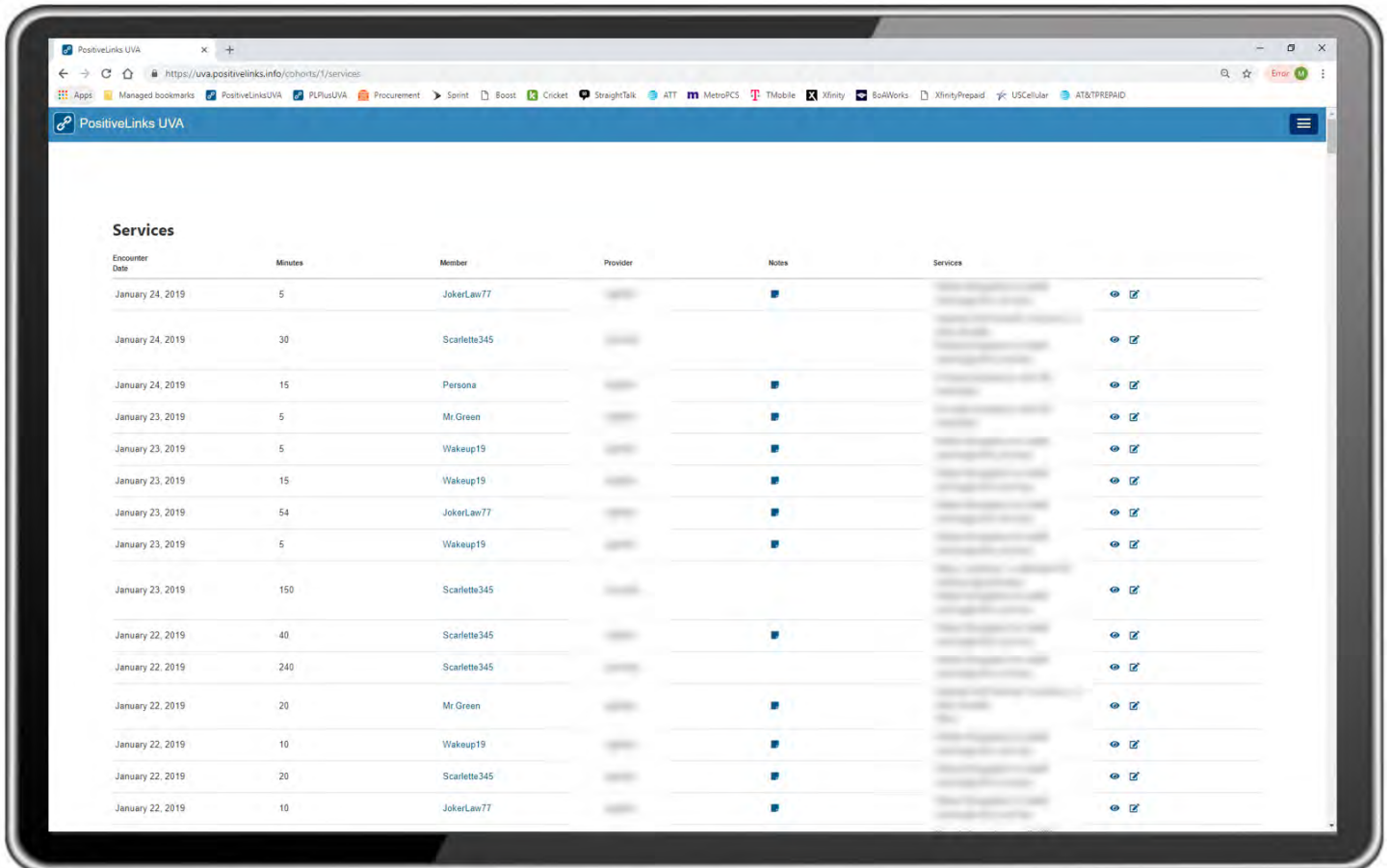
All audio and video files are displayed and can be played from the portal. The list is sorted alphabetically by resource group. Audio and Video files are remotely streamed from hosted sources in order to keep the app size small.



## Services (Restricted Access)

### Menu, Services

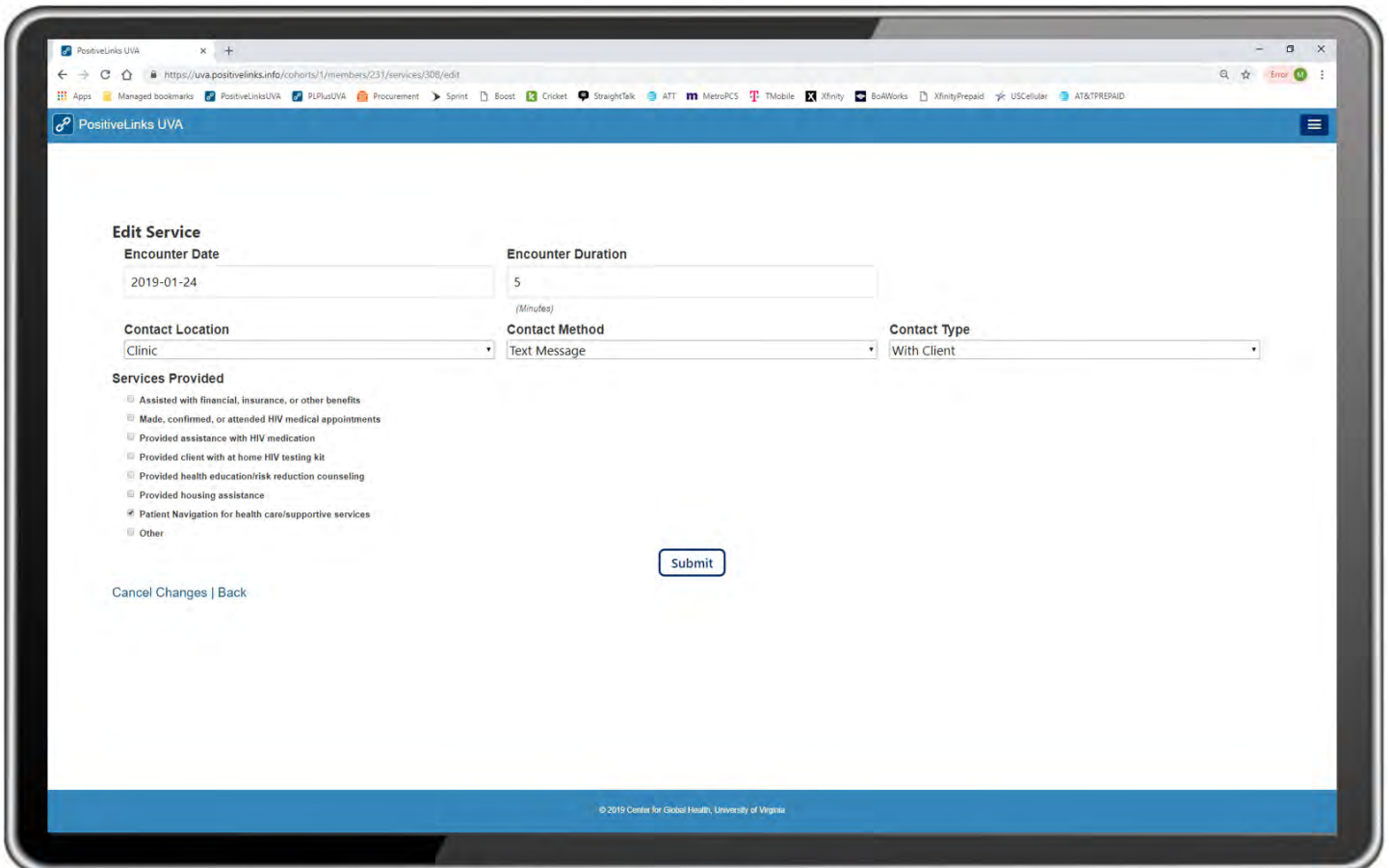
The services section of the portal allows Site Providers (with access) to review the services that have been provided to all PositiveLinks clients. Providers can view and edit previously entered services from this page, simply click the ‘eye’ icon to view the details of a previously entered service.



### Edit Service

#### Menu, Services, Edit Service

Providers can edit previously entered services either from the member specific services list or the full list of services. Simply select the edit icon on the desired service and update the necessary information. Select ‘Submit’ to save the changes to the service.



## 7b. Using PositiveLinks Administrative Portal

This section provides detailed descriptions of how to use PositiveLinks Portal to administer the PositiveLinks Apps. The PositiveLinks Portal tools described in this section support the Site Care Team's monitoring, administering, accessing and reporting on data from the PositiveLinks Member and Provider Apps. This section provides guidance to Site PLC, Site Administrators, and Site Care Team for Portal functionality and intended use.

*This section is organized as follows:*

*Decision and Task Checklist*

*Portal Login*

*Portal Roles*

*PositiveLinks Portal Features*

*Portal Summary Page*

*Provider Account*

*Availability*

*Appointments*

*New Appointment*

*Check-Ins*

*New Check-In*

*Community*

*Edit Community Post*

*New Community Post*

*Contacts*

*New Contact*

*Labs*

*New Labs*

*Members*

*Add Member*

*Member Dashboard*

*Alarms*

*New Alarm*

*Edit Alarm*

*Check-Ins*

*Documents*

*Edit Document*

*Upload New Document*

*Labs*

*Sign In Activity*

*Services*

*New Service*

*Messages*

*New Message*

*Message Notification*

*Providers*

*New Provider*

*Questions*

*New Question*

*Quizzes*

*New Quiz*

*Resources*

*New Resource*

*Services*

*Edit Service*

*Edit Cohort*

*Cohort Access*

*Provider Permissions*

*Reports*

*Member Activity Report*

*Provider/Admin Activity Report*

*System Activity Report*

*Services Activity Report*

*Achievements Report*

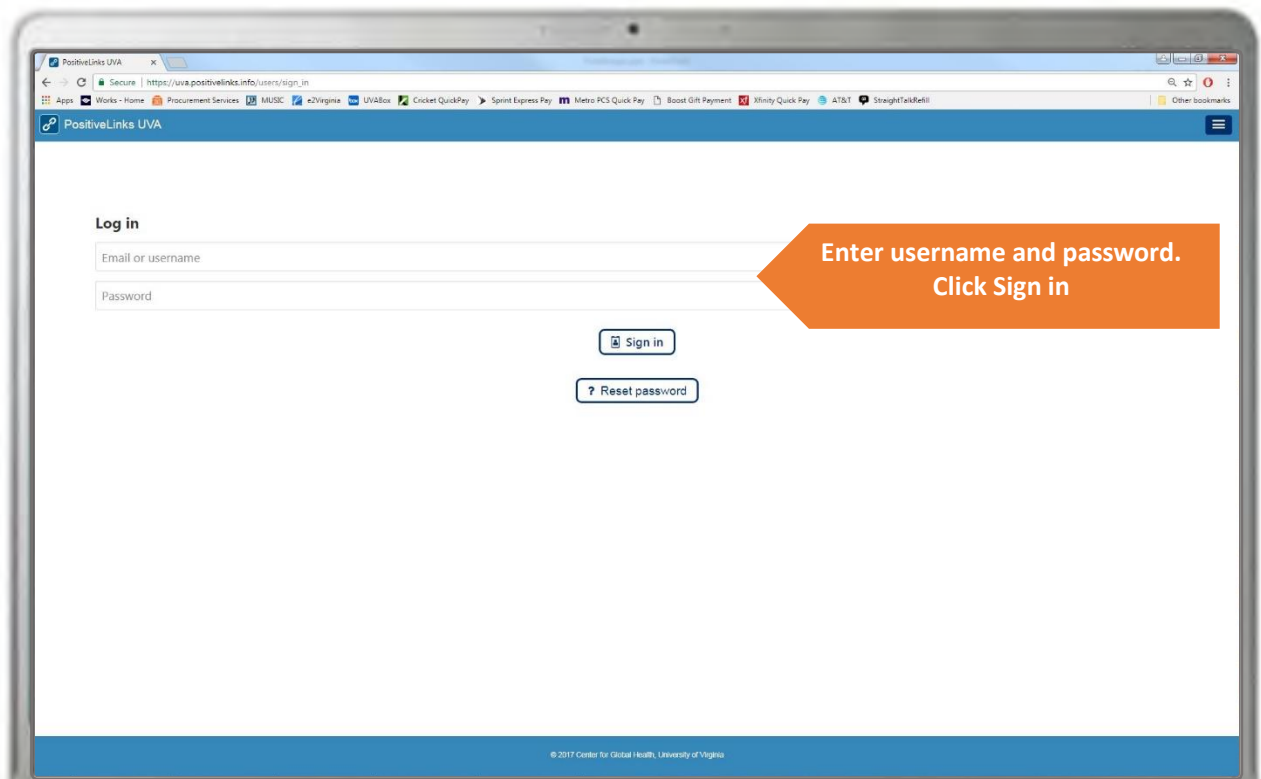
*Using Reporting and Analytics*

**Decision and Task Checklist for Using PositiveLinks Portal**

✓	<b>Decisions and Tasks</b>
	Consider the audio and video content your Site can use to support PositiveLinks Members
	Consider a PLC work plan that identifies tasks related to monitoring, engaging, and reporting
	Finalize Site's Community Post protocol
	Consider Portal role assignment for your Site Care Team
	Finalize Site's Messaging protocol
	Develop a plan for team reporting
	Determine reporting intervals and the data that will be followed
	Identify actionable data and how your Site team will respond to changing trends in Member engagement at both individual and cohort level.

## Portal Login

Providers and Administrators login to PositiveLinks Portal using this link [uva.positivelinks.info](https://uva.positivelinks.info) (site specific URL).






## Portal Roles

To sign in to PositiveLinks Portal use this link [uva.positivelinks.info](http://uva.positivelinks.info) (site specific URL)

There are two different types of roles for logging into the PositiveLinks Portal; Provider and Administrator. Each Site will determine the appropriate role for their Site Care Team members.

- Provider:** The Provider role in PositiveLinks includes anyone who provides services to Members. This includes Medical Case Managers, Community Health Workers, Nurses, Front Desk Staff, and Physicians providing HIV medical care. Those with Provider roles login to PositiveLinks Portal to see Member Dashboards, create and view Messages, and if desired, to review Member Resources. Provider roles do *not* see Community posts; are *not* able to create, edit, or deactivate Member accounts; do *not* have the ability to create or edit Member resources; do not have access to the report menu to run reports.
- Administrator:** The Administrator role in PositiveLinks includes anyone who provides administrative services to PositiveLinks Members and Providers. This includes the Site PositiveLinks Coordinator, those who will be creating Member and Provider accounts and performing Member enrollment and monitoring, and staff who will be providing monitoring of the Community. Administrators have access to all areas within PositiveLinks.

 Portal Roles		
	Provider	Administrator
View Member Dashboard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Send/View Messages	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Create/View Appointments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
View Member Resources	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Create/Edit/Deactivate Members		<input checked="" type="checkbox"/>
Create/View/Edit Appointments		<input checked="" type="checkbox"/>
Create/Add Member Resources		<input checked="" type="checkbox"/>
View the Community and Remove Posts		<input checked="" type="checkbox"/>
Run PositiveLinks Reports		<input checked="" type="checkbox"/>

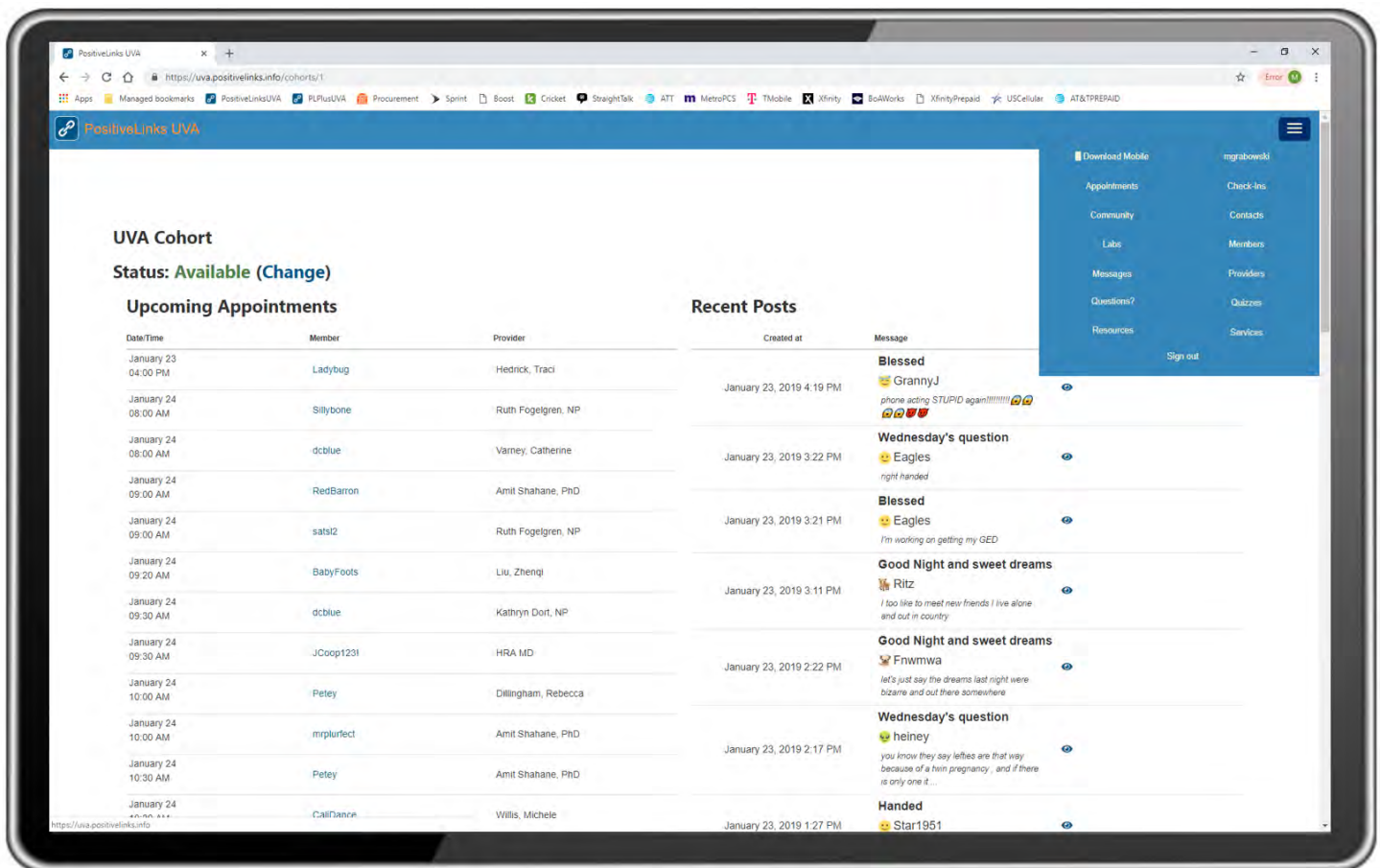
## PositiveLinks Portal Features

### PositiveLinks Portal Summary Screen

The Summary screen is the default screen when Site Providers log in to the PositiveLinks Portal.

For Site Administrators it displays the following information:

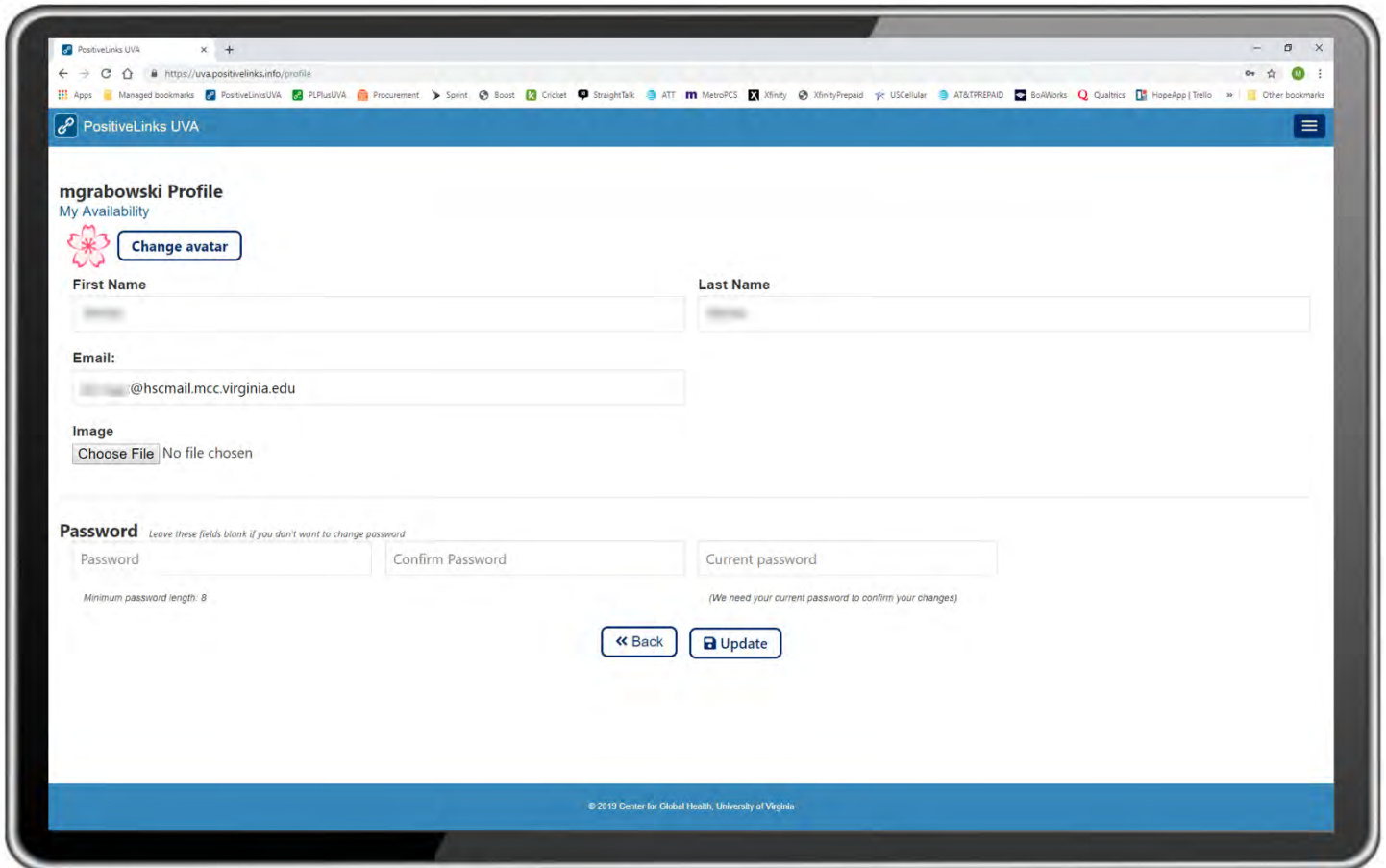
- Availability
- Upcoming Appointments: Cohort wide appointments
- Latest Community Posts
- Actions: Add Member button
- Reports: Access to Reports for Member, Provider, Admin, Services and System Activity
- Recent Documents
- Cohort Statistics: Average Stress, Average Mood
- Menu with access to all other Portal features



## Provider Account

### Menu, Username

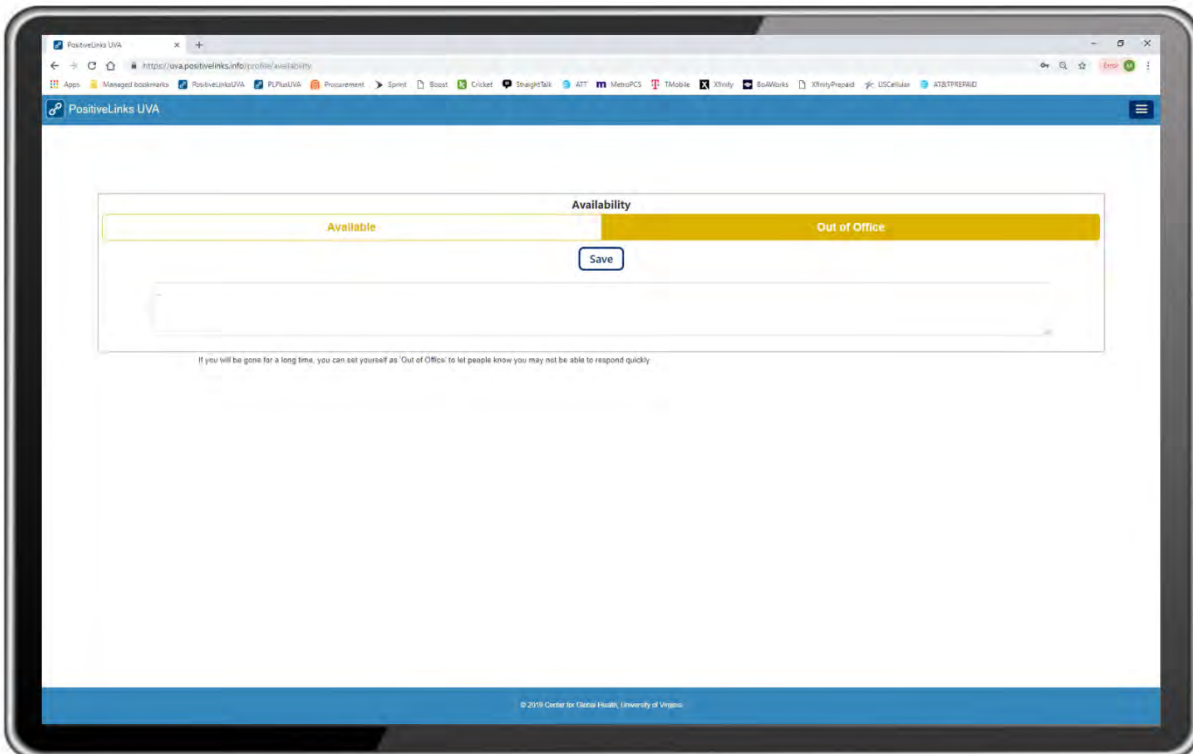
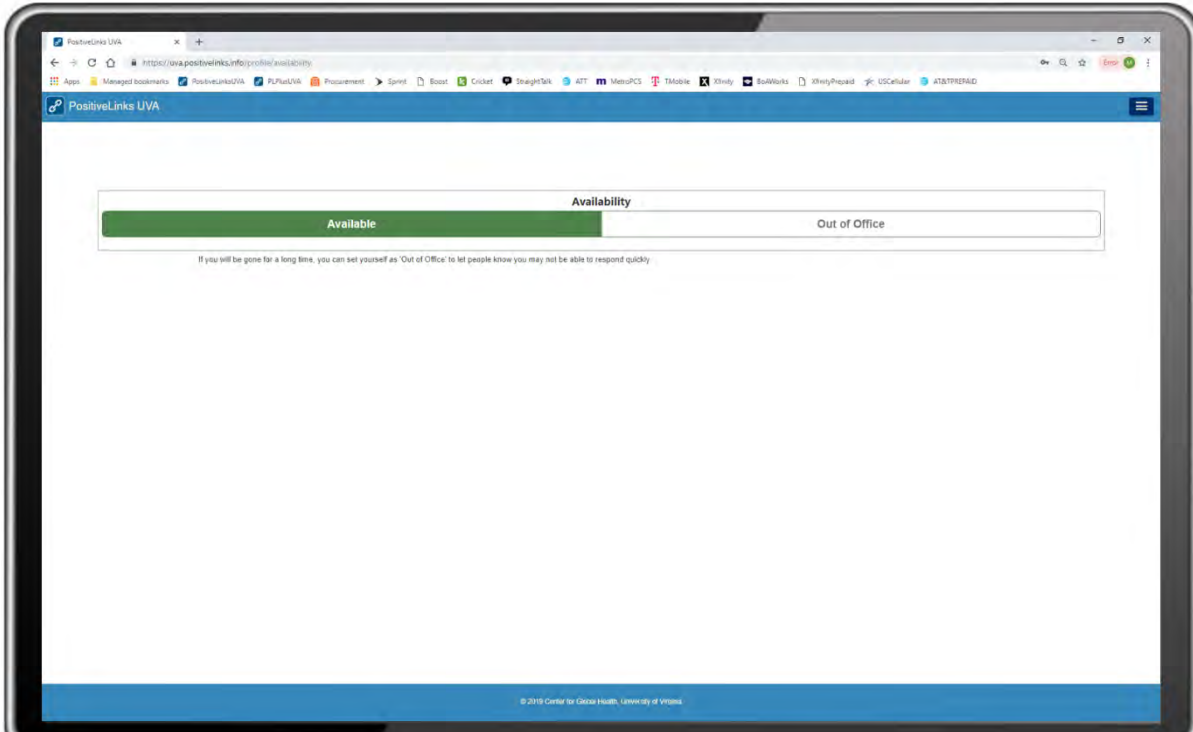
The **Accounts** section of the portal allows providers to update their password, avatar, add an image for the contact list, and change their availability status.



### Availability

Menu, Username, **Availability**

Providers can set their availability status to ‘Out of Office’ which generates an automated message notifying the Member that they may expected a delayed response. Providers select ‘Out of Office’ and then can enter a personalized message about their availability and expected return.

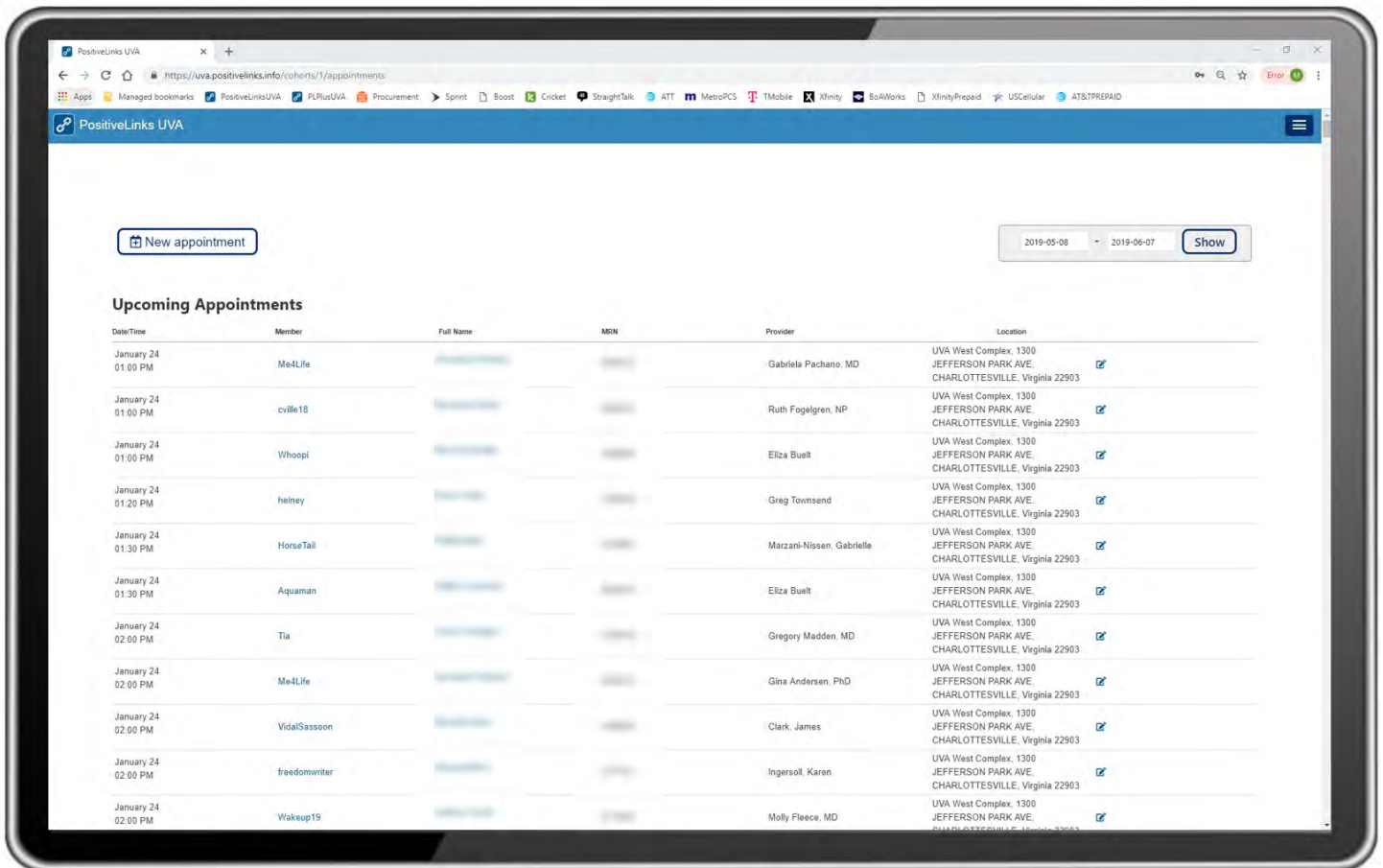


## Appointments

### Menu, Appointments.

The Appointments page allows the Site Administrators or PLCs see all appointments for the PositiveLinks cohort. Appointments arranged chronologically by date created with newer Appointments on top. By default, only appointments for the next 30-days are displayed but the date filter can be adjusted as needed. Appointments may be sorted by any column. In addition to the Appointments List, Appointments for the next 3 days may be viewed on the Summary screen. Appointments listed on this page include the following information:

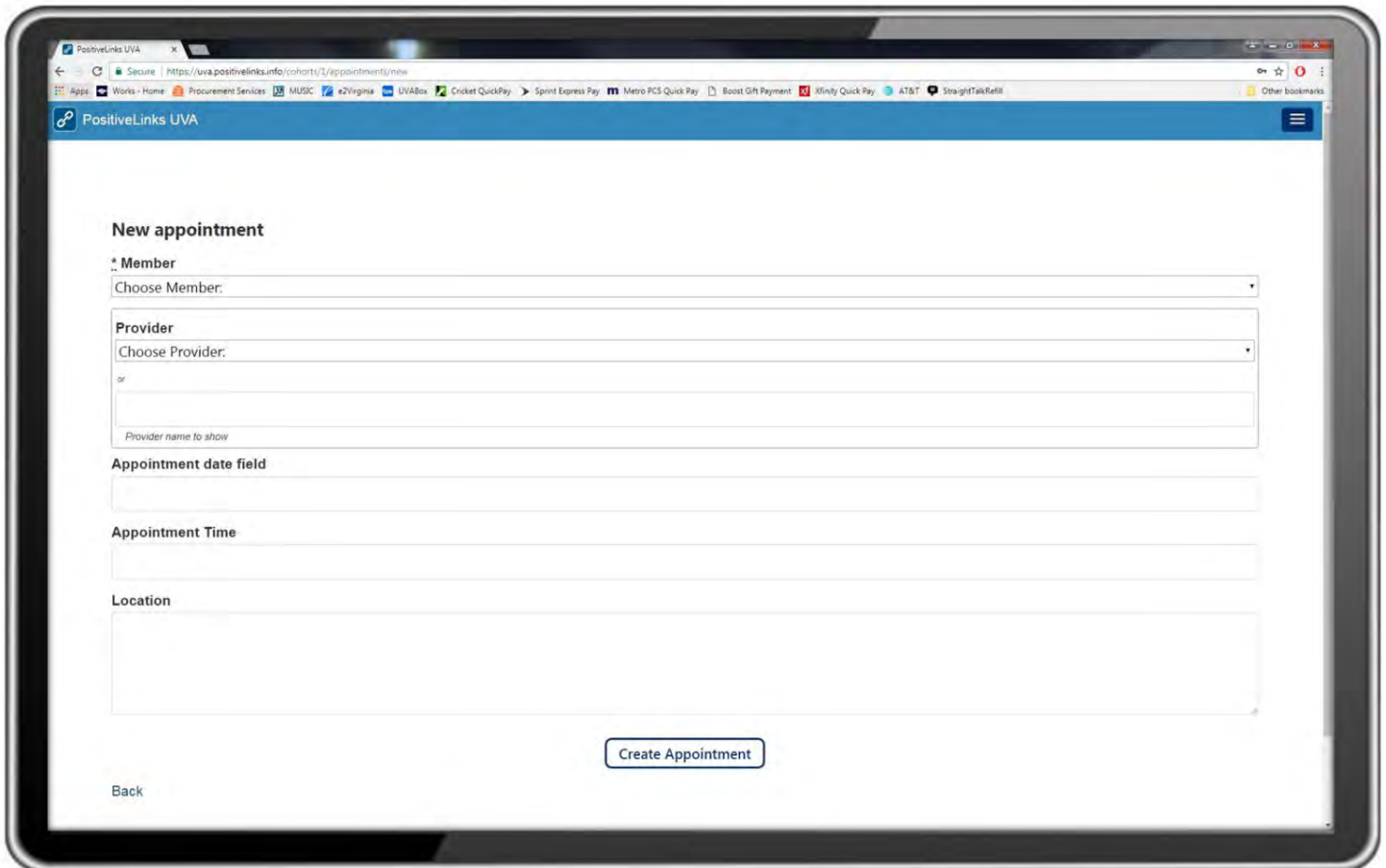
- Date/Time
- Username
- Name
- MRN
- Provider
- Location



### New Appointment

Menu, Appointments, **New Appointment**.

The New Appointment feature is used to create appointments that display on Member's smartphones in the PositiveLinks Member App and on PositiveLinks Portal. Site PLCs or Administrators may create appointments manually or use automatic delivery to the PositiveLinks Portal and App through integrating EMR data. Site Administrators are able to manually enter and edit appointments as well as edit some appointment data pulled from EMR integration. This allows sites to fill in information that may be missing for an appointment transferred from the ERM data.



## New Appointment

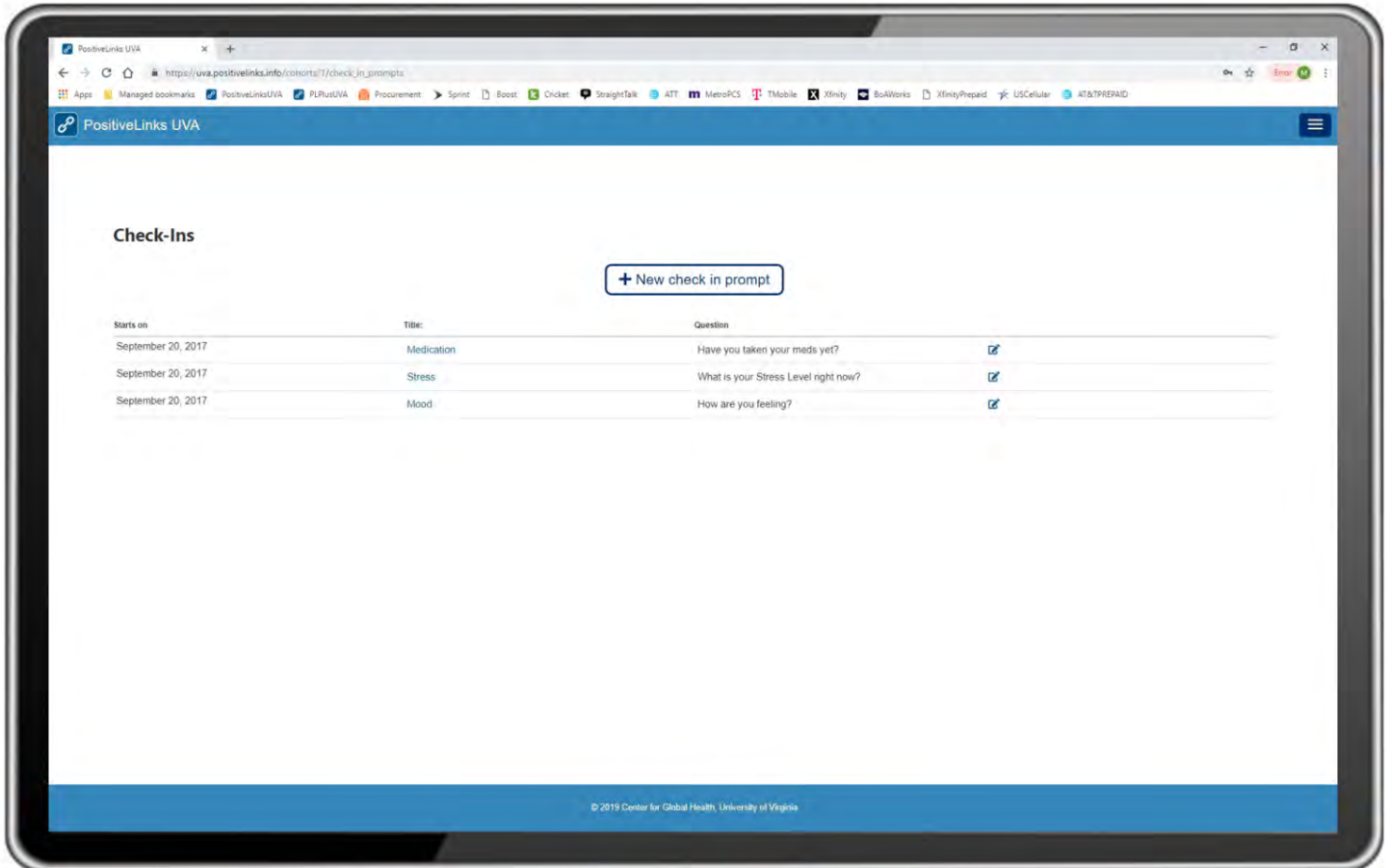
1	Menu, <b>Appointments</b> .
2	Click + <b>New Appointment</b> button, on the Appointments screen.
★	Sites may view and modify Appointments using PositiveLinks Portal.



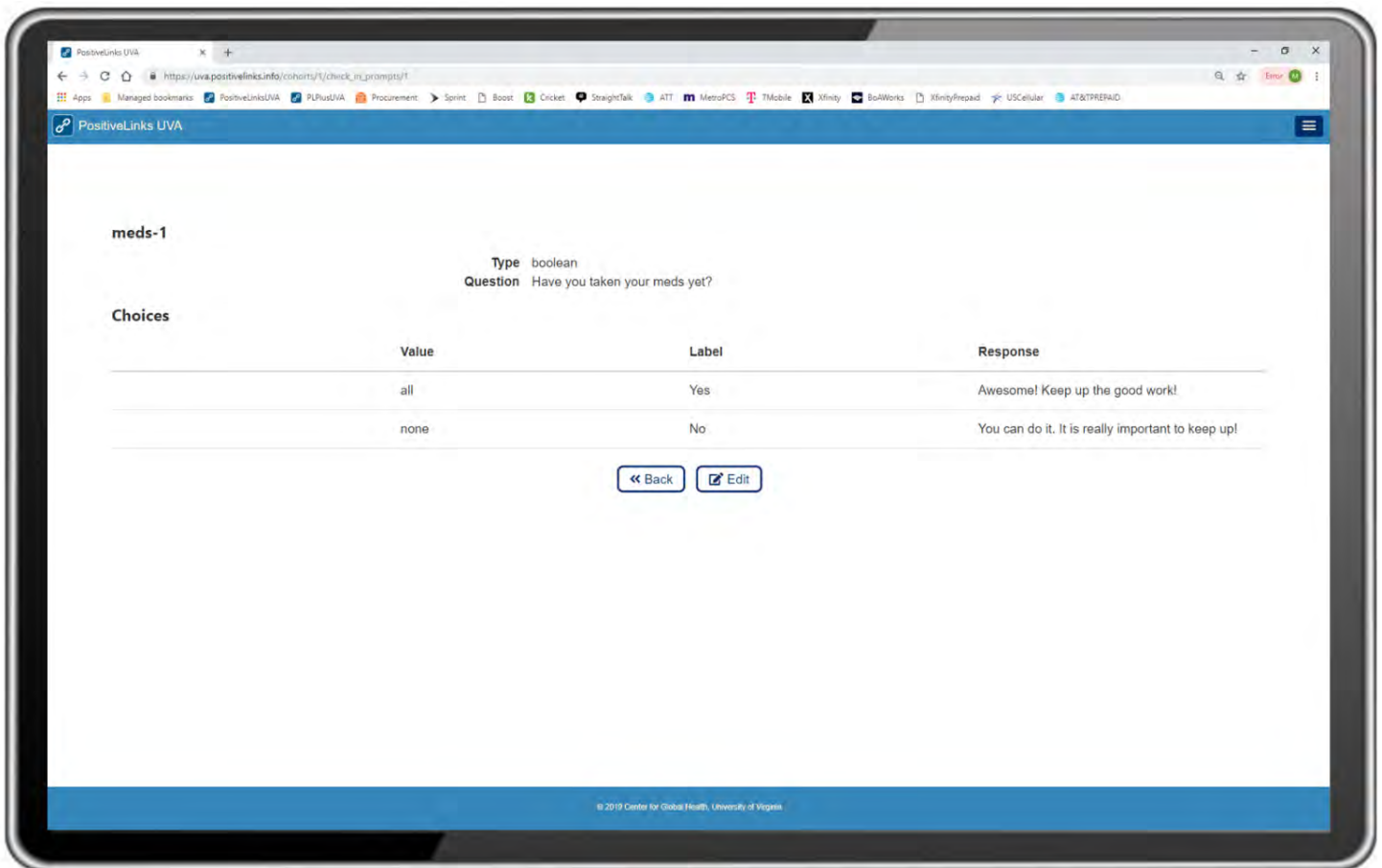
## Check-Ins

### Menu, Check-Ins.

The Check-Ins feature of the portal allows for Site Administrators to create, edit, and view the daily check-in questions. This page displays the start date for a check-in, the question, and the option to edit.



Clicking on the check-in question displays the type of question, value, label, and response. For example, the daily medication check-in ('Have you taken your meds yet?') would display the following:




### New Check-In

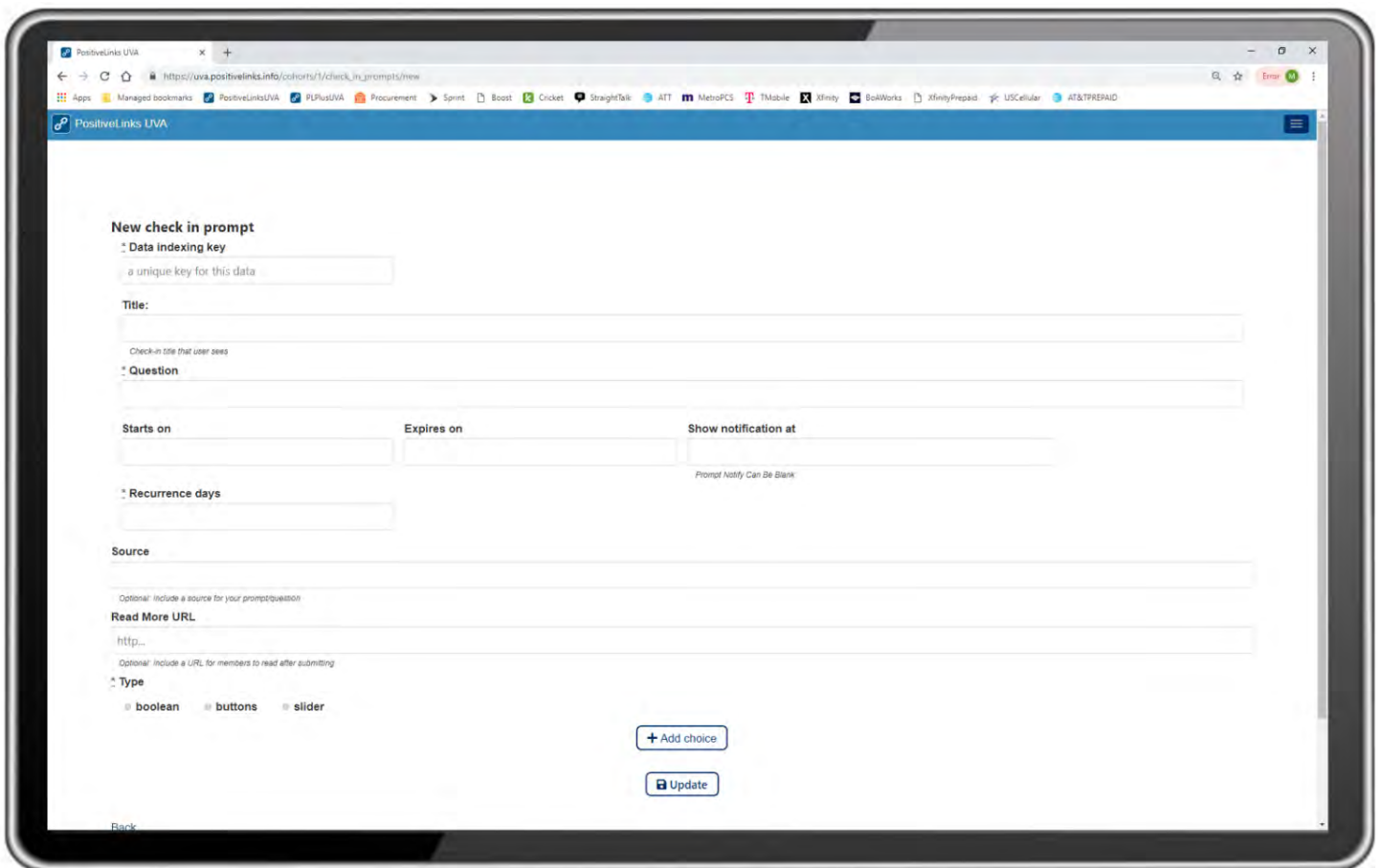
Menu, Check-Ins, **New Check-In**.

When creating a new check-in Site Administrators enter the following information:

- Title and Question
- Starts on/ Expires on
- Show notification at
- Recurrence days
- Source (optional)
- Read More URL (optional)
- Type: Boolean, buttons, or slider

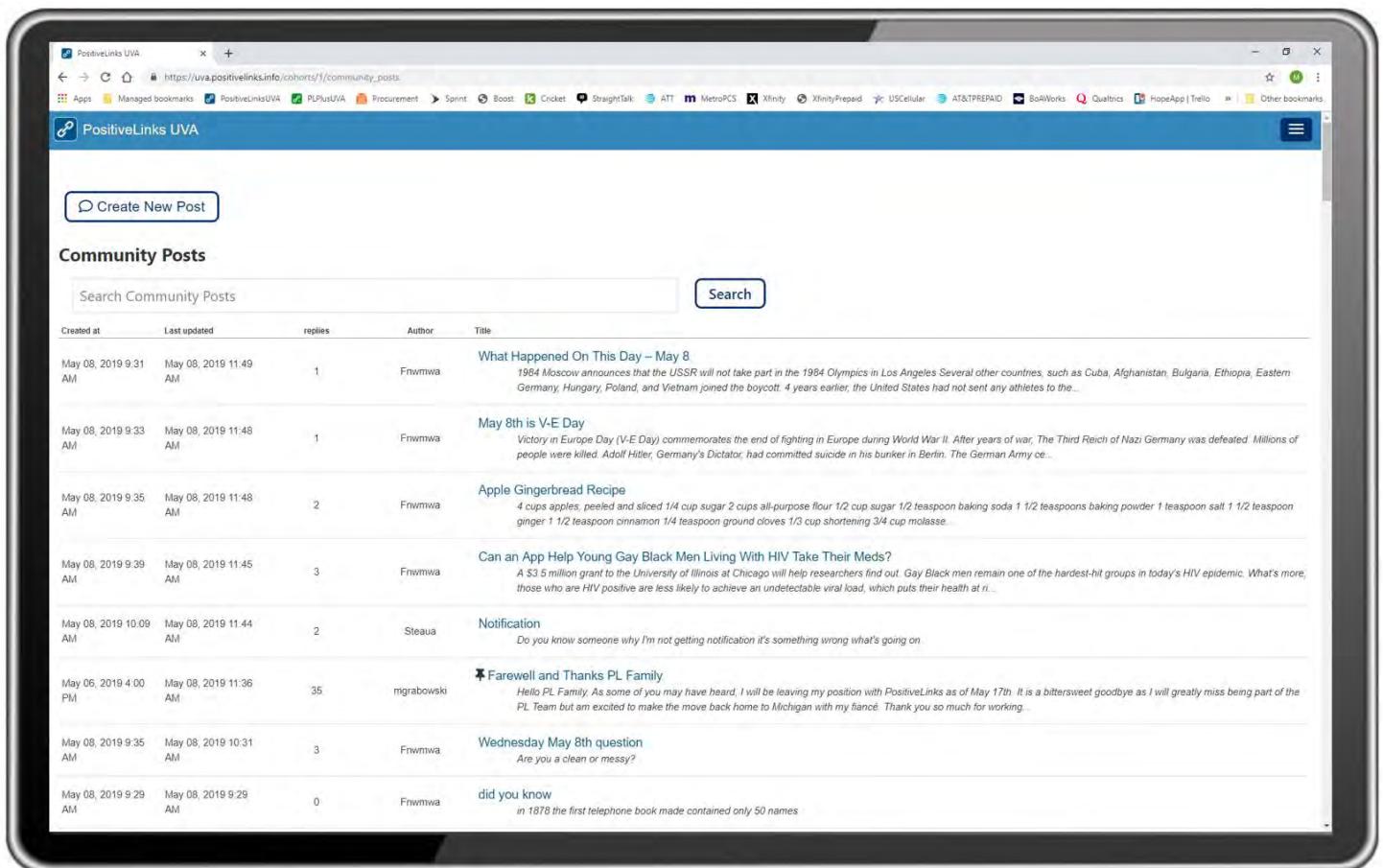
Site Administrators can then add answer choices. Value indicates the number stored in collected data, Label indicates the naming the Member sees, and Response text is the reply Members see for a particular answer. There is also an option to upload images for each answer choice as we have done for the Mood and Stress Check-ins. Check-ins that display on a slider must be entered in the order they are expected to appear along the bar.

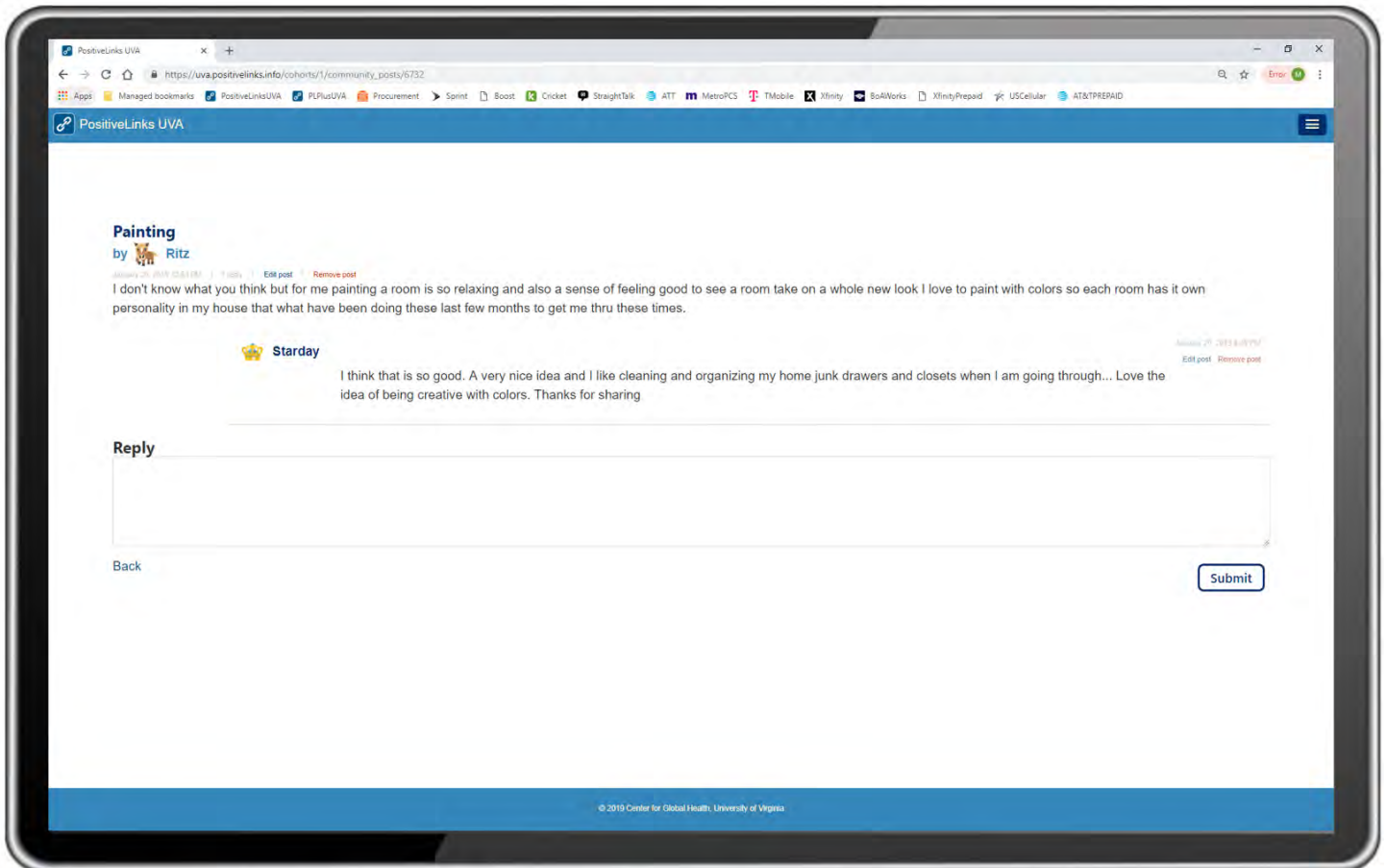
New Check-In	
1	Menu, <b>Check-Ins</b> .
2	Click + <b>New Check-In</b> button
	Sites may create and edit the check-ins that their Member cohort receives daily.



## Community Menu, Community.

The default page contains all Community posts. Posts are ordered chronologically by Timestamp field, with newer Posts on top. Posts are threaded together and a note in the bottom right of each posts indicates either the time of the post or time of last reply. From this page you can click on the original post to view the full text and any commented responses. Site PLC and Administrators may post to the Community. Posts may be created for routine events, such as *Your Weekly Achievements*, to inform Site Members of usage statistics, policy changes, or to start conversations. Site Administrators can also ‘Pin’ important posts to the top of the Community board for a set amount of time. This feature allows for important information to remain visible to more members who may not choose to scroll through the full Community. Upcoming clinic events, PL app updates, and other program updates are examples of posts that Site Admins may wish to pin to the board.



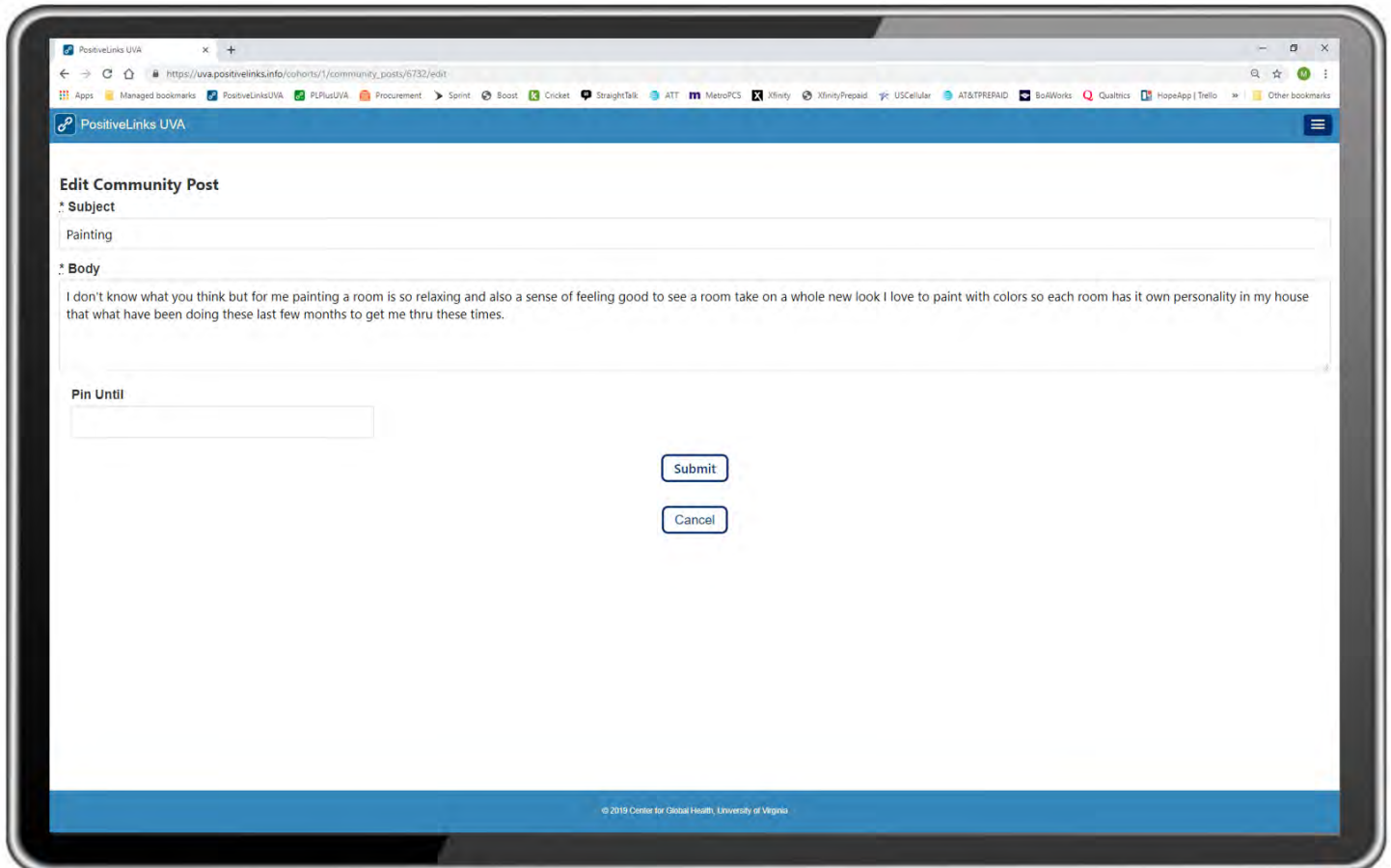




### *Edit Community Post*

Menu, Community, Select Post, **Edit**

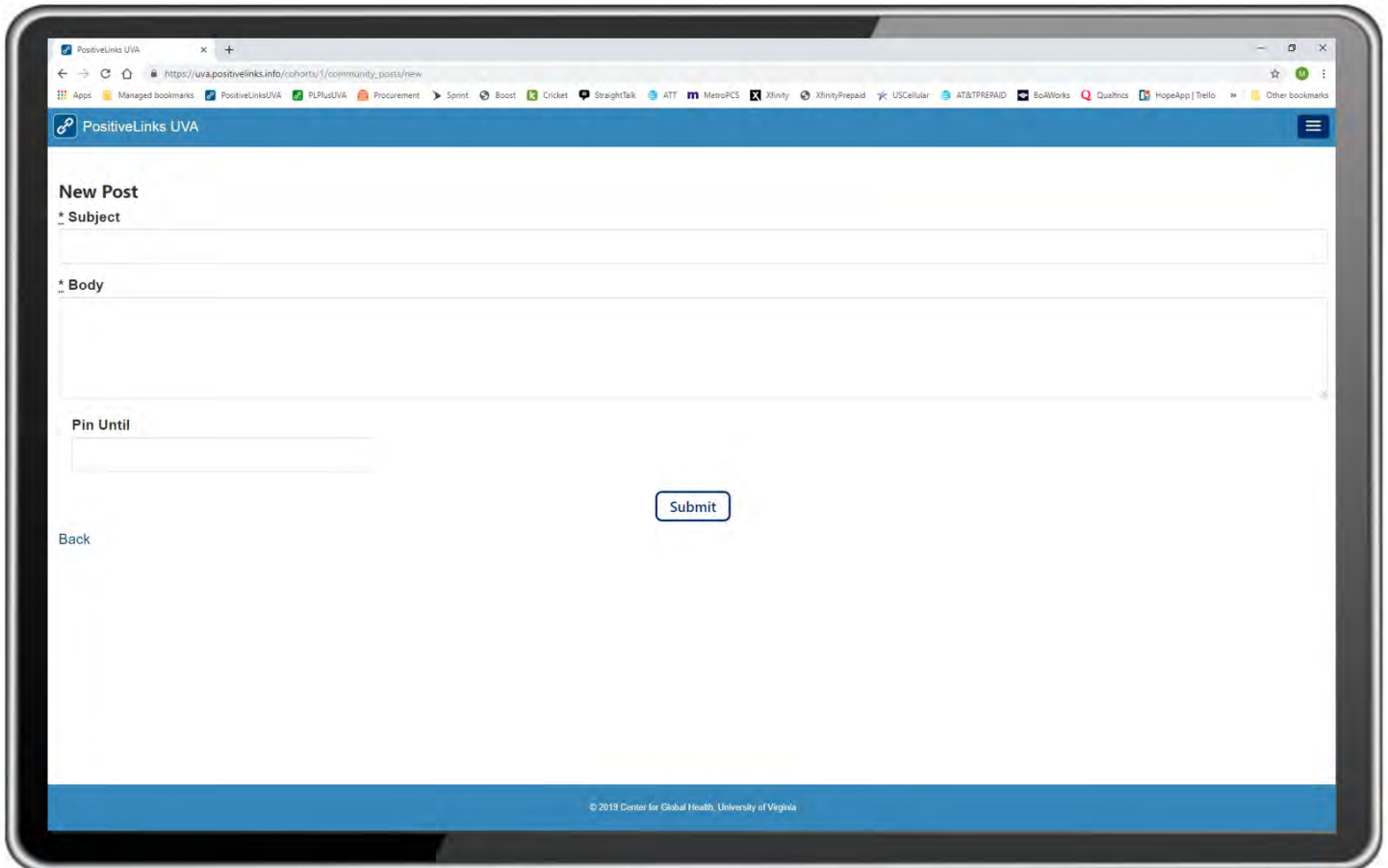
Community Posts may be edited or deleted by Site PLC and Administrators. To edit, open the post of interest and click edit next to the post content. Editing allows Administrators to modify text content of the post or delete the post from the Community.



## New Community Post

Menu, Community, **Create New Post**

Site Administrators are able to create post for the Community board, though it is recommended that PLCs are minimally invasive when posting to the board. To create a new post providers choose ‘Create New Post’ and enter a subject and body to submit. When creating or editing a Community post the option to ‘Pin’ the post is available to Site Administrators. Simply select the date you would like the post pinned until and submit or save your edits. The post will then remain at the top of the Community until the selected date. The ability to pin a post is only available from the portal and not the admin app.



### New Community post

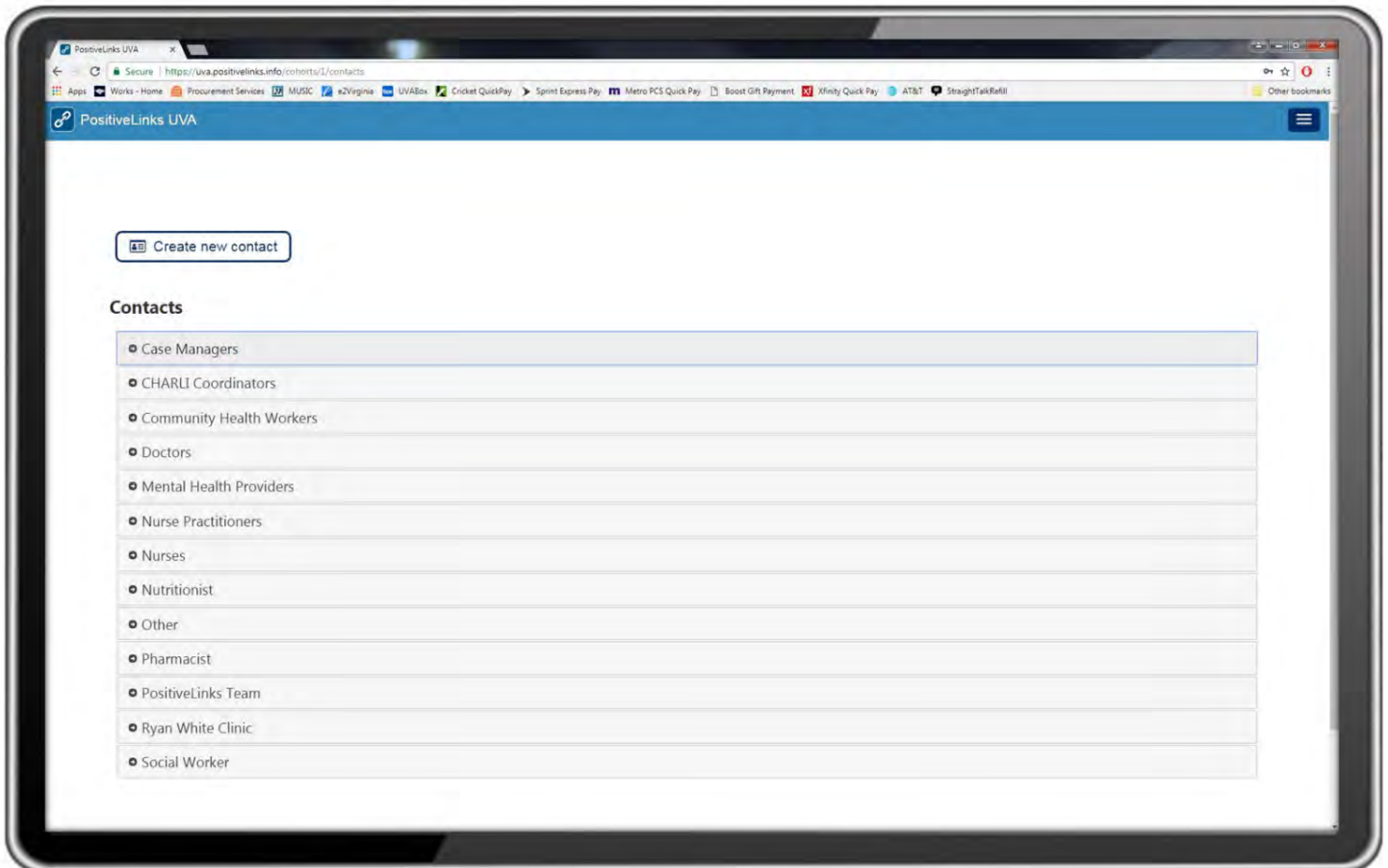
1	Menu, <b>Community</b> .
2	Click + <b>Create New Post</b> button
★	Sites may view and modify Community posts on the Portal

## Contacts

### Menu, **Contacts**.

The Contacts section of the PositiveLinks Portal allows Site Administrators to view, create, and modify the contacts. This allows customized contacts for each Site. As contact information is entered in PositiveLinks Portal, it will display immediately in PositiveLinks Member App.

The Contacts list shows all the contact groups sorted alphabetically. Each group can be opened with a dropdown arrow to display all Site Care Team members within the category, sorted alphabetically by provider username. Contacts may be modified or deleted using the Edit button.

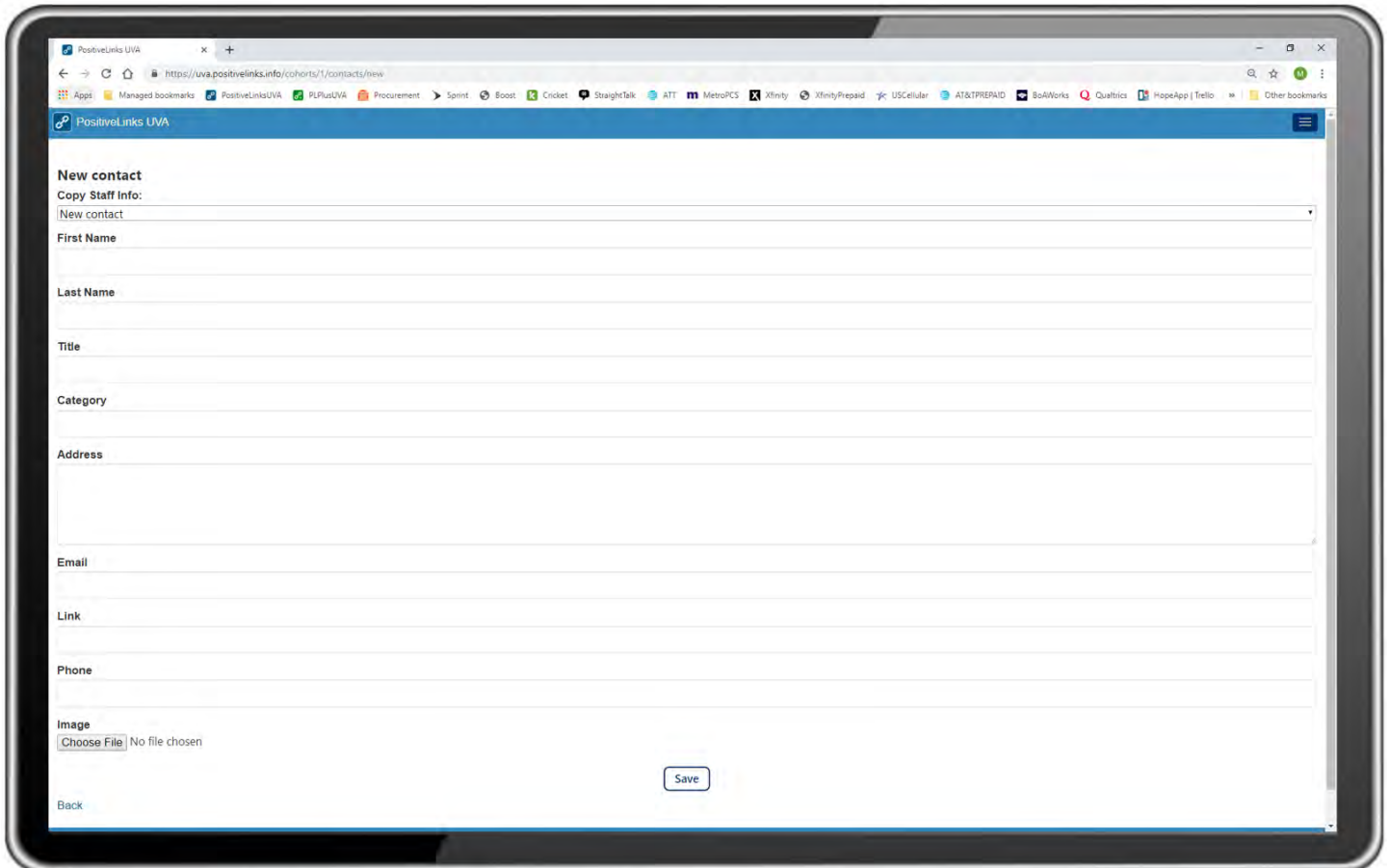


## New Contact

### Menu, Contacts, Create New Contact

When creating a new contact, Site Administrators can link the contact to a provider account to allow for direct messaging from Members in the PositiveLinks Member App. To link a contact to a provider use the ‘copy staff info’ drop down list to select a provider. Contacts contain the following entry fields:

- First Name
- Last Name
- Title
- Category
- Address
- Title
- Link
- Phone Number



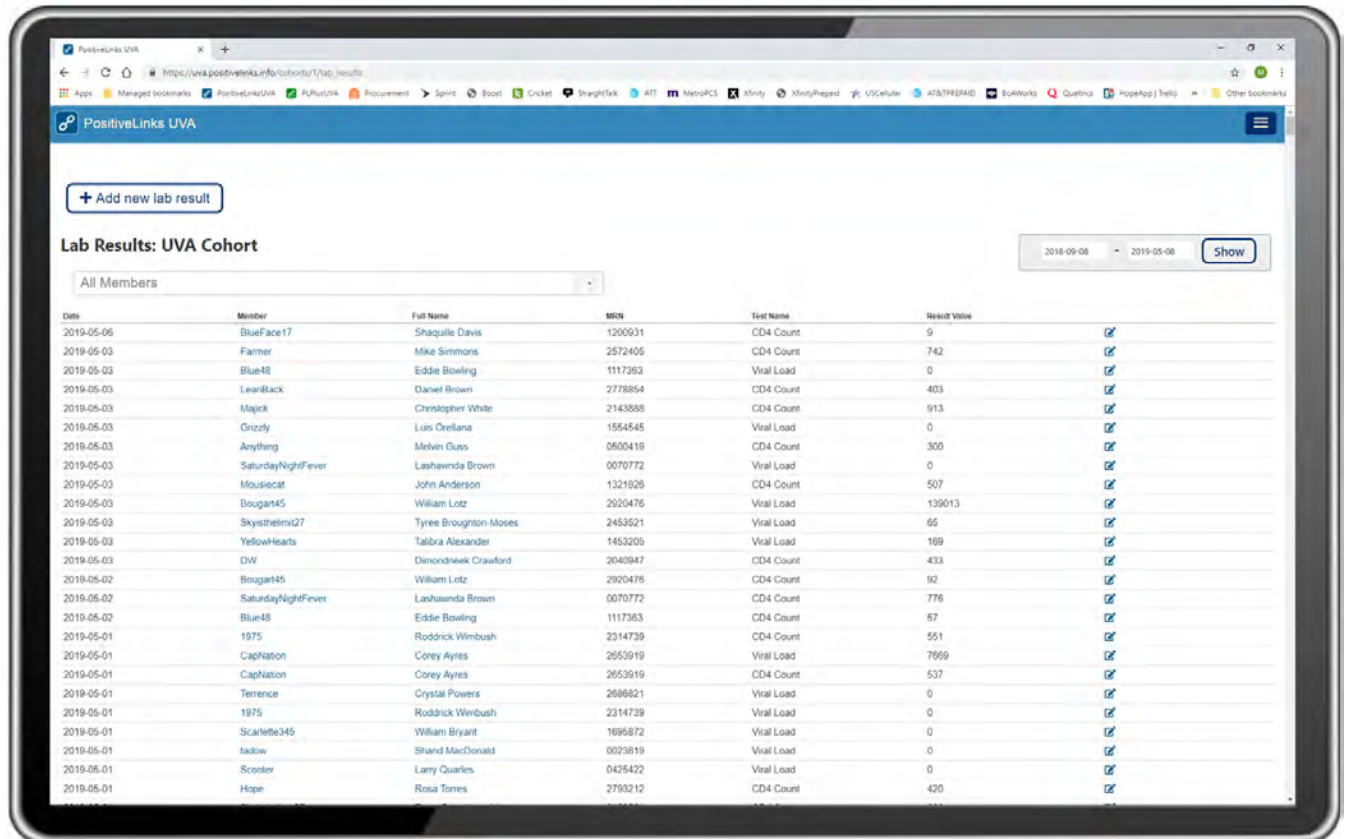
## New Contact

1	Click Menu, <b>Contacts</b> .
2	Click + <b>Create New Contact</b> button.
★	Sites may establish different groups of contacts, but may not customize contacts specifically for each Member.

## Labs

### Menu, Labs.

Labs section of PositiveLinks Portal contains lab data values for Member CD4 and Viral Load. The default page is the full list of Site Lab Results ordered by date. Lab results may be entered by Site PLC. Sites may consider automating entry of Lab values through EMR integration. Labs may be modified from the Labs List screen.



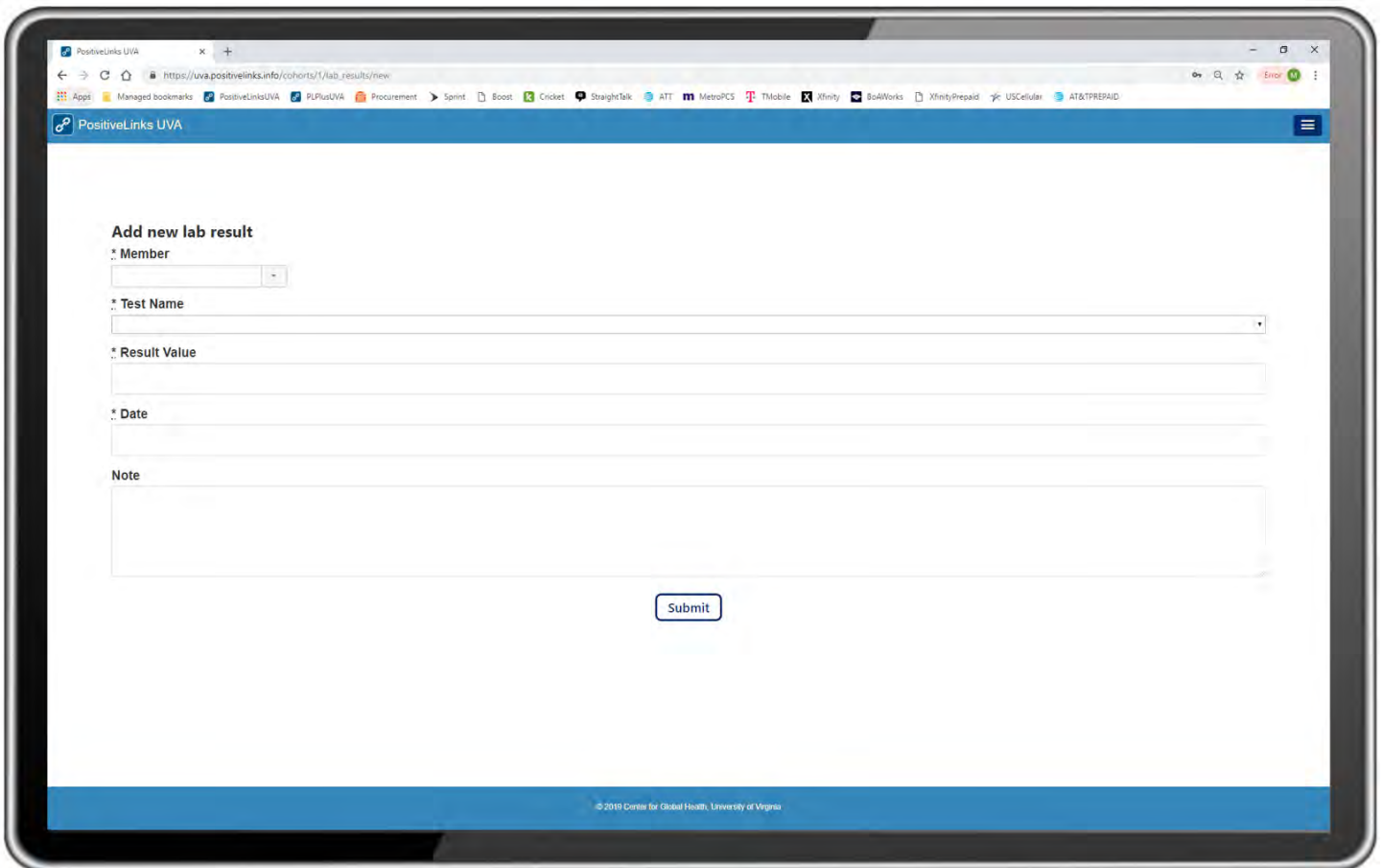
### New Lab

#### Menu, Labs, Add new lab result

Site Administrators can add lab results for Members when EMR integration is not used or to add additional values. To add a result, select the member from the drop-down list and enter the test, value, and date. You can also add notes.

Labs entry fields consist of:

- Date
- Username
- MRN
- Test (CD4 or Viral Load)
- Result (units are automatic)
- Note(s)



New Lab	
1	Click Menu, click <b>Labs</b> .
2	Click + <b>Add new lab result</b> .
★	To enter new Lab values, have Username available for each Member with Lab values.



## Members

### Menu, **Members**

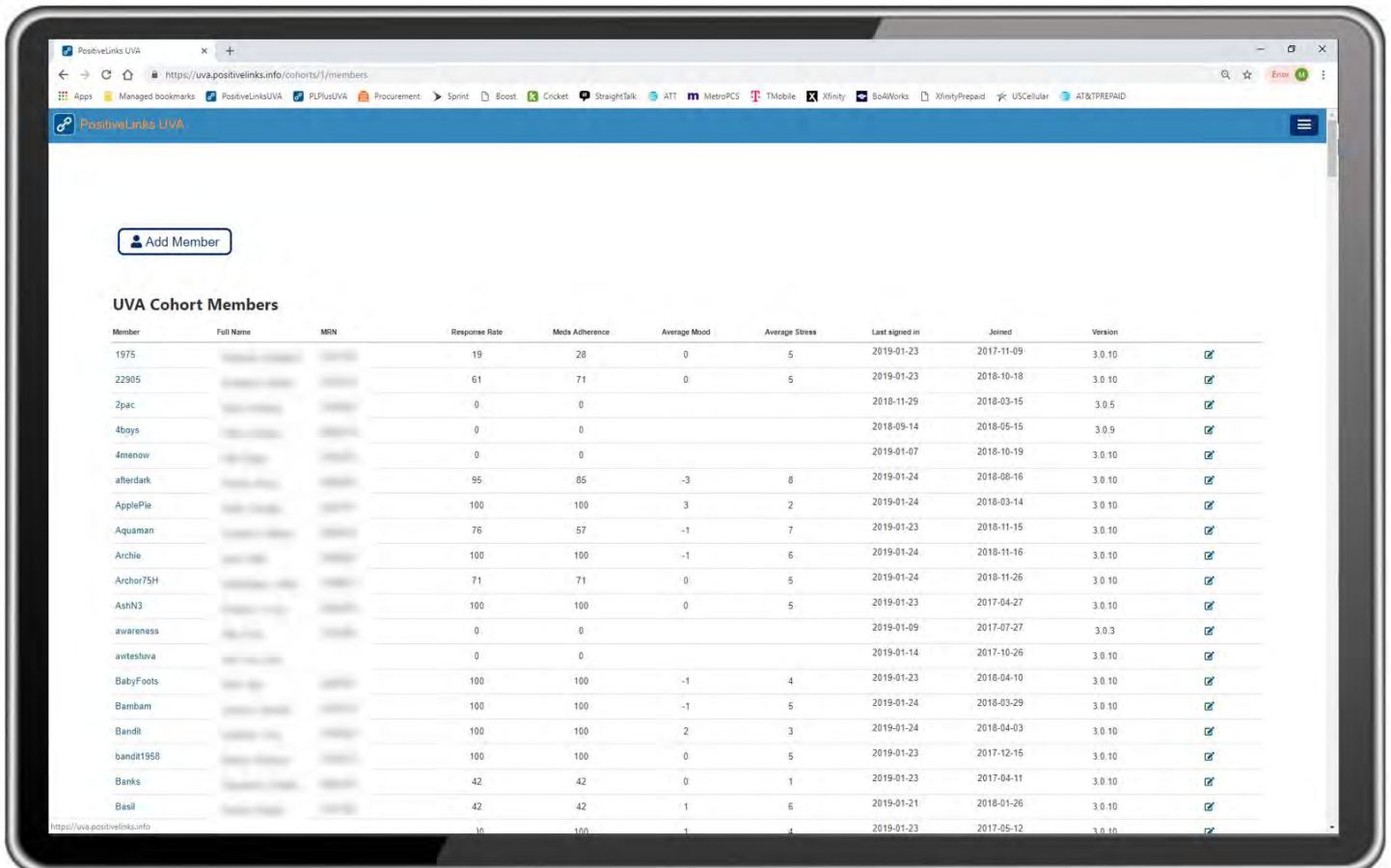
The Members screen displays all active members in the PositiveLinks cohort and allows access to the Member Dashboards.

Site Administrators are able to view the following:

- Username
- Name (legal name)
- MRN
- Response Rate: averaged for the week
- Meds Adherence: averaged for the week
- Avg. Mood: averaged for the week
- Avg. Stress: averaged for the week
- Version: app version
- Edit button

The Members tab is used for the following activities:

- Register a new Member
- Modify a Member account
- View a Member’s Dashboard
- Message a Member
- Delete a Member’s account



### Add Member

Menu, Members, **Add Member**

Site Administrators are able to add new Members from the Member page or from the Summary Page. Demo member accounts can be created for Administrators to use to test and demonstrate the app to potential members. This account can be excluded from reporting by selecting 'Don't include this account in activity reports' when creating or editing the member account. New member registration can consist of the following information:


- Username (required): This is the name that will display on the Community
- First and last name (optional)
- Medical Record Number (optional)
- Password (required)
- Site ID and Study ID (optional)
- Primary Provider, Case Manager, Eligibility Specialist (optional)
- Medication: New Alarm (optional)

The screenshot shows a tablet displaying the 'Add Member' form in a web browser. The browser address bar shows the URL: <https://uva.positivelinks.info/cohorts/1/members/new>. The form is titled 'Add Member' and contains the following fields:

- Username (required)
- MRN (optional)
- First Name (optional)
- Last Name (optional)
- Password (required)
- Confirm Password (required)
- Site ID (optional)
- Study ID (optional)
- Primary provider (dropdown menu)
- Case manager (dropdown menu)
- Eligibility Specialist (dropdown menu)
- Don't include this account in activity reports (checkbox)
- Medication: New Alarm (optional) (text input field)

At the bottom of the form, there is a blue 'Save' button and a '<< Back' button. The footer of the page reads: © 2019 Center for Global Health, University of Virginia.

## Add Member

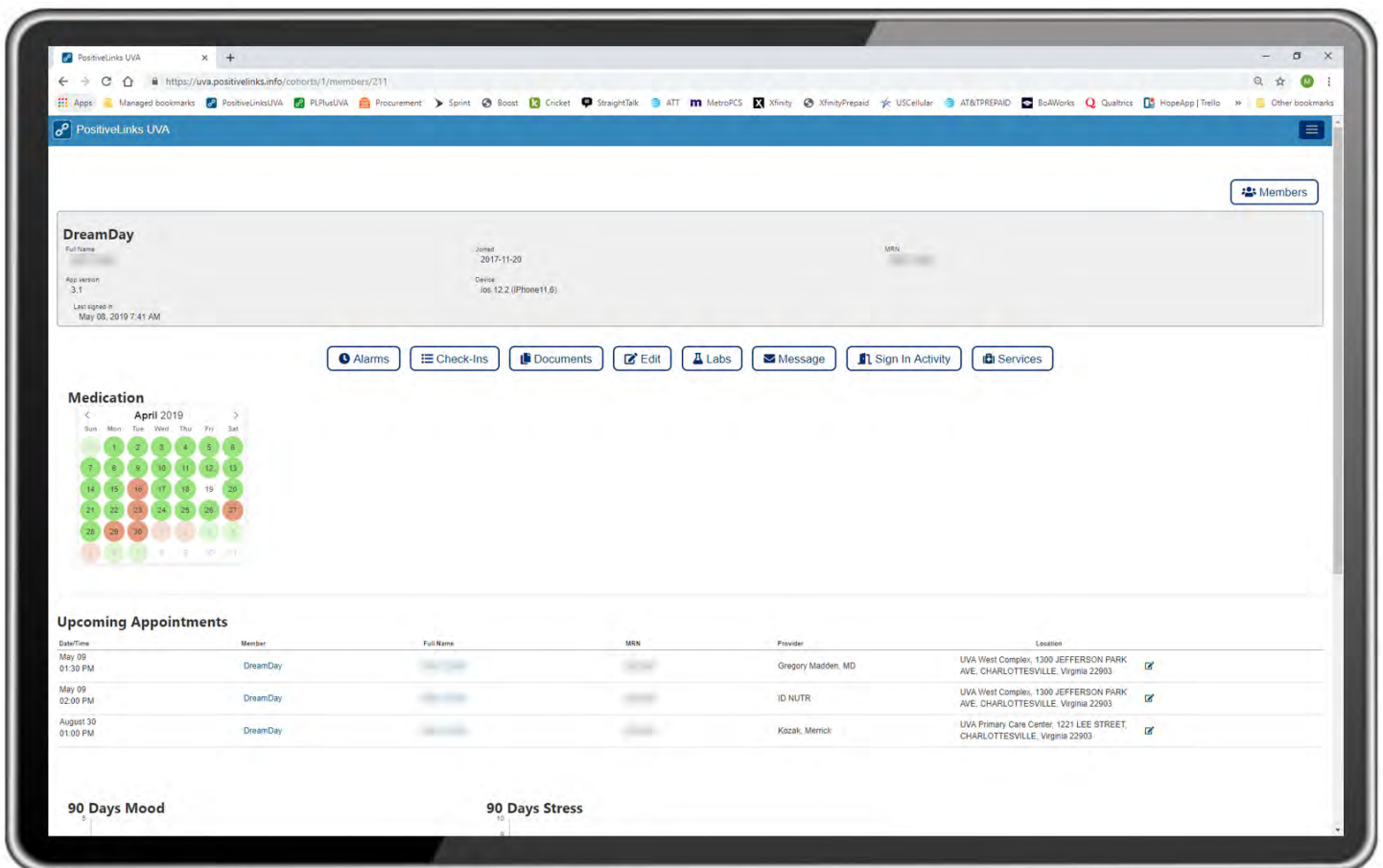
1	Menu, <b>Members</b> .
2	Click <b>Add Member</b> . Enter new Member details into the web form, click <b>Submit</b>
	To modify Member accounts, select the edit icon, make required edits, click <b>Submit</b> .

## Member Dashboard

### Menu, Members, **Select Member**

Site Administrators can view the Member Dashboard to do the following actions:

- Review summary check-in and lab data
- Add or edit alarm timing
- View detailed check-in responses and app logins
- View, edit, or add documents
- Edit the member account
- View, edit, add labs
- View or start message conversation
- View or edit services



## Member Dashboard

1

**Menu, Members.** From the Member list, search or scroll to find desired Member record.

2

Click on the **Username** of the desired Member to open up their Dashboard.

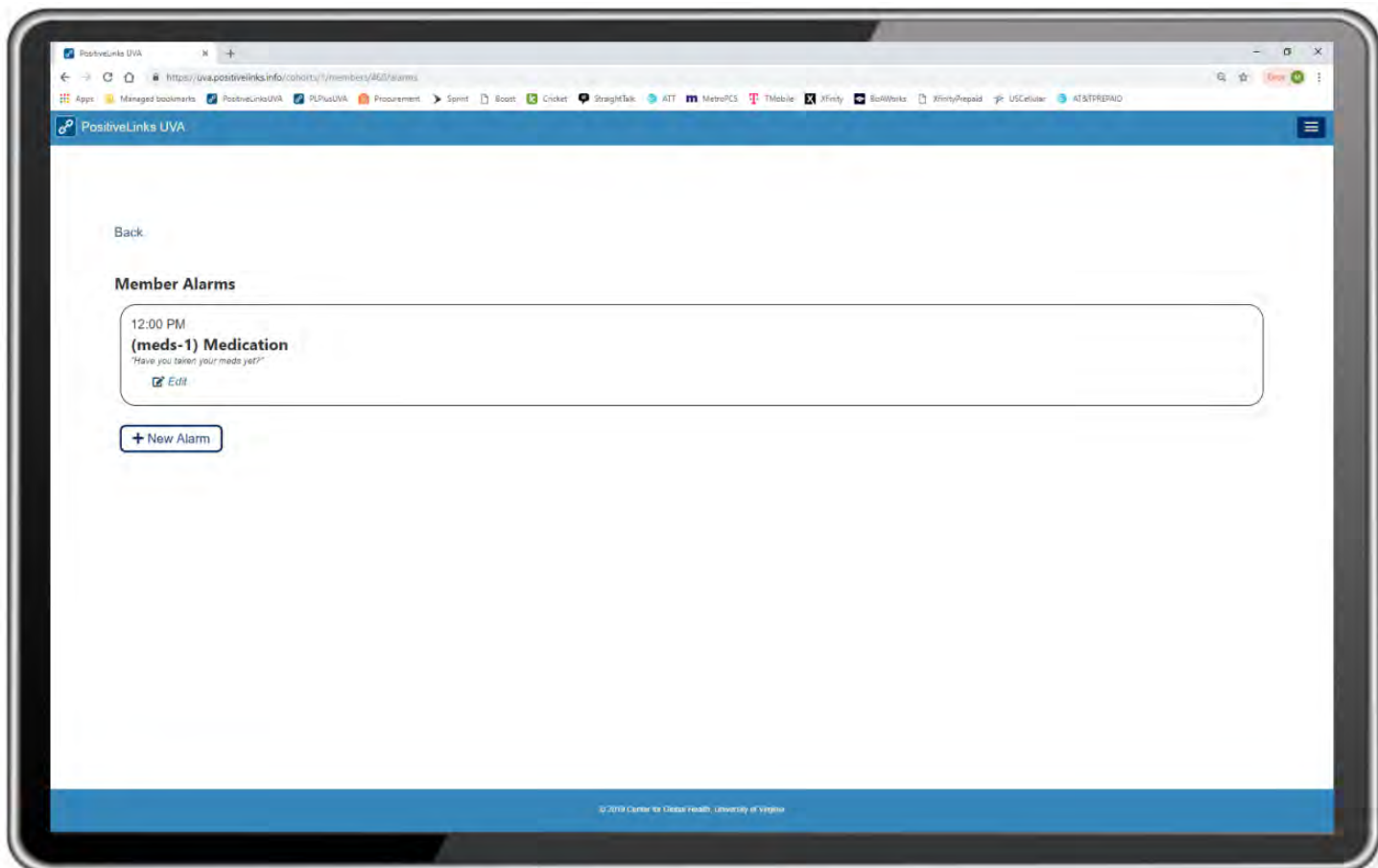


Dashboards provide a complete snapshot of Member response rate, reported meds adherence, and mood and stress levels.

## Alarms

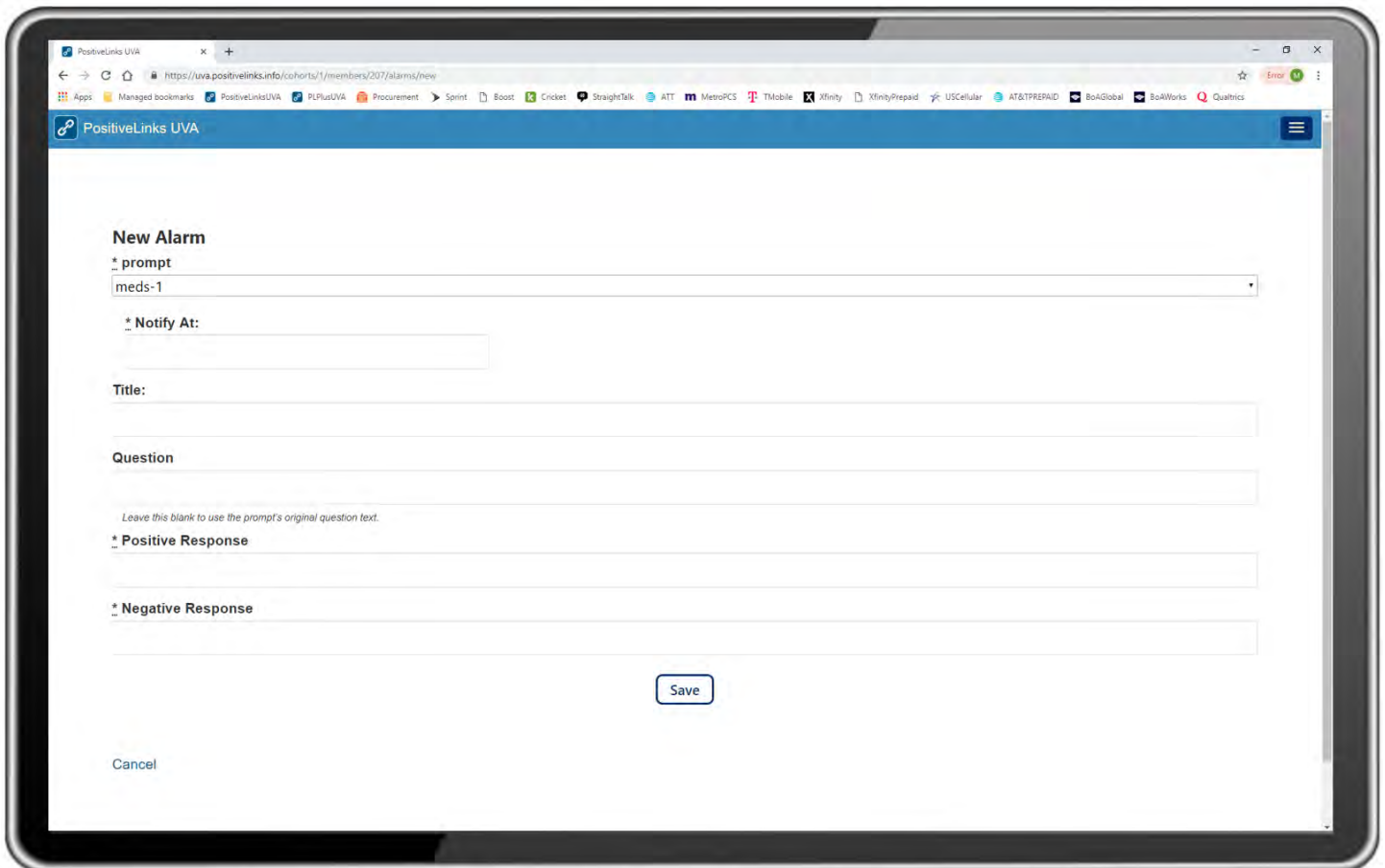
Menu, Members, Select Member, **Alarms**

The Medication Check-In time can be modified from the alarms page of Member dashboard. It is recommended that this time and any changes in the affirmative or negative replies are made during enrollment. If the alarm isn't set, the default time (11:00 am) and replies will be used.



### New Alarm

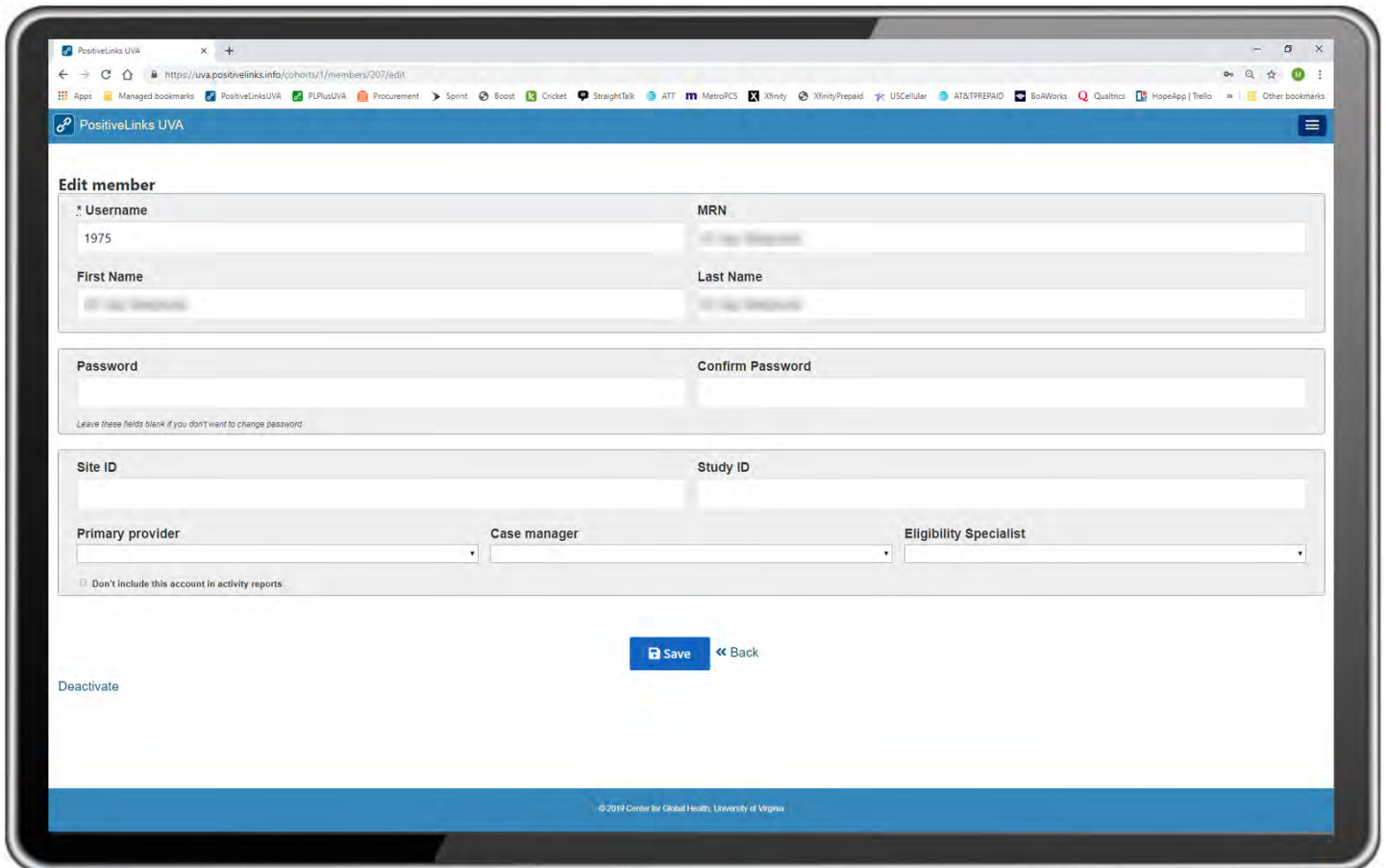
To add a new alarm, Administrators select the ‘New Alarm’ button from the alarm listed. Administrators select the alarm prompt of interest and they can edit the time of notification, title, question used, positive response, and negative response.





### Edit Alarm

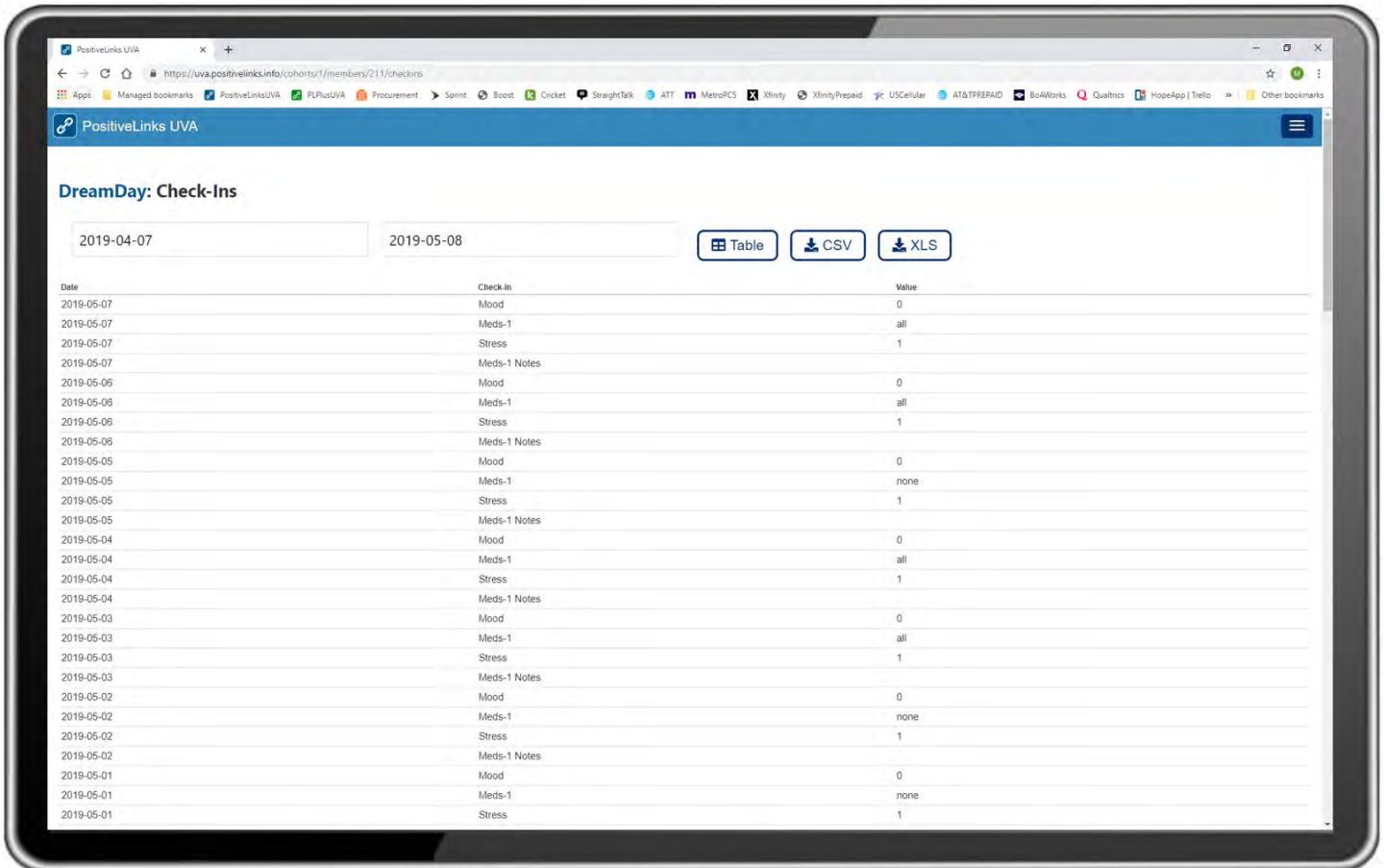
To edit a previous alarm, Administrators select the Edit button from the alarm listed and they can edit the time of notification, title, question used, positive response, and negative response.



### Check-Ins

Menu, Members, Select Member, **Check-Ins**

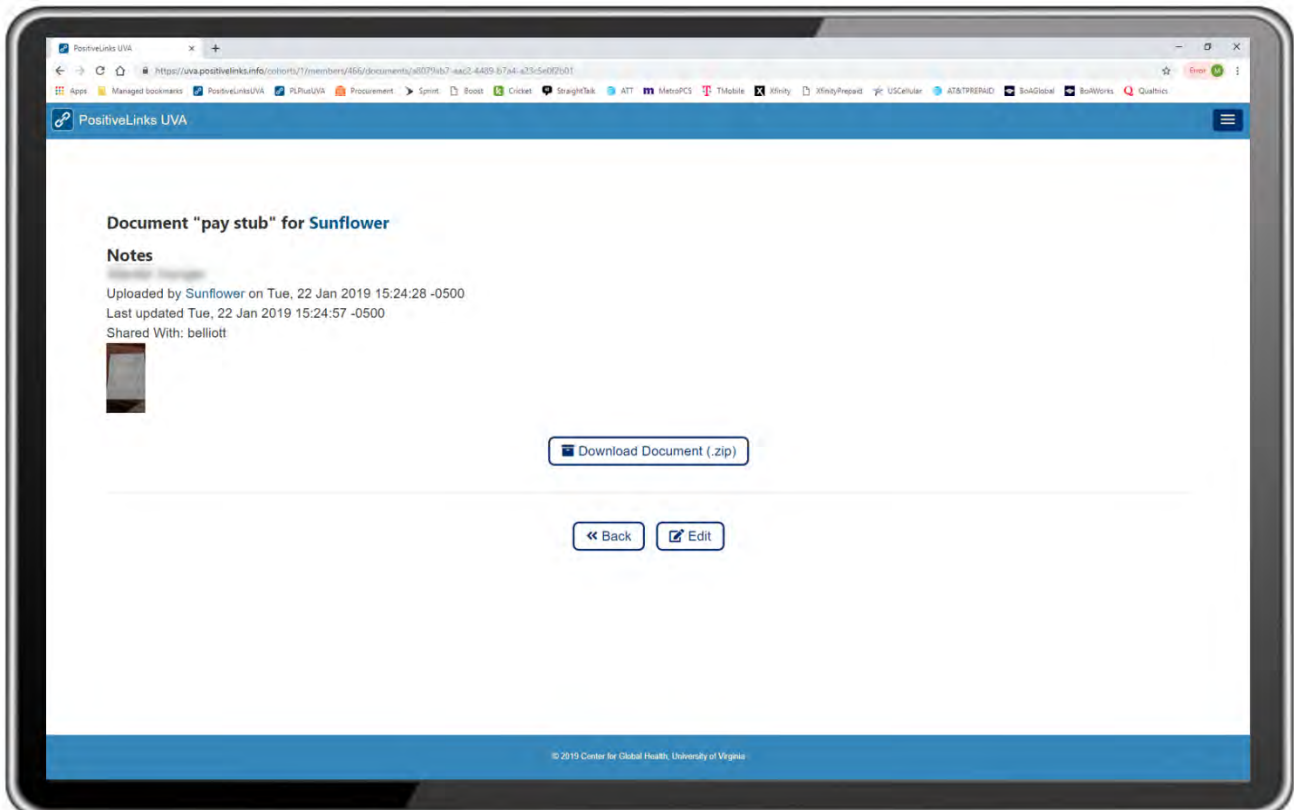
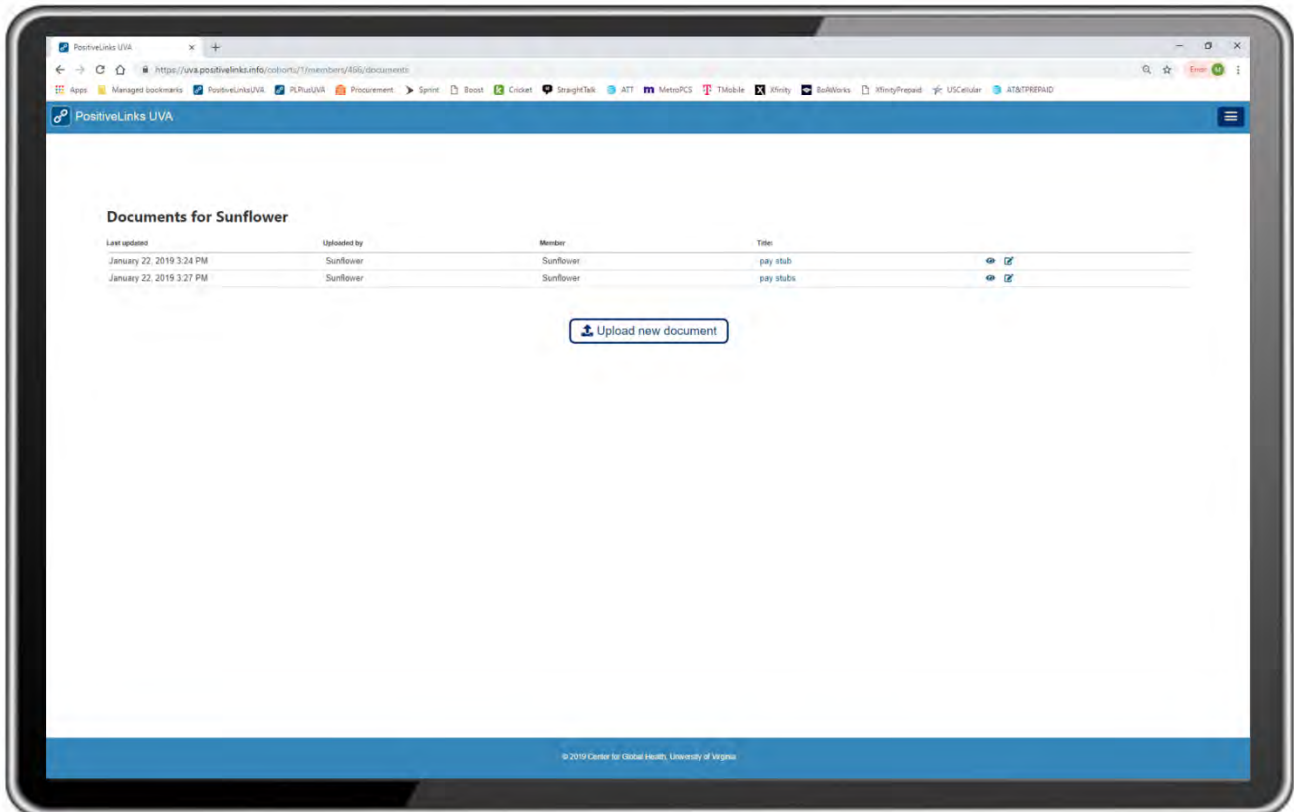
Site Administrators can view detailed reports of member Check-In activity by selecting Check-Ins from the Member Dashboard. These reports can be exported or viewed in the web browser for the selected date range.



## Documents

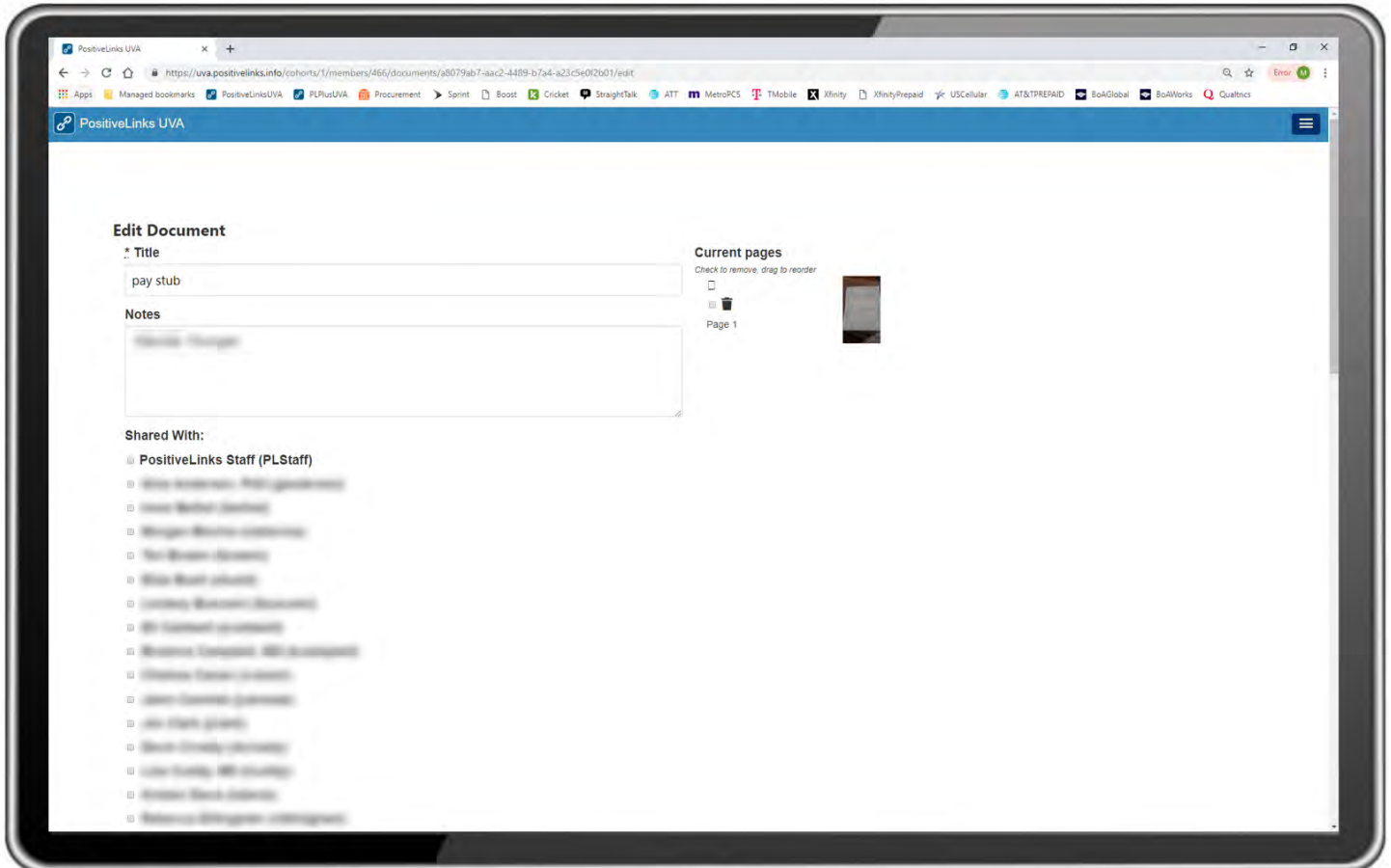
Menu, Members, Select Member, **Documents**

Sit Administrators can view, edit, or add new documents for a specific member from the Documents page of the Member Dashboard.



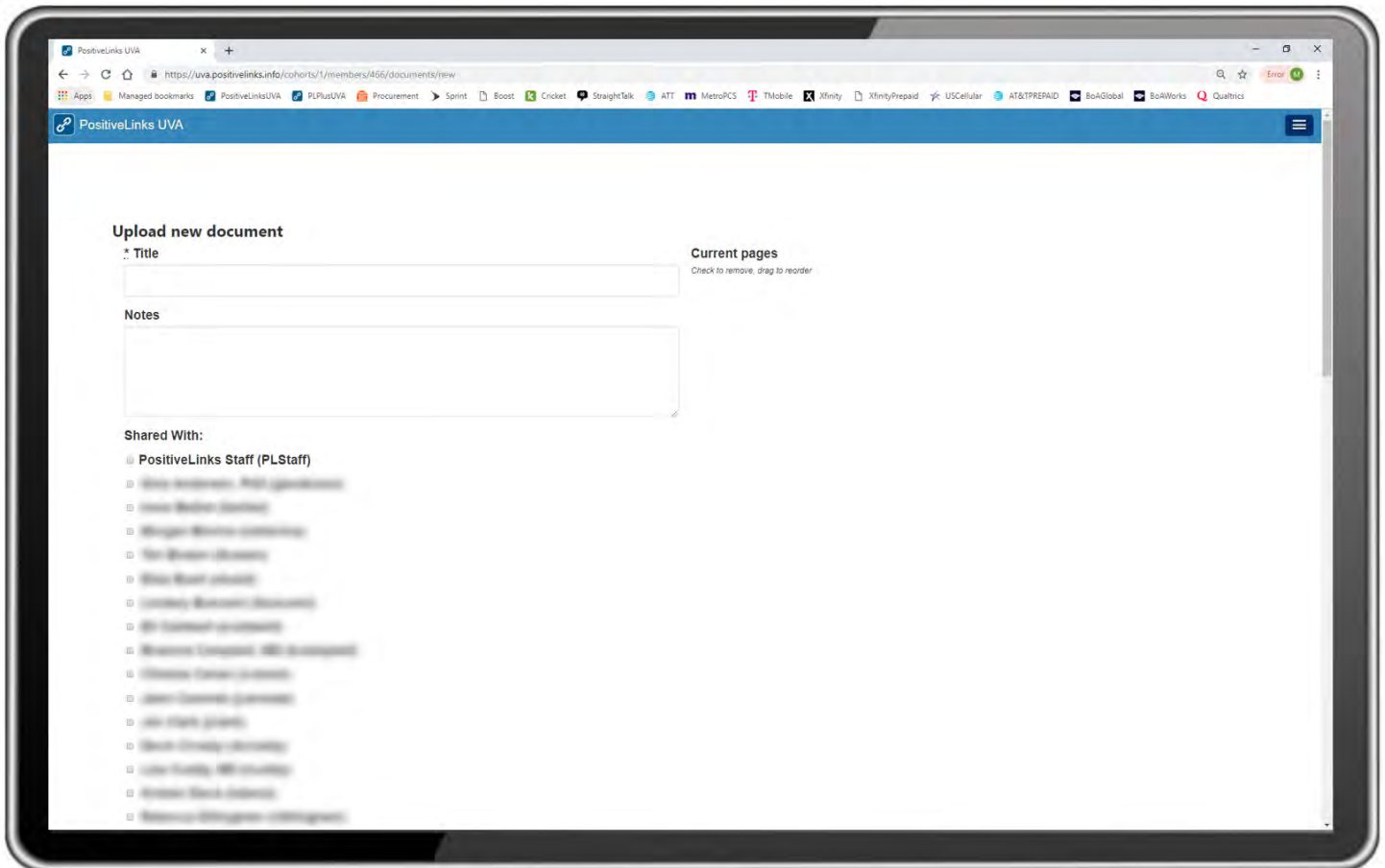
### Edit Document

To edit a previous document, Administrators can select the edit icon on the right side of the screen. Administrators can edit the title, add notes, or update the shared providers list. Select ‘Save’ to complete the edit.



### Upload New Document

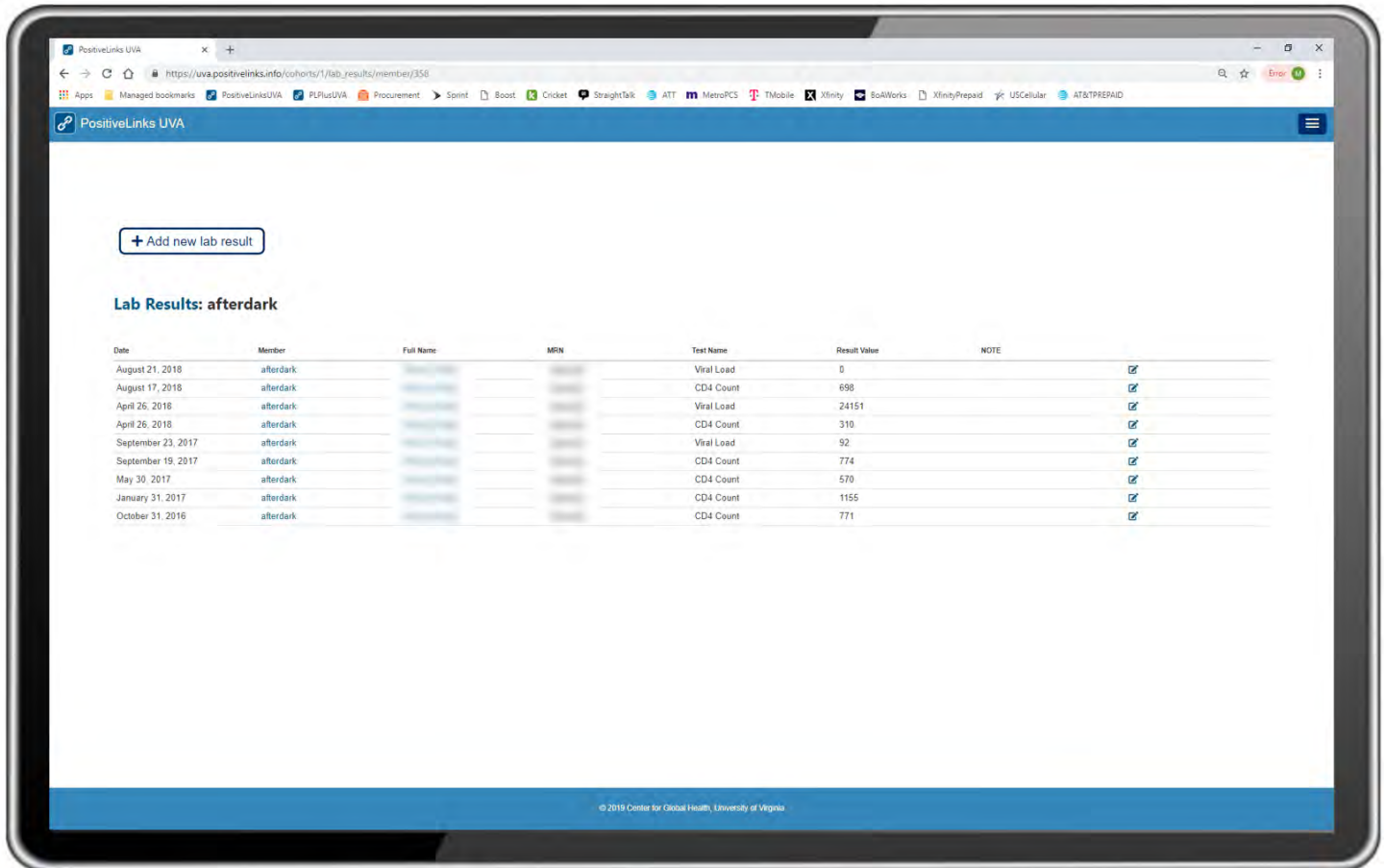
To upload a new document, Administrators select ‘Upload New Document’ from the Member specific document page. Administrators are then prompted to enter a title, notes, select providers to share the document with, and upload a file. Select ‘Save’ to complete the document upload.



### Labs

Menu, Members, Select Member, **Labs**

Site Administrators can view labs for specific members from the Labs page of the Member Dashboard. Administrators can add or edit labs from here or go to the full lab page and add or edit labs.

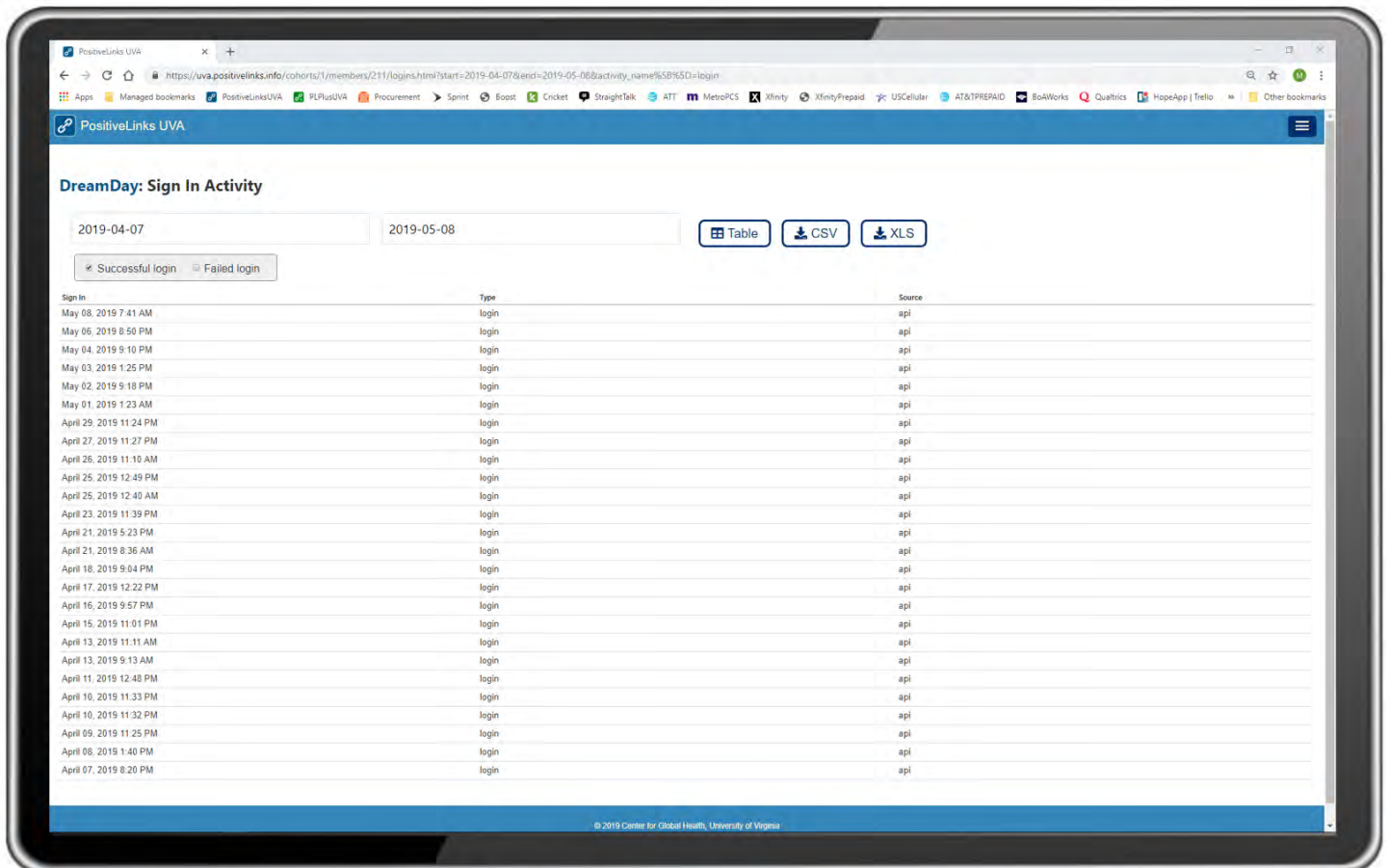




### Sign In Activity

Menu, Members, Select Member, Sign In Activity

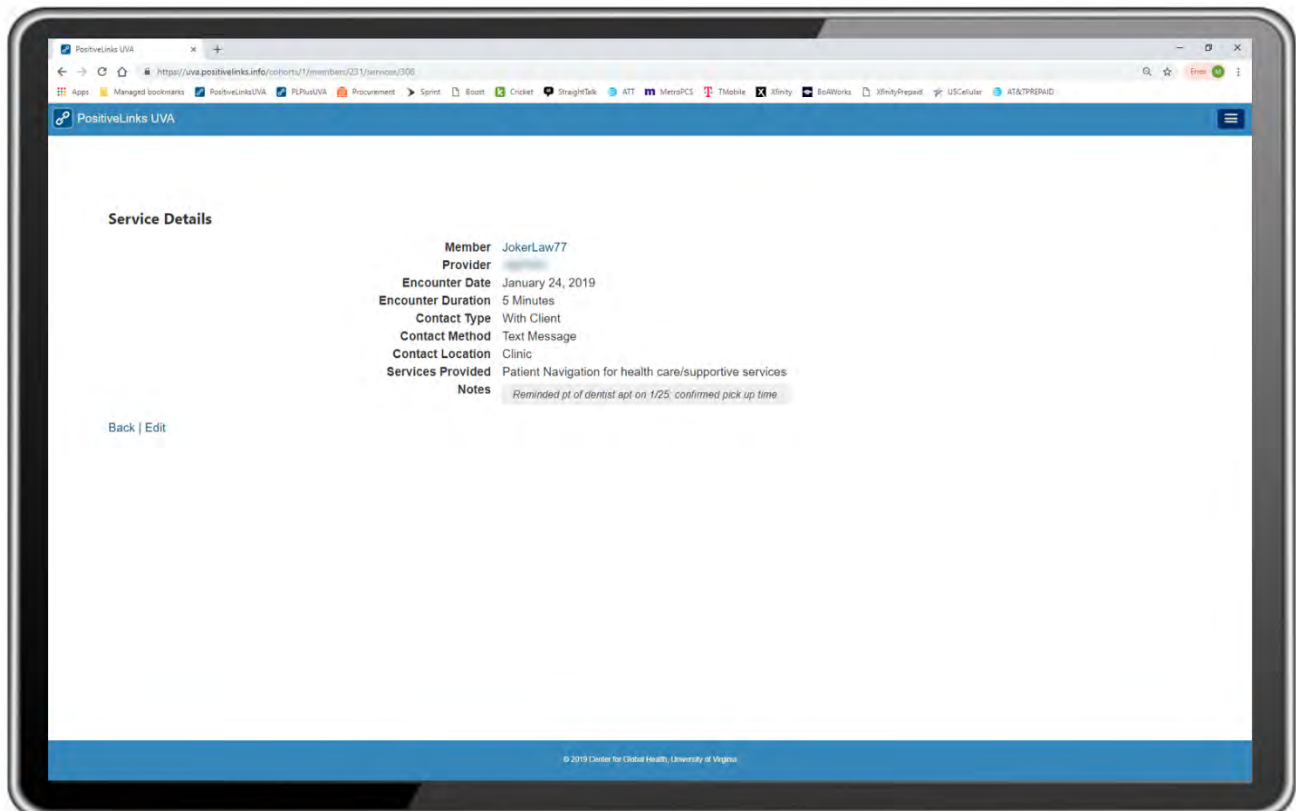
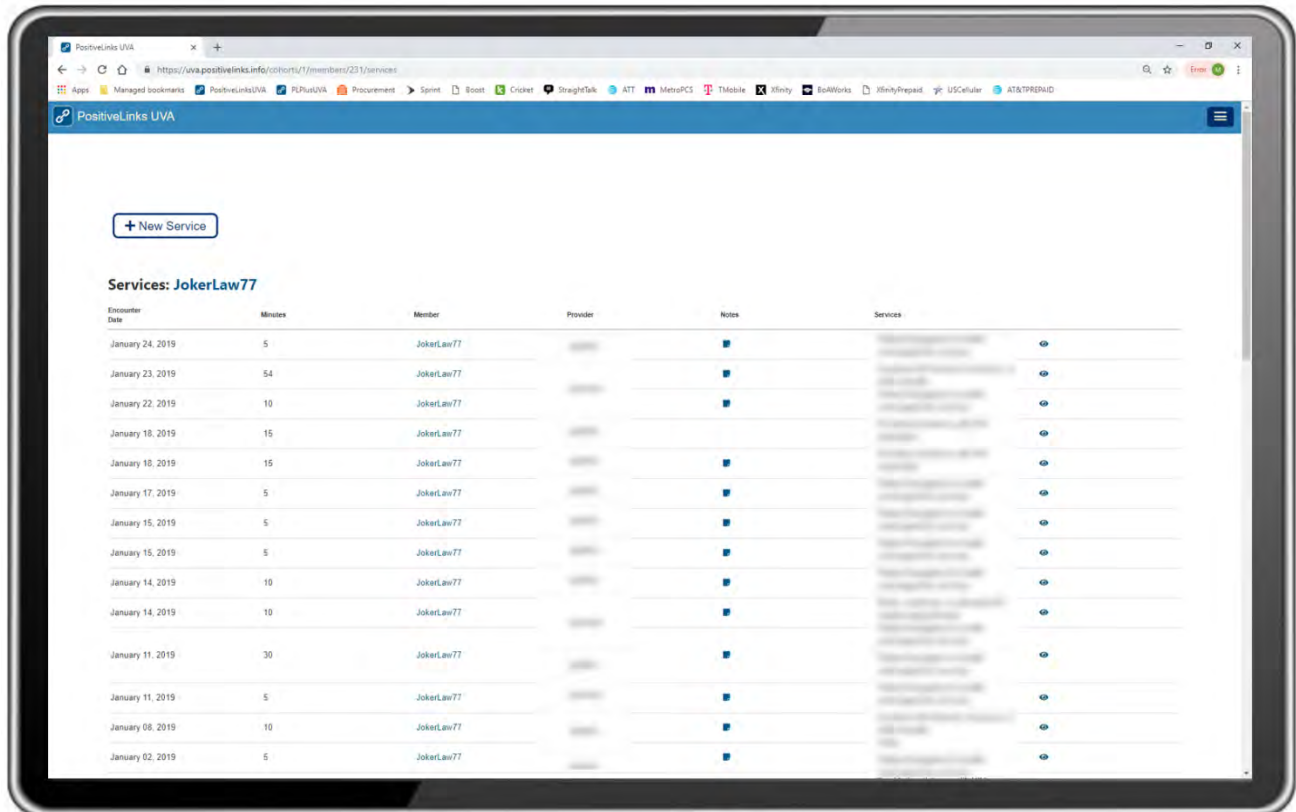
Site Administrators can view all login attempts members make for a desired date range, by default the past 30-days. This login data can be filtered by successful and failed logins and can be used to help identify if members are having difficulty logging in due to password errors.



## Services

Menu, Members, Select Member, **Services**

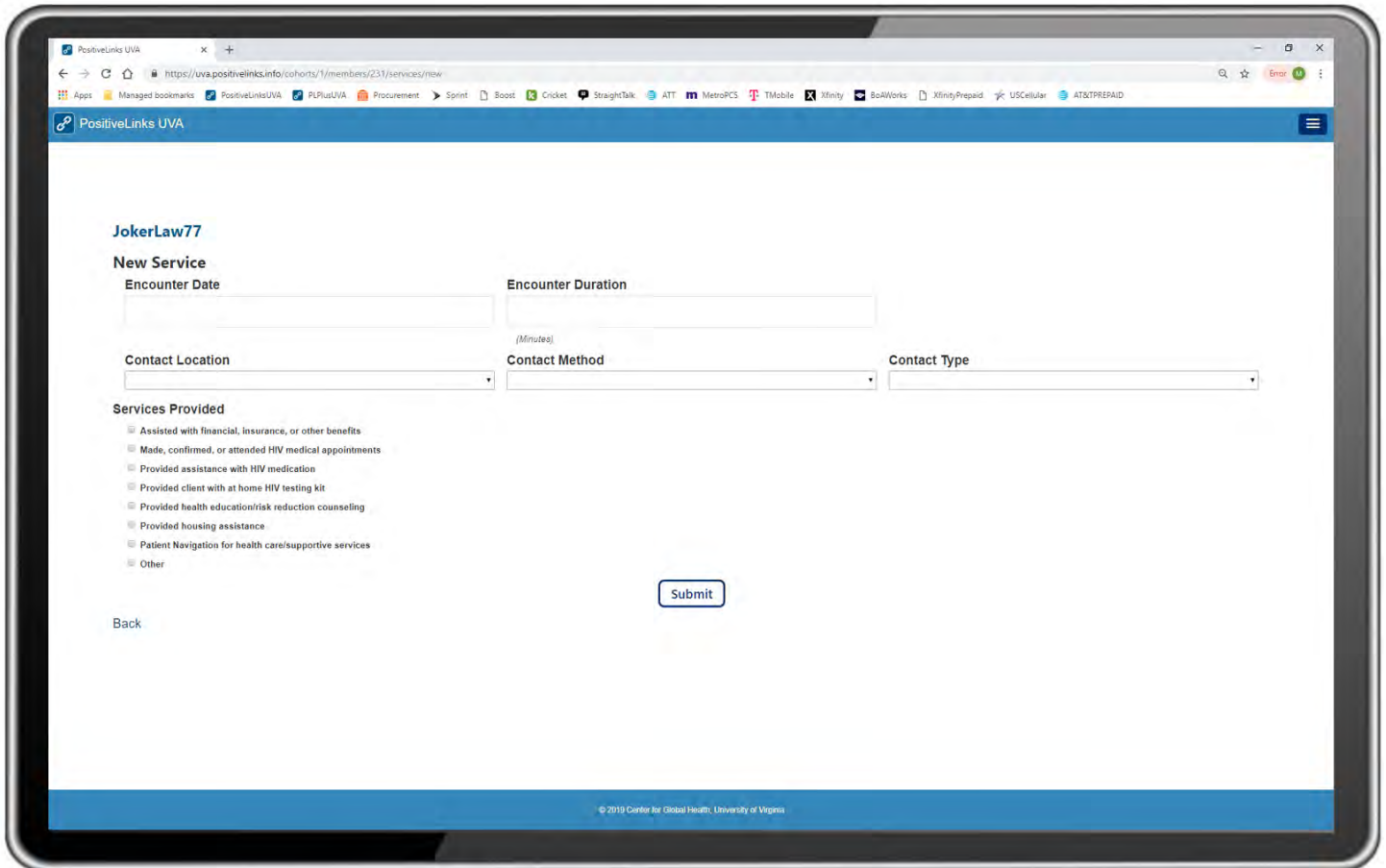
Site Administrators can view, edit, and add new services for a specific member from the Services page of the Member Dashboard.



### New Service

To enter a new service, Administrators select the ‘New Service’ icon on the Services page of the Member Dashboard. Administrators are prompted to enter the following information:

- Encounter Date
- Encounter Duration
- Contact Location
- Contact Method
- Contact Type
- Services Provided

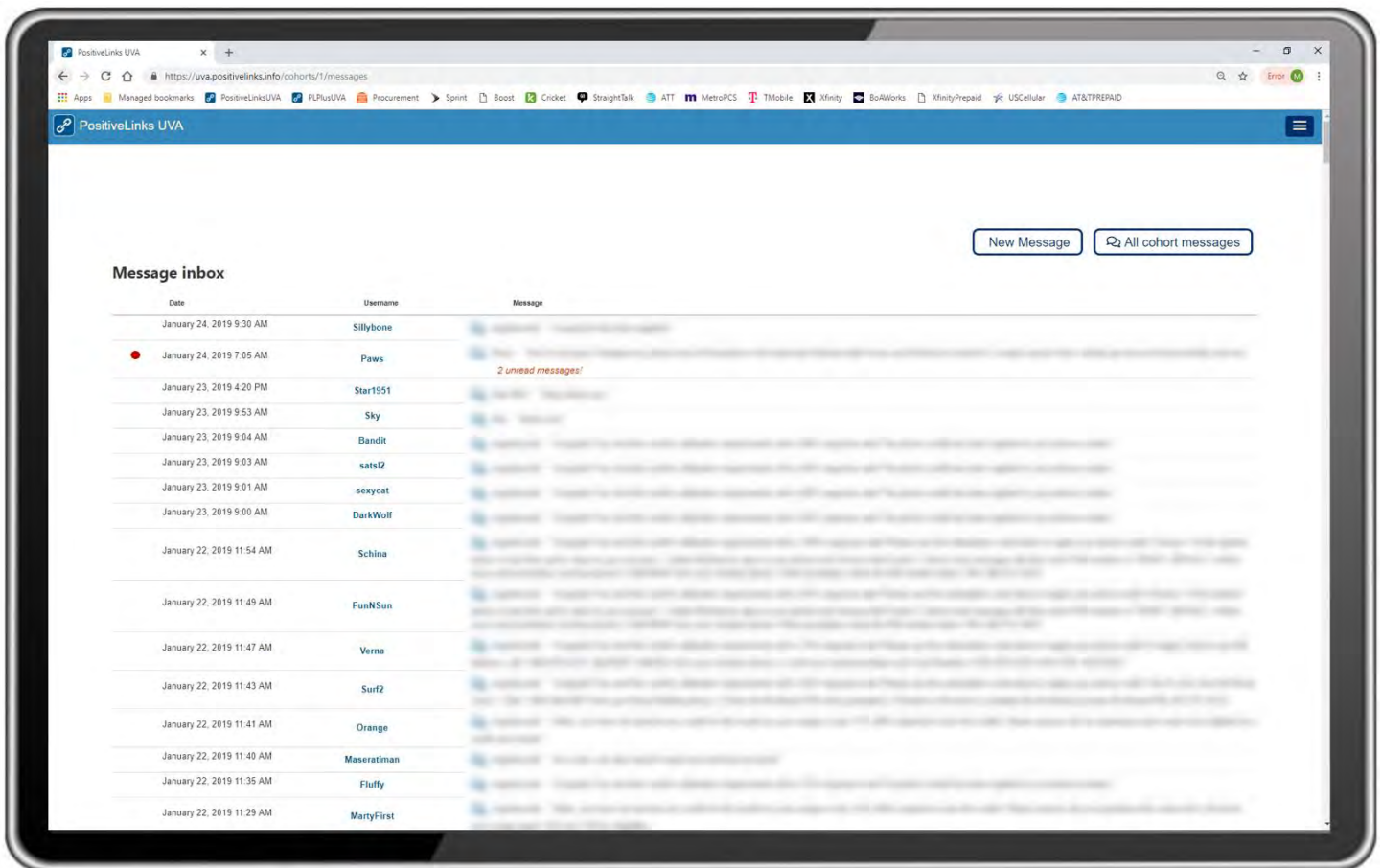


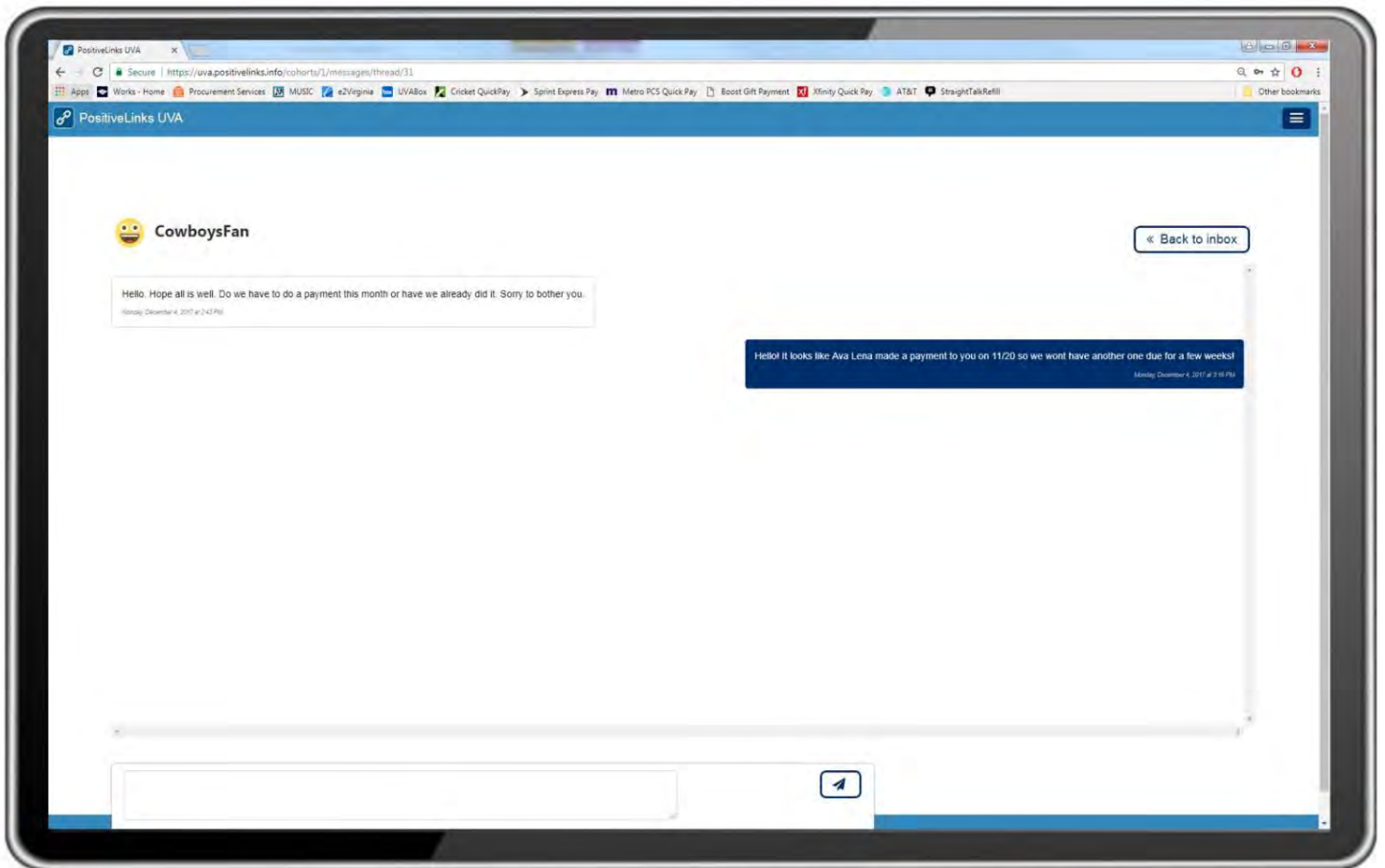
## Messages

### Menu, Messages

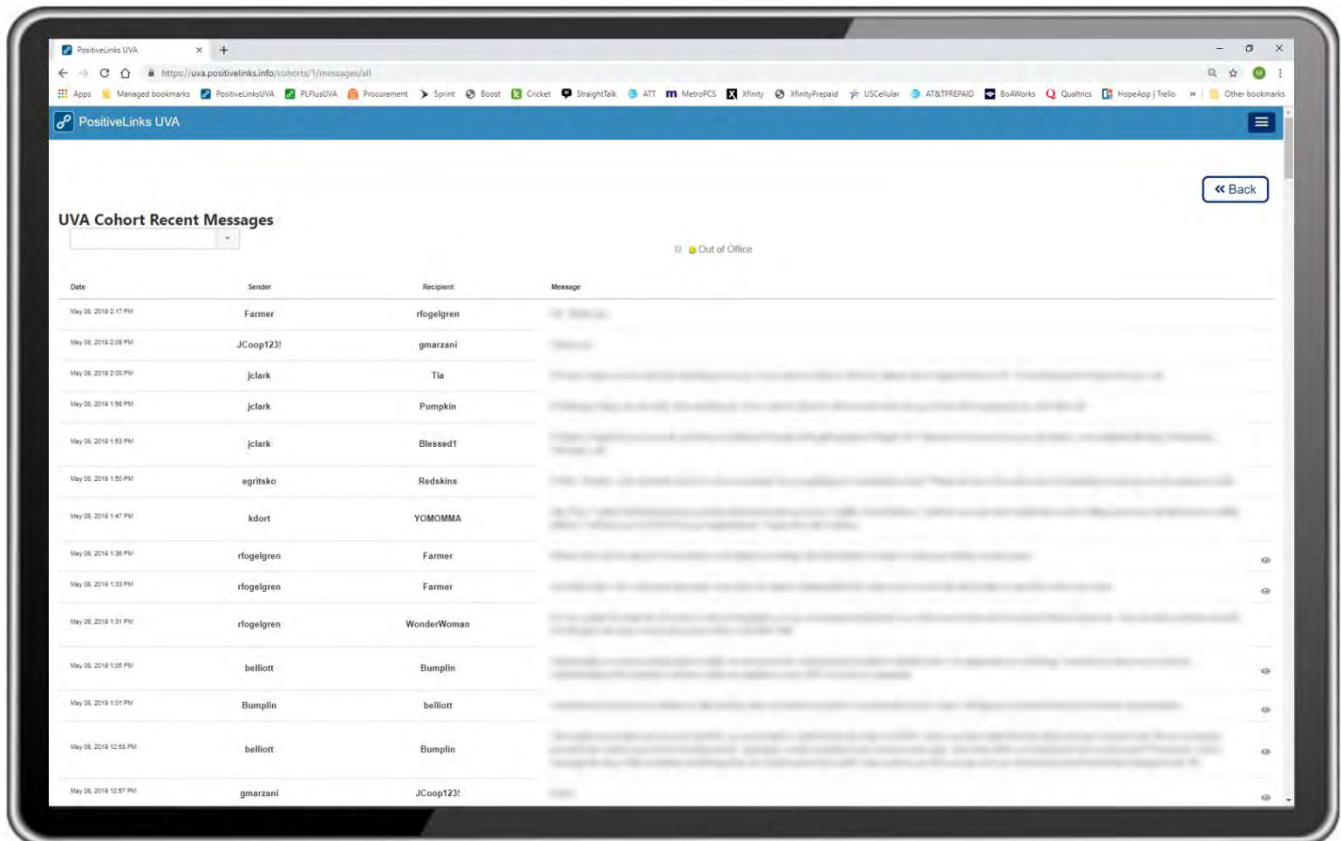
The Messages screen allows Site Administrators to send and receive messages with Members. Messages sent by and to Members will be securely stored on the PositiveLinks server.

- *Message Inbox:* This is the default Message display and shows all message threads for the Site Administrators. New messages can be created from this page. A red dot next to a message indicates the message is unread. If there is more than one unread message from a single patient, a text call out indicates the number of unread messages. The Message Inbox displays the following information sorted by Date and Time of message:
  - Date/Time of the most recent response
  - Username
  - Message





- **All Cohort Messages:** This tab displays for Administrator Role only and is a list of all PositiveLinks messages. A yellow dot next to a message indicates the provider in that message has listed their availability as ‘Out of Office’ and Administrators can limit the message list to these messages. This feature helps Administrators to know when they might need to reach out to a patient or triage a message if the provider recipient is unavailable. It displays the following information sorted by Date and Time of message:
  - Date/Time of the most recent response
  - Sender
  - Recipient
  - Message



Administrators can also sort the messages for specific members or providers to allow for easier tracking of conversations that might require additional follow-up.



## New Message

Menu, Messages, **New Message**


Site Administrators may create new Messages to Members through PositiveLinks Portal. There are two ways to do this.

- Menu, Members. Selecting the Member from the PositiveLinks Member list and click the **Message button**. If there is no prior contact with that Member, a black chat will open. If the Site Administrator has previously contacted that Member it will pull up their chat history.
- Menu, Messages, + **New Message** button. Username or legal name must be selected from a list.

### Start a conversation

**Recipient**

**Message**

 Send

### Message Notification

Rather than transmit message content to another system, for example the Site's email system, PositiveLinks sends a **New PositiveLinks Message** email to the appropriate Site Administrators registered in the system. The email's subject line is 'New PositiveLinks Message' and the message content is 'You have received a new message! You can view the message using the link below: <https://uva.positivelinks.info> (site specific URL)'

To view the Message, Site Administrators may use the link in the email to access PositiveLinks Portal login screen, then login with their username and password. The email notification provides immediate heads-up of new Messages for Site Administrators. Replying to the email notification, however, results in a failed message. Site Administrators can also access new messages through the Admin App and details on that are located in the Section 6.



## Providers

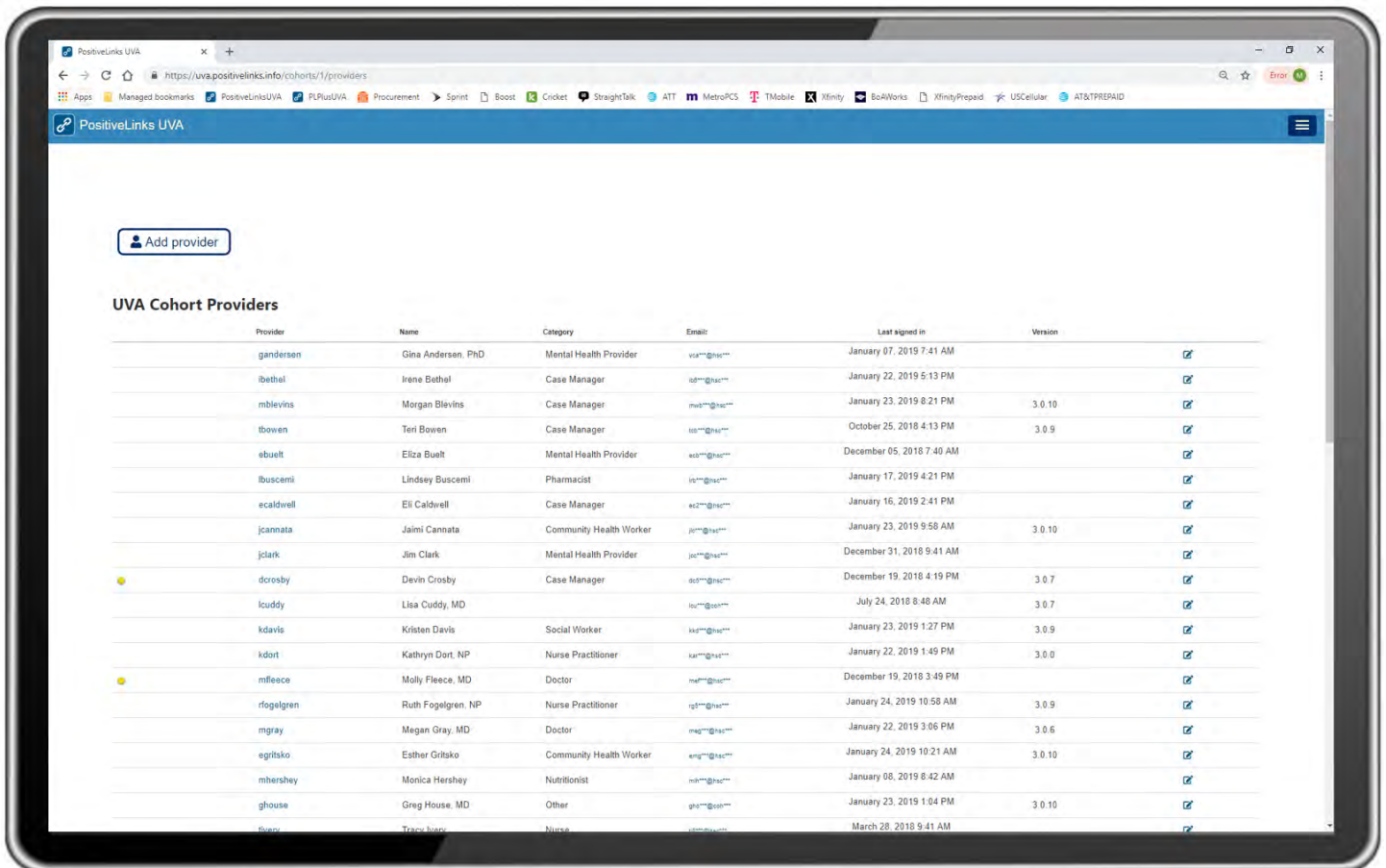
### Menu, Providers.

Site Providers play a key role in PositiveLinks. The Providers tab displays a list of Site Providers. It provides the following information, sorted alphabetically by provider username:

- Provider
- Name
- Category
- Email
- Last signed in date
- App version number
- Edit option

The Providers tab is used for the following activities:

- Register a new Provider
- Modify a Provider

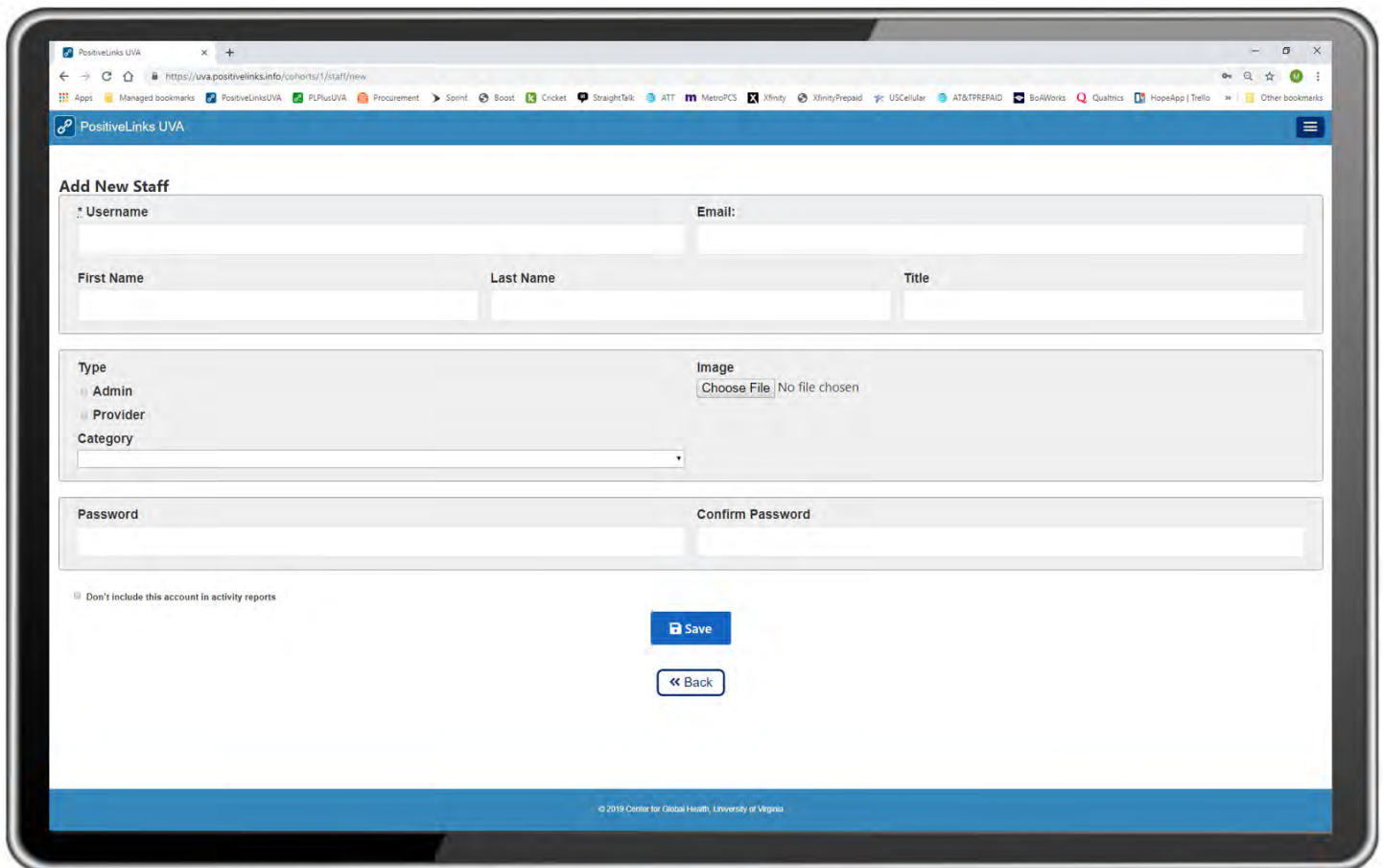


## New Provider

### Menu, Providers, Add Provider

Site Administrators can register new Providers under the Providers tab. Demo accounts can be created for Administrators to use for testing. This account can be excluded from reporting by selecting ‘Don’t include this account in activity reports’ when creating or editing the account. Creating new Providers uses the following information:

- Email
- Username
- First and Last name
- User type (Admin or Provider) and category
- Title
- Password



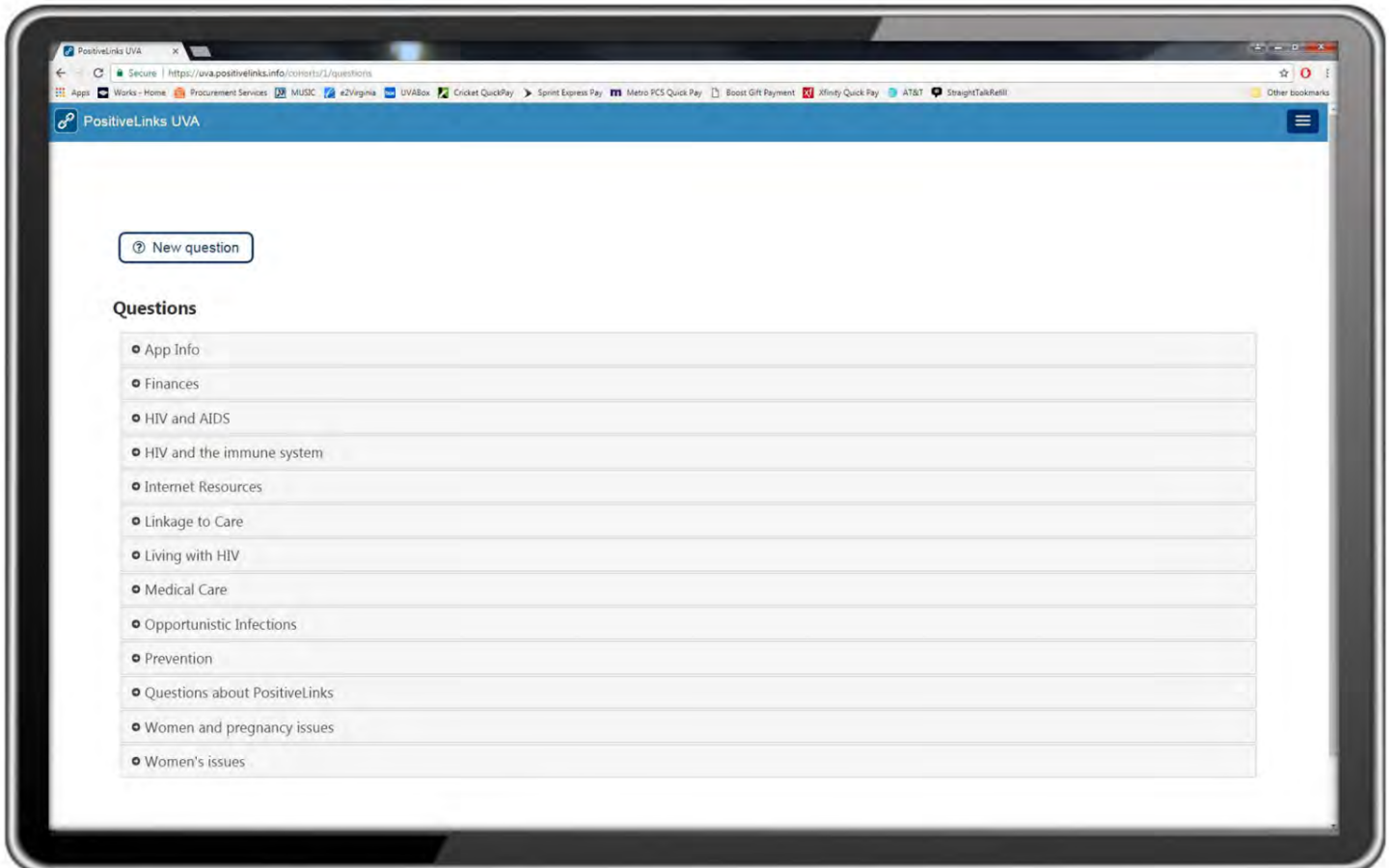
## New Provider

1	<b>Menu, Providers</b>
2	<b>Click Add Provider</b>
★	Site Administrators can create Providers which allows for linkage to Contacts list and direct messaging with Members

## Questions

### Menu, Questions.

The Question section is a collection of common questions and responses. Questions are primarily text based, but may contain hyperlinks. Sites should aim to keep Questions short since they will be viewed on Member smartphones. Questions are organized by question type and may be modified from the Question screen

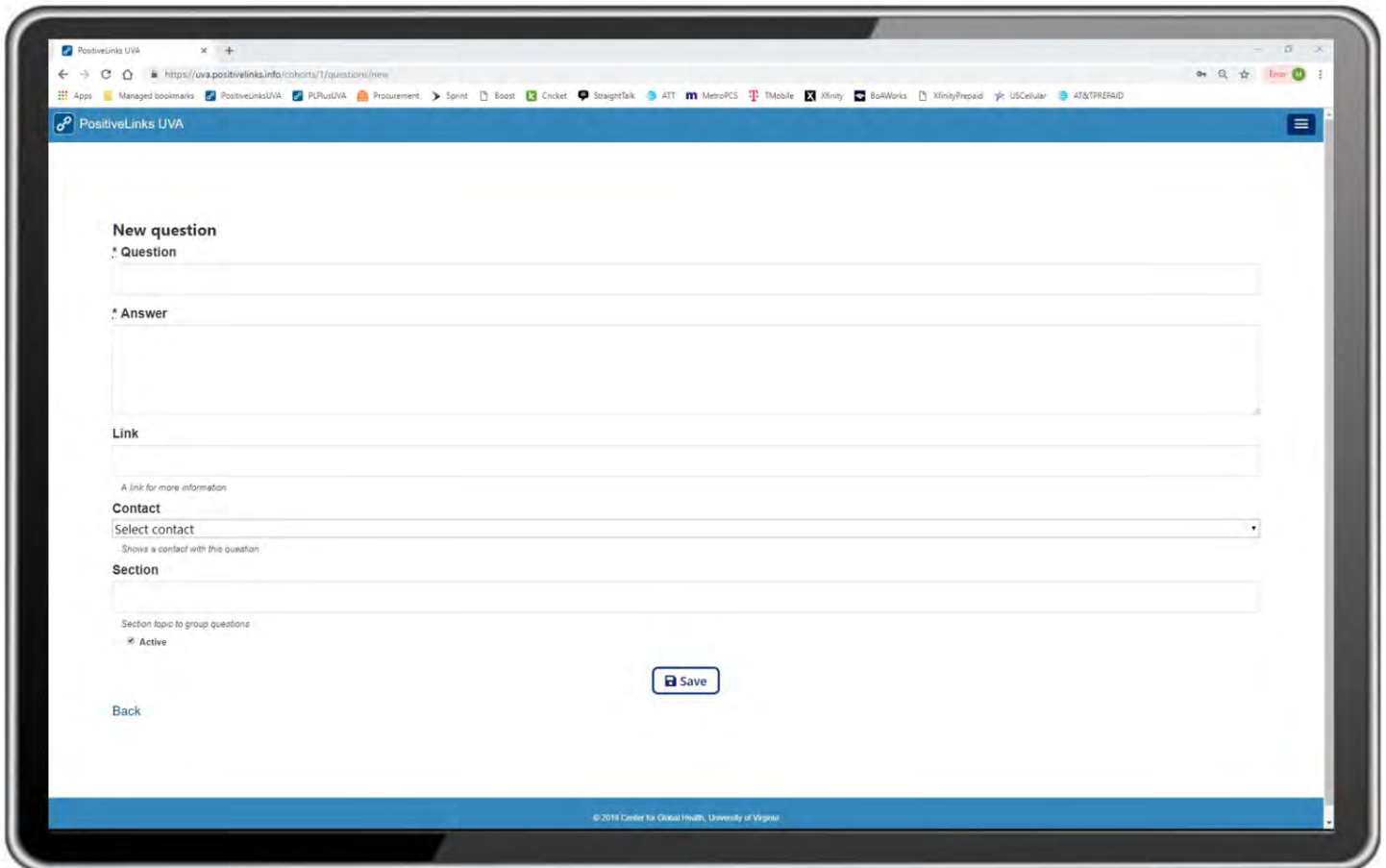


## New Question

Menu, Questions, **New Question**

Site Administrators can add information they think will be useful for their Members as a new questions. Questions can consist of the following entry fields:

- Question
- Answer:
- Link (optional)
- Contact
- Section (question type/group)



## New Question

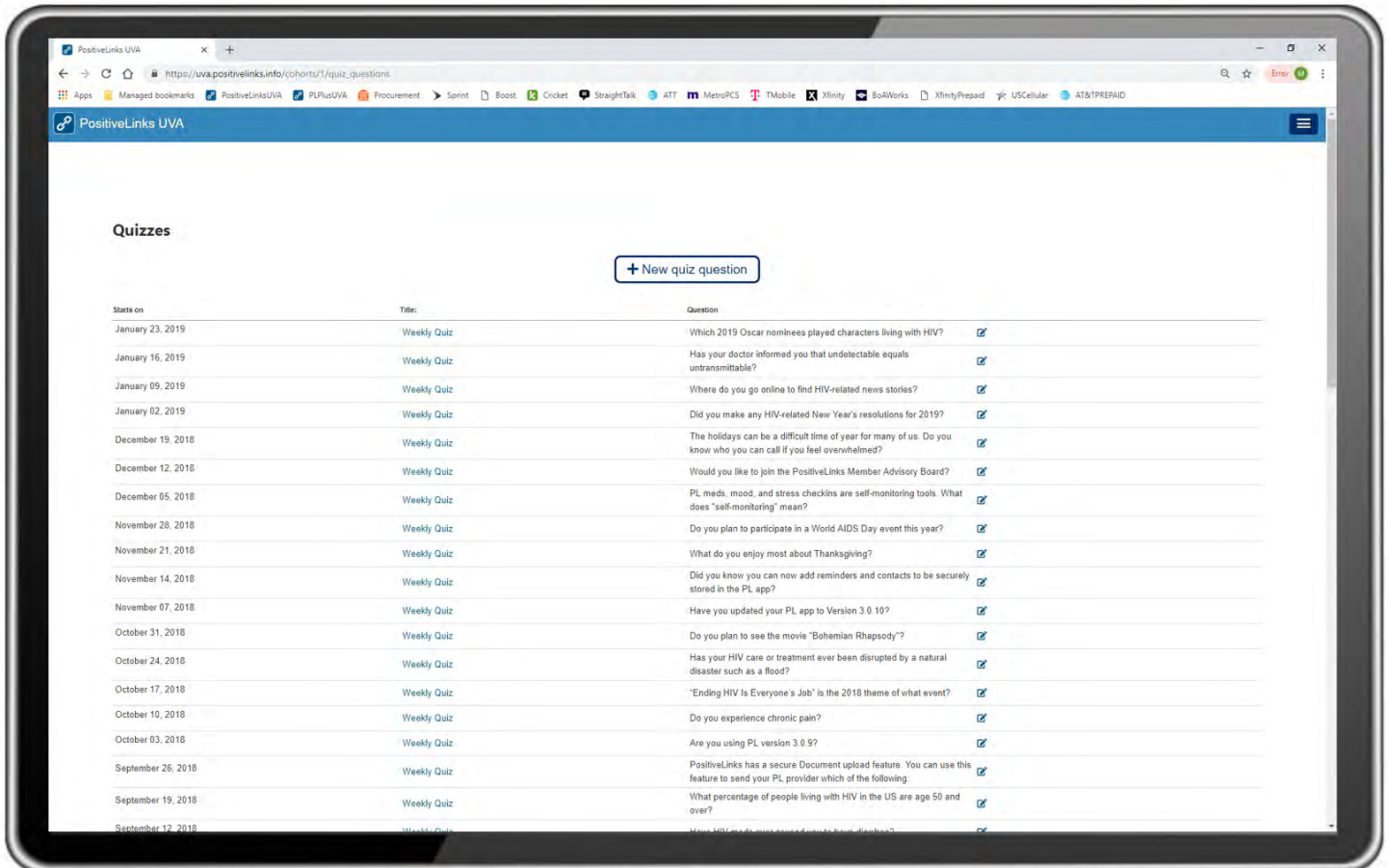
1	Click Menu, <b>Questions</b> .
2	Click + <b>New Question</b> .
★	Keep in mind that Questions will be viewed on Member smartphones. Keep the content short and be mindful about Site cohort reading levels.



## Quizzes

### Menu, Quizzes.

Quizzes section of PositiveLinks Portal contains Quiz content to engage, educate, and inform PositiveLinks Members. The default screen is a full list of Site Quizzes, with most recent Quiz on top. Site PLCs and Administrators may add their own Quizzes, and modify Quizzes using the Edit button on the Quizzes List screen. Fields available in the quiz section are the same as for Check-Ins. Please refer to the Check-Ins portion of Section 7 for more detail.

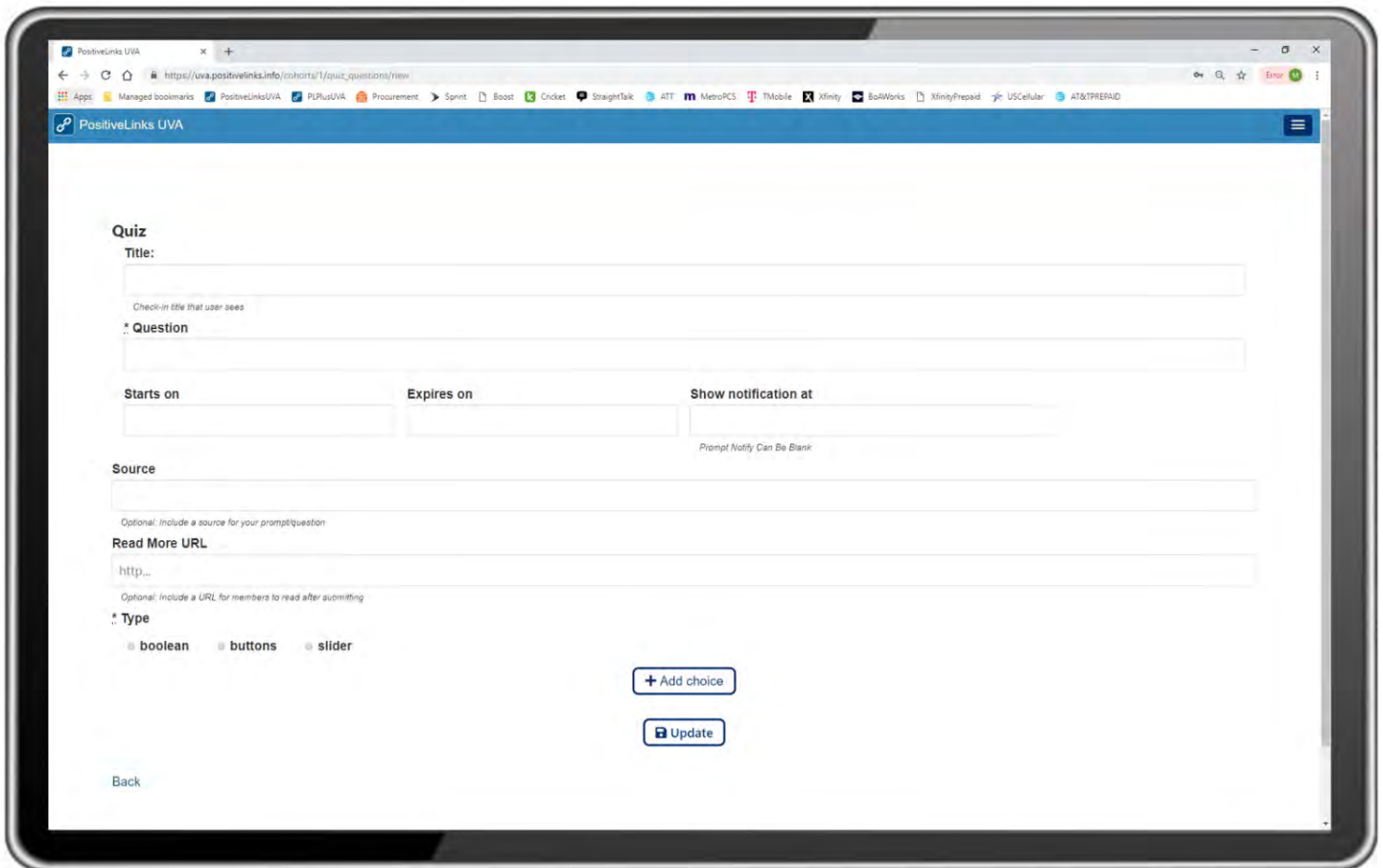


## New Quiz

### Menu, Quizzes, New Quiz

Site Administrators can create new quizzes from the quizzes page. Quiz questions should be short and contain straightforward language. Quizzes can contain the following information:

- Title and Question
- Starts on/ Expires on
- Show notification at
- Recurrence days
- Source (optional)
- Read More URL (optional)
- Type: Boolean, buttons, or slider



## New Quiz

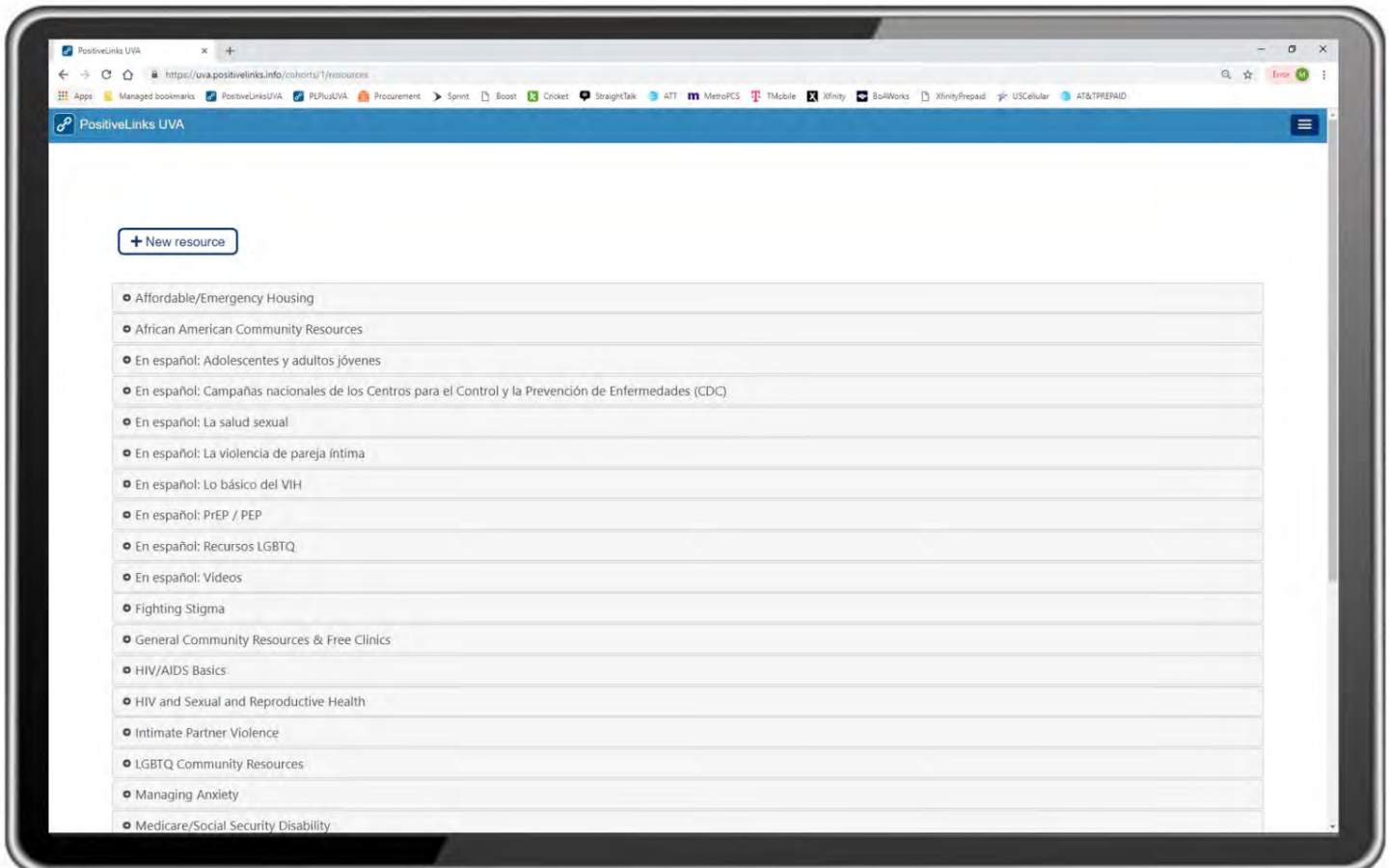
1	Click Menu, click <b>Quizzes</b> .
2	Click + <b>New Quiz</b> button
★	Craft answers to be supportive and informative. Keep language simple and easy to understand. Select topics that will be of interest to the Site's Members.

## Resources

### Menu, **Resources**.

This section allows Administrators to view the content that displays in PositiveLinks Member App Resource section. To edit or add to the content Administrators can click 'Edit' under the desired resource or '+ Create new resource.'

All audio and video files are displayed and can be played from the portal. The list is sorted alphabetically by resource group. Audio and Video files are remotely streamed from hosted sources in order to keep the app size small. While the PositiveLinks App allows access to videos hosted on any valid Internet URL, it is recommended to use high quality streaming sources, such as Vimeo or YouTube, to assure reliable playback support for multiple devices and network speeds. Prior to creating audio and video content in PositiveLinks, the files must be uploaded to the hosting website.



## RECOMMENDED

### Use Video and Audio Resources

**Welcome to Site video.** Create a video that shows new Members what they may expect at a typical Site visit and introduce the Site Administrators with whom they are likely to interact.

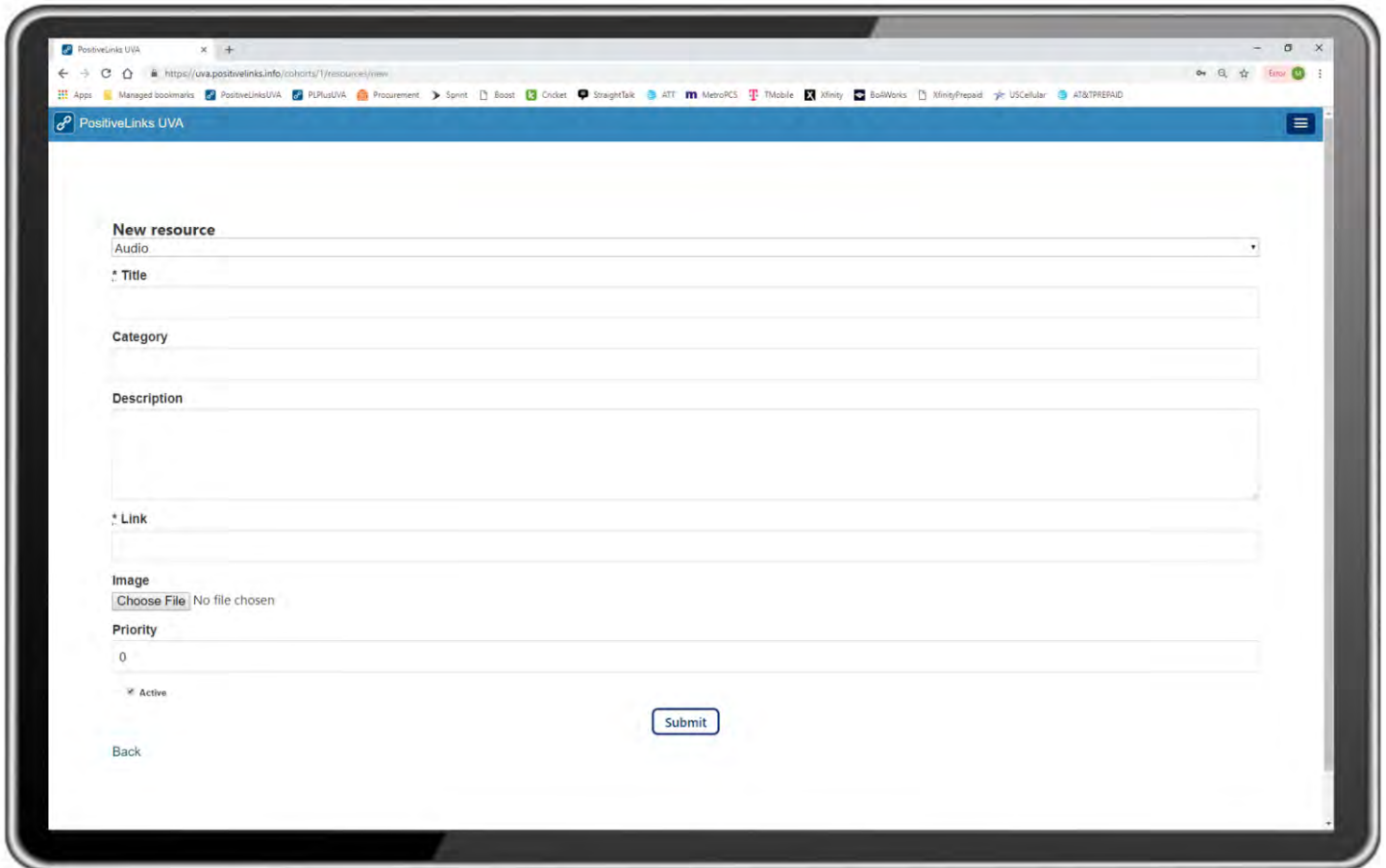
**Use Audio and Video files.** Effective ways to share information with Members about HIV and to introduce stress management practices.

*New Resource*

Menu, Resources, **New Resource**

When creating a new resource, Site Administrators can fill out the following fields:

- Type: Audio, Video, link
- Title
- Category
- Description
- Link
- Image



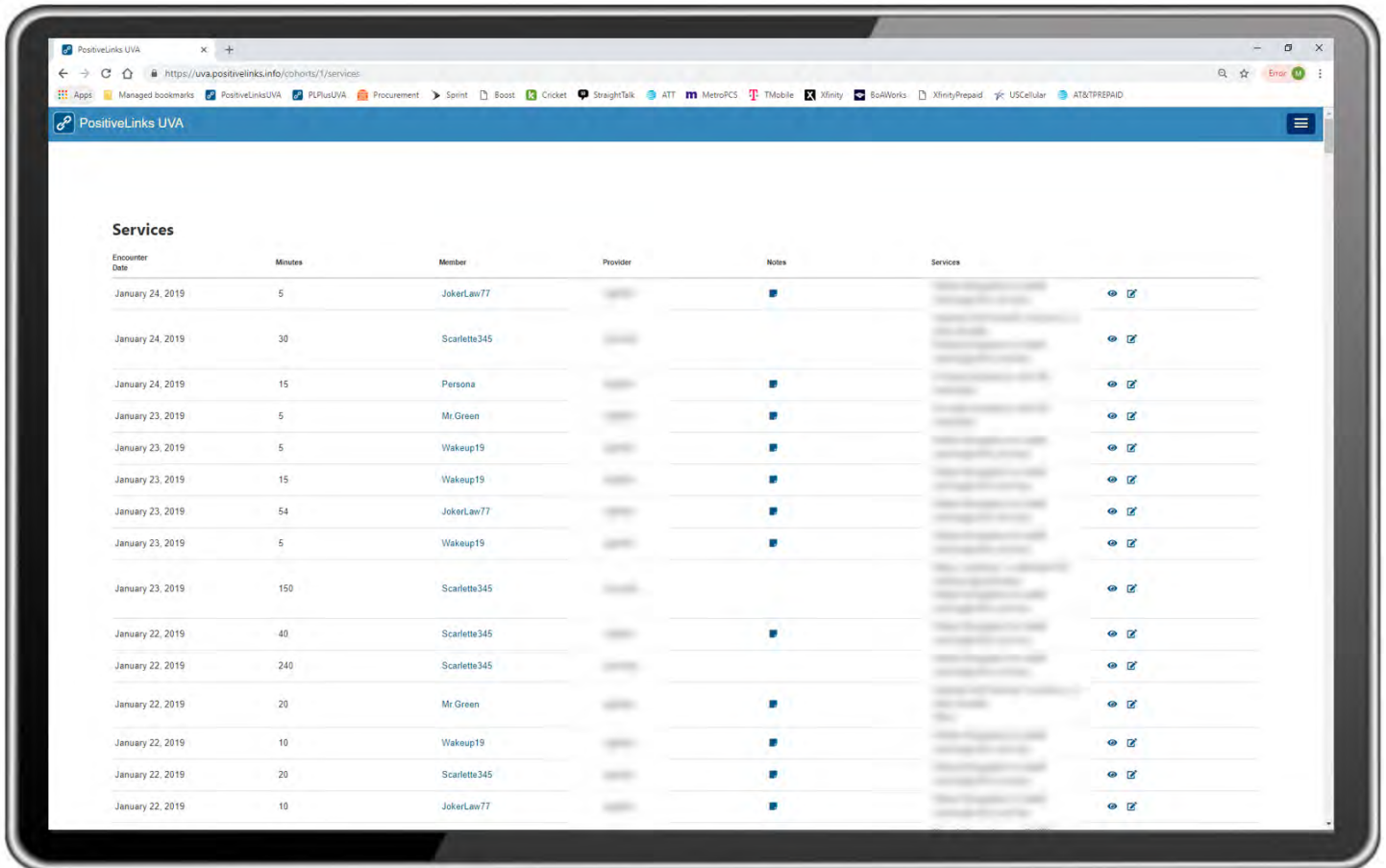
## New Audio/Video Resource

1	Click Menu, click <b>Resources</b> .
2	Click + <b>Create new resource</b> , on the Resources List screen.
★	Sites may link to existing hosted audio or video through PositiveLinks Portal. Sites may create their own custom audio and video files and upload them to Vimeo or YouTube, then add a New A/V Object in PositiveLinks.

## Services

### Menu, Services

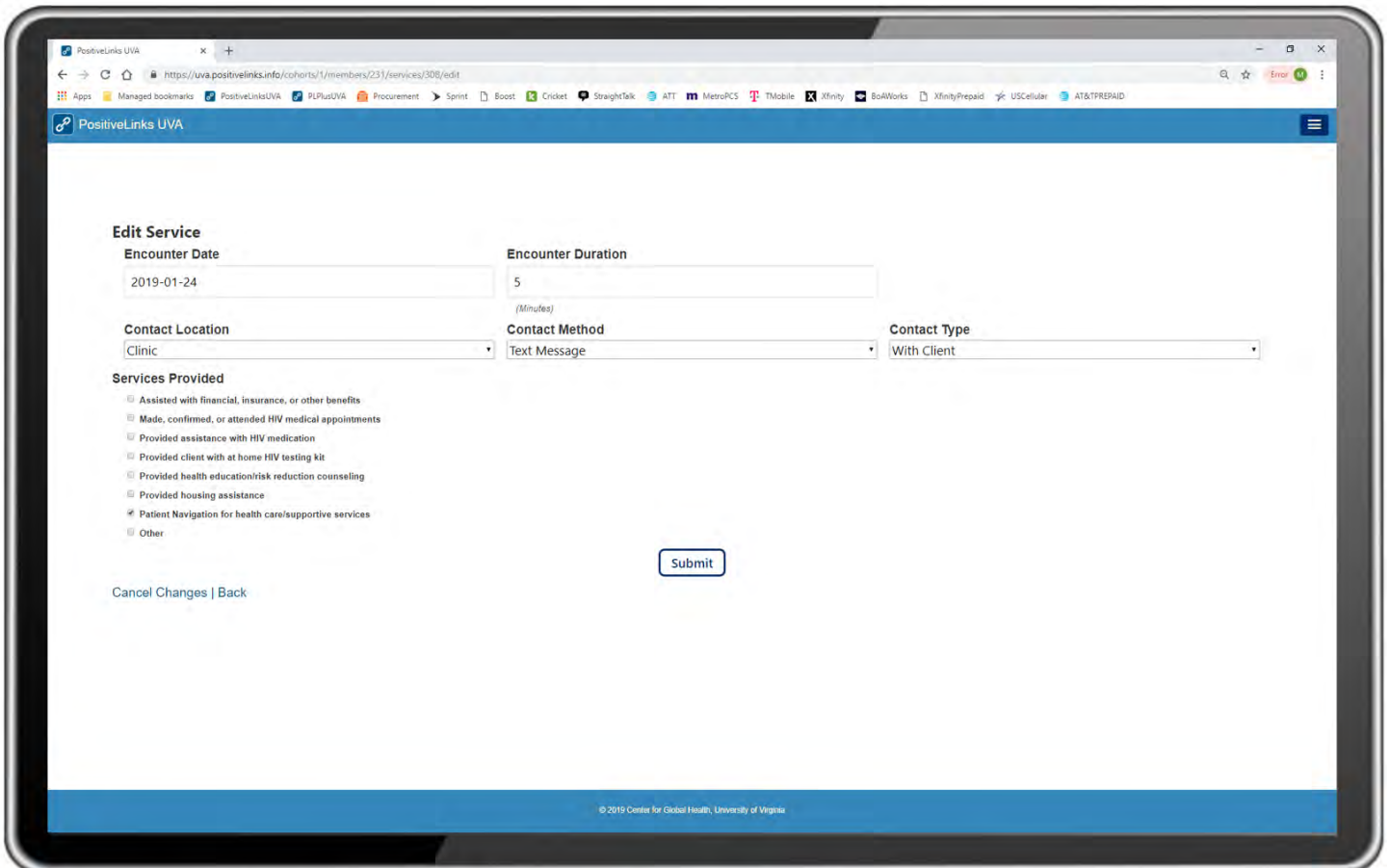
The services section of the portal allows Administrators to review the services that have been provided to all PositiveLinks clients. Administrators can view and edit previously entered services from this page, simply click the ‘eye’ icon to view the details of a previously entered service.



## Edit Service

### Menu, Services, Edit Service

Administrators can edit previously entered services either from the member specific services list or the full list of services. Simply select the edit icon on the desired service and update the necessary information. Select 'Submit' to save the changes to the service.





## Edit Cohort

Site Administrators, specifically the account identified as the primary on the PL system, have access to the Edit Cohort feature. The Edit Cohort feature is accessed from the bottom of the summary page of the PL portal. The default page of the edit feature allows the administrator to edit the following information:

- Cohort Title
- Cohort Language
- Cohort Email
  - Option: send email alerts when a new private message is sent
- Default away message
- Features
  - Option to turn on and off the following features: appointments, community, documents, labs, messages
- Member Options
  - Option to turn on and off the following features: allow members to create appointments, allow members to create contacts

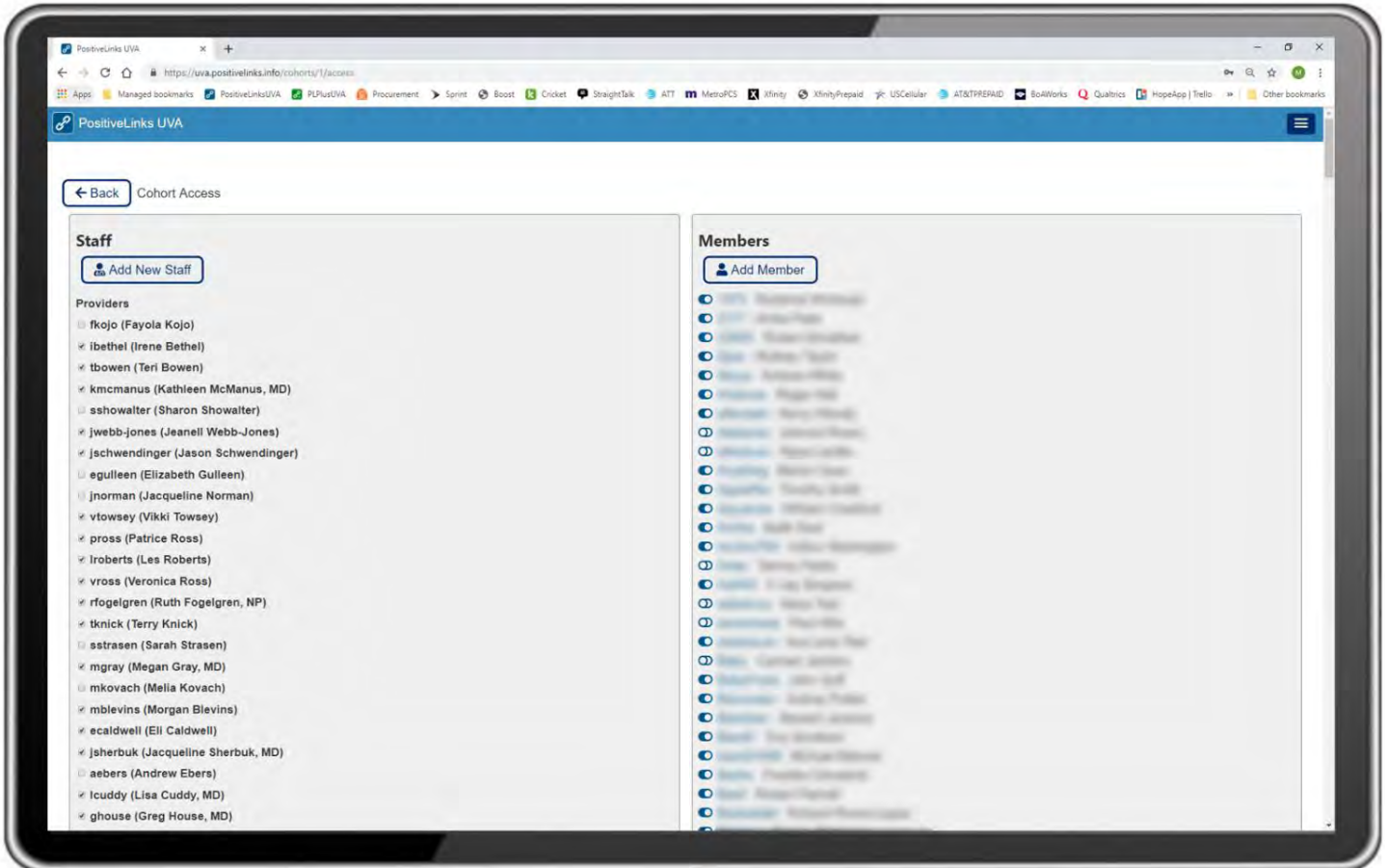
The screenshot displays the 'UVA Cohort' edit page in a web browser. The page has a blue header with the 'PositiveLinks UVA' logo and a navigation menu. Below the header, there are three buttons: 'Back', 'Cohort Access', and 'Provider Permissions'. The main content area is divided into several sections:

- Title:** A text input field containing 'UVA Cohort'.
- Language:** A dropdown menu set to 'English'.
- Email:** A text input field containing 'ALW9T@hscmail.mcc.virginia.edu'.
- Time zone:** A dropdown menu set to '(GMT-05:00) Eastern Time (US & Canada)'.
- Email for receiving cohort alerts:** A section with a checked checkbox for 'Send email alerts when a new private message is sent'.
- Default Away Message:** A text area containing the message: 'Hello, unfortunately I am out of office and cannot respond to your message. Please call the clinic for urgent or time sensitive needs. Call 911 for emergencies. Thank you!'.
- Features:** A section with five checkboxes: 'Appointments', 'Community', 'Documents', 'Labs', and 'Messages', all of which are checked.
- Member Options:** A section with two checkboxes: 'Allow members to create appointments' and 'Allow members to create contacts', both of which are checked.

At the bottom of the form is a 'Save' button. The footer of the page reads '© 2019 Center for Global Health, University of Virginia'.

### Cohort Access

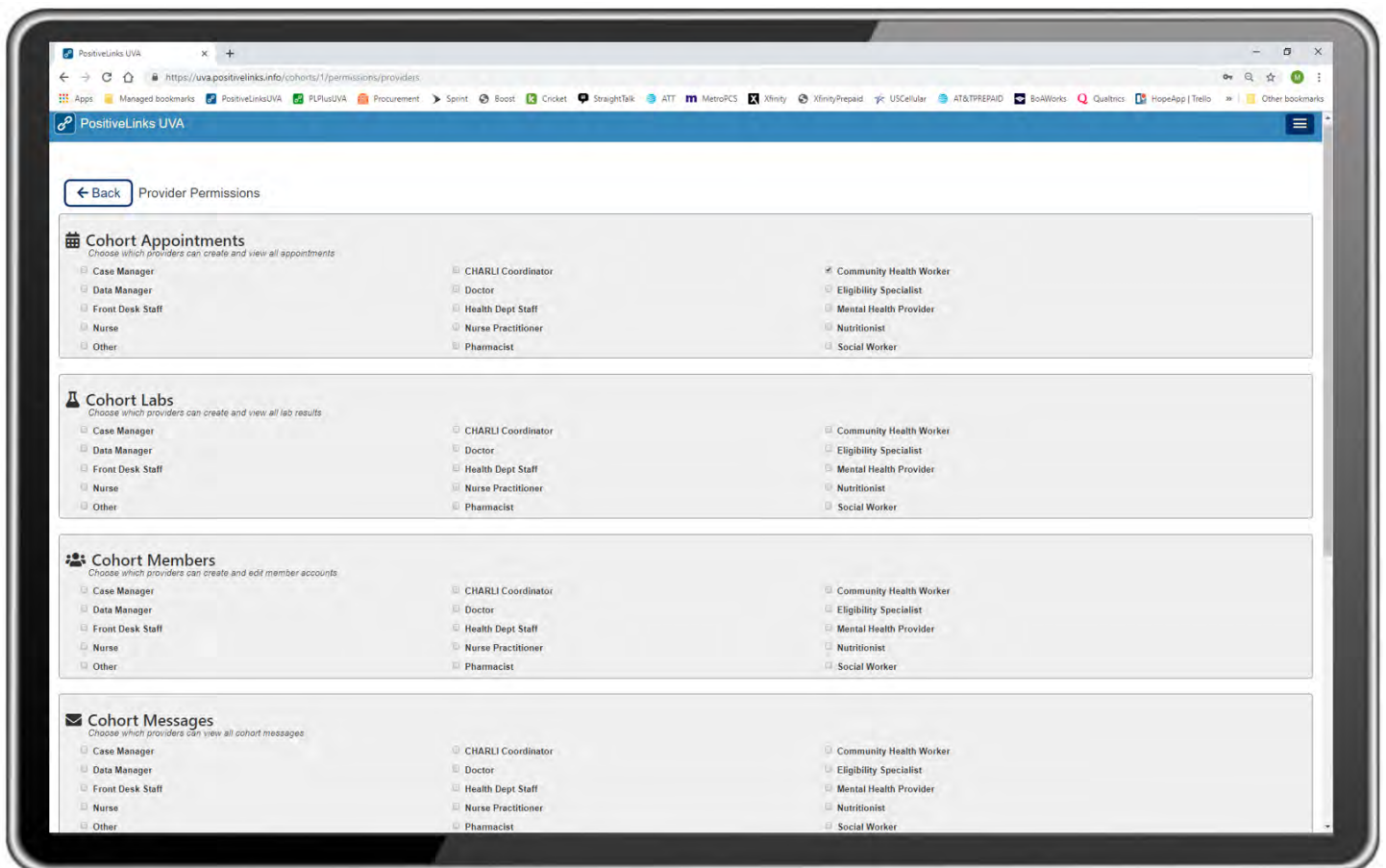
The Cohort Access tab of the Edit Cohort feature allows Site Administrators to turn off and on provider and member accounts. Accounts can also be disabled from the Edit Member page but can only be re-enabled here.

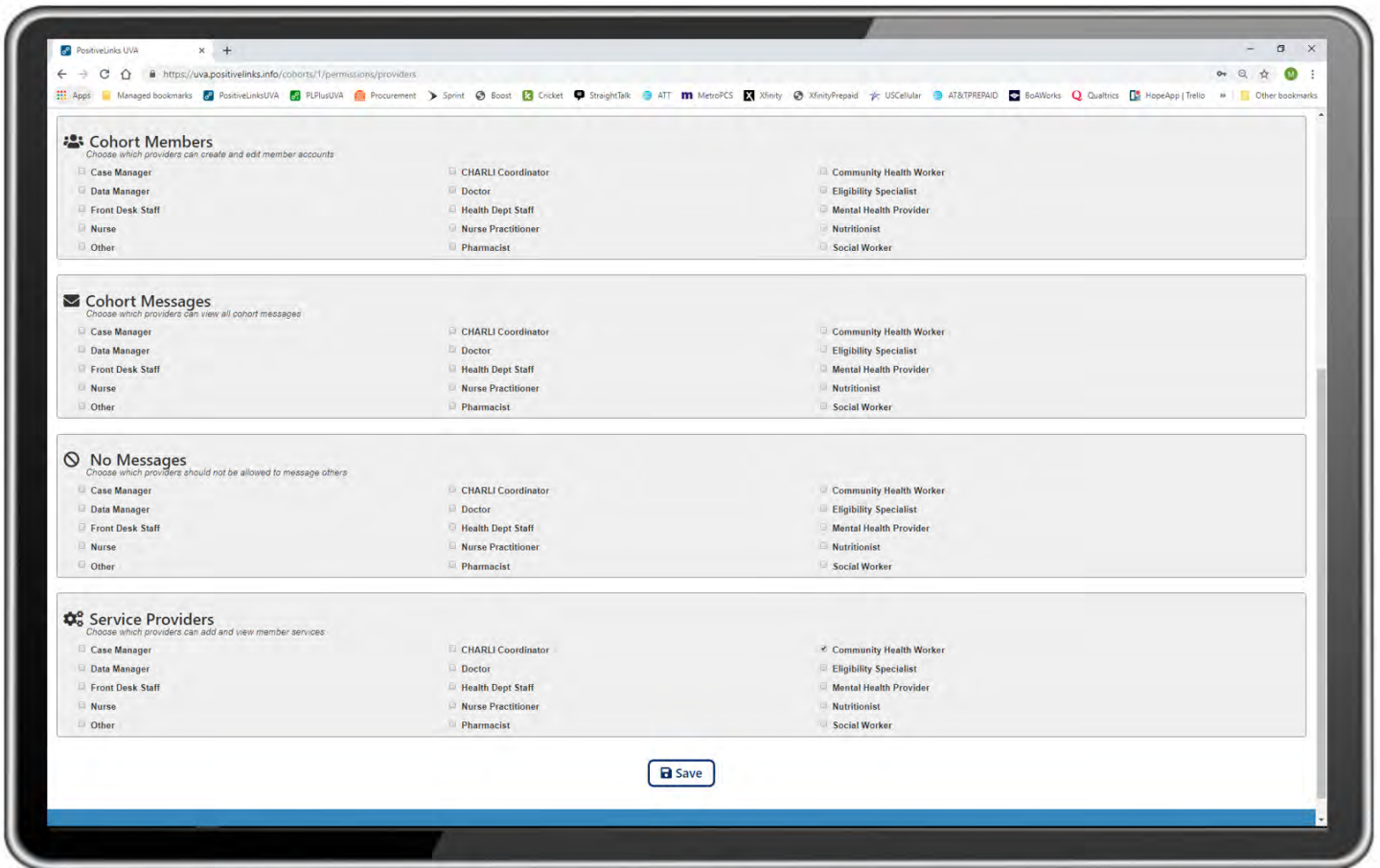


### Provider Permissions

The Provider Permissions tab of the Edit Cohort feature allows Site Administrators to select which provider categories can access different features in the PL portal. Administrators can control access to the following features:

- Cohort Appointments
- Cohort Labs
- Cohort Members
- Cohort Messages
- No messages
- Service Providers





## Reports

PositiveLinks Portal has six reporting options: Member, Provider, Administrator, System, Services, Achievements, and Inactive Lab Results. Reports can be accessed from the bottom of the Administrator view of the Summary page.

Reports may be exported to excel using the CSV button, or selected data may be copied and pasted to excel.

### Member Activity Report

Click on Member Activity to open the Member reporting system. This report displays the following data for a given date range:

- Username: Displays Username in alphabetical order
- Response Rate %: Percent of check-ins to which Member responded
- Meds Adherence %: Percent of 'yes' responses to meds check-in
- Avg Mood: Average mood for submitted responses
- Avg Stress: Average stress from submitted responses
- Community Posts: Number of posts on the Community
- App Launches: Number of times Members launch PositiveLinks Member App
- Quiz Responses: Number of Quizzes to which Member responds
- Messages: Number of Messages Member sent

Username	Response Rate	Medication Adherence	Average Mood	Average Stress	Community Posts	App Launches	Quiz Response	Messages
Alabama	0	0	-	-	0	0	0	0
Aies	22	22	1	2	0	17	0	5
AshN3	51	51	0	5	0	31	0	0
awareness	54	54	1	6	0	26	0	0
Baby	0	0	-	-	0	0	0	0
Banks	70	70	-1	2	0	44	0	4
Batman	64	64	0	6	2	37	0	1
Bettyboo	75	77	0	5	0	24	0	1
BikerGirt	81	70	0	2	2	44	0	8
Blue	74	70	-1	5	0	31	0	2
BMW	32	25	0	6	1	43	0	7
Boost	0	0	-	-	0	0	0	0
Boxingfan	67	67	-1	5	2	20	0	2
BrownEyes	100	100	-3	5	0	42	0	3
BunnyLove	0	0	-	-	0	0	0	0
Bulch	80	80	0	2	0	52	0	0
CapitalsFan	67	67	5	1	0	45	0	1
caramel	58	58	-1	1	0	5	0	0
cartoonfan	0	0	-	-	0	0	0	0
cat	0	0	-	-	0	0	0	0

### Provider/Admin Activity Report

Click on Provider Activity or Admin Activity to open the Provider and Admin reporting systems. These reports display the following data for a given date range:

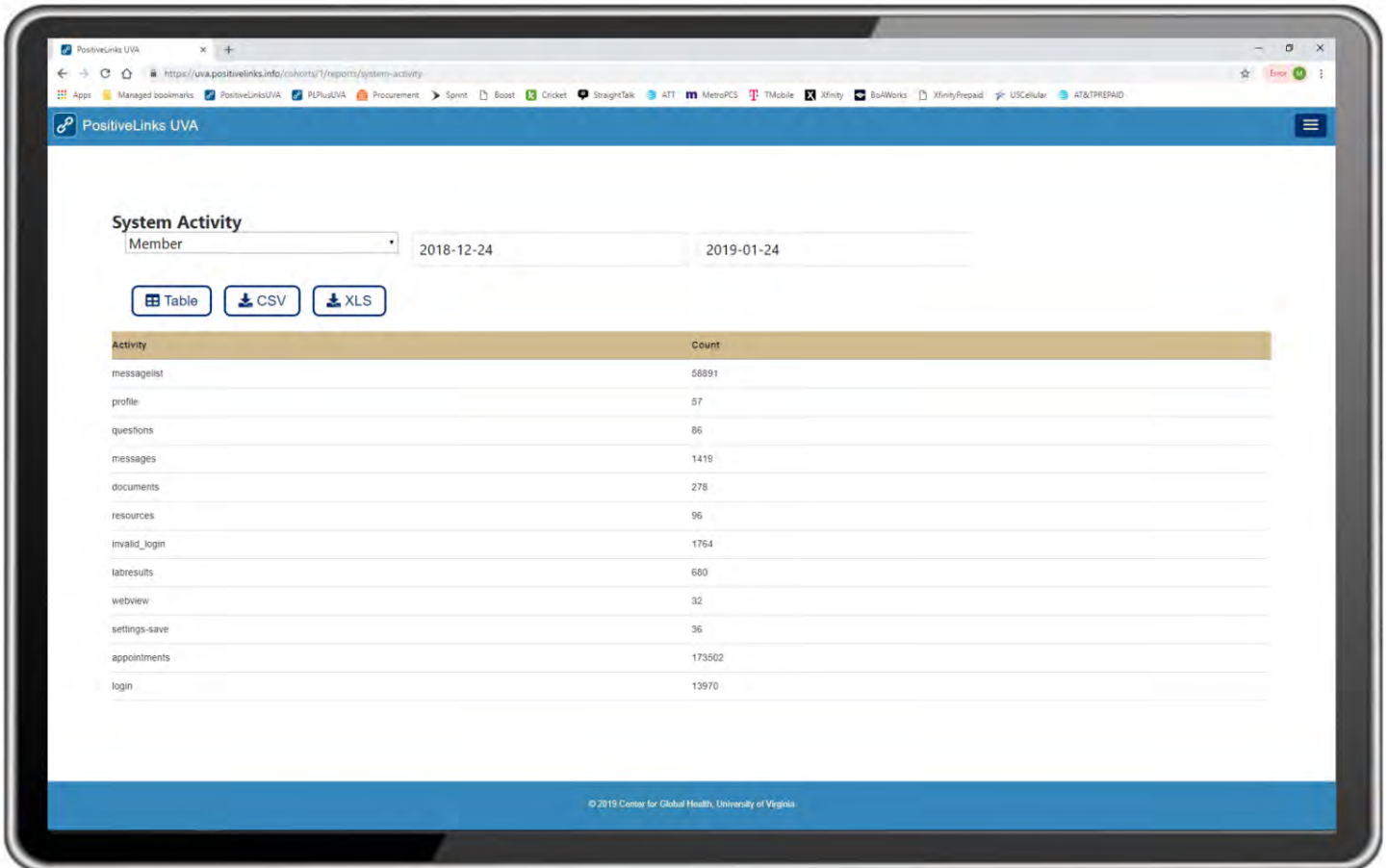
- Provider Username
- Dashboards Viewed
- System Logins
- Messages Sent
- Messages Received
- Provider Category (Provider Activity Only)

Provider	Dashboards Viewed	System Logins	Messages Sent	Messages Received	Category
tyoung	1	20	14	25	Case Manager
kmcmanus	0	1	0	0	Doctor
ashahane	0	5	2	5	Mental Health Provider
mthershay	0	5	3	4	Nutritionist
aschnee	0	7	6	6	Doctor
sshowalter	0	0	0	3	Nurse
jwabb-jones	0	0	0	0	Nurse
vrowsey	0	0	0	0	CHARLI Coordinator
loberts	0	0	0	0	CHARLI Coordinator
pross	0	0	0	1	Nurse
tlvry	0	0	0	1	Nurse
bwilliams	0	0	0	0	Other
tknick	0	0	0	0	Nurse
ldort	0	24	17	36	Nurse Practitioner
sstrasen	0	0	0	0	Case Manager
ynewberry	0	1	0	5	Nurse Practitioner
gmarzani	1	16	22	22	Mental Health Provider
lreedar	0	6	3	8	Case Manager
ldavis	0	11	2	5	Social Worker
jsherbuk	0	1	1	1	Doctor



### System Activity Report

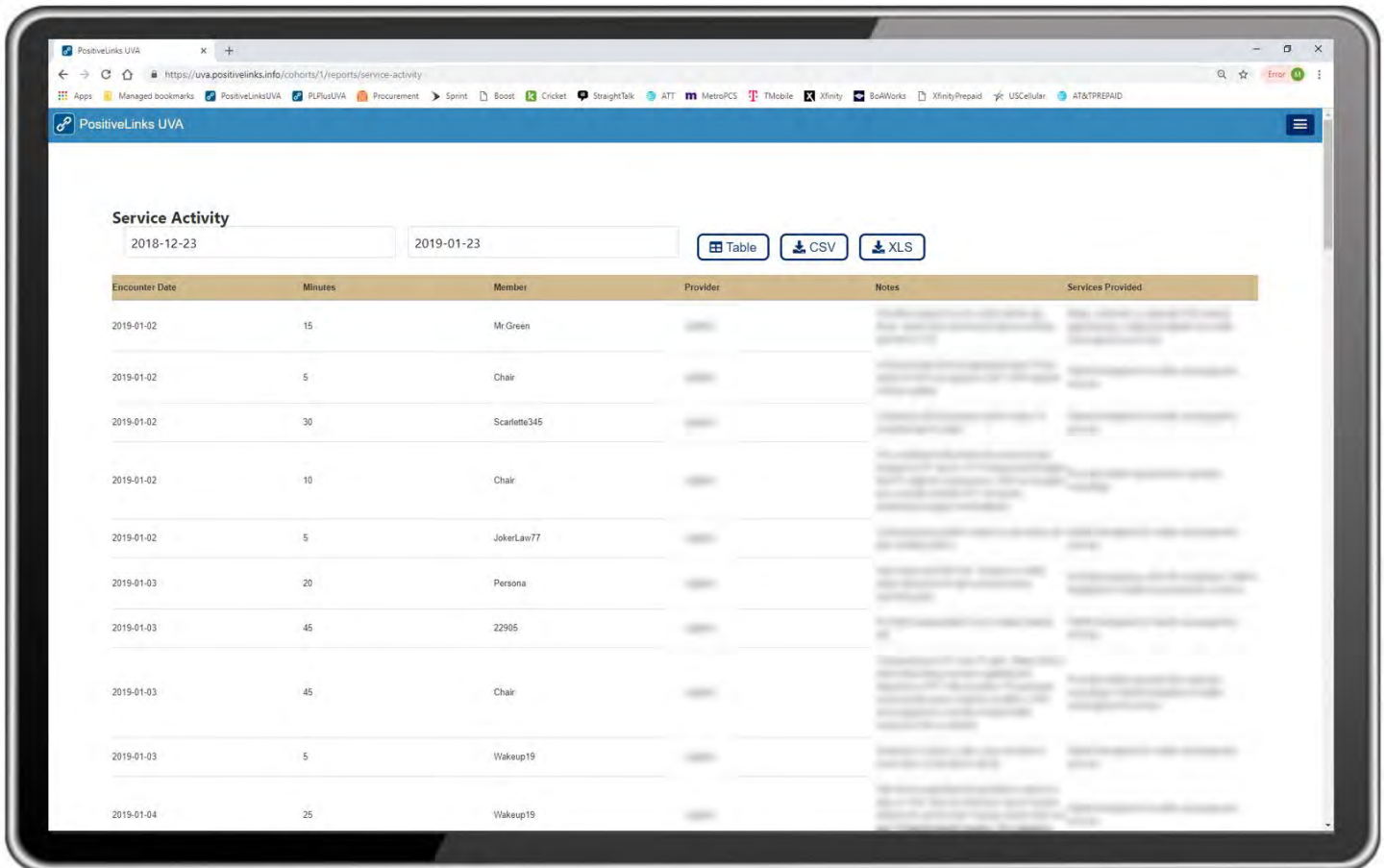
Click on System Activity to open the System reporting system. Reports in this section can be selected based on member, admin, or provider accounts. The system activity data reports the number of screen views for each page of the program. This report displays the following data for a given date range:



### Services Activity Report

Click on the Services section of the reporting feature to open the Services reporting system. This report displays the following data for a given date range:

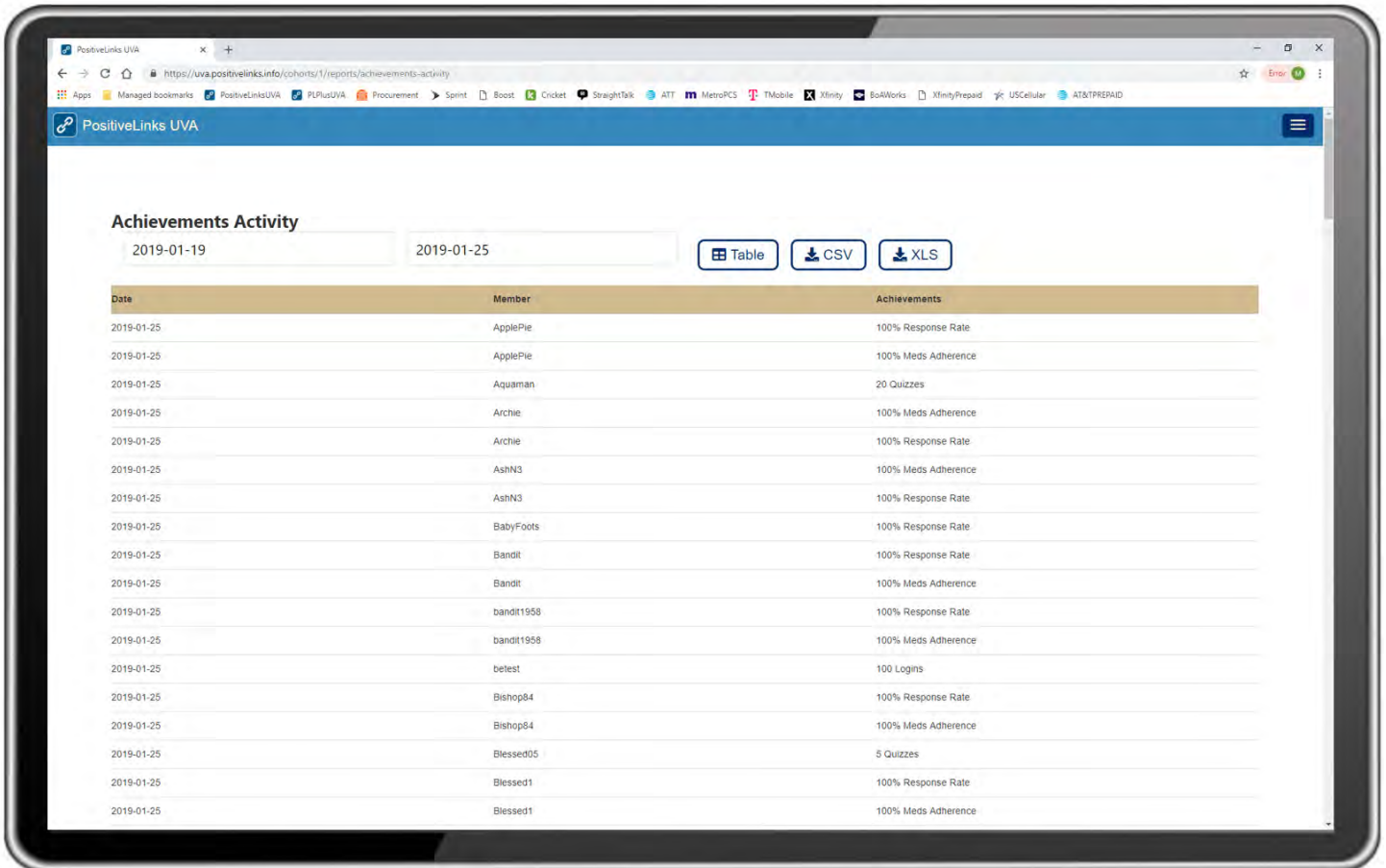
- Encounter date
- Minute
- Member
- Provider
- Notes
- Services provided



### Achievements Report

Click on Achievements to open the Achievements reporting system. Achievements are released to members every Friday. This report displays the following data for a given date range:

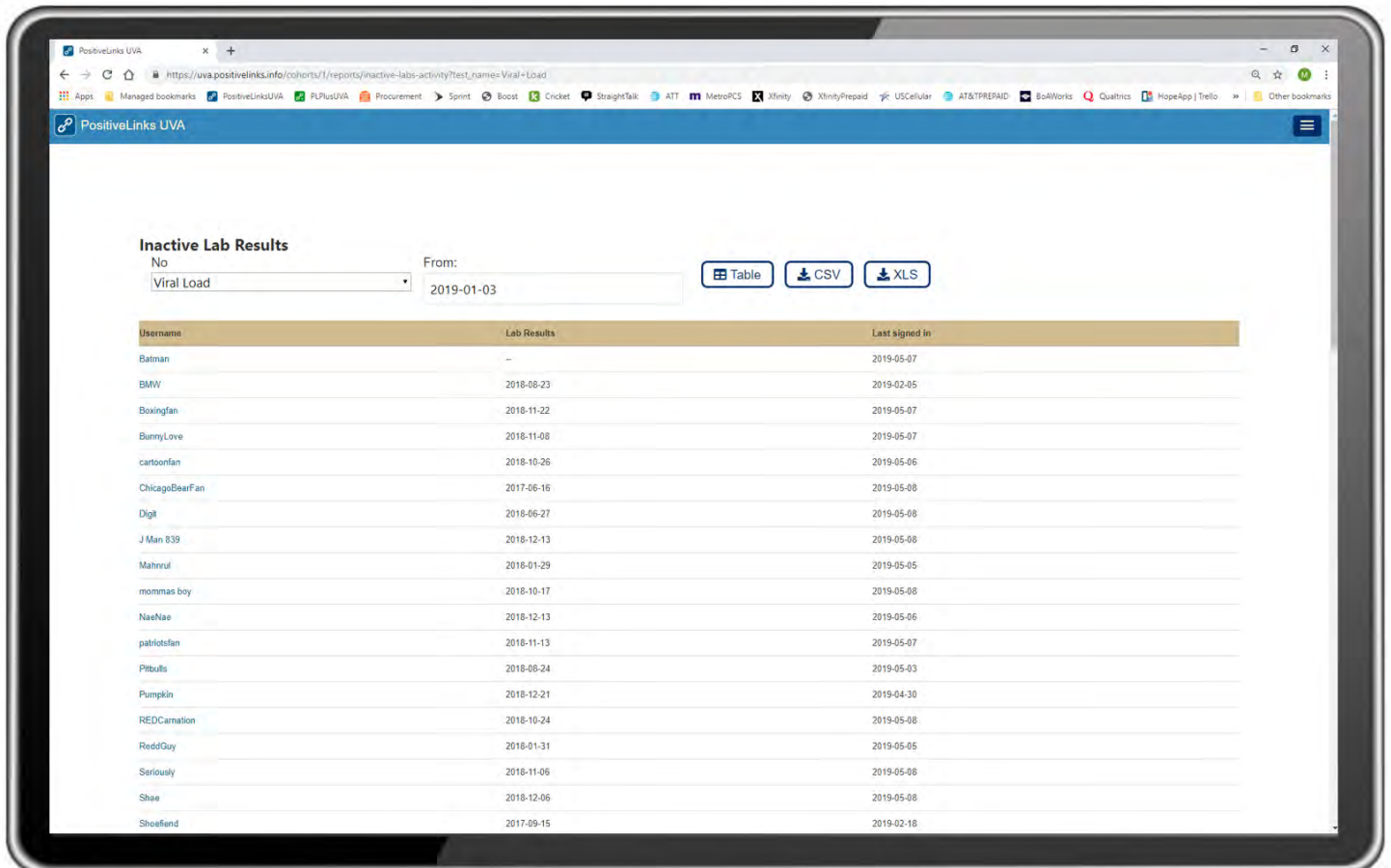
- Date
- Member
- Achievement



### Inactive Lab Results

Click on Inactive Lab Results to open the lab results reporting system. The lab reporting feature allows Administrators to check for members who do not have a recent lab value (either for viral load or CD4). The report output lists their last lab value of that type in the system and the last PL sign in. Administrators can use this report to identify members who may be needing additional follow-up. This report displays the following data for a given date range:

- Member
- Lab Result (date of most recent lab)
- Last signed in



## Using Reporting and Analytics

PositiveLinks tracks system usage so that Sites can measure and continuously improve PositiveLinks effect on Member care. Usage data can inform an array of activities: from conversations between Site Provider and Members, to supporting smartphone data plans. PositiveLinks utilizes two modes of tracking and reporting: Google Analytics and direct application logging. Google Analytics is property-oriented and generally deals in aggregate and anonymous usage. On the other hand, direct logging is Member-oriented and offers specific response rates and levels

### Google Analytics Tracking

You can follow app usage trends in aggregate and by Member by using Google analytics. With Google analytics you can see which features are the most popular, which Members are logging in the most and which days are most popular. You can also determine information on screen views etc.

Google analytics will be used to track app usage including the following metrics:

- Application launches
- Sessions
- Active Members
- Screen views
- Session duration
- Average time/screen
- Screens/session
- Device type
- Geographic location

### Direct Application Logging and Downloadable Log Files

In addition to the Google Analytics app usage reporting, the PositiveLinks system maintains the following data points within the system's notification log database:

#### Notifications/Check-Ins

- Time/date sent
- Recipient's PositiveLinks ID
- Message content and Type (e.g. Stress EMA, Quiz, Medication Check-In)
- Message response (if applicable)
- Message response time/date (if applicable)

#### App Launches

To support the Achievement system PositiveLinks 3.0 logs app launches with the following data points:

- PositiveLinks ID
- Date/Time of launch

## 8. Using PositiveLinks to Engage Members in Care

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This section provides guidelines on the skills required to effectively integrate PositiveLinks into practice at your Site. You will find real-life scenarios to help your Site Staff think through actual situations. Information is provided on how Members and Site Care Team members can use PositiveLinks data to assess ongoing Member engagement. PositiveLinks is built on a warm technology approach that uses the power and reach of communication technology and keeps the focus firmly on human connection and support.

This section provides strategies for how best to engage Members in care, based on the data they report in the PositiveLinks Member App. Rather than replace more intimate forms of communication, PositiveLinks increases the connection between Members and their Site Care Team, in a cost effective way. This section includes exercises to help practice applying PositiveLinks strategies to your own Site.

*This section is organized as follows:*

*Decision and Task Checklist*

*Using PositiveLinks to Improve Care*

*Example 1*

*Example 2*

*Example 3*

*PositiveLinks Practice Scenarios*

*Scenario 1*

*Scenario 2*

*Scenario 3*

*Using Dashboards to Engage Members*

*Dashboard Practice 1*

*Dashboard Practice 2*

*Dashboard Practice 3*

*Community Board Challenges*

*Suicidal Ideation Posts*

*Member Bullying Posts*

*Identity Information Posts*



<b>Decision and Task Checklist for Engaging Members in Care</b>	
✓	<b>Decisions and Tasks</b>
	Decide whether staff needs SBCM or MI counseling training.
	Create protocols for Member engagement on the Community.
	Create Action Plans for when Community Member engagement is not followed.
	Determine a protocol for when and how Site Providers will access Member dashboards.
	Create a plan for Site Providers and PLC for strengthening Member care with PositiveLinks.
	Determine Site Messages protocol for PositiveLinks Messages from Members.
	Determine a plan for communicating and integrating PositiveLinks into practice with Site Providers.

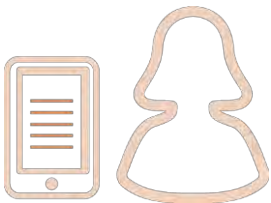
## Using PositiveLinks to Improve Care

PositiveLinks communication tools allow Site Care teams to integrate supportive methods into routine care. Here is an example of how observing the PositiveLinks Community, and integrating that information with Motivational Interviewing, can be used to strengthen Member care visits.

### Example 1



**New Member Community Post:** *Hi, how r u? I am new here...  
I am a little nervous because I am not a pill taker...  
I wish they had it n different forms like gummies lol*



**Member Community Reply:** *Ur good I was in ur shoes two and yeah I  
would love gummies but ur in good hands...yeah its is kinda  
scarey cuz I was but then I started talking about it the more it  
helped me and it will take a few weeks to get ur meds*



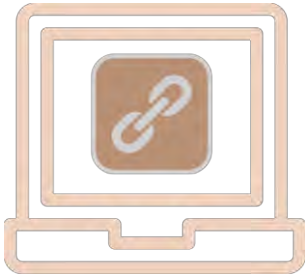
**New Member Community Reply:** *Hi all n thank u for the welcome...  
I want to start takin meds but my biggest fear is not  
keepin up with them...*



#### **Using Motivational Interviewing with PositiveLinks**

The Site PLC observed the Community and became aware of the new Member's medication adherence concerns. When the PLC checked in with him during the next appointment, she used Motivational Interviewing techniques. She did not explicitly reference Community posts, but used knowledge of them to guide the discussion. This enabled her to initiate a conversation about adherence and encourage the Member to reflect on his concerns about taking daily medicine. Exploring these concerns served as the starting point to initiate change talk from the Member and helped move him toward setting a plan for change.

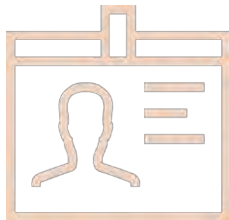
## Example 2



### ***Use Member Dashboard during an appointment***

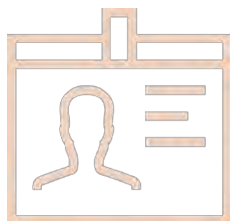
The Site Provider logged into the PositiveLinks Portal at the beginning of a Member appointment so she and the Member could review the Member's Dashboard together. Reviewing the Portal data during a visit gives Site Providers opportunities to affirm Member successes and explore Member challenges.

In this example, the Dashboard showed the Member was doing well with medication adherence, but was experiencing higher stress and lower mood than the last visit.



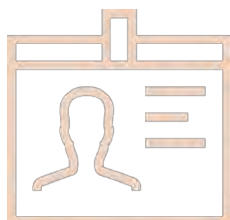
### ***Medication Adherence – Affirming Strengths***

"I see from your PositiveLinks Dashboard that you answered 'Yes' to taking every dose of your medication. Well done! Seems like the plan you made to keep up with your meds is important to you."



### ***Stress and Mood – Discussing Challenges***

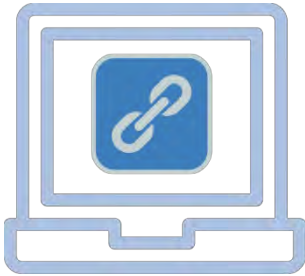
"It looks like life has been a bit more stressful than usual lately. What has been going on with you recently?"



### ***Making a Plan – Engaging member in the process***

"What are some strategies that you can think of to improve your stress and help bring your mood back up?"

## Example 3



### ***Emergency Situations***

The Site PLC was alerted that a Member had been experiencing suicidal ideation and may have harmed himself. His whereabouts were unknown. The PLC followed the established Site protocol for mental health emergencies.



### ***Communication – Connecting with those who are hard to reach***

Site Provider reached out to the Member on his smartphone. She was able to talk with him, calm him, and encourage him to share his whereabouts.



### ***Finding Help – Coordinating help at the time it is needed***

Having obtained knowledge of the Member's location, the Site PLC contacted his case worker. The case worker found the Member and safely coordinated the emergency mental health and medical care the Member needed.



### ***Additional Resources – Connecting Members to other services***

During the next Site visit, the PLC asked about additional resources the Member may require. Member requested assistance with finding a winter coat. PLC was able to coordinate help from a case manager to get donated winter clothes for the Member.

## PositiveLinks Practice Scenarios

It helps to practice the methods and techniques used in PositiveLinks by considering real life situations experienced by Members at your Site. Here are a few possible scenarios for role play with other Site Care Team members. Take turns being the Site Provider and Member. Once you complete these Scenarios, extend the practice by creating your own.

### Scenario 1



#### Member: Martin

- 24 year-old, straight Caucasian male
- recently diagnosed with HIV at the local Emergency Department
- on and off homeless for the last 2 years
- often stays at homeless shelters or on the street
- has trouble remembering to take his pills
- worried that others see his meds and learn his diagnosis
- Martin enrolls in PositiveLinks



#### Site Provider

How can PositiveLinks help Martin?

Focus on ways that Site Care Team can be; affirming to Members, reflect back Member strengths, and summarize Member concerns.

- *Think about specific features of PositiveLinks App that may be helpful to Martin.*
- *Consider ways the PositiveLinks Portal can be used to improve Martin's care*

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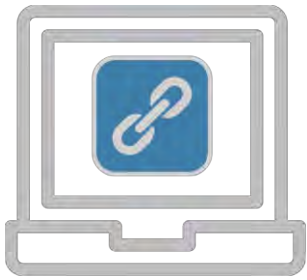
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## Scenario 2



### Member: Victoria

- 42 year-old African American woman.
- diagnosed with HIV several years ago
- on and off meds 4 or 5 times
- taking several different meds daily for diabetes and hypertension
- daily ART med is unwelcome reminder of status
- partner is HIV- and Victoria wants to reduce the risk of transmission
- Victoria enrolls in PositiveLinks



### Site Provider

How can PositiveLinks help Victoria?

Focus on ways that Site Care Team can be; affirming to Members, reflect back Member strengths, and summarize Member concerns.

- *Think about specific features of PositiveLinks that may be helpful to Victoria.*
- *Consider ways the PositiveLinks Portal can be used to improve Victoria's care*

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### Scenario 3



#### Member: Anthony

- 21 year-old, gay African American male
- recently diagnosed HIV positive
- enrolled in an associate degree program
- has lots of friends and liked going out to clubs before diagnosis
- has not disclosed his status to anyone
- distanced himself from friends
- Anthony enrolls in PositiveLinks



#### Site Provider

How can PositiveLinks help Martin?

Focus on ways that Site Care Team can be; affirming to Members, reflect back Member strengths, and summarize Member concerns.

- *Think about specific features of PositiveLinks that may be helpful to Anthony.*
- *Consider ways the PositiveLinks Portal can be used to improve Anthony's care*

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## Using Dashboards to Engage Members

PositiveLinks Member App and Portal extend the Site Care Team's reach and increase communication with Members beyond usual Site appointments. Member's self-reported data is 'actionable data' that can be used to help drive collaborative decision making with Members and appropriate referrals to additional resources when required.

PositiveLinks Portal **Member Dashboards** provide a complete and convenient snapshot, in graphic form, of the Member's 'actionable data' between Site visits. PositiveLinks Member Dashboards meet the needs of displaying data over a range of time versus only daily or weekly monitoring patterns.

When visits to Site Providers occur every few months, it is hard for Members to clearly and accurately remember and discuss their medication adherence, and mood, and stress levels for the time between visits. The PositiveLinks Portal **Member Dashboard** allows Site Providers to have a clearer idea of Member medication adherence. Mood and Stress level data is useful for recognizing triggers and as a starting point for conversations with Members.

The **Dashboard** displays Member's responses to check-ins over time. Site Providers get a full picture of how the Member is doing and the Member's engagement level in PositiveLinks.

Member Dashboards consist of the following:

- Check-In Response rate
- Self-reported Medication Adherence (weekly, monthly)
- CD4 and Viral Load
- Mood and Stress
- Accomplishments
- Upcoming Appointments



- 1 Mood**  
View self-reported Check-ins for mood over time.
- 2 Stress**  
View self-reported Check-ins for stress over time.
- 3 Meds Adherence**  
View self-reported Medication adherence by month, over time.
- 4 CD4 and Viral Load Labs**  
View Lab values for Member over time.

## PositiveLinks Practice Dashboards

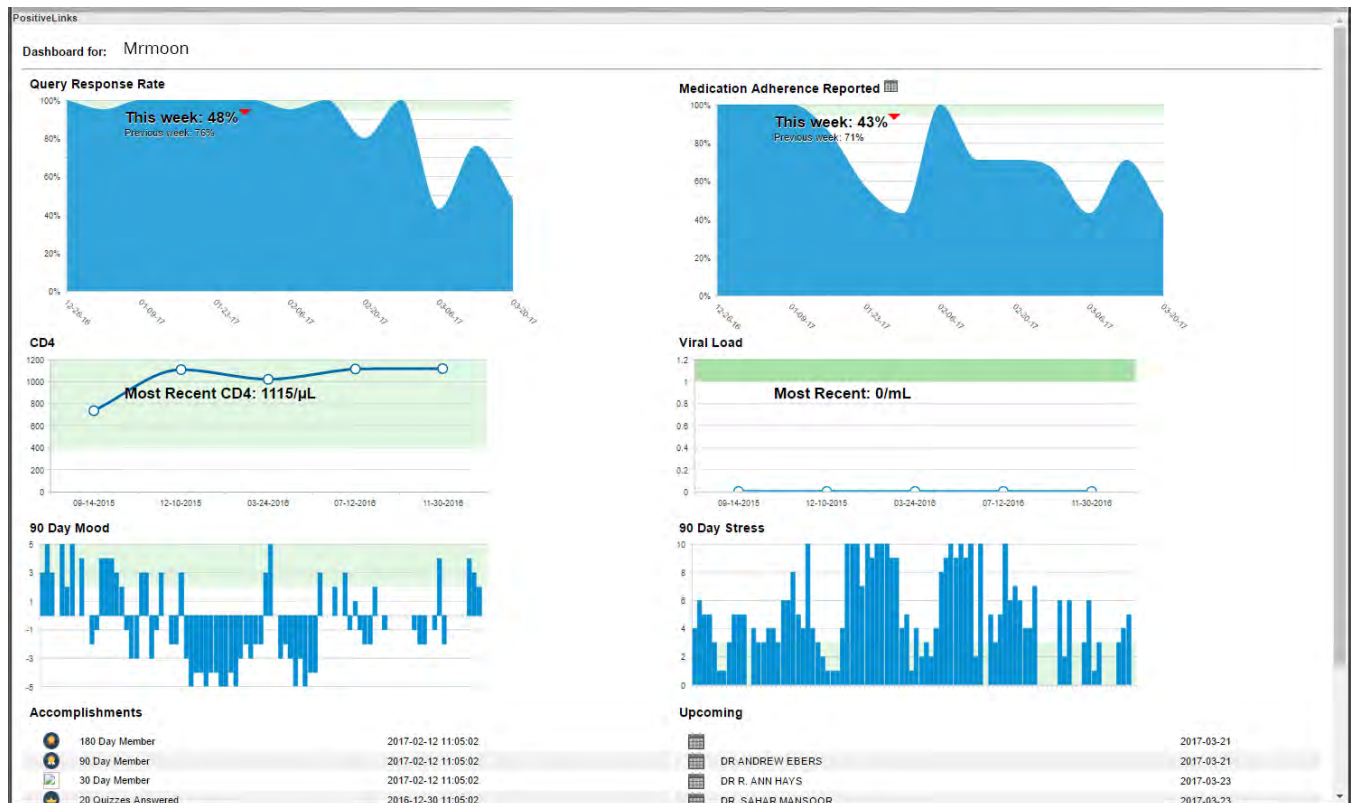
During this activity you'll see examples of Member Dashboards from the PositiveLinks Portal. This activity will help you interpret and make sense of what you see on the Dashboard, and how to integrate your interpretations into a conversation with Members. The first Scenario has been completed for you, as an example.

### Dashboard Practice 1

Consider Martin, introduced in Practice Scenario 1. Imagine you are Martin's Care Provider. Review Martin's details. He has now used PositiveLinks for 6 months. Take a minute to look at his Dashboard. What do you see?

#### Member: Martin

- 24 year-old, straight Caucasian male
- recently diagnosed with HIV at the local Emergency Department
- on and off homeless for the last 2 years
- often stays at homeless shelters or on the street.
- has trouble remembering to take his pills
- worried that others see his meds and learn his diagnosis
- **Martin has now been enrolled in PositiveLinks for 6 months**



After you have looked at Martin's Dashboard, go through the guided questions and consider the responses. This one has been completed for you. You may have additional insights that aren't reflected in the answers here.

Dashboard Guide	
Initial observations	Until recently he had been using PL regularly
What is his adherence rate?	He's dropped from 71% to 43% in one week!
Recent peaks/valleys in adherence rate?	Yes, ups and downs, with recent big drop
Most recent CD4 and VL?	Looks stable - good
General Mood?	Jan/Feb bad, very little in green goal zone
General Stress?	Stress high, most outside green zone
Recent peaks/valleys in either Mood or Stress?	Recent mood OK, stress a little high
Engagement with PositiveLinks?	Good, though recent drop - I'd like to see Community usage
Regularly responding to check-ins?	Check-In response down from 76% to 48% hmmm?
Accomplishments/Badges?	Looks good, answered 20 Quizzes! engaged
What is going well?	Labs and Mood lately, engagement until recent
What areas need help/support/improvement?	Something recent in Adherence and Stress

Now, based on the completed Dashboard Guide, consider questions you may want to ask Martin. Think through how you can best meet engage Martin and meet his needs. Use motivational interviewing and strengths-based case management approaches whenever possible.

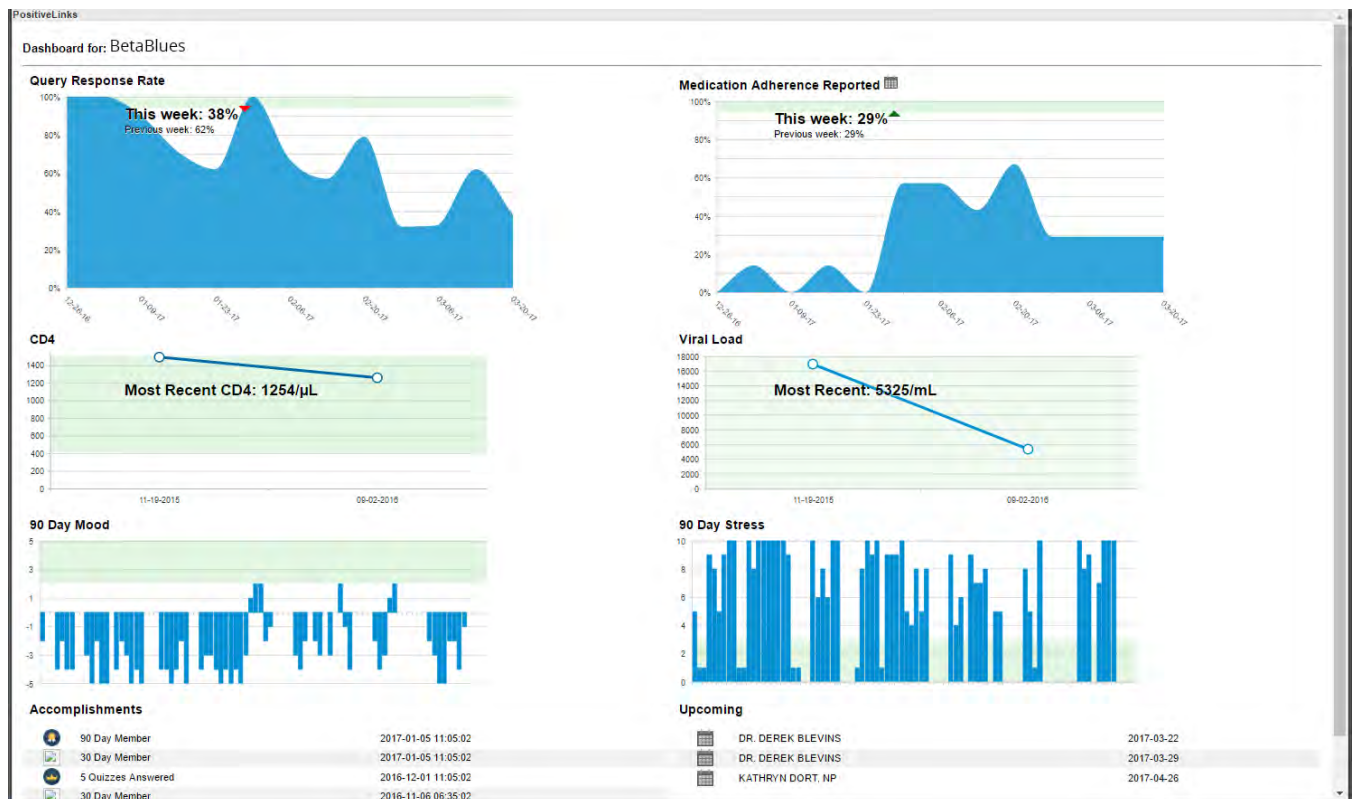
Dashboard Questions
1. I see taking your meds was hard last week, what was different that made it harder?
2. Your mood seems pretty good lately, has something changed that has influenced your mood?
3. Stress seems high in general, what has been going on? Anything you want to talk about?
4. Looks like it is important to you to keep up with PositiveLinks, how is that working out for you?
5. Your labs look good, and you are doing a great job of keeping your appointments.

## Dashboard Practice 2

Consider Victoria, introduced in Practice Scenario 2. Imagine you are Victoria's Care Provider. Review Victoria's details. She has now used PositiveLinks for 3 months. Take a minute to look at her Dashboard. What do you see?

### Member: Victoria

- 42 year-old African American woman.
- Diagnosed with HIV several years ago
- On and off meds 4 or 5 times.
- Taking several different meds daily for diabetes and hypertension
- Daily ART med is unwelcome reminder of status
- partner is HIV- and Victoria wants to reduce the risk of transmission
- **Victoria has now been enrolled in PositiveLinks for 3 months**



After you have looked at Victoria's Dashboard, go through the guided questions and fill in your responses.

Dashboard Guide	
Initial observations	
What is his adherence rate?	
Recent peaks/valleys in adherence rate?	
Most recent CD4 and VL?	
General Mood?	
General Stress?	
Recent peaks/valleys in either Mood or Stress?	
Engagement with PositiveLinks?	
Regularly responding to check-ins?	
Accomplishments/Badges?	
What is going well?	
What areas need help/support/improvement?	

Now, based on the completed Dashboard Guide, consider questions you may want to ask Victoria. Think through how you can best meet engage Victoria and meet her needs. Use motivational interviewing and strengths-based case management approaches whenever possible.

Dashboard Questions
1.
2.
3.
4.
5.

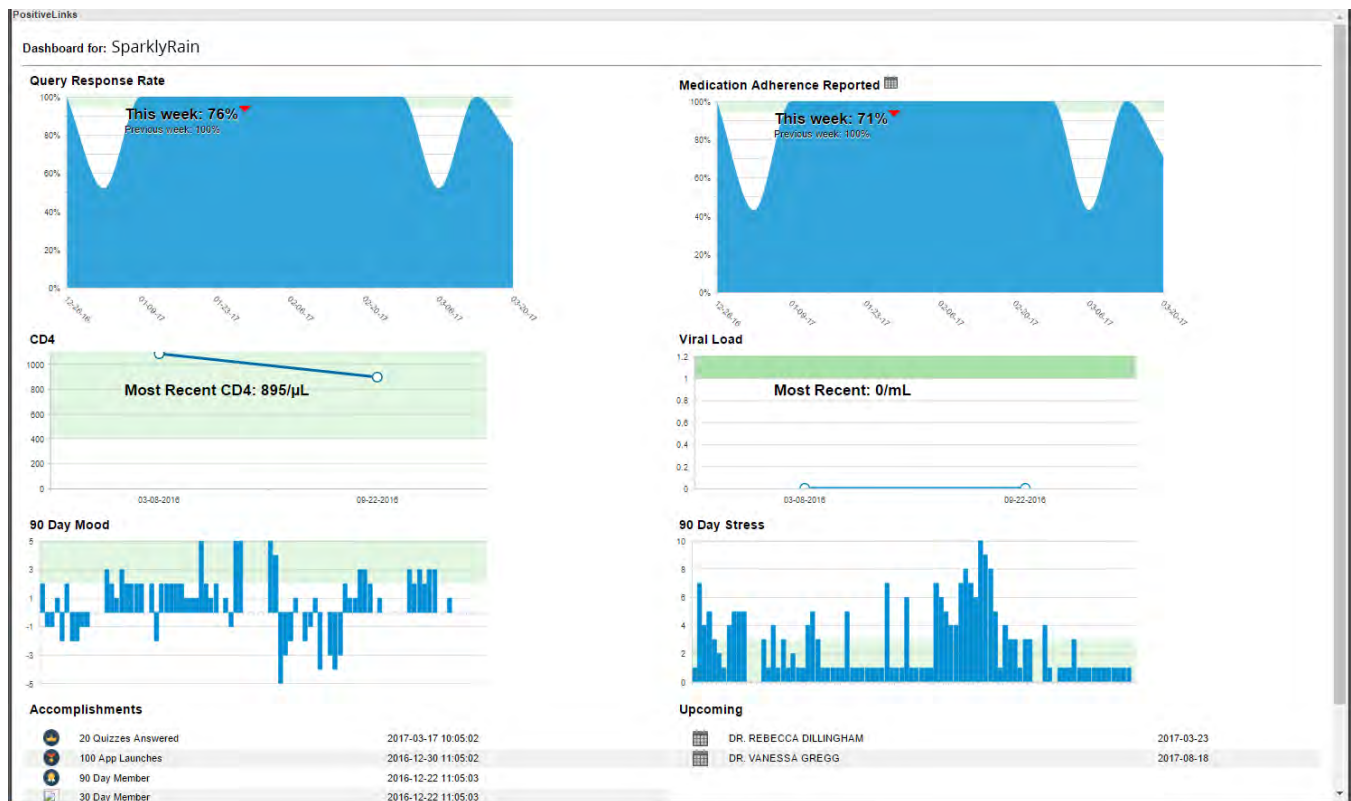


### Dashboard Practice 3

Consider Anthony, introduced in Practice Scenario 3. Imagine you are Anthony's Care Provider. Review Anthony's details. He has now used PositiveLinks for 4 months. Take a minute to look at his Dashboard.

#### Member: Anthony

- 21 year-old, gay African American male
- Recently diagnosed HIV positive
- Enrolled in an associate degree program
- Has lots of friends and liked going out to clubs
- Has not disclosed his status to anyone
- Distanced himself from friends
- **Anthony has now been enrolled in PositiveLinks for 4 months**



After you have looked at Anthony's Dashboard, go through the guided questions and fill in your responses.

Dashboard Guide	
Initial observations	
What is his adherence rate?	
Recent peaks/valleys in adherence rate?	
Most recent CD4 and VL?	
General Mood?	
General Stress?	
Recent peaks/valleys in either Mood or Stress?	
Engagement with PositiveLinks?	
Regularly responding to check-ins?	
Accomplishments/Badges?	
What is going well?	
What areas need help/support/improvement?	

Now, based on the completed Dashboard Guide, consider questions you may want to ask Anthony. Think through how you can best meet engage Anthony and meet his needs. Use motivational interviewing and strengths-based case management approaches whenever possible.

Dashboard Questions
1.
2.
3.
4.
5.

## Community Board Challenges

While issues on the Community are rare, it is critical for Sites to create a protocol to address Community issues when they do arise. The Community offers Members valuable social support and anonymous connection to others living with HIV. Sites are encouraged to establish the Community as a space for Members to communicate with one another with minimal intervention from Site Administrators, rather than a space where Site Administrators initiates and directs discussions. Here are some identified Community issues that Sites should be prepared to handle.

### Suicidal Ideation Posts

Members may post suicidal comments on the Community. This is traumatic for the Member in crisis and for Members in the community who read the post and want to do something to help, yet are limited because Member identities are not disclosed.

Here are suggestions for dealing with suicidal posts on the Community

- Try to prevent suicidal posts by reinforcing to Members that the Community is not the place to reach out when in crisis.
- Encourage Members to call 911, use a crisis hotline, contact their care Provider, or reach out to the Site Care Team directly when in crisis.
- Assign a Site Administrator as 'on call' to observe the Community 24/7. The schedule should include weekends and holidays so that Site Administrator can respond quickly when an issue arises.
- Reach out immediately to Members whose posts indicate medical or mental health emergencies and coordinate appropriate follow-up care with them.
- When Members express plans to harm themselves, coordinate emergency care.
- Report Community post issues to the Site PLC leader along with actions taken and situation status.
- Do not remove suicidal posts from the Community since other Members have likely seen them.
- Site Administrators should immediately post to the Community that they are aware of the situation and are following up with Member in crisis.
- Encourage Member, when crisis is over, to share with community that Member is OK.

### Member Bullying Posts

When learning how to use PositiveLinks Member App, Members are encouraged to be respectful and accepting toward one another on the Community. Members must be aware of the rules of engagement. In general, it is best to let Members of the community enforce the acceptable rules of behavior. The consequences for posting inappropriate, offensive, or unkind messages on the Community should be discussed with Members when helping them learn to use PositiveLinks.

### Identity Information Posts

Reinforce to Members that the Community is an intentionally anonymous community. Anonymity fosters open and candid sharing of personal issues. Although some Members may feel comfortable sharing their identity, Members are asked not to do so. When Members do reveal identifying information about themselves or others, such as Facebook pages, names, addresses, smartphone numbers, or any identifying features, their posts are immediately removed when spotted by the 'on call' Community observer. Members who post identifying information should be reminded by Message or phone call of the rules of engagement on the Community.

## 9. Implementation Phase

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The Implementation section includes suggestions for Member enrollment in PositiveLinks and suggested timing for points of contact with Members. Sites may choose the timing and points of contact schedule that best meets their own organizational goals.

*The section is organized as follows:*

*Recruiting Members*

*30-Day Check-in*

*Join the PositiveLinks Community!*

## Decision and Task Checklist for Implementation

✓	<b>Decisions and Tasks</b>
	Site Administrators trained and comfortable using PositiveLinks Member App and Portal.
	Site Care Team members comfortable and ready to use PositiveLinks to engage members.
	Determine Site's recruitment strategy.
	Determine PositiveLinks eligibility requirements and how they will be measured (for example, passing a reading test)
	Develop protocols for what happens when a potential Member does not meet eligibility or pass an eligibility assessment. Will there be secondary assessment?
	Decide what components to include in the enrollment process.
	Determine frequency and duration of scheduled follow-up with Members.

## Recruiting Members

During pre-implementation you defined your Site's target population for PositiveLinks recruitment based on a number of indicators, including who is at most risk of missing medical appointments and who will most benefit from PositiveLinks. Sites should use their institutional knowledge and data, current academic literature, as well as state and national data on linkage, retention, and medical adherence to determine their appropriate PositiveLinks population. Sites are encouraged to collect and analyze their baseline data prior to implementing PositiveLinks to see which groups have lower rates of viral suppression and greater gaps in care.

### UVA Case Study

#### *Usual Care Recruitment and Enrollment*

##### **RECRUITMENT AND ENROLLMENT**

Usual care recruitment at UVA Site was most frequently done by Site Provider referral. PLC was notified when there were Members who would benefit from PositiveLinks. PLC then reached out to potential Members, provided information about PositiveLinks and scheduled a time and date for enrollment. Member enrollment in the PositiveLinks usual care took 45 minutes to 1.5 hours and included the following components: benefits of the program, program agreement form, setting up phones (as needed) and training on PositiveLinks features.

##### **TRAINING**

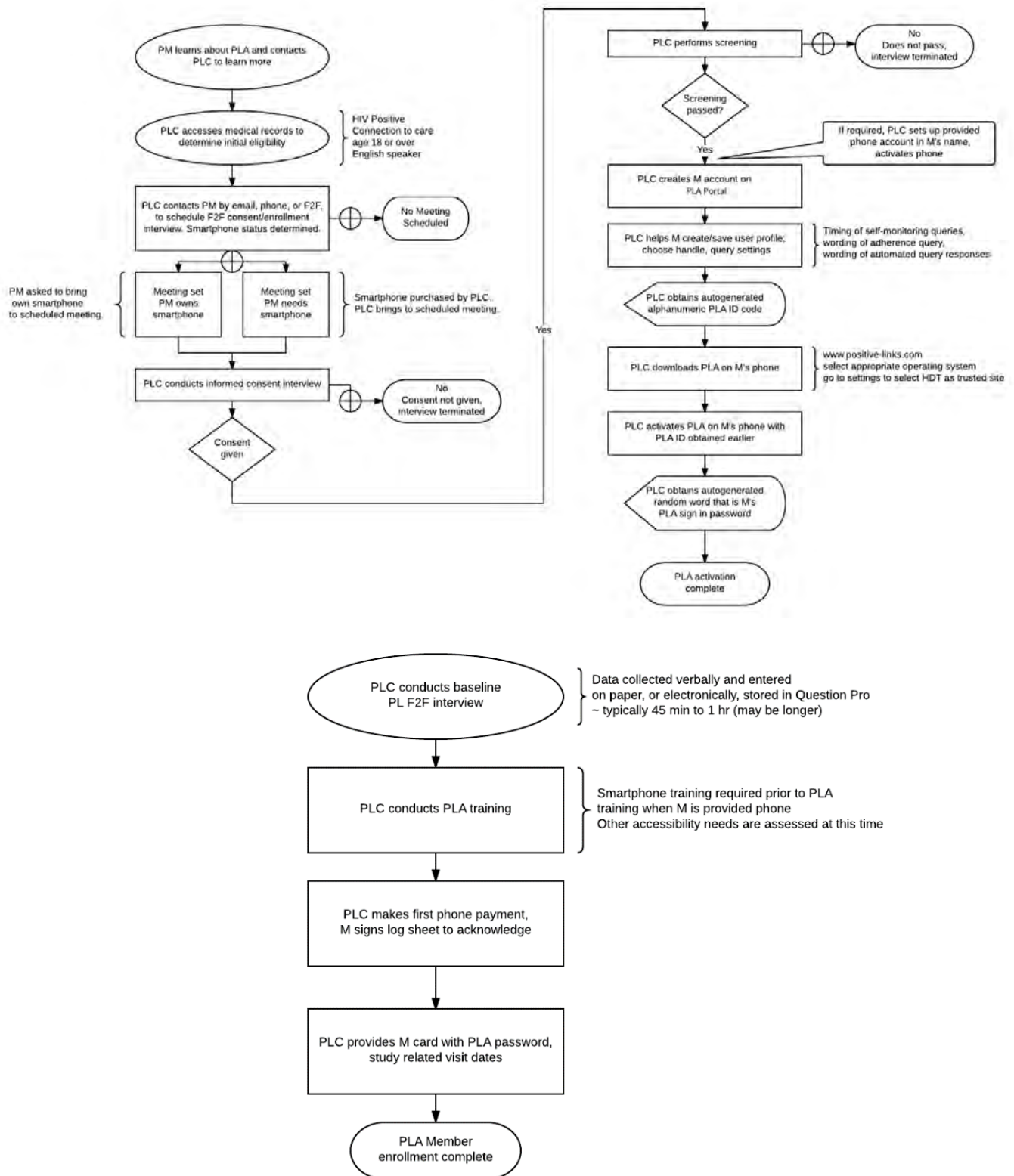
During enrollment, PLC provided Members help learning to use the smartphone and the PositiveLinks App. UVA PLC demonstrated for Members the different features of the PositiveLinks App and explained how to use each feature, asking Members to use the feature to demonstrate understanding. PLC helped Members choose their profile preferences.

##### **LESSONS LEARNED**

Due to the number Members with limited phone knowledge and no smart phone prior to enrolment, enrollment can take up for 2 hours to complete.



# UVA Site Study Enrollment Process Flow Chart



## CORE Member Consent

**The consent process.** Informed consent is integral to the Member/Site Care Team relationship. Regardless of whether an IRB is required, Members should have a clear understanding of PositiveLinks before beginning the program and consent to participate. After the consent process, Members should be familiar with features and components of PositiveLinks as well as the potential risks and benefits of the program. Members should also have demonstrated understanding of the details of the smartphone and data plan the Site is providing them.

## RECOMMENDED Data Collection

**Demographic data collection.** Certain demographic data may be essential to implementing and using PositiveLinks effectively. Sites should collect data on retention indicators and medical lab values so that they can track the effect of PositiveLinks among their Members.

## OPTIONAL Other Data Collection

**Other data collection.** Data collection is up to each Site to decide based on their interest and capacity to do so. Other data collection is optional and decisions may be

## UVA Usual Care Enrollment Procedures

Enrollment in PositiveLinks in the usual care setting typically involves one forty-five minute session. Session duration may be longer when Members are unfamiliar with smartphone use, require set up of a new phone, or if transferring phone providers. Here are the procedures UVA uses for usual care enrollment.

### UVA Usual Care Enrollment Procedures (30 minutes to 1 hour duration)

#### *Introduction (5 minutes)*

- Determine prior knowledge of PositiveLinks and how it works, "What have you heard about PL?"
- Overview Demo of PositiveLinks Functions, "Are you interested?"  
Use Member PL Quick Start Guide or own Phone to show

#### *Program Agreement Form (10 minutes)*

- Provide program agreement form
- The form gives an overview of the PositiveLinks program and expectations of Members. It is initialed and signed by Members.

#### *Smartphone Service Account Setup and Phone Activation (30 minutes)*

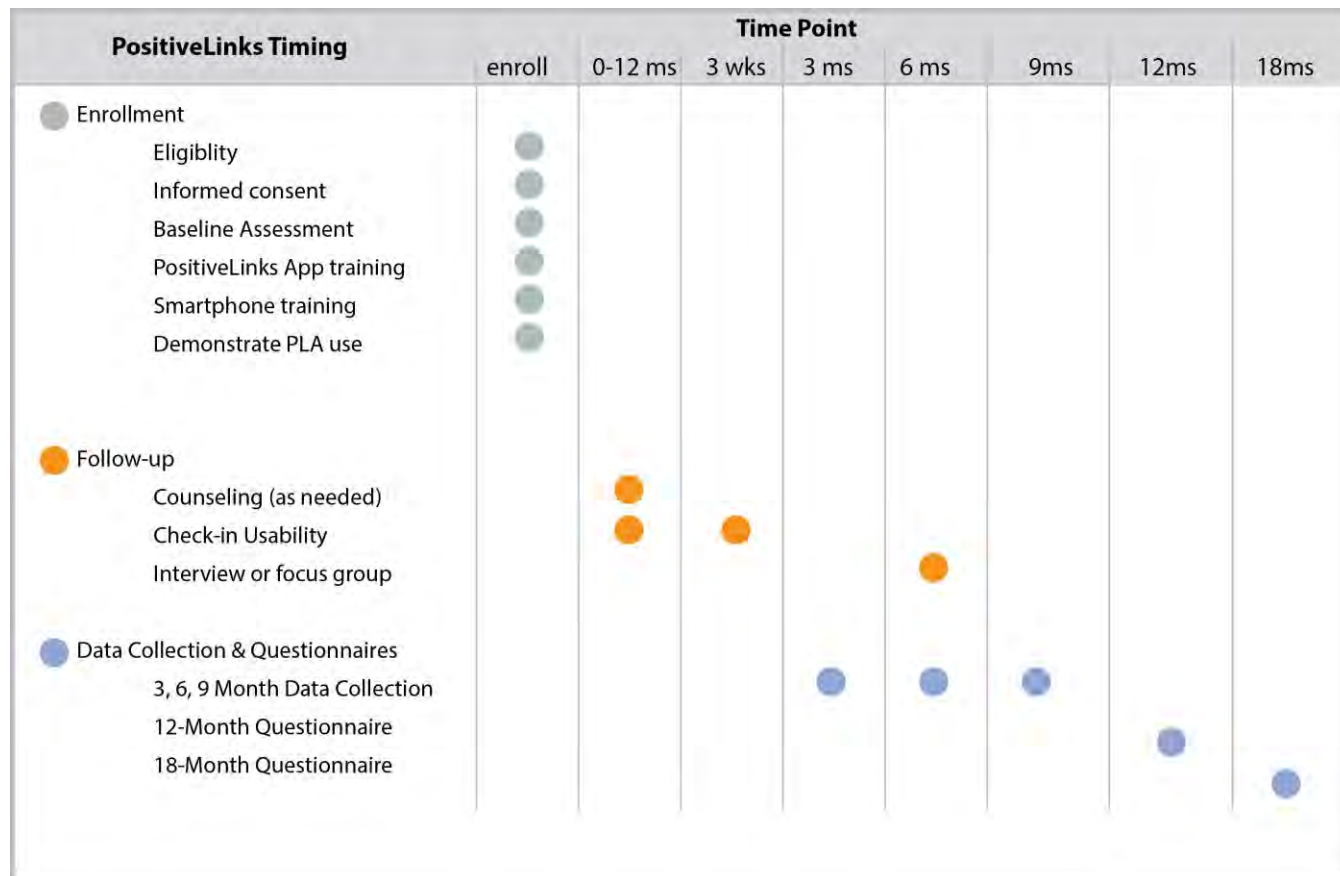
- UVA provides smartphones to Members who need them. PositiveLinks Coordinator confirms whether a new Member can use an existing smartphone or will get a new smartphone. Service providers are checked for coverage in Members' home location and an appropriate service provider is selected.
- Phone Activation: Remove phone from packaging. Open phone, insert battery into phone. Member info is entered as required and the appropriate data plan is selected.

#### *PositiveLinks Setup (15 minutes)*

- Be sure that Members select a Username that is not a nickname by which they will be recognized in the community. When setting the medication reminder, set it at a time that makes sense with the members schedule
- Install the PositiveLinks App (If needed go to Settings and enable 'downloads from unknown sources' on an Android or 'Trust developer' from an iPhone)
- Open PositiveLinks on the Member phone and enter the Username and password to login
- App/Phone Training: Provide Member with password and go through the login process. Have Member navigate now through the different sections of the app
  - Dashboard
  - Appointments
  - Messages
  - Community Board
  - Contact List
  - Resources
  - Use the teach-back method to confirm understanding:  
'Show me Lab Values... Show me where to find my contact information if you have any questions'
  - Members are guided to pick an Avatar and identify the 'home' button.
  - Additional smartphone training is provided as needed.

## Follow-up Timing Schedule

This chart shows an example schedule for follow-up. Sites may chose the schedule that best fits their own needs.



## 30-Day Check-In

The 30-Day Check-in interview is given in a semi-structured interview format. It is an opportunity for Site PLCs to strengthen their connection to Members, and to help engage Members in care. This check-in allows PLCs to ensure Members understand how to use all features of the app. In the notes section of the interview guide PLCs can document any issues or member opinions regarding a specific feature. Site PLCs could also focus their interview on documenting member usage and opinions regarding the various app features.

Here are the interview instructions for UVA's semi-structure guide:

1. **In person interview:** ask member each of the questions on the semi-structured guide
  - a. For each question, start with an unprompted version (e.g. 'please go to the appointments feature')
    - i. If able, check 'yes' in the 'prior to prompt' column and move to the next question
    - ii. If unable to do so, check 'no' in the 'prior to prompt' column
  - b. Add prompt (e.g. 'do you see the calendar icon? That is the appointment tab')
    - i. If able, check 'yes' in the 'after prompt' column
    - ii. If still no, check 'no' in the 'after prompt' column and demonstrate the feature to the member before continuing
  - c. For each question ask the member to show you the page as proof of their ability to access the desired information
    - i. OR: ask the secondary component to each question (e.g. 'tell me what upcoming appointments you have') and verify via the dashboard
    - ii. OR: can combine these methods to verify member knowledge
2. **Over the phone with wifi connection:** ask member each of the questions on the semi-structured guide
  - a. For each question, start with an unprompted version (e.g. 'please go to the appointments feature')
    - i. If able, check 'yes' in the 'prior to prompt' column and move to the next question
    - ii. If unable to do so, check 'no' in the 'prior to prompt' column
  - b. Add prompt (e.g. 'do you see the calendar icon? That is the appointment tab')
    - i. If able, check 'yes' in the 'after prompt' column
    - ii. If still no, check 'no' in the 'after prompt' column and explain the feature in more depth to the member before continuing
  - c. For each question to verify member knowledge as the secondary component to each question (e.g. 'tell me what upcoming appointments you have') and verify via the dashboard
3. **Over the phone without wifi:** start with the appointment question
  - a. Ask each member to describe the icon/location of the icon associated with each question
    - i. If able, check 'yes' in the 'prior to prompt' column and move to the next question
    - ii. If unable to do so, check 'no' in the 'prior to prompt' column
  - b. Add prompt (e.g. describe what information is available under this tab)
    - i. If able, check 'yes' in the 'after prompt' column
    - ii. If still no, check 'no' in the 'after prompt' column and demonstrate the feature to the member before continuing
  - c. At the end of the interview ask the member to log into the PL app and create a new message and send it to you
    - i. Can delay checking off the message question and login boxes until after the message is received

### PositiveLinks 30-Day Check-In Semi-structured guide

#### Goals:

- to reinforce the different app features;

- to assess PL Member knowledge regarding accessing PL app features; and
- to identify and address barriers to app engagement.

Instructions:

30-day check-in can be administered in person or over the phone. If over the phone, Interviewer will instruct PL Member to turn their phone Wi-Fi on and use the speaker phone function unless no Wi-Fi is available.

Questions	Prior to prompt: Does Member demonstrate knowledge of this?	After prompt: Does Member demonstrate knowledge of this?	Interviewer Notes
Please log into the PL App.	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	
Please find the Appointments Feature, and open it.  Tell me what upcoming appointments you have.	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	
Please find the Dashboards Feature, and open it.  Tell me what this information says to you.	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	
Please find the Lab Values Dashboard.  Tell me what this information says to you.	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	
Please find the Contacts Feature.  Tell me where you can find my contact information,	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	
Please find the Messaging Feature, and open it.  Please Create a Message and send it to me.	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	
Questions	Prior to prompt: Does Member demonstrate knowledge of this?	After prompt: Does Member demonstrate knowledge of this?	Interviewer Notes
Please find the Community Board Feature.	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	



<p>Tell me how to Start a New Conversation.</p>			
<p>Please find the Resources Feature.</p> <p>Tell me what kinds of resources you can find here.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>	
<p>Please tell me where to look for the monthly phone credit redemption code.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>	
<p>Please tell me how many questions a week so that you receive the monthly phone credit</p> <p>Your response rate for this week has been _____%</p> <p>Remember you need to answer a minimum of 10 queries a week each month to receive the phone credit. That means you need to have at minimum a 48% response rate.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>	
<p>What questions do you have?</p>			

## UVA Case Study

### *30-Day Check-in Interview*

UVA selected 30 days as a good time to check-in with Members. The rationale was that at 1 month Members still had fresh ideas about what they liked and didn't like about PositiveLinks App, and enough time using PositiveLinks to have informed opinions.

UVA Site used the 30-day check-in as an opportunity to continue to strengthen the PLC's connection with Members and help strengthen Members' engagement in care. Many UVA Members enjoyed being part of the PositiveLinks program and enjoyed sharing with and helping the PositiveLinks team improve the app.

The 30-day check-in gathers information from Members on their knowledge of app features and their ability to use these features. This helped UVA PositiveLinks Team understand and improve their training and identify app issues. The PositiveLinks Team is committed to providing a supportive and useful app for all PositiveLinks Members and tracking this information helped inform updated versions.

UVA found it good to take a semi-structured approach to the check-in questions to allow Members the opportunity to share stories about when or how they used PositiveLinks App in a specific way.

The 30-day interview at UVA provided an opportunity for the PLC to continue to teach and support Members' best use of PositiveLinks App. When the PLC noticed Members were unable to identify any features she reviewed those items to help the Member better learn and understand the features.

## Six Month, Twelve Month, and Continued Data Collection

At 6 months and 12 months after enrollment, Sites can collect data on their Member cohort's visit consistency and lab values (CD4 and VL). These may be collected from the Member's medical record.

App engagement should also be reported using reporting through PositiveLinks Portal:

- Check-In response percentage (in aggregate and by number of weeks [or months] in the study)
  - Medication Adherence
  - Average Mood
  - Average Stress
- Community engagement (number of Community posts)
- Quiz engagement
- Member messaging
- Total PositiveLinks Member App logins

This data is used to determine the impact of PositiveLinks at the Site. It helps inform and guide Sites about changes or adjustments that may be needed.

## Join the PositiveLinks Advisory Board

We have created an Advisory Board where Site Care Teams using the PositiveLinks program can share how the program works at their Site. We are setting the conditions for a collaborative community where the team feels comfortable talking about successes, failures, and lessons learned throughout implementation. This way we can continue to improve the PositiveLinks program to best meet the needs of Site Care Team and Members.

We would also like to follow the impact of PositiveLinks as the program grows. We encourage Site Care Teams to opt-in on sharing their Site data on linkage, retention, CD4 and Viral load and other indicators of interest. We will provide Sites that join this cohort with a few basic measures to track and define how to collect them.

Thanks for your Site's efforts to help improve PositiveLinks!

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