

Utilizing Qualitative Methods to Inform the Design and Implementation of a CSC Learning Healthcare Network

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The EPI-CAL Network

Participating Clinics & Counties



- LHCN & EPINET
- EPINET
- Not part of EPI-CAL (yet)

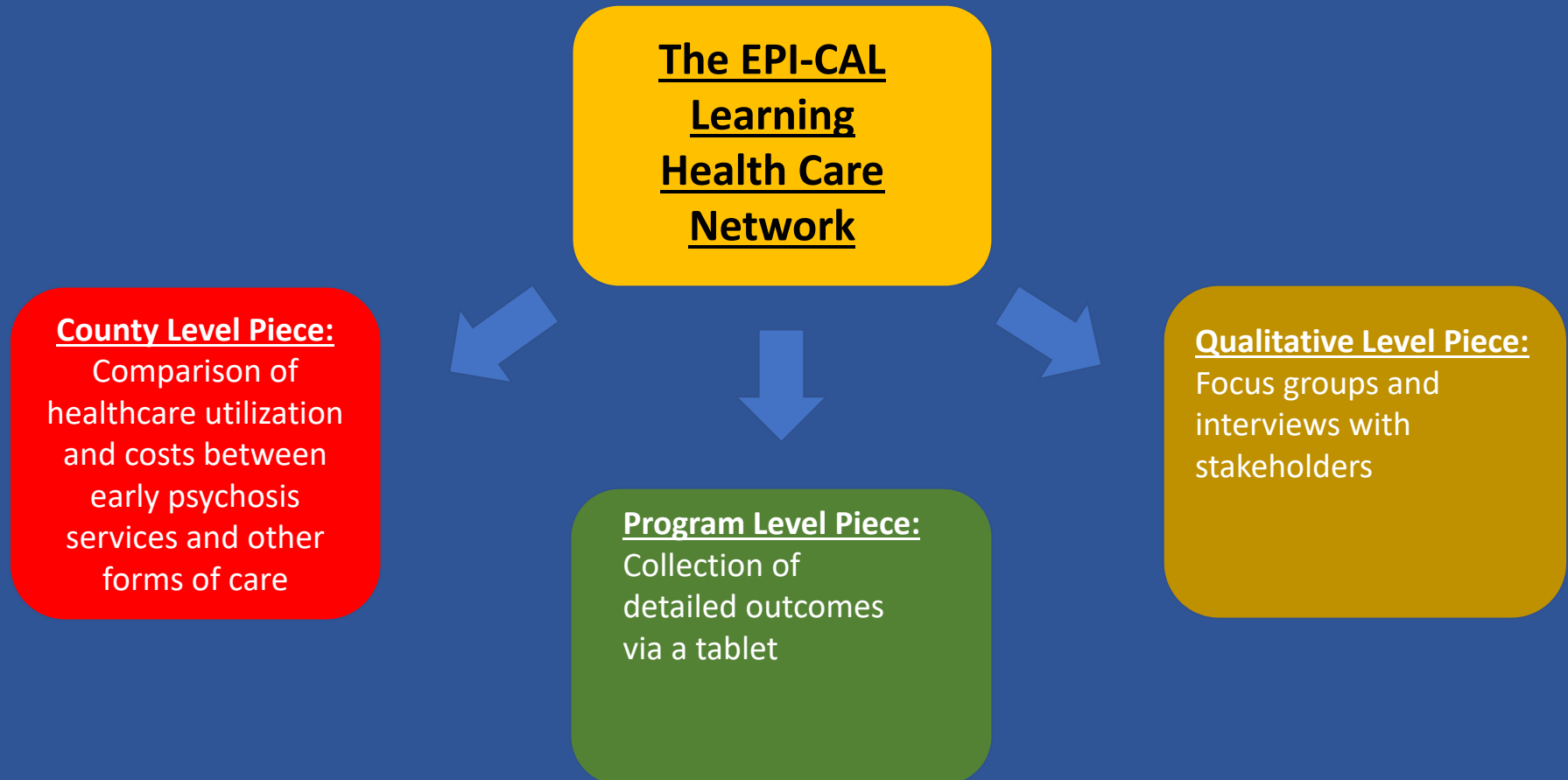


The EPI-CAL Network

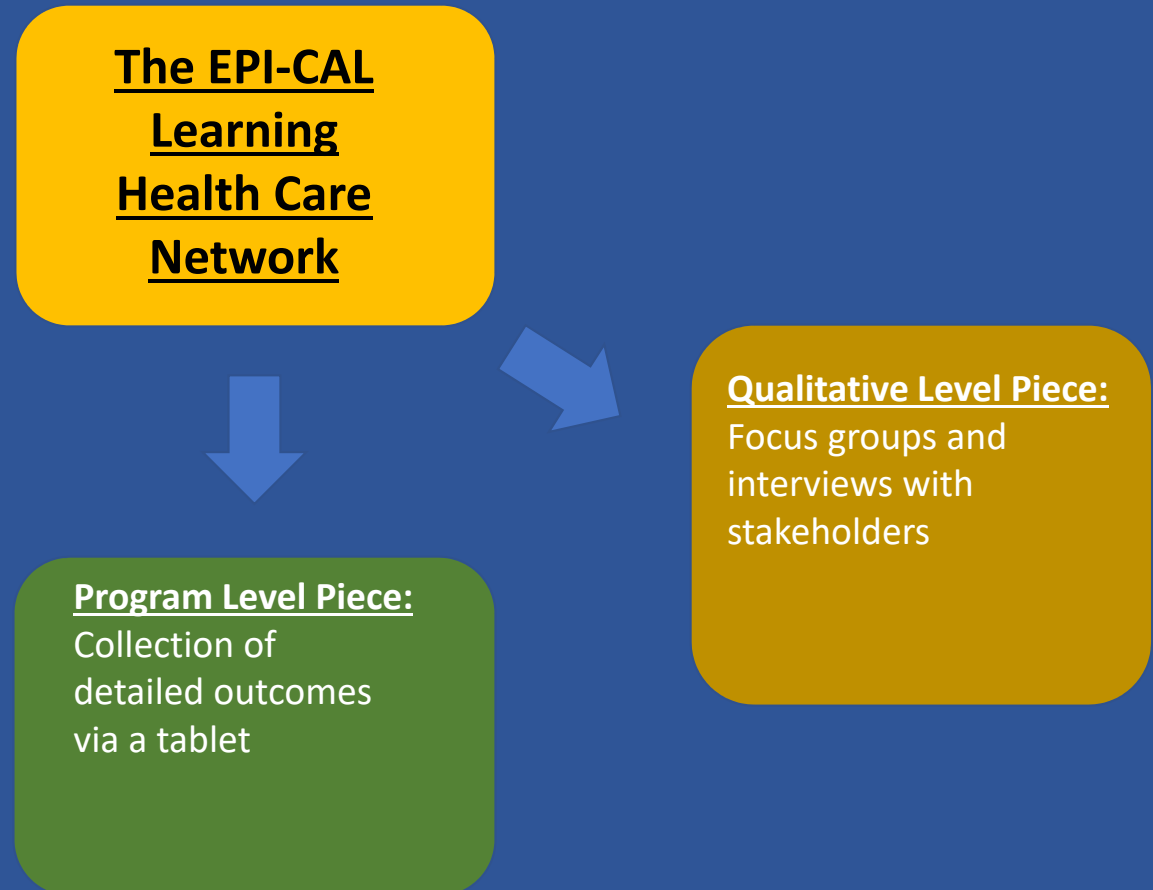
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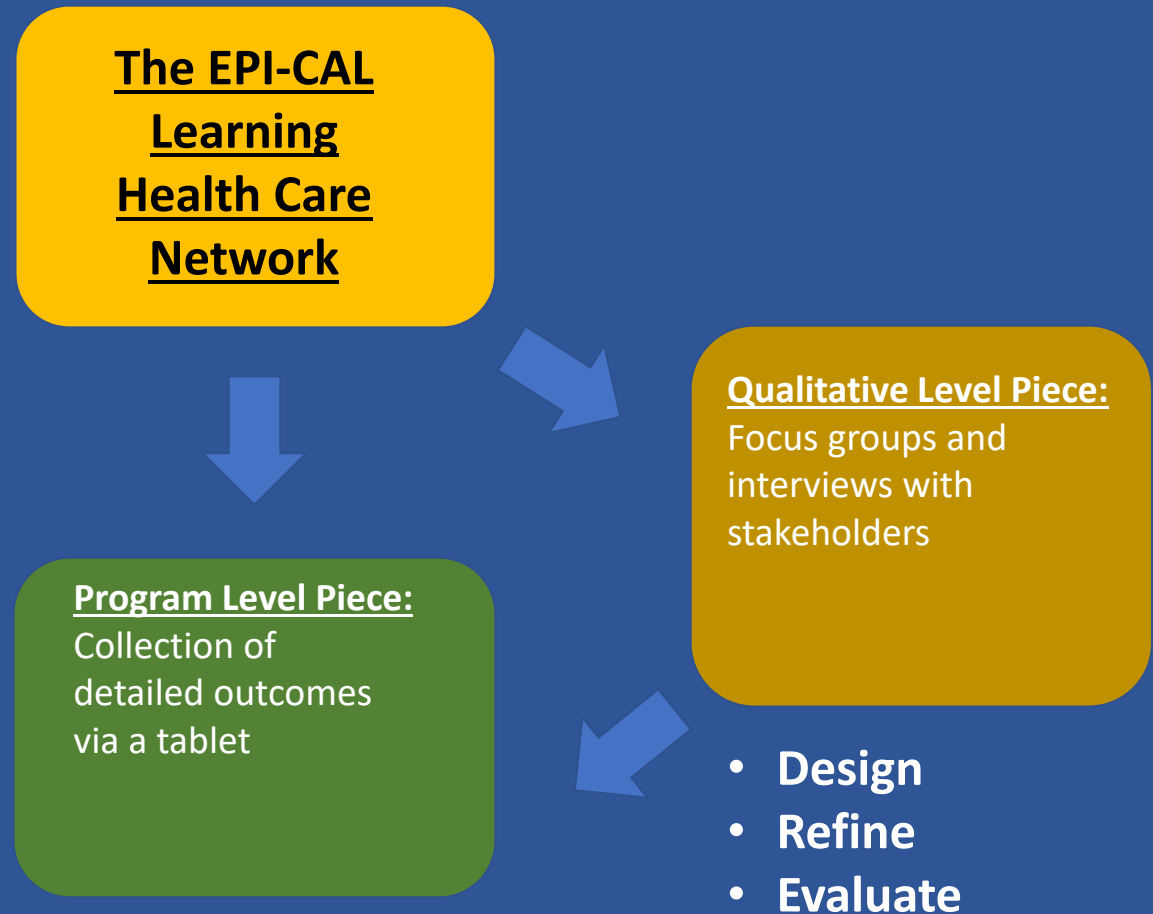
The Structure of EPI-CAL



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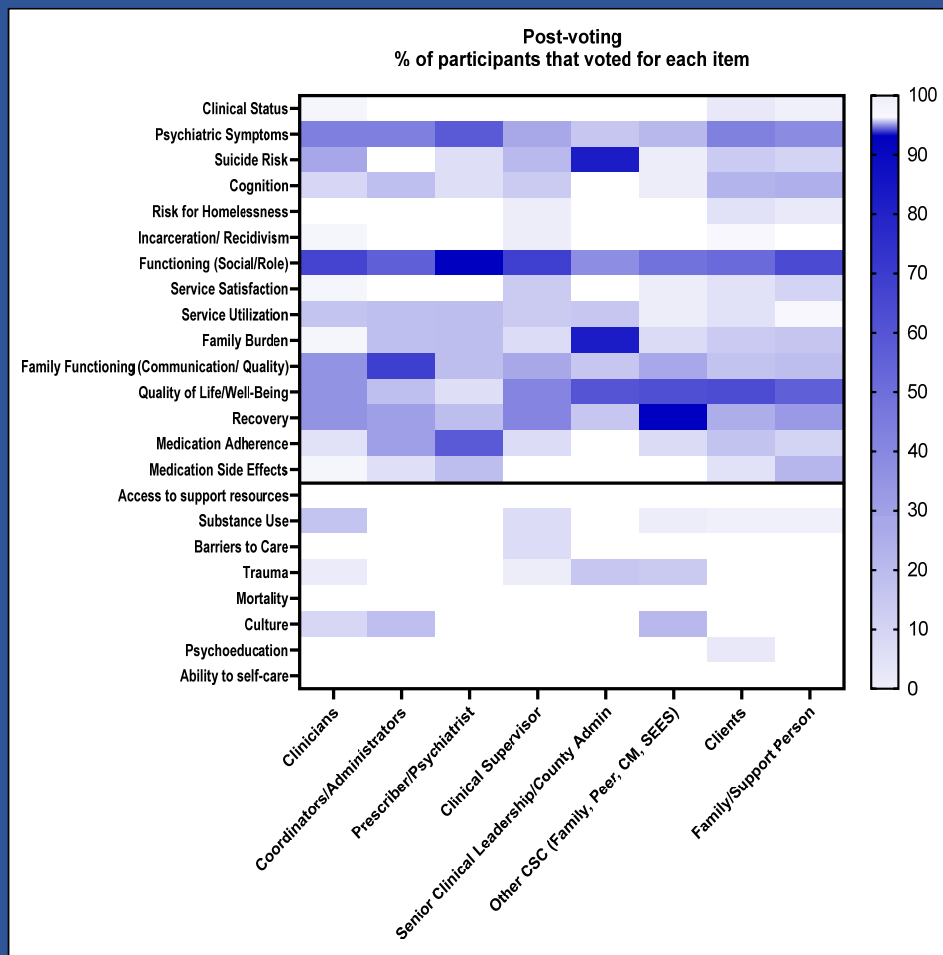
The Structure of EPI-CAL



Design Phase Aims

- 1) Document stakeholder priorities around data collection
 - 26 focus groups, 184 participants (43 clients, 107 providers, 34 family members)
- 2) Develop the data collection and presentation platforms
 - 14 focus groups, 74 participants (8 clients, 45 providers, 9 family members, 12 researchers)
- 3) Understand what information clients feel is most important to make an informed choices around data sharing (EULAs)
 - 3 focus groups x2, 24 unique participants (6 clients, 14 providers, 4 family members)

Data Domains Prioritization



- **Functioning** most frequently cited across all stakeholder roles. **Quality of Life, Psychiatric Symptoms, Recovery, and Family Functioning** also frequent selections.
- Reasonable heterogeneity across stakeholder roles.
 - **Prescribers** have greater focus on *Medication Adherence*
 - **Senior leadership** particular focus on *suicide risk*.
 - *Recovery* primary focus to **SEES/peer staff**.
 - *Cognition* seems more important to **clients and family members** than providers.

Informing Domain Selection

Appropriateness of specific terms [i.e., “Family Burden”]:

“...it does impact the family, but you don't ever want to let them know and make them feel like a burden. Burden is so negative. Such a downer word.”

Family Group, ID: 476

Data collection priorities:

“What I'm saying is that recovery, quality of life, all of that stuff: the stuff that dictates how that person will live their life from that point on. I think those are the most important things to track because those are the things that have the most significance.”

Consumer, ID: 284

Level of detail necessary to inform care:

“For me, it would be less about just a dichotomous “yes you have substance use disorder” or “no you don't,” and more about current level of use quantity. The method of use. Type of use. [...] Because I think that mediates outcomes, right?”

Provider Group, ID: 476

Informing Domain Selection II

Significance of self-report

"Yeah, I think that everyone -most people- are sharing is that sense of empowerment and having this opportunity to hear the voice of the clients, and that's very important."

Provider Group, ID: 467

Clinical Utility of longitudinal data collection

"I think it [measuring recovery] kind of encourages the clients to really self-reflect, and I think it's really hopeful. I have a lot of clients do these, and they'll express, "I'm pretty sure I marked this on the last one, so I feel like I'm improving," and I think that self-reflection's really validating for them."

Provider Group, ID: 303

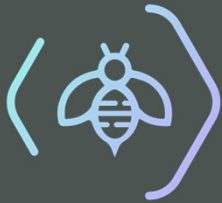
Importance of modifiers/predictors of outcome

"I think some level of a measure regarding therapeutic alliance will be helpful. [...] I think it helps to be able to understand how well there is a relationship established between you and the clients, and how that affects the outcomes and their engagement within treatment."

Provider Group, ID: 467

Wireframe Focus Groups

Developing the Beehive Platform



BEEHIVE Clinic Name 1 Brandi Weidner

- Dashboard
- Clinic
- Providers
- Clients
- Surveys
- Incidents
- Reports

NOTIFICATIONS

- New survey bundle is uploaded. Please assign it to corresponding Diagnosis.
- "Mark J" is not able to complete the survey. Please help.
- Your report issue is resolved.

[View all notifications](#)

SURVEY COMPLETION RATE

36% Internal average Clinic 1

74% Total clinics average

Completed In progress Yet to start

CLINIC SUMMARY

- 129 Total Clients
- 12 Clinic Providers
- 02 Admin
- 03 Survey Bundles

[View Clinic](#)

Question About Your Symptoms Comparative Data

Time	Clinic average	Network average	Threshold
Baseline	50	90	50
6 Months	30	10	50
12 Months	70	35	50
18 Months	85	85	50
24 Months	10	70	50
30 Months	85	50	50

SUPPORT REQUESTS

Total Incidents	open Incidents	Inprogress Incidents	Closed Incidents
118	28	20	70

- Michael Smith** (High priority) - Not able to update Client details (Open) - 12/26/2019
- John M** (Medium priority) - Diagnosis list is not loading (Inprogress) - 12/26/2019
- David K** (Low priority) - Survey is not loading (Inprogress) - 12/26/2019

High priority Medium priority Low priority

Logout

Designing the Platform

“My thought it is with the progress bar, if it were a different color it would be easier to see.”

Provider Group, ID: 501

“Yeah therapy is for individuals, and individuals should not be compared to others. It makes sense for the clinic to need to look at the data, but the parent or client doesn’t want to know about that data.”

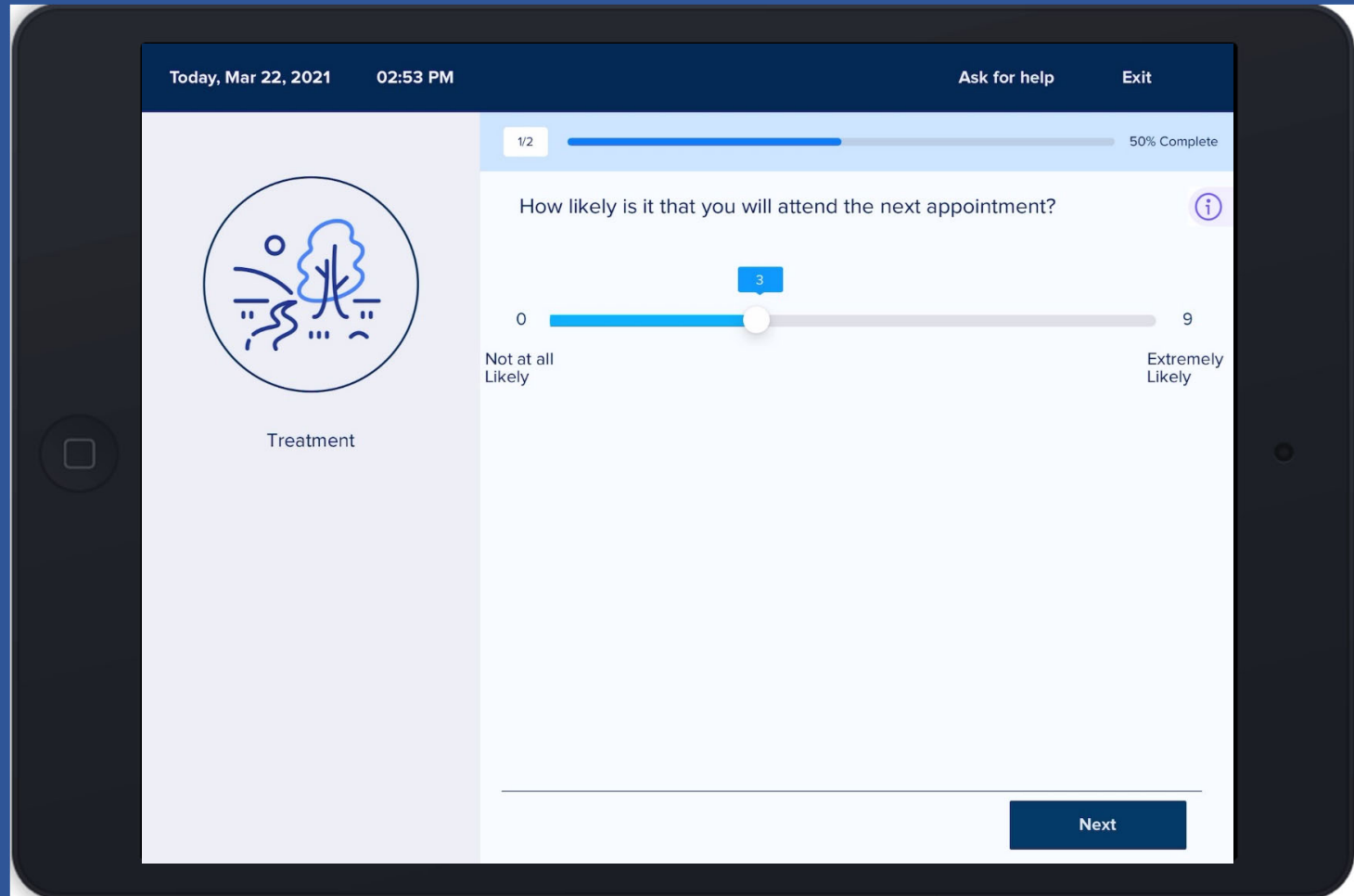
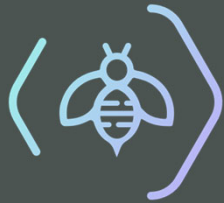
Client and Family Group, ID: 422

“From an administrator perspective, they’ll want demographics and diagnosis. A pie chart that shows race, ethnicity, gender. When I think of a dashboard, I want graphic displays of data.”

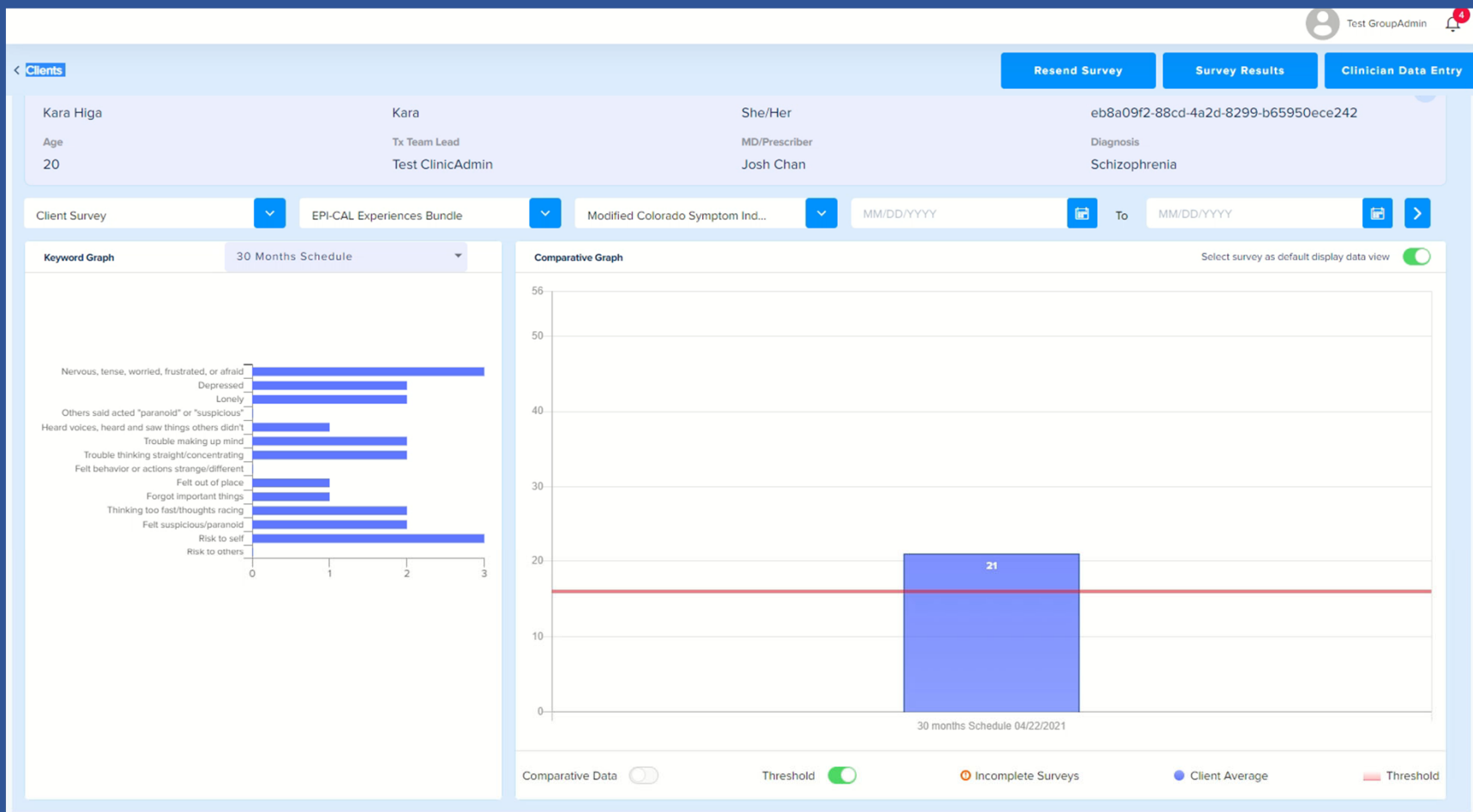
Clinic Admin Group, ID: 415

“My thought it is with the progress bar, if it were a different color it would be easier to see.”

(Provider Group, ID: 501)

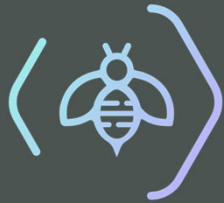
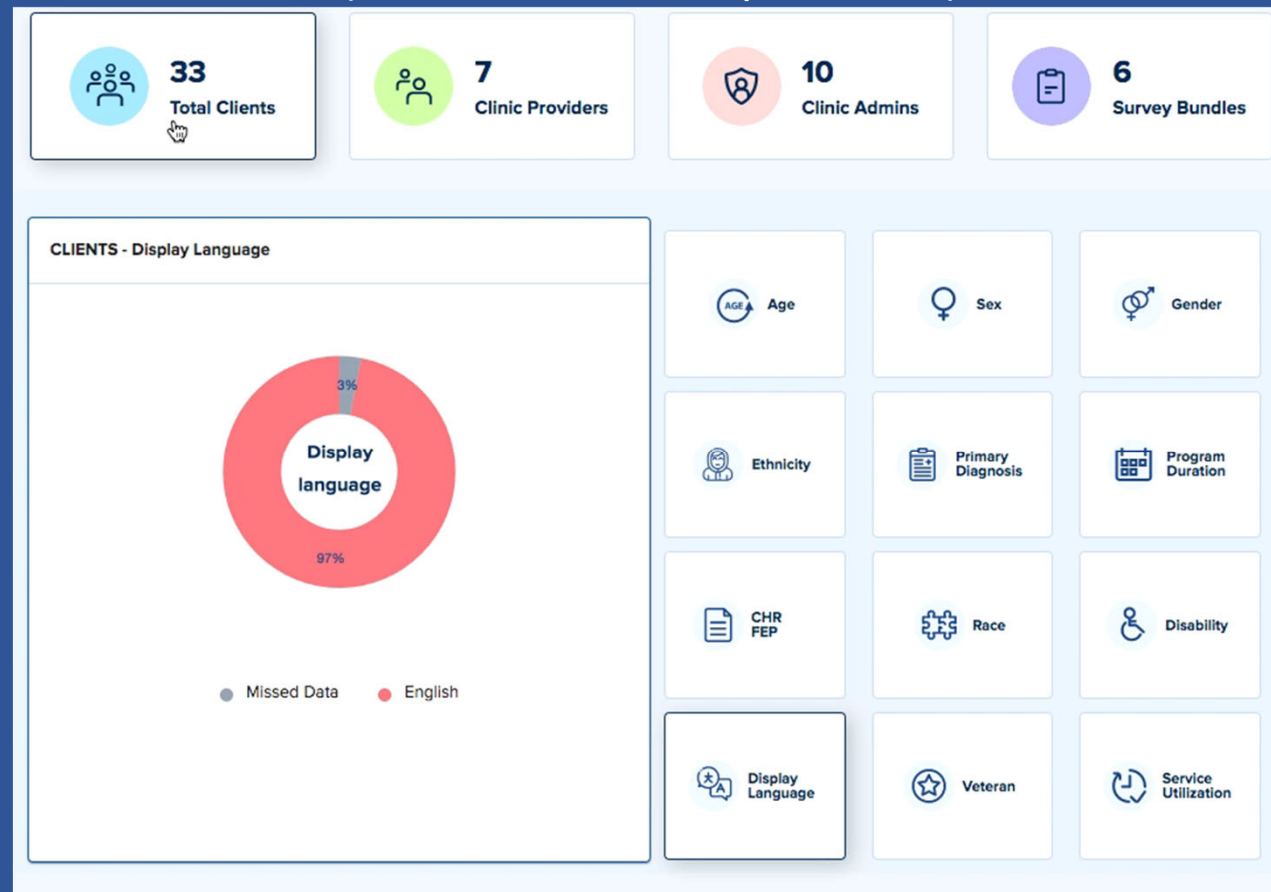


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(Clinic Admin Group, ID: 415)



Understanding Data Sharing
and
End-User License Agreement (EULA)
Focus Groups

A Few Core Themes

- Transparency

"... I feel like our clients would ask, "What is going to be shared and why?...why do we want to do this? I think [the benefits] is what could maybe sway somebody one way or another, and then understanding exactly...which de-identified information is going to be shared and how that will be beneficial."

Provider Group, ID: 811

- Communication

"I teach all our trainees to...know how to talk about it [consent] in layman's terms, so that people really understand and make sure they understand what they're saying... I've had patients that are extremely symptomatic, but they'll say, "[Psychologist/Case Manager], I wasn't going to fill it out, but the way you explained it, I actually think I feel comfortable now.""

Provider Group, ID: 811

- Agency

There's so many protections on my information that even I can't access it, which I find really ridiculous. ... That doesn't make sense to me. Why would I want you to share that information to other people if you won't even share it to me?

Client Group, ID: 819

- Protection of data

"I think [the ability to delete your data] provides you with a level of security. You feel secure if you have the ability to do that. And if you feel secure you put more information...out there."

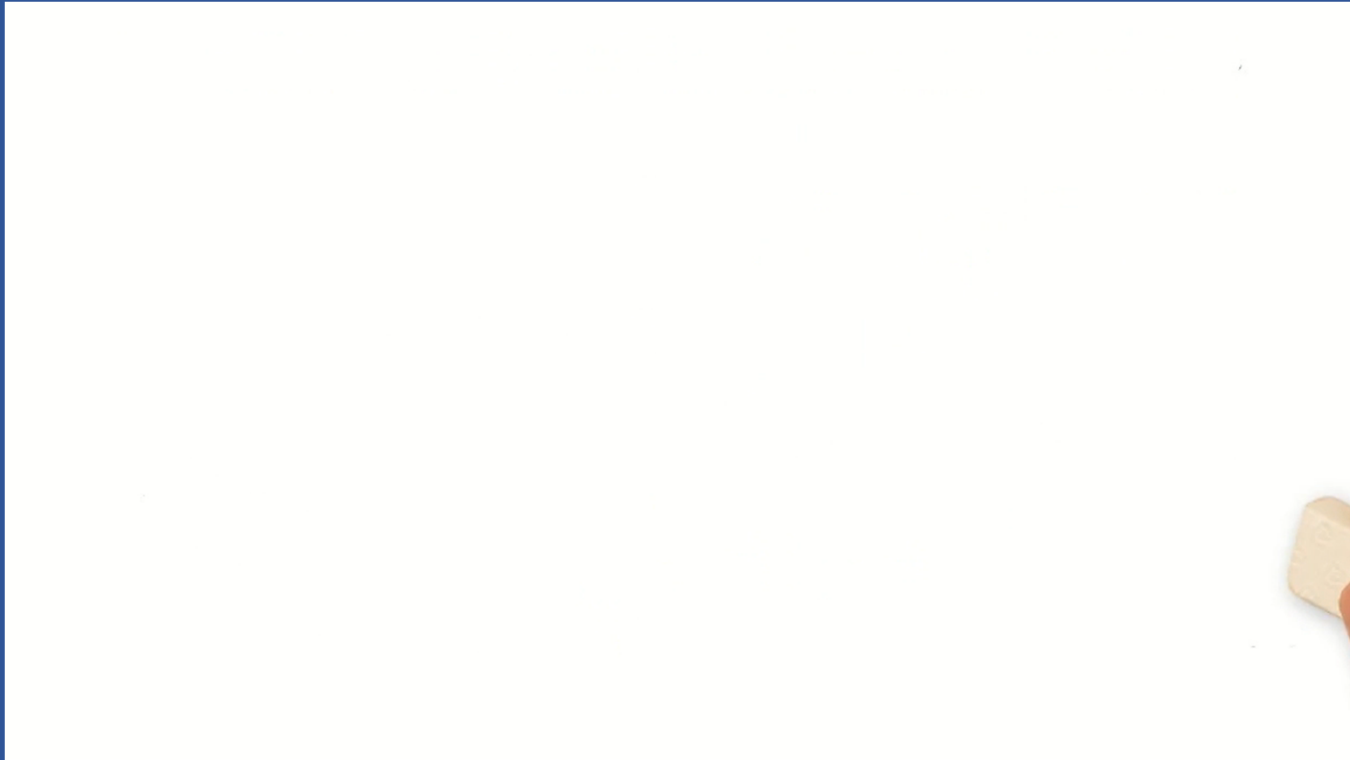
Parent Group, ID: 827

End-User License Agreement (EULA) Focus Groups

Part 1: 7 min video presentation

Part 2: Text and checkboxes

Part 1: Developing the End User License Agreement (EULA) Video



“The pace was the overwhelming thing. I loved the video I thought was great. I love the cartoons, super entertaining. But I think the pace was way too fast.”

Part 2: Developing the End User License Agreement (EULA) Data-Permissions Screen

End User License Agreement for Chey

"Now that you've watched the video about Beehive, it's time to choose your data permissions. First let's review what you are agreeing to by using Beehive as part of your care."

**-required*

I understand this application is for data collection only and not treatment. *

- This application does not provide medical advice. It is not for use in medical emergencies.
- If I am in need of urgent medical treatment or emergency care, I should contact my treatment team directly or call 911.

I understand that my **identifiable** mental health data entered on this platform will be shared as part of standard Early Psychosis care in my clinic. *

- My treatment team (ie. doctor, therapist, clinic administrators) will see my identifiable mental health data (ie. my name and other information that can identify me). This is part of standard Early Psychosis care.
- My treatment can export my **identifiable** mental health data from the application. They may do this to support my treatment or provide required reports to groups that oversee and fund my clinic (e.g., county mental health department, private insurance). My treatment team is responsible to protect my data once it is exported from the application. This is described by HIPAA guidelines and my clinic treatment agreement.

I understand that the UC Davis staff that manage Beehive will have access to my de-identified mental health data in order to support application development and management. *

- The UC Davis research team will not see my name or any other information that could directly identify me. They will see my zip code and month/year of birth. All of my data will be linked to a unique identification number (ID). My unique ID will not contain any information that could identify me. My unique ID will not be connected to my name.
- This data will only be used as part of Beehive management. For example to provide technical support to me and my clinic, and/or improve Beehive.

"Next, choose your permissions levels. You can choose to share your data outside of Beehive for research purposes to improve Early Psychosis care for others in California and across the United States. You can change these permissions at any time. You can also ask researchers to delete your data."

(Optional) I agree to share my de-identified data with the UC Davis Research Team.

- I understand the UC Davis research team will not see my name or any other information that could directly identify me. They will see my zip code and month/year of birth. All of

"I guess in the past with EULAs it's like they're already pre-typed into the form. If I did want to have it sent to somewhere, I would physically have to cross it out. But since you guys have checkboxes that's much more convenient."

Client Group, ID:120

Summary

- Qualitative work critical to informing implementation
- Key component of maximizing the utility of the network for stakeholders
- Major facilitator to stakeholder buy-in
- Driver for the success of EPI-CAL overall

