

Acceptability and implementation of an online cognitive behavioral therapy platform

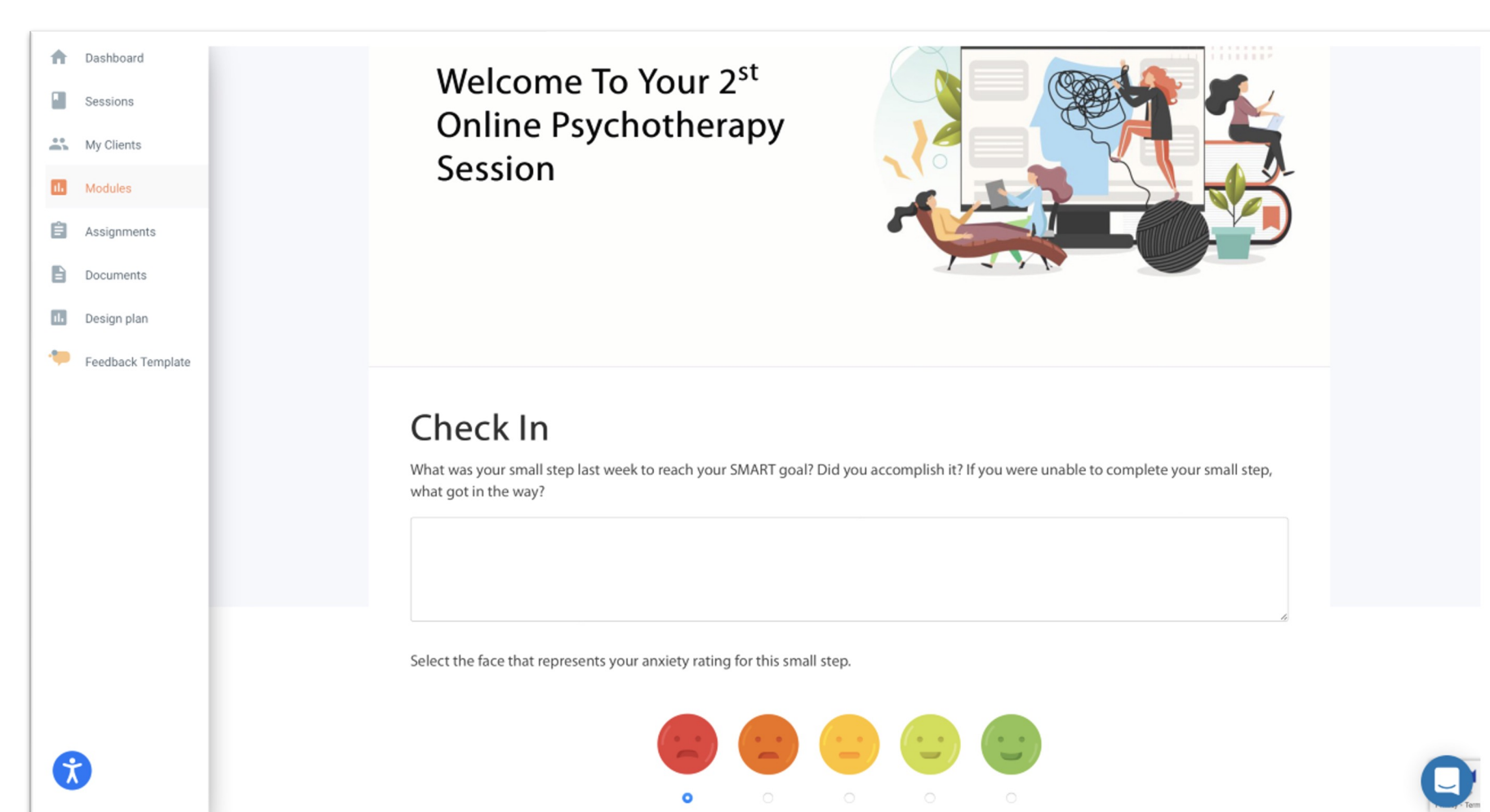
Kat Marriott, PhD ¹; Sara Chokshi, DrPH ¹; Stan Kachnowski, PhD, MPA ¹

1. HITLAB Healthcare Innovation Technology

ABSTRACT

Cases of major depressive disorder and anxiety are estimated to have increased by more than a quarter worldwide in 2020, largely attributed to the Covid-19 pandemic. Digital tools have the potential to expand mental health service providers' capacity to meet this growing demand, particularly Covid-related depression and anxiety. We studied a novel platform designed to deliver asynchronous, module-based cognitive behavioral therapy (CBT) to patients for common mental health conditions such as depression, anxiety and post-traumatic stress disorder, to evaluate the usability and acceptability of the platform and assess the implementation of the platform into clinical and administrative workflows.

Working with a large, urban behavioral health clinic we recruited 3 clinical psychology trainees to use the platform with their patients (n=15) to complete 4 modules of a Covid-focused CBT content. After a brief training on delivery of online CBT and features of the platform, clinicians and their patients used the platform for 4 weeks.



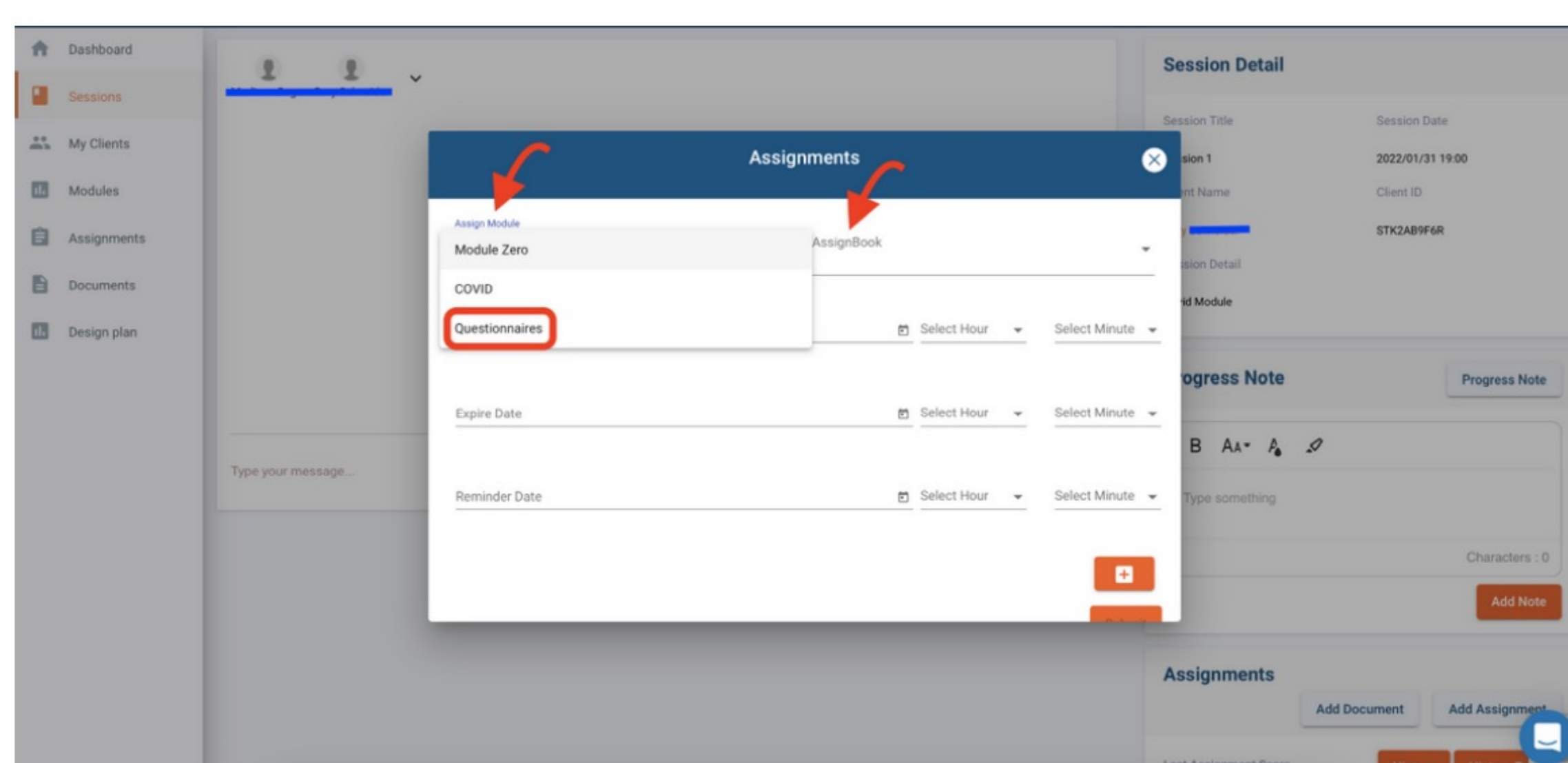
OBJECTIVES

- Assess the acceptability of an asynchronous online platform to deliver CBT-based therapy to patients with mild to moderate Covid-associated depression and anxiety.
- Assess the usability of an asynchronous online platform for clinicians to deliver feedback, evaluation and coordinated care for their patients.

STUDY METHODS

Study Design:

- Single-arm, mixed methods quantitative (survey) and qualitative (interview) study involving clinicians and their patients with mild to moderate depression or anxiety.
- Acceptability and usability of the platform as evidenced by end of study questionnaires completed by the clinicians, clinic administrator and patients of a mental health clinic.
- Acceptability and usability as evidenced by responses to interviews with clinician and administrator.



Cognitive Behavioral Therapy

Cognitive behavioral therapy (CBT) is a short-term form of psychotherapy directed at present-time issues and based on the idea that the way an individual thinks and feels affects the way he or she behaves. The focus is on problem solving, and the goal is to change clients' thought patterns in order to change their responses to difficult situations. A CBT approach can be applied to a wide range of mental health issues and conditions.



CBT: How it works

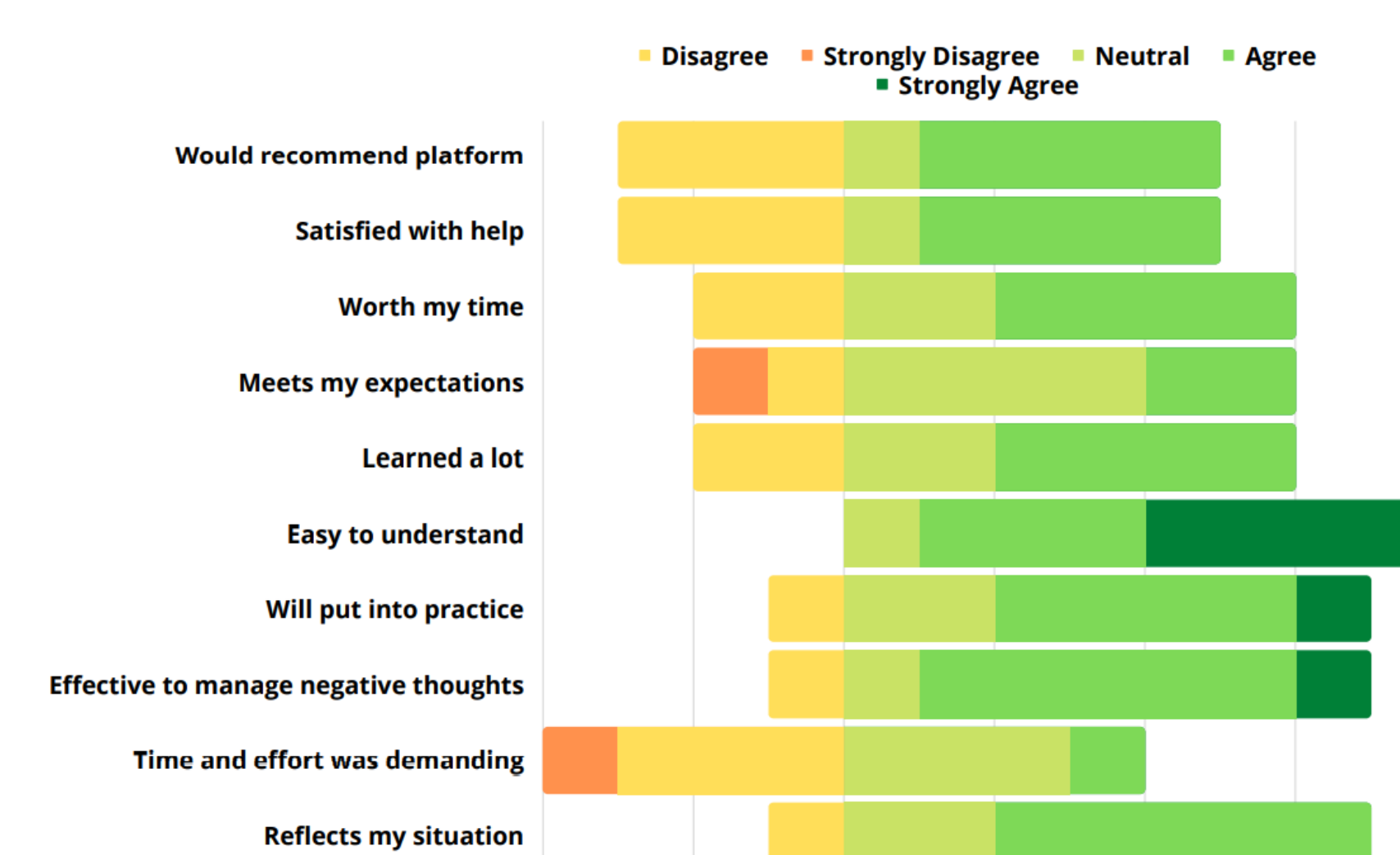
- CBT integrates behavioral theories and cognitive theories to conclude that the way people perceive a situation determines their reaction more than the actual reality of the situation does. When a person is distressed or discouraged, his or her view of an experience may not be realistic. Changing the way clients think and see the world can change their responses to circumstances. CBT is rooted in the present, so the therapist will initially ask clients what is going on in their mind at that moment, so as to identify distressing thoughts and feelings. The therapist will then explore whether or not these thoughts and feelings are productive or even valid. The goal of CBT is to get clients actively involved in their own treatment plan so they understand that the way to improve their lives is to adjust their thinking and their approach to everyday situations.

RESULTS

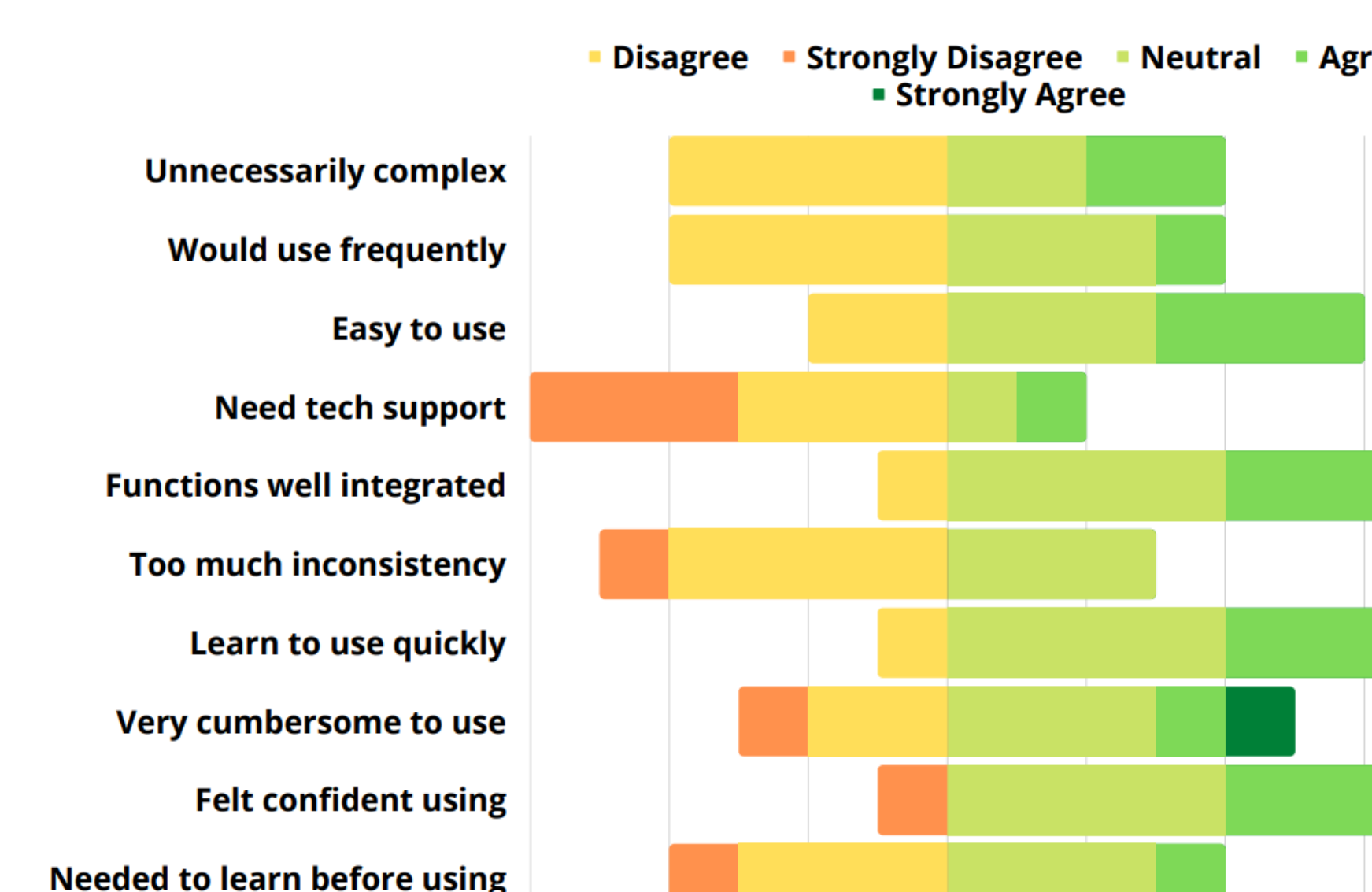
Patient Quantitative Data

- All patients reported that the information on the platform was easy to understand (**Median score 7.75/9**)
- Most patients reported that using the platform had the potential to help with their anxiety and depression (**Median score 6.5/9**)
- Patients found the various functions on the platform were well integrated and learned to use the platform quickly (**Median SUS scores 3.25**)

Platform Acceptability



Platform Usability



Qualitative Clinician Data

Overall, clinicians found the platform acceptable, easy to use, and a positive impact to workflow. In general, providers felt the platform would be an excellent addition to their practice to provide therapy and services remotely in conjunction with one-to-one live sessions.

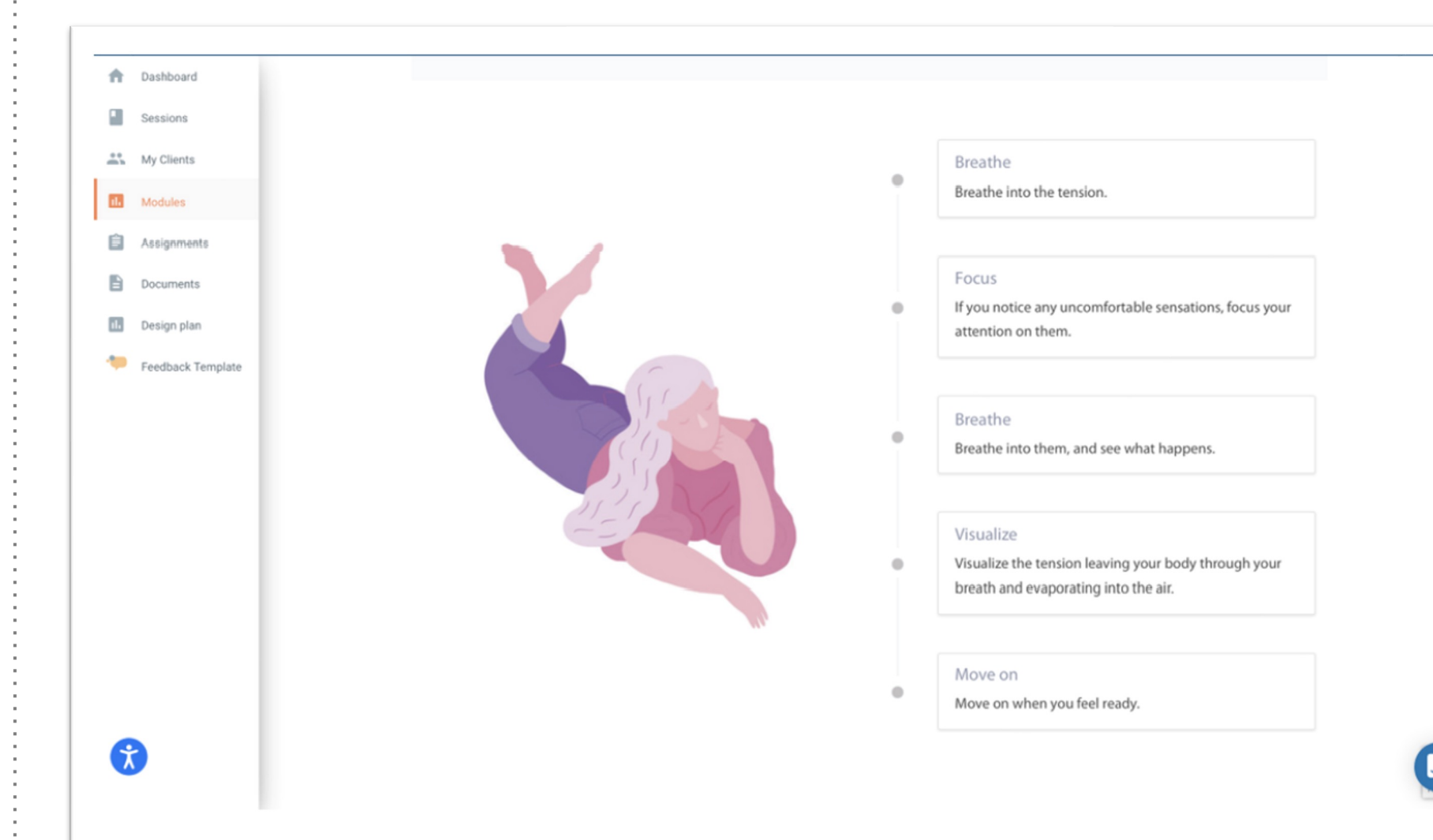
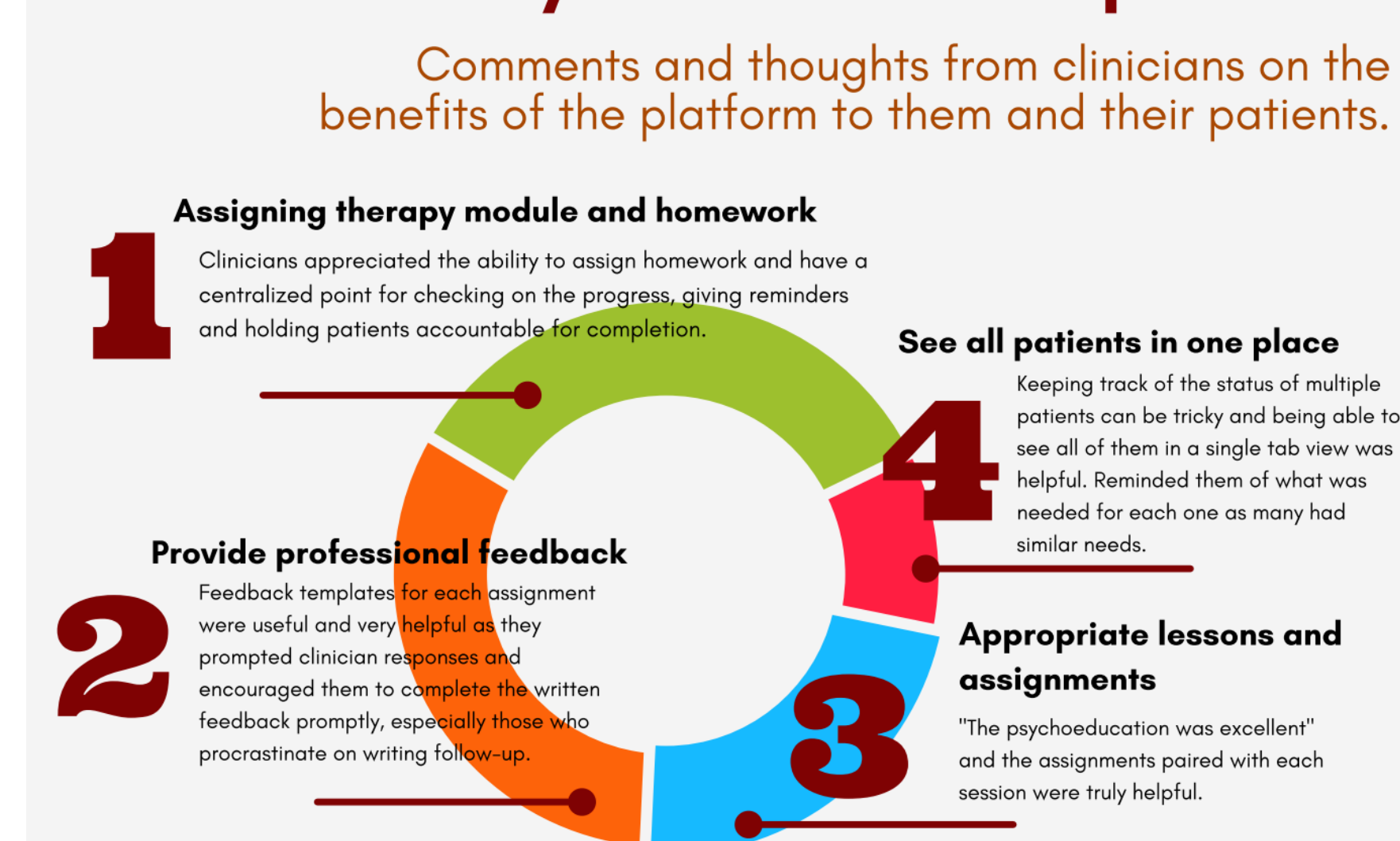
- "Oh my God, I would love this as a way to assign homework to clients through a platform. Being able to use it for that purpose I think would be very helpful for clinicians. Because CBT homework is important for treatment but not always completed because it's either too hard or it's annoying or they forgot. And I think that a platform like this could at least take care of the 'I forgot' or 'oh, I lost it'. I wish, I wish we had something like that."

- "There is that percentage of patients that would be interested, the ones that are asking us 'can I be seen three times a week? I need more resources. I'm not quite ready for a partial program, but once a week, outpatient therapy isn't quite enough.' I feel like those people, this would be really well marketed to them because it's just extra service, therapy that we can offer without necessarily having to schedule a 45 minute session. And it's not as much effort on the therapist part."

CONCLUSIONS

- Development and technical issues caused some confusion and frustration for participants starting the platform but were quickly overcome.
- In general, patients found the platform acceptable and usable and thought that it could help improve their anxiety and depression
- Clinicians found the platform particularly helpful in assigning important homework and providing timely, written feedback
- Online CBT has the capacity to expand clinicians' ability to address the growing need for mental health services in the U.S. and globally. Studying and addressing the acceptability and implementation barriers to integrating online platforms is key to realizing the potential of these platforms.

Benefits of asynchronous CBT platform



ACKNOWLEDGEMENTS

Authors would like to acknowledge the HITLAB research team for study support and implementation; the platform developers for their work and technical support throughout the study, and the Behavioral Associates staff for their efforts in recruiting and executing this study.