Michelle Day: [00:00:00] Good afternoon everyone, and welcome to the Fletcher Group, Rural Center of Excellence's webinar series. Today's session is scheduled to run from 2:00 PM to 3:00 PM Eastern Standard Time. My name is Michelle Day and I am your moderator for the session, along with Janice Fulkerson and Erica Walker. A couple of brief housekeeping items and then we'll begin.

You entered today's session on mute and your video was off and will remain so for the entirety of the webinar. Your chat feature is located at the bottom right of your screen. Use the drop down feature to communicate with either the panelists only or panelists and attendees. Please direct all questions regarding the webinar content to the Q& A section. Be advised that this meeting is being recorded and will be available to you on our website once it has been transcribed. You can access our website at www.fletchergroup.org. Also, at the conclusion of today's [00:01:00] session, there will be a short survey regarding the webinar content. Your participation in that survey is greatly appreciated and will only take a few moments to complete.

Today's presenters are Zachary Gidwitz and Alex Weber with Open Recovery. Zachary is the co founder and CEO of Open Recovery, the company behind 12 Steps Addiction Recovery, an AI driven app providing tailored support for people working on substance use and behavioral addictions. Originally from Baltimore, Zachary has an MBA from INSEAD and he is fluent in Mandarin Chinese. His career includes entrepreneurship and work with top tech companies in the United States, Brazil, and China. With over eight years in active recovery himself, he combines first hand experience with advanced AI technology to make personalized recovery support widely accessible.

Alex graduated from Wesleyan [00:02:00] University. After almost two decades working as a corporate leadership facilitator, trainer, and coach with clients from the United States, Europe, Brunei, China, the Philippines, and Australia, his new role as head of partnerships at Open Recovery sees him collaborating with treatment professionals in alumni services, the Bureau of Indian Affairs, SMART Recovery, and numerous recovery centers and sober homes to explore how AI can transform addiction recovery and bend the cost curve on treatment.

Zachary, Alex, the floor is yours.

Alex Weber: Hey, welcome. I'm really excited to spend some time with you to explore artificial intelligence and recovery. and look at how AI is making addiction recovery more accessible and effective. Um, we're going to use the chat a little bit. Um, that's how I can interact [00:03:00] with you today. Um, so I see people introducing themselves. Um, so happy that you are all here. I'd like to direct your attention to the chat for a minute and begin by asking What's your general impression of artificial intelligence on a scale from one to five? So we have a classic Likert scale, and I'd like you to just put a number there. So we have four, five, five, five, four, two. Good. A couple more. Okay, good. We have a good mix. We have a mix of curious and excited and skeptical. Anybody flatly opposed? Okay.

Zachary Gidwitz: They didn't come.

Alex Weber: Yeah, no way. None of that, none of that recovery stuff. Uh, none of that AI. Not in my recovery. Let me ask you [00:04:00] another question. Uh, how about your familiarity with using? So here I've gone one, I've never tried it. Don't wanna. No, thank you. Um, up through, I've tried it. I've used it casually. I use it frequently, or I'm an expert user. All right. So here we have an even bigger range from one. Dan, I need you to put a five. Dan is our head of product. Makes me nervous. Good. Absolutely. Um, we have a big range. Okay, good. Well, the average attitude towards AI is, interestingly, correlated with experience, interaction, and exposure to the technology. Now, some of

that's just common sense. If you feel an aversion to something, you're not likely to engage with it. You've already decided it's not for you.

Contempt prior to [00:05:00] investigation, that's the saying goes. I don't know, I think I read that somewhere. And the same logic applies at the top of the scale. People who are curious or excited are naturally more likely to be frequent or expert users of these technologies. That makes sense, right? So where does skepticism about AI come from? What's natural and understandable? And what might stem from some older assumptions that no longer hold true? What might change your mind?

Interestingly, when the Medical Economics Journal published a recent Tebra study of 500 healthcare professionals, of the doctors whose perspectives on AI shifted after they were shown how chat GPT provided medical advice, 95 percent of participants reported a positive shift. You see that? 95. This is, like I said, more exposure to the technology.

It's going to [00:06:00] shift, and it's going to correlate. Did you notice at the bottom there, the 25 percent of Americans who wouldn't visit a healthcare provider who refuses to embrace AI? Now that number is going to go up. Right now, it's novel, and we're scared of new things, right? I'm curious about you. For me, when I go visit my doctor at Kaiser, she's already using generative AI for charting in our appointments. Uh, she asked for my consent in the beginning, and then it helps her take notes. Um, have you seen more of it cropping up in your life, in your work? We all evolve on this technology, and it's important to be clear eyed about it. Zachary, I'd like to give you a chance. to talk about your personal feelings towards AI and where that started and how that works.

Zachary Gidwitz: Absolutely. So, you know, my story, [00:07:00] I, I'll first say that I've been in recovery myself for, for over eight years and you know, when I, in my, my journey in recovery and my journey with, with AI, there are actually some interesting parallels because when I first went to a therapist and, and I'm more on the behavioral addiction side, digital addiction side, I, uh, you know, he said he heard my whole story. Um, he was a CBT therapist and he said, Zachary, you have two choices. I could admit you to, uh, a, a, uh, six month, you know, inpatient, uh, residential, or try the 12 steps. And, uh, so of course I tried the 12 steps first. I'm really fortunate it worked for me, but even then I could see, you know, I had to do a lot of find, replace in my head because I, I read from the AA Big Book, but that wasn't my, my addiction. Some of the language, uh, didn't really sort of fit with, with my identities. I was [00:08:00] able to do that. I was flexible and, and it worked for me and it's really been great. But it was very clear that that wasn't going to be the case for everyone.

So that was sort of the first seed. When I started sponsoring people, um, I would, you know, sponsor, I sponsored a lot of people or took a lot of outreach calls and met a lot of people. And when people were talking to me about their problems, I ended up kind of having this Rolodex in my head, uh, where I would see, all right, so we've got this type of person at this stage in recovery in this emotional state. Um, what is, okay, flip, tell him this story, give him this quotation, uh, give this piece of advice. And I realized I was doing it in an effective but sort of mechanical way in that way. And I was like, you know what? I bet one day AI is actually going to be able to do this and do this better. I didn't just, I just didn't realize it would be so fast.

So that's where, you know, me being curious and excited comes from. But I think it was Samantha in the chat that actually put a five and a [00:09:00] two. And I, I actually might be more toward that because as excited as I am, and as much as I've already seen the ways in which AI has been used, that we're using it already to make people feel like, Oh, well, I'm not ready to talk to someone, but I'll talk to this chatbot. Oh my God. I've, I mean, I have literally been brought to tears by our own product. And I I've seen that with others where I tell it like, it's okay. Tell me exactly what you think. And it really goes deep knowing everything, remembering everything. But that's because we've trained it so

well. My two or my fear even comes from the fact that it's everywhere all at once. And that it uses the data that you give it. It uses the information that you give it. And I know, and we'll talk about this a little bit more later, that if we don't do it really, really well with domain experts and people that, you know, are really well meaning and use it in the right way that there are [00:10:00] some problems as well. So I just wanted to share the excitement is very much there. Uh, but the skepticism, let's hold on to that as well.

Alex Weber: Thank you so much. Um, my feelings have evolved a lot. Um, I started out really opposed and Zachary's laughing because Zachary and I have known each other for 20 years. Uh, we overlapped at university. Um, he followed me out to China. Um, I've coached him throughout his corporate, uh, career, and he's my best friend. He's my brother. Um, and I'm from San Francisco, and I grew up next to tech hubris. And, oh, this new, uh, buzzword or hype is going to save the world, and I roll my eyes. So I personally went through quite a journey in my attitude towards this set of technologies. I started with skepticism, frustration, even a bit of derision.

At first I dismissed it as a plagiarism machine. This thing just scrapes the internet, garbles all the information, [00:11:00] spits out what seems like a random hodgepodge of half baked truths, hallucinations, and nonsense. But two things really started to change my mind on the technology. The first was really simple. It was comparing the voice-to-text input on ChatGPT versus Siri. And maybe you've had this experience with Siri. I still have it when I try to message from the car with my hands free. I have to enunciate very clearly and explain where the question mark goes and the comma, and then it gets things wrong and I have to edit my message and go, this is unsafe.

Send the message when I'm done driving. It's quite frustrating, right? And I just assumed Siri is AI. Alexa is AI, right? And when I tried ChatGPT, I realized I could talk with an accent or not enunciating for three to five minutes and get it word perfect. And it could summarize. It could get a [00:12:00] message from my mess. And that was really exciting. So that changed my mind first. The second thing that changed my mind on the technology was when I tested out ChatGPT's capacity for machine translation. I spent the majority of my career living in China, working in Asia, and Google Translate never worked very well. I'm sure those of you who've worked in international organizations have seen the word salad that happens with traditional translation algorithms, and people made all sorts of apps based on them that didn't work very well.

And I woke up willing to test out my, um, assumptions about ChatGPT and went, Hey, ChatGPT, do you speak Chinese? And he goes, of course I speak Chinese. Let me double check this. I don't think you do. Here's the beginning of like a, a couplet. And it goes, this is how it finishes. And this is what it means. I go, wow, you do actually. So when I went to Japan, I'm in the suburbs. Um, excuse me, in the, in the countryside. And I'm able to, I've [00:13:00] asked, uh, ChatGPT, please pay the, play the role of a translator, and I'm in a Yakitori place at the base of Mount Fuji, and I'm able to talk to somebody across the language barrier. I talk and it types Japanese, he talks and it types English, and I'm telling him about my San Francisco Giants, and he's telling me about his Fukuhiro Giants.

Alex Weber: Blew me away. So the technology is powerful. Particularly for people with accessibility issues or who might live with a disability, these technologies are life changing. So, over time, I found I was carefully, this carefully and intentionally designed apps, like ChatGPT, um, were making their way into my life. And I started experimenting with using it. Making shopping lists, recipe prep, drafting emails, writing. I see some of you in the chat talking about using it for editing, use it for other things. But I did the last thing I ever thought I'd do as a skeptic from San [00:14:00] Francisco, who rolled his eyes at the tech industry, because I grew up right next to it.

I quit my career, which I loved, and I joined a tech company. Why? Well, Zachary. This guy. This wasn't the first time Zachary patiently let me come to a complete 180 on something. The first time was the 12 Steps. I was sure I hated the 12 steps. I had lots of opinions about AA, and he didn't argue with me. He was really patient, and he asked questions, um, and I, you know, I gave him a bunch of crap about it while I was drinking, and while my life was pretty unmanageable as a result, um, and now I love, I love the fellowship. Um, I love my home groups. I love my community of recovery. So that wasn't the first time that he patiently let me come to a complete 180 on something. Um, now, I find that AI, even more than my job and my passion, [00:15:00] it's part of my personal recovery. So like Zachary, our technical co founders, Jack and Kevin, they don't thank me with empty promises on the technology.

They encourage and invite my skepticism. They've encouraged me to explore and ask them tough questions and verify my assumptions and really challenge them. So that's my intention for our time together today as well. My primary intention for our time together is to create a space where we can explore some of the fears and worries and questions and curiosity you might have about this technology.

I want to encourage you to experiment and try things out in a safe and productive way. So together we'll explore why AI and addiction recovery are such an exciting combination. We'll examine the current state of applications and research in the field, and discuss how you can be part of shaping this technology to ensure that millions of people suffering from [00:16:00] addiction receive the help that they truly deserve. So let's start with that first one, why AI and addiction recovery. We need to zoom right out and go What AI is and isn't. There's an incredible amount of misconceptions, confusion, and hype around artificial intelligence and the mainstream media. It's going to end the world. It's going to save humanity.

There's attendant buzz and hype and funding and sales pitches. In the corporate world and in the research and grants world. We're not a tech company here to sell you on the next big thing. We're individuals in recovery who bring passion, knowledge, and a sincere willingness to collaborate. And I'm going to end today asking those of you who want to collaborate on the research, on the pilots, who want to make sure that your voice and your lived experience has the role it needs in shaping this technology.

Um, [00:17:00] that's, that's why I'm really excited to present to you. So we're going to look at what Gen AI is and isn't. We'll go a little bit past Gen AI today, but what we do at Open Recovery is really specialist in generative AI. So Zachary will talk about that. We'll talk about the five layer generative AI tech stack.

Um, and we'll look at what that looks like in the applications and how that happens under the hood as it's happening in the backend. The AI Myth Project, which was funded by the Ford Foundation and Mozilla, it identified several common myths. Now, I know Zachary would happily bend your ear about these first two, uh, but we're going to focus on a comical but important one.

This is that AI equals shiny humanoid robots. And the last three, which are particularly relevant to understanding how you might use AI in your recovery programs. So let's look at number three there, AI equals shiny [00:18:00] humanoid robots. Number three is a personal gripe that Daniel Leufer, who's the founder of the AI Myth Project, has with how the media reports on AI, often feeding misconceptions about what the technology truly is.

Alex Weber: Take a look at these two images. What do you notice? The first one was shiny humanoid robots. That's a classic example of how the media misconstrues and hypes AI. In contrast, I'd like to congratulate our friends at The Fletcher Group for choosing a much more accurate and interest provoking visual, which is the second one. But why does it matter? Are we just talking about accuracy here? Metaphor significantly shapes our attitudes and expectations. And the media is doing us no favors with sloppy, red eyed robots that are here to kill us, or hyper sexualized, almost always white, almost always created by white people in the images. Um, [00:19:00] robots here to do our bidding. Neither of these help. So the AI Recovery Assistant we've developed at Open Recovery, which we've named Kai, it's not gendered. It doesn't purport to be a person. I like to think of it as a journal you can talk to that prompts you to reflect and explore and set actionable next steps. But those are metaphors.

To cut past marketing hype, it helps to be very clear eyed about what happens on both an interface level and a technical level. So that's what Zachary is going to help us understand, and we'll pass the ball back and forth a little bit. But I'm going to pass it to Zachary here to help you explore one of the biggest myths.

And that's the idea that AI is one discrete thing. This is AI, and that's AI, and that's AI. Experts in the field, there's no clear consensus on what counts as AI, okay? So, we're gonna focus on where we've been doing a lot of work, which is generative AI. Um, and that'll naturally take us a little bit to [00:20:00] numbers five and six as well. How it takes real work to de bias, refine, and contain AI. And which particular problems are best solved by which tools. Because this idea that AI can solve any problem and is a panacea, um, deserves skepticism. So Zachary, can you talk us through this five layer stack, please?

Zachary Gidwitz: Yeah, all right. So AI, you know, is a very generalized term and I like to understand it simply, you know, by what it says. Artificial intelligence. Intelligence, as we know it, staying away from metaphysical and spiritual for this moment, is basically, all right, what do we do? What can we do? And then artificial intelligence can we make a machine do that. Uh, think solve problems? All of this, and there are many different, uh, subfields and artificial intelligence.

You have machine learning, deep learning, [00:21:00] natural language processing, computer vision, robotics. These are all subfields. And the one that really is getting the most attention, uh, these days is, is generative AI. Uh, and that is a subfield of, of machine learning. And the idea with machine learning is it's basically programming a machine in a way where it can keep getting better by itself. Uh, not every time we have to add something, but even then, the way the generative AI works is it basically takes, uh, different things in the world. So maybe that's going to be text. You've heard of large language models. So Chat GPT is, uh, is using it. Well, at first it was a large language model, uh, an application based on one, I should say. Um, there can be images. So a lot of these generative, uh, image, uh, creators and then uh Whisper, it takes audio. And what it does is it takes all of these things. [00:22:00] And it turns them into numbers, which are the language of computers, um, vectorizes them, uh, as we say, uh, and, and basically then maps them out such that a computer can understand, huh, this seems to be similar to this, this is close to this, and you have many different AI models, right?

So at the bottom here, we're looking at, uh, Claude, Which are these foundational models, if you've heard that term. Claude Sonnet 3.5 model. Um, Chat GPT is an application. Built on top of GPT 4. So it gets a little complicated, but the lowest level, we have this foundational model, which is where we just dump a bunch of data and then let it learn through these algorithms and hope that it gets really, really smart. And so far, almost incredulously, all the experts still are like, it just keeps working the more [00:23:00] data we give it. It just keeps getting smarter and smarter and smarter. And there's a

very hot topic, which is a debate. Is this going to keep happening? Or is this going to sort of get better, but less better, less better?

And so far, it just keeps getting better. And that's why we've had such amazing increases recently. Now, on top of that, we have a sort of specialized, and it's okay, Alex, you can, you don't have to go back to the previous one, because really what a specialized AI model is, is an AI model where you've uploaded a bunch of stuff on a topic, um, and maybe you've all heard of RAD, Retrieval Augmented Generation. Um, so that's where something like Pinecone, you're going to put a bunch of stuff and say, all right, we've got this really smart base model, foundational model, and now I'm going to teach it everything about addiction. Every speaker tape ever, every book, every pamphlet, tons of conversations, putting it all there in this database, turning in the numbers.

And then basically the AI then is, [00:24:00] puts that first and foremost in its memory. But that's a lot of stuff. So then we need to orchestrate all this stuff. And the way that we do that, there, you know, these other, other tools, we, uh, use LangChain and, and Mem0, where, in addition to all this corpus of knowledge, we have a lot of prompts. So prompts can come from experts like you, um, like we work with on the team saying, I didn't really like how the base model, ChatGPT even, says this kind of thing. When you're dealing with someone who is still high, on heroin, coming down, you don't talk to them. Like you talk to someone who, you know, is, is, is in a very different emotional state.

Zachary Gidwitz: You, so in the future, respond this way in this situation. So that is how we do prompt engineering with thousands and thousands of examples for that. Then you have this middleware where you're basically connecting all this stuff to the application. And [00:25:00] ChatGPT is actually an application where you're seeing the expression of everything below it in that stack.

All put together in a way to give you or the user the best outcome. And that's why we've been able to really surprise people with Kai, who first found his home in 12 step addiction recovery, and we'll have a separate app that is not 12 step based soon, which is fully trained on addiction recovery, psychology, and then a lot of expert domain expert prompts to get as good as possible and how to respond to different people in different situations. And it's still the very early days. It's just going to get better, with your help, hopefully.

Alex Weber: So I'll show you what that looks like and then hand it back to Zachary to give the technical side of what's happening under the hood. But you'll notice at the top we have these applications. I've listed two examples, ChatGPT and our current public application, which is 12 [00:26:00] Steps Addiction Recovery. For me, Zachary, thank you, very technical understanding the stack. For me, I'm not very technical. And I think of ChatGPT and GPT 4.0, the application and the general model, as the same thing, or I did in the beginning. And that gets me into trouble. Uh, when I go, I'm just talking to GPT and I'm anthropomorphizing.

Remember that, um, shiny robot? Remember the caution about thinking of AI as shiny robots? When I talk to Chat GPT and think of it as my buddy or my assistant or my intern or whatever frame works, right? Um, I find myself engaging with it emotionally. So before I found the rock image that I used as a visual metaphor for Zachary to explain the five layer stack there, um, I asked ChatGPT. I'm like, oh, just make me five layers. And when I anthropomorphize, I think of ChatGPT as my robot friend who tells me it understands and then doesn't do what it says it will. And I quickly [00:27:00] grow frustrated. It goes, here's the corrected version, exactly five layers, same size. Let me know if that's okay. I go, Oh, that has eight. And it goes, Oh, I understand now. Here's, here it's updated. Um, let me know if further adjustments are needed. Now I'm feeling really frustrated, right? So I go in.

Alex Weber Recording: I have to say I'm pretty frustrated and disappointed by the current state of the image generation technology with Dall-E. I don't need you to problem solve, but I want you to understand, Help me understand, um, why.

Alex Weber Recording: When I specify a prompt, like five specific layers, it'll generate eight and then twenty. Um, so the text of the prompt tells me it understands my request, but there's a huge disconnect between what's, uh, represented graphically. What's going on there?

Alex Weber: So, I'm [00:28:00] basically saying bad robot. Right? What does my language show you? As a non technical user, I'm responding emotionally to my experience of the application. I was anthropomorphizing it. I was projecting my expectations onto the app. When in fact there are three distinct components, I'm actually really excited about the speech to text, right? I almost take it for granted at this point.

I'm reasonably pleased with this plausible seeming explanation from the LLM that we see right now. But I've given up for the moment on the image generation. And the reason I prompted it, hey, don't try to problem solve, is Chat GPT will happily throw spaghetti at the wall trying to help me find ways to get Dall-E to quote unquote listen. And therein lies a black hole for my presentation prep topic. It's not the fix all panacea for every job. The image generation technology is not yet at the state where it does what I magically think it will. So I'll just go find a nice royalty free photo of stacked rocks instead.

Zachary Gidwitz: So I think it's just important here to, um, [00:29:00] get clear in this case that when we say one thing is good and one thing is less good, um, we're supposed to understand that like Alex just said, one of these models, these foundational models, where he was talking about, uh, like Stable Diffusion, Dall-E 3, Sora, Sora is the new video one, text to video, might not be there yet.

That doesn't mean we should then out of hand dismiss everything or all of AI. And I, I think it's a very common thing to do with that one. But as I mentioned before, this is the worst that AI is ever going to be. The scary thought, especially when we see how quickly it is actually getting better. Though what's nice though, is that we actually have the opportunity to influence what direction it goes.

And before it reaches people who are in very sensitive situations, like people in recovery, especially early stages of recovery, or not even in recovery yet, that's almost the [00:30:00] most sensitive group. And we need to put so much effort in this middleware. I'm sorry, in the orchestration vector database to make sure that these very powerful, not always accurate, foundational models are giving very helpful responses and guidance. And also know when it's time for them to hand it over and say, maybe you should just talk to your sponsor about this instead.

Alex Weber: So thank you. Um, and Zach's been really patient with me about this, um, because he's, he's let me evolve on my, my outdated, um, in, uh, understanding of AI. And now I have this job where I'm surrounded by a billion people. And I love to learn. I did as a corporate trainer as well. I get to learn from people all the time. Um, this is, there's a reason we use the word agent or intelligent recovery assistant for a model instead of chatbot, not just marketing. There are technical reasons I've come to understand this. So I want to share with you guys, um, just quickly, a [00:31:00] literature review on quote unquote chatbots in AI addiction recovery. So in 2022, Lisa Ogilvie, Julie Prescott, and Jerome Carson did a literature review of chatbots as supportive agents for people seeking help with SUD, published in the Journal of European Addiction Research. And this, they did the literature review and they disqualified most of the studies.

Uh, but I want to pull out this one from 2020, where they looked at, um, chatbots. Siri, Cortana, Google Assistant, things like that. I'd like to draw your attention to two things. First, only four of 70 queries generated a singular response. That means 66 of 70 queries returned a boilerplate version of, I don't understand. Or the cutesy, was it something I said? I'll go away if you just tell me. Which is a serious way, right? Of those four responses, one was a definition for drugs, two were advertisements for a smoking cessation app, and the last directed the person saying, help me quit pot, to the [00:32:00] nearest dispensary. Okay? Um, that's obviously not ideal.

That study was in 2020. People think of Alexa and Siri as AI. Well, there's a reason Apple's contracted with OpenAI for Apple Intelligence rather than forging ahead with Siri. Like Zachary said, these foundational models are really powerful. So let's look at how ChatGPT handles a request. First, this is with no context. This is a fresh GPT account and second.

Alex Weber Recording: So I kind of want to take a drink and I feel like an old timer might say, go ahead, try it, see what happens. What do you think?

Alex Weber: So now instead of Just giving me a boilerplate, yeah. What's a drink? It's going, it sounds like you're considering something. Are you, are you curious? What are your reasons? There's no context. It's not related to recovery, but it's an answer, right? Now when I use my [00:33:00] personal chat GPT account.

Alex Weber Recording: So I kind of want to take a drink and I feel like an old timer would say, go ahead, try it, see what happens. What do you think?

Alex Weber: Now this is much better, right? Now it knows it's about recovery. You've already tried this path. You know where it leads. Um, and it's what are you actually seeking here? And how about urge surfing? Which is kind of nice. This is because it's my personal ChatGPT account and I've told it to remember I work in addiction recovery and I'm an individual in recovery. But when I go back and ask it again, it gives me a different version of the last response. Some empathy, some explanation, some reflective questions. And when I explain, oh, I actually just wanted to record an example video, it happily starts helping me plan. New [00:34:00] task! I'm anthropomorphizing again, but I believe you understand.

Now, let me show you the same thing with Kai. This is my base user account in Kai. Now this stack is currently built on Anthropics Cloud Summit 3.5 as a base. So the base model is different. We used to build on top of GPT. That doesn't, that's not as important. There's a lot of work in the middle layers around fine tuning to recovery and persistent memory. That's what, what I want to emphasize here. So I'm going to do the same thing with Kai.

Alex Weber Recording: So I kind of want to take a drink and I feel like an old timer might say, go ahead, try it and see what happens. What do you think?

Alex Weber: It's bringing in a lot of things about me. Um, it knows planning to get a chip soon. Um, Grandma is my conception of my higher power. Um, so it brings that in. Um, it gets [00:35:00] a little more stern if I'm in anthropomorphize again. I need to be direct here if you're having strong urges to drink, this is exactly the time to reach out to somebody in the program directly. Right? Um, but most important, when I ask again, when I allude a new, new conversation, it's different than with ChatGPT. It refers to my previous interactions, my step work, my sobriety milestones. It gets really stern, right? Because I notice you're bringing this up right after our previous conversation. Yeah, this is serious.

It looks, it sounds like you're looking for permission rather than guidance. If you look at the bottom, this feels like the disease talking, looking for a justification to drink. Um, and when I explain, you know, it says this makes my response more direct. You have a sponsor who knows you and your journey. Instead of contemplating some, what some theoretical old timers might say about experimenting with drinking. Why not call your sponsor right now about these thoughts you're having. This is exactly what a sponsor is for, especially in moments when you're playing with dangerous ideas like testing or alcohol.

Alex Weber: Now, when I say, no, no, no, I just wanted to make a video. [00:36:00] It says, I see. Thank you for clarifying. But instead of happily launching into a new task, it frames everything through the lens of my recovery. What's important to my recovery? Authenticity, honesty, real lived experience. Stop. Oh, I'm sorry, I skipped over that, but you're going to notice it says, Oh, it's a test scenario. I appreciate your intention to demonstrate the app's safety, but role playing can confuse people or trigger people. Let's look at your memories. Let's look at what's real for you. You've been finding new ways to regulate emotions and behaviors after quitting alcohol. Showing up differently for your kids is key to your recovery.

Those are the real authentic experiences that can help others. If you want to demonstrate how the app can support people, Let's focus on actual challenges you've faced. So in everything, every interaction with Kai, is framed through the lens of my recovery. And that authenticity is what matters. But over time, because of that work in the middle layers, it remembers things, a picture of [00:37:00] me and my recovery. This is private, and this is transparent to me. I can edit what it remembers about me. Other people cannot view it unless I specifically export a summary or a report. I do, often, to my sponsor, to my colleagues. That's an active choice. We briefly considered allowing automatic sharing through the accountability reports, but you write in your journal differently when you know somebody's going to read it.

Privacy is vital for vulnerability, authenticity, and trust, and those things are really important in recovery. So it can generate a report for me, an insight report over time, and it remembers my understanding, my higher power, and refer to things I've done in my inventory as reflective step work conversations. This insight report, if you look at the suggestions here, it suggests I do step meeting because I've been on step eight for a while. I've shared my feelings around procrastinating. It also prompts me to take action towards the real reasons I no longer dreamt showing up differently for my son. So that's what can happen on the interface layer.[00:38:00] I'll pass it to Zachary to briefly explain what's happening under the hood as it were with, uh, Zach.

Zachary Gidwitz: This is, you know, Alex made the comment about, uh, talking about agents rather than chatbots. And this is really important for understanding what's going on, uh, under the hood, because while it seems that we have, uh, Kai, which is, you know, our AI, the AI Recovery Coach, what we actually have here is many, many different agents. We have specially trained agents for each scenario. We have agents for actually even each type of addiction. I want to reference really quickly a question we have in the Q& A from Mark, which is talking about how do we develop an AI when there's so many different, uh, pathways to recovery, which is a very, very good point.

And so when you do onboarding with this first app of ours, 12 Steps Addiction Recovery, you are actually being [00:39:00] asked, are you currently working a program? Then there's one path for people who are, one path for people who are not. And once you choose a certain program, then you are really interacting with a specific agent that is trained on that program. If you then, let's say, want to do, instead of an open chat with Kai, a nightly inventory, a resentment, we've trained individual agents for that. Now take a step back. We're going to be releasing Kai as a standalone app for those who are not actively working 12 steps. Um, and we're working with SMART Recovery, uh, right now

to develop multiple pathways, basically a multiple pathways app that will try and frame the right methodology for the right person.

And maybe no methodology at first, let's just talk. And when you're ready to start exploring different methodologies, surfacing some information about them, but because we have all of these separate agents in the background that can be called, they can come go away, all sort of under the hood. [00:40:00] So that we, uh, can make sure that the right thing is being said to the right person at the right time, given the right emotional state, um, meeting people where they are is very, very key. Um, Alex, I don't know if you wanted to, uh, go back to the technical stuff or do this first, your choice.

Alex Weber: I will very briefly show what you're talking about with, um, with the SMART application, and then I'd like you to briefly tell them how we're making that work with RAG and Few-Shot.

Zachary Gidwitz: Got it.

Alex Weber: Yes, we need to, we need to be mindful of the time, I apologize. Um, but as, as Zachary mentioned, um, just as a proof of concept,

Alex Weber Recording: I'd like to respond less angrily to my children. Can we do a SMART exercise?

Alex Weber: We built out a proof of concept for our friends at SMART, um, and instead of being so 12 step like the example was just now, now we're very

Alex Weber Recording: Yeah, my daughter called at six in the morning needing to be picked up. Alright.

Alex Weber: So you can see [00:41:00] here, we've got SMART's ABC tool. And that happens, we're able to change the pathway to recovery because of RAG and Few-Shot. So, uh, in a few words, Zachary, what is RAG? What is Few-Shot?

Zachary Gidwitz: Sure. So RAG stands for Retrieval Augmented Generation. And that's where we're talking about us, putting on, putting a lot of data, a huge corpus of information, all the papers, the books, pamphlets, recordings, videos in the database, in a vector database, so that it basically becomes part of the persistent memory of the model that you are, or the agent that you're talking to and will first and foremost, be referencing that information before accessing it's sort of generalized, uh, body of knowledge. The Few-Shot um, there, there are several different types, uh, of Few Shot. The ones that are most relevant for us [00:42:00] is, is actually called a Few Shot Inference. Um, which is, is basically prompting where the idea of, um, zero shot, which is something else is just, here's the really smart AI here are the rules of the game.

Figure it out. Um, that, uh, for example, if you were looking at, like, the AlphaGo and training, like, how to, how to make, or, or, uh, a computer play Go or Chess, sometimes it's actually better not to give examples and just let it figure it out through trial and error, and it's going to teach itself really effectively, really well.

Whereas Few-Shot is, give it a few examples, one shot or few shot, here's, here's what good looks like. And then you use that to train yourself. Few-Shot Inference, which actually is also just what,

how prompting works, is we give it a bunch of examples and it is then able to infer the model, the agent, the right way to talk in that situation that we tagged, given those examples.[00:43:00] And it's sort of, it's basically mimicking how humans learn.

Alex Weber: Awesome. Fantastic. Um, so Fuschia is, is, and, and RAG is how it was able to go from sounding very 12 steps to very, um, SMART, just by adjusting a couple of things in that middle layer. Um, so that's what we built in the top. The domain specific prompting is what's it drawing from. It's like when you go to the library before answering somebody. Are you going and reading a SMART manual, or are you going in the rooms and spending some time around an old timer, right? That real time feedback loop is really important, though. That pays attention to how the user's responding. Are they pushing back?

Are they giving short answers? Are they not engaging in depth? So that real time feedback loop is what our technical co founders have been doing amazing things with that and the persistent memory as well. Um, our technical co founder was a semi finalist to present at OpenAI Dev Day. He was going back and forth with LangChain, writing them code, um, because it was the first time their stuff ever appeared in a mobile app, um, and making it [00:44:00] happen there. So I'm really proud of him. Um, I'm going to take just five minutes and I'm going to let you guys drive a little bit here because that's the important thing. What AI is and isn't. But for this middle bit, um, some examples of addiction recovery applications and research, um, this is a menu. This is Choose Your Own Adventure.

So one of the reasons we're excited about applying Gen AI is the way it's the person shapes the experience. Janice, I noticed you say meeting people where they are. Absolutely, we have to. Um, that means people, meeting people in, uh, on their phones, but also meeting people in the, with sensitivity to their lived experience in their cultural frames, right?

So here, I want to let you guys drive. Tell me in the chat, which one do you briefly want to look at here? A, B, C, or D? Um, I can show, briefly, show you how the current 12 Steps, uh, Addiction Recovery App is most relevant and helpful for sober homes. Choose A. I can show you how a different set of AI technologies is being deployed by our friends at Rehavior with research from Carnegie Mellon, the National [00:45:00] Institute of Health.

That's option B. I can show you our own research with the University of Toronto and get into some of that golden data set and expert refinement aspects. Um, or Zachary can show you, uh, how we used Few Shot, RAG, and an expert to help people in early contemplation recovery. That's D. All right, I'm seeing a bunch of A. Um, well, I'm happy because my job is going to sober homes and saying, you see this thing we've built? Um, I'm not trying to sell it to you. It's basically free. People can choose to pay $10 a month. Um, and, um, I will give you extended access as well, but please look at this.

So I won't give you the infomercial on everything that's in the app right now, but I want to just highlight two things that are really relevant to sober homes. Um, the first is accountability reports. I can enter in a person or multiple people, my mom and my sponsor, uh, my house manager, my recovery coach, and I [00:46:00] can choose which of my recovery actions I would like to share with them, then they're going to get a report. They can get their report every day, or if you're very busy as a house manager, you can say, I want this on a Tuesday, or I want this on a Saturday. They can do custom actions, so eat something green, or find a new sponsor, or service work, and we also have recovery actions. So this is from the 12 step app, and we have step work on awakening and things like this.

It can be very top level, my mom just wants to know how many days have I been sober and am I going to meetings, or it can be very granular. But it's granular only to the level of data. John's exchanged 12 messages with a recovery assistant. The content of these messages only show up when John actively pushes that to you.

Because again, the design is for the person. This is not surveillance technology. We want to really empower individuals in recovery. So the accountability reports is really huge. The other thing I want to show you very briefly, and I'll have to speed through the video. Um, but I was talking to somebody who runs some solar homes in Colorado, uh, just yesterday, and [00:47:00] she was just in the, in the act of writing out the nightly inventory questions and sending them in their WhatsApp. I'm like, you know, you can do that on the app, right? Cause she's using the app. She says, you can? I say, yeah, and you can do it with speech to text. So look at this.

Alex Weber Recording: Let's do a nightly inventory with Kai. Yeah, I was definitely a little self centered today and dishonest by accident. That was some friends. I wanted to show them how well I was doing in recovery, but it might've been a little forced. I think rather than an apology, I owe them my honest, gentle, attentive, empathic presence on listening. And I did manage to do some of that today. I, I

Alex Weber: I'll pause, but notice how it's referencing what I said. You know, do you own an apology, particularly as friends for not being authentic? And so it's, it's prompting me. I can go a little deeper and I go back and forth on it, but I can also ask it [00:48:00] questions. So if it says, were you in the stream of life today? I can, instead of answering the question, I can ask a question.

Alex Weber Recording: Yes. What do you mean?

Alex Weber: I said, give me an example here. What do you mean? And it'll based on the,

Alex Weber Recording: I was able to give some positive affirmation to people at work and to research and explore some really cool things about addiction recovery that

Alex Weber: So I can go back and forth with it, either answering the questions or asking the question questions. And at the end, I have this summary that I can save for myself or I can send to my sponsor or my house manager or somebody. So this is a nice way to make sure people are doing their nightly inventories, period. Um, and they can share the content of that with people. That's what I wanted to show you with the app.

We have time for one of the others. Um, what are you curious about, B, C, or D?[00:49:00] B. Okay, I'll give B very briefly. Ellie Gordon often presents with us. She and Zachary will be presenting at the SMART Conference in North Carolina, if you're going to go there. But this is a different kind of AI. This is not gen AI. This is predictive algorithms. So this is her, um, poster from, uh, a recent National Institute of Health presentation that they did.

But the summary is that with base wearables, they were able to look at biomarkers and predict craving and potential return to use really early. This is another area where I'm really overjoyed about AI writ large as a category. Um, I remember even 20 years ago meeting a researcher who had programmed a $10 Logitech webcam, just a base level, in the ICU and it could predict shock and uh, people going critical and more before the most accomplished doctors could. [00:50:00] So being able to surface this information and put it to use in the hands of experts is incredible. One of the other reasons we really love working with Ellie and Behavior is they also believe in this three part relationship that we do as

well. That it's not about person and AI. It's person, facilitator, or expert, or doctor, or healthcare provider, or sponsor. Yeah, we use the blanket term facilitator and AI. So that's B.

Um, I really want to close strong, but I'll speed through very quickly. It's important when you say, what's Golden Dataset or LLM as Judge? This is some research that we've been doing with the University of Toronto in making the algorithm better and bringing people. So we take this, uh, raw data. These are encrypted conversations. And we strip personally identifiable information. Now HIPAA has 18 things you need to take out. You need to take out social [00:51:00] security numbers, you need to take out dates down to the year, state, things like that. You strip that out, and then you set a context window and say when people are struggling at work, or when people are new to recovery, or like Zachary said, when people are high on heroin and going, you're, you're talking way too much, like there's more text than I can handle.

That's a context window. Um, and then we do human and AI quality rating. Um, so my, my co founder, Kevin, could speak at, at great length about the research they've been doing with the University of Toronto there. But essentially, they go through and they take high quality, which means people are engaged and, and really going deep, um, and train the algorithm to really look at that.

The next step is bringing in experts. and helping people be able to, um, say, yes, I love that response. That's what I would say as well. Or no, in this case, that's not a good, uh, example of motivational interviewing because you're, uh, leading and assuming and projecting. Well, why don't [00:52:00] you remember to reflect and ask questions and use some empathy instead? And so by using both the LLM and experts, we're able to create a loop where it gets increasingly powerful. Zachary, will you mention very quickly what we did with Rob?

Zachary Gidwitz: Well, sure. Right now, and this is a really interesting use case that, where we have someone who, he's a bit of an online influencer in the gambling recovery space. He also partners with recovery centers to work with them as well. And he is inundated with messages everyday. Uh, sometimes as much as 1, 200 a day, uh, from people who are either trying to recover from gambling addiction or are clearly suffering, but don't know what to do. Like he will get questions like, should I gamble more to try and, uh, you know, uh, win back the money that I've lost gambling and, and, and other things like that.

And he gets, and this kind of goes back, loops back to [00:53:00] my first use case when I was a sponsor and having my little Rolodex. Okay. He has some responses that he just knows, okay, well, this kind of person respond this kind of way, uh, in this kind of situation. And so what we've been able to do with him is he has trained Kai on all these frequently asked questions that he gets inundated with. And now he can basically, when he gets all these messages, he says, hey, just go talk to Kai, and he has a higher level of confidence that they're going to get the support they need in a timely manner because he hasn't had time to respond to all these people. And then he can always review this later if we set that up and make sure that, you know, everything is going the right way.

But this sets the groundwork for us to be able to provide tools for facilitators as well, to make their lives easier, free up more of their time, and make it so that they can support more people. Which we all know is very much needed.

Alex Weber: And it helps people really, not just get the information that they need, but, um, in a way [00:54:00] that resonates. So with the chatbots, the author's advice was this should link to SAMHSA's headline instead of ads. Right? Not hotline, excuse me. Now we can really free us and engage with people in a way that they're going to listen to, um, and connect people with the support that they need.

Um, what recovery programs in my state take Medicare or, uh, with people who have a non binary experience and a certain history, um, of being, you know, judged or interactions with people, where can I go for care, pretty much.

Alex Weber: All right, so that's, sorry, a speed read through some of the research that we can go through, but I want to finish with this, how you can shape solutions that align with rural and social recovery models. Um, why are we talking about this at all? This represents an extraordinary opportunity to transform addiction recovery, making it more accessible and effective for millions of people who struggle.

It's also a chance to bend the cost curve while creating lasting, sustaining, healthy outcomes. [00:55:00] The addiction recovery space, as you know better than I do, it's truly unique and special. It's a place where real collaboration happens. The only real competition is against the disease itself. And organizations like The Fletcher Group, like NARR, like HRSA, like SAMHSA, like NIDA, um, like NAADAC, uh, work tirelessly to help people to their best practices, learn from one another, and discover what genuinely works to alleviate suffering and rebuild lives.

And that's why my job at Head of Partnerships is not code for sales. I feel genuinely grateful that I get to collaborate with passionate people like you, many who are individuals who are recovering, who are paying it forward. Um, so People really deserve good tools in this space, and a lot of respect and intention and empathy is really important. There's a problem in opportunity, and collaboration and human connection will pave the way. So I just want to say one thing about people deserving good tools. Meeting people where they are and helping people past [00:56:00] emotional barriers, ideological barriers, um, is really important. I, all of you are familiar with the, um, the SAMHSA, you know, more than 90 percent of people who need help don't seek it. Step. That one rocked me when I first saw it. Um, but when we first built this app and put it out there, we've done no marketing. None. Uh, we built an app, we put it out there, the AI was just in the back end. It was just vectorizing speaker tapes.

And we put just a simple Google form in there. We had fewer than 10,000 users and 2,600 responded. Now, the industry average, if you do polling, you know, it's 12%. And if you do a real short two question, uh, uh, really nicely designed survey, you might get better. Well, we more than doubled the industry average with our clumsy survey because people care. And they need help.

And we've been, this isn't to self congratulatory to look at all our great, um, uh, reviews. These are human. Uh, people reaching out to us. They send [00:57:00] us emails. So when you see, you know, I've been using this even at 17 years sober or 38 years sober. Or when you see people saying, um, it's kept me sober for the longest 24 days I've been in the last 14 years, Or, I found more help in it than all five treatment facilities I've been in.

Um, that matters to us, and that's an awesome responsibility. It isn't to pat ourselves on the back and say, Look at this great thing we've made. It's, these people deserve good, empathic help. People like us. People like you. And we really want to work with you to do that. Zachary.

Zachary Gidwitz: Yeah, just quickly. I know we're pretty much out of time. The fact that we all know there are so many barriers, you know, it speaks to this problem where we have, you know, SAMHSA says 50 million suffer from SUD. We estimate another 20 to 30 suffering from, uh, from behavioral addictions. And we know how much money goes into treatment that [00:58:00] only reaches a very small portion. But you put people, the professionals who are out there trying to help. deserve good tools and more ways to amplify your impact, and this is very much what we're looking

to do. We first made these products that we can distribute and you can share directly with your community, but we're going to be working hard to also make these products tools to make your life directly better.

And we can use our learnings from these consumer apps to really build better understanding, work with you, validate the outcomes, build better tools for you so that you can do your job better, easier, and help more people, which is really just putting this sort of flywheel of engagement so we can all learn how to help people access more effective recovery better and better. That's what we're trying to do.

Alex Weber: The bedrock for that is collaboration and privacy and trust. Um, so we're [00:59:00] not mining and scraping data like surveillance capitalism, like so many ways that AI is, is developed right now. Um, it's, it's asking for earning and demonstrating trust. Um, so all of this, this happens with you. Um, we're democratizing access because well deployed AI can help triage, it can help people. Uh, but we're really asking, uh, to connect with you here. So if you're a sober home who's just looking, I, I want to save some time, uh, seeing our people doing their step work. Um, I will give you a, first, the app is the overwhelmingly free. You can get what you need out of the free version. Um, we hope that people enjoy working with Kai, that they want to pay the $10 a month. Um, but we don't do that thing of you have to take, enter your credit card details so that if you forget to cancel, aha, we have your money.

That's not the point. We give people a trial and then say, did you [01:00:00] find that useful? People have emailed Zachary saying, this is saving my life and I don't have $10 a month. And he says, fine, here, have an account. Um, that's what really matters to us. But what matters to us and what saves us money is working collaboratively with you to build good tools right from the beginning, rather than just making something and seeing if people like it. So, um, If you're interested in doing research and pilots, if you want to see as we build out home group and social, um, channels and look, how can we do this better than WeChat in a way that's HIPAA compliant and okay, that understands recovery? Um, let's collaborate together.

Janice Fulkerson: Alex and Zachary, that is a great segue, I think, into we're at the top of the hour and we do have a few questions that people really wanted to get to. So for those who can stay a little bit longer, we're hoping you can too and answer a few questions. Um, we wanna make sure everybody knows that this [01:01:00] webinar, uh, will be on our website and our YouTube channel, along with all our other webinars next week. So we hope that you'll stay, listen to a few more questions and then check out the webinar and the follow up, um, in the future. So, one of the questions, it goes back to your comment about HIPAA, um, and clarifying the HIPAA compliance and the HIPAA content related to, um, AI and this particular app.

Alex Weber: Okay, this is an excellent question. Um, HIPAA compliance really matters for the clinical side and for recovery centers. Our gold standard is what's called Safe Harbor Compliance, and that means there are 18 things that you need to de identify. What we're doing, unlike a medical chart or spending time with your doctor, we're not collecting that information to begin with. We don't have people's social security numbers, we're not looking at their medical records, we're not asking for any of that. Unlike a lot of the uh, applications [01:02:00] that are, that are out there where it says, Hey, what's your birthday?

Um, we don't ask that. Why would we need to know that? That's not for you. That's for them to sell to an advertiser. Um, so we don't start with that information in, to begin with. Um, but when, it means when we take anything that, you own your data, And you build this data in a way that's useful to you, and then we ask you transparently if you're willing to disclose de identified parts to make it useful to

other people in recovery and better for this technology in general. And the way we do that is by completely decontextualizing it. Anything that could re identify a person as a HIPAA violation. And so Safe Harbor, um, I believe is the term for that. Great question.

Janice Fulkerson: Thanks. Super great. Thank you for that. I think that was a good clarification. You know, I think that that is something that's top of mind for people, um, and especially when we morph into, like, the next question. Um, [01:03:00] as you were going through some of the examples, it looked like there was some real emotion. Like, the response. The respondent, Kai, um, could respond, it seemed like, with emotion. So can you, uh, speak to that for a minute? Um, and then our third question is really going to be about roles, like lived experience, peer, you know, peers, et cetera. So let's start with the emotion.

Alex Weber: Those two questions. really linked. I'll pass you in just a second. Um, those two questions are really linked. So people do form emotional sort of interactions and reactions with chatbots. And some people really try to manipulate them. Um, that real time feedback loop, you remember in my example, it goes, Hey, call your sponsor. Like really? And I'll do that when I'm doing a spot check sometimes too. If I'm feeling disconnected, it goes, make an outreach call, call your sponsor, connect with a human being. The emotional attachment [01:04:00] people can create, it's nice for trust and for open up and that safe, no human friction. Our Head of Products, one of his sponsors says, look, I'm an introvert. I do outreach calls and, um, meetings, but to be able to gather my thoughts with this journal and with this program for us in a safe space, it makes me really happy. But we do not want to create something that tricks people into thinking that it's human, that they have a relationship with that substitutes human connection, because the opposite of addiction is human connection. Now, we want to make something that promotes that. Zachary.

Zachary Gidwitz: I'll just add that, you know, we, we currently have this one set of personality, um, that, uh, cause this is, As weird as it sounds, something that we can program, right? I'll put it this way. We can ask Kai to, uh, be more concise, to not speak so much if we want to. And one time, for example, Kai was being a little careful with [01:05:00] me and I said, just be direct with me. And it was direct with me. And it knocked me off my feet. In the future, something we would explore is even having different personalities preset for people to choose from. For example, some people want their recovery coach to be a Big Book thumper, an old timer. Um, maybe more of the fire and brimstone stuff, maybe something a bit more spiritual and light, you know, light minded. So the emotion Is definitely not real because this is artificial intelligence, but it can ape not just emotion, but different personality, and we are experimenting with ways in which what type of person is going to recover better with different types of interactions.

Janice Fulkerson: That's a great clarification. And I think it really gives people something to think about. You know, like, you referenced it, referenced it as it, not he or she, or, you know, they [01:06:00] or them. So, you know, what does the future, um, you know, what could it look like? So I think that that gives people a lot to think about. What, um, one of the questions is about roles. You know, like there's a variety of different roles and then those with lived experience and how to qualify that or how to ensure that people know that that, you know, kind of experience or quality is included. Can you, I mean, it's, you know, that's a, that's, that's a big question. We don't have a lot of time, but maybe there's a couple of points you might add.

Zachary Gidwitz: Sure, I just want to clarify what you mean by, by role. Is this a role that the, that the AI could take or a role of the person or others in recovery?

Janice Fulkerson: Um, the, the role of AI.

Zachary Gidwitz: Okay, great. So that's a really important one because what we have really wanted, what we're worried about, and I'll speak as someone who suffers [01:07:00] from digital addiction, right? The last thing I want is to develop a solution where I am now addicted to my phone even more, where I am just talking to this thing all the time. Um, and so, from the very beginning, we, put in this sort of flywheel of how this works, this trust flywheel, if you will, um, the, the facilitator, or other people, that it, it has to be that way. It's why we're so much more comfortable deploying, uh, AI in the addiction space, which is, necessarily a social thing, unlike some therapy bots, uh, you know, or, or therapy, uh, products that you might see, which really are one on one because therapy is traditionally one on one. And so, uh, we've developed Kai in a way to understand its role as a bridge. As something that can lower human friction, where someone might not be comfortable. comfortable going to their first meeting, speaking [01:08:00] up in their first meeting, approaching someone to ask to be a sponsor. And Kai can be there as a cheerleader, help them explore their fear of, you know, what is it going to take to, you know, what little small step can you take to walk toward getting your first sponsor or finding a recovery program or researching a sober living facility. It's there as a support, as a bridge, but as one. role in many, in the, what we're trying to help facilitate, an ever growing ecosystem of recovery resources.

Janice Fulkerson: Oh, Zach, that is a great way to close this webinar, um, because connection, that human connection, and finding our people, and finding our tribe, is such an important part of the human experience. So, thank you for that. As always, we appreciate our webinar presenters and we really appreciate Alex, you and Zach being here with us today. For [01:09:00] everybody else, thank you for being here as well. Look for the video and the follow up on our website this time next week and you can always look at this, review this again, on our YouTube channel. So thank you.