Work Focused Cognitive Behavioral Therapy to Complement Vocational Services for People with Mental Illness: Pilot Study Outcomes Across a 6-Month Posttreatment Follow-Up

This call is being recorded.

Gretchen Grappone:

> Welcome everyone. I'm Gretchen Grappone. I work in the Training Division at the Center for Psychiatric Rehabilitation at Boston University. I'm going to be moderating today's Making Sense of Employment Research Webinar. The first in this new series that we're doing. Today's event is funded by the National Institute on Disability, Independent Living and Rehabilitation Research. The content of the webinar does not represent the views or policies of the funding agency and you should not assume endorsement by the federal government. This webinar is going to be recorded, transcribed and posted as an archive on our center's website. We acknowledge that the territory on which Boston University stands is that of the Wampanoag and the Massachusetts people. Our classrooms and BU's campus or places to honor and respect the history and continued efforts with native and indigenous communities. Thanks to Sigal Vax for our tech support today. Zoom related reminder that at the top of your screen, you can click on that gallery view if you want to see who's participating, or click on speaker view if you want to focus on our speaker today, and we ask that you please keep yourselves on mute during the hour, and we're going to have a Q and A session at the end of the presentation so just post your questions in the chat box as they arise. Our webinar today is titled Work-Focused Cognitive Behavioral Therapy to Compliment Vocational Services for People with Mental Illness, Pilot Study Outcomes across a Six Month Post-Treatment Follow Up. It's going to be led by researcher, Dr. Marina Kukla. Dr. Kula is a clinical psychologist and research scientist at the VA HSRNB Center for Health Information and Communication at the VA Medical Center in Indianapolis. She's an associate research professor in the Indiana University, Purdue University Department of Psychology. Dr. Kukla conducts mental health services research specializing in psychiatric rehabilitation approaches that promote recovery among adults with serious mental illness. In particular, her studies that focused on interventions to promote women's success in veterans with mental health disorders. Welcome Dr. Kukla, and I'll pass it over to you.

Dr. Kukla:

> Well, thanks so much for having me and for that wonderful introduction, I'm going to share my slides, hopefully. Is that showing up? Yep. Okay, perfect. Alright, so today we're going to talk about this line of work that I have undertaken with my colleagues in

which we developed a work-focused, cognitive behavioral therapy intervention that is designed to compliment supported employment services for veterans and adults in general with serious mental illness. So, I think the introduction was great and it already gave you a lot of information about me and sort of where I come from. I will also say that I sort of got interested in the field of work rehabilitation for people with disabilities and SMI in particular after I finished undergrad. My very first job was working at a rehabilitation agency, serving adults with disabilities, including mental illness. So that sort of led me to get super excited about supported employment in general and thinking about how we can help people achieve their goals and psych rehab more broadly. So this is the current study. I also have a reference slide at the end that has all of these studies if you're interested in taking a look at that published in Psych Rehab Journal in 2019.

So I'm going to talk about the background of this. Most of us on this call are probably familiar with the employment problem and why we should care and should continue thinking about how we can help people achieve their goals and work. I'm going to talk about the developmental work that we did as a series of five studies. I had a career development award, which is an early career award in the VA where we kind of took a look at this and develop this intervention that we're now testing more rigorously. Then I'm going to present the findings from this current study that I'm here to talk about and sort of some next steps that we have. So the employment problem, so specific to veterans, but we found that less than 12% of veterans with mental illness or mental health diagnoses who use veterans' health care, so in other words, they come to the VA hospital for their healthcare are employed. And so that's, that's a bad number. We've also found that in other studies that the presence of having a mental health disorder, especially two are more, is associated with unemployment in veterans. But when we look at veterans and non-veterans, most people want to work and a lot of people are actually looking for a job with little success. But it goes beyond just unemployment and employment. We've also found that on the job, outcomes suffer; things like poor work performance and loss of work productivity are very common in people with serious mental illness in addition to sort of this underemployment issue and lack of career advancement. Dr. Gary Bond, who is my advisor and mentor in graduate school, he and I did a series of a couple of studies where we wanted to look at job duration amongst adults with SMI who were receiving IPS supported employment services and we found that most people lost their job pretty quickly. Job durations were brief of about four to eight months. A followup study more recently led by my colleague, Dr. Nick Retrey, he was interested in looking at veterans with invisible injuries, which would include SMI and cognitive injuries and found that there was this really inconsistent and non-linear pattern of not only work and career, but also post-secondary education achievement. Here I have this sort of graphic that shows three cases where you have this sort of up and down pattern of military involvement, going to Iraq or Afghanistan, mental health discharge, and other physical injuries, some involvement in college and post-secondary education and various involvements in

employment. So you could see it's very, non-linear, it's not just finished high school, go to college or get a job. So this is another thing that we were thinking about wanting to address. So, I think this sort of answers the question of why do we need another intervention? I mean, we have high quality individual placement and support services. The VA has also really transformed their service model and is geared more towards helping veterans across the spectrum, have success and get competitive jobs. But we still find when we look at VA program evaluation data that a third or more of veterans who received these high quality services remain unemployed. So, this is a problem. So this sort of speaks to the need for maybe a targeted, complementary approach to help these non-responders or people in general. We also see a need for an approach to bolster long-term outcomes. So not just people getting a job and losing them, but how can we help them have success over time? And so we undertook then a series of studies where we tried to better understand what are some of these personal factors that are remaining barriers to work success. So, of course then we find that many of these factors that are on this table are amenable to a CBT type approach. We did a couple of studies. The first was we did a national survey of VA vocational providers with follow-up phone interviews. And then we also did a study, it was a mixed methods study where we examine the perspectives of veterans with SMI on the same questions. In addition to that, we see that there's an existing and growing body of literature that have identified similar personal barriers that may be responsive to CBT approaches. So you can see, I'm not going to go over all of them here in this table, but you could see some of the important ones that I might mention: things like work-related self-efficacy, or it's our ability, our beliefs about our ability to have success at work, especially over longer periods of time, and things like sense of self as a worker. I'm going to touch on that here, but it's our sort of sense of ourself for ourself experience. People with SMI oftentimes see themselves as sort of disabled or incapable of having success at work. Other things that really came up in this previous literature and our studies were things like psychological stress and managing interpersonal troubles on the job. A lot of people have experienced many interpersonal difficulties that continue to get in the way job after job. So, we really felt like CBT then would be a strong fit. There's other reasons why it would be a strong fit, especially within the VA and for the veteran population. So it's already being used across clinics and across veteran populations. It has strong potential for implementation and wide dissemination across the VA, and we found that it can be integrated and delivered within VA clinics and services. Other previous studies and areas of work have found that CBT can be added to psych rehab approaches and result in benefits that go above and beyond those psych rehab approaches alone. So I've cited Dr. Eric Granholm’s work here where he added CBT to social skills training, finding benefits to interpersonal functioning that went above and beyond social skills training alone.

So we took an existing CBT intervention and we substantially overhauled and revised it for this use. So we developed the cognitive behavioral therapy for work success program

or CBTW, so what is this? I'll give you a quick overview of that. So it's a strengths-based intervention, it's all based on CBT elements. All of it is tailored specifically for work, so we don't talk about symptoms or other things, it's all based on competitive work. It's customized and the sort of direct treatment targets are beliefs about workability, sense of self as a capable worker and those adaptive behavioral strategies related to work. And I'll give you a couple of examples here in a minute about that, but CBTW is not intended to be a standalone intervention, and it's definitely not intended to take the place of our high quality employment services; like we have our IPS supported employment services and other services within the VA that are growing. So who is this for? So this is really designed for adults and veterans with serious mental illness who are unemployed and have a competitive work goal. There are no exclusions based on other factors, it's for all genders and ages. It doesn't exclude based on work readiness, substance use, legal history, etcetera. It's also designed specifically for people who are receiving help with competitive work, specifically IPS supported employment. So what are we targeting again? Again, we're not targeting symptoms, this isn't your sort of run of the mill mental health intervention. We're really targeting those hard, competitive work outcomes, like job acquisition and job maintenance. So, are people getting jobs and when they get them, are they keeping them? It's really focused on individual work goals. So in lock step with things like IPS supported employment, and I'll talk about our open trial study today in those six month outcomes. But in that same study, we did look at psychosocial outcomes and we found a secondary outcome. We did find some early preliminary evidence that it may also improve those direct treatment targets like subjective recovery attitudes and self-esteem, which I really think maps on well to that sense of self domain and then some symptom domains like depression and negative symptoms measured by the pans for people with schizophrenia. How does this work? The CBTW is a 12 week group based intervention. It's a cohort model; we have about eight people per group. So when you start the group on week one, you go through week one through 12, with those same folks. It's a manualized intervention that involves a participant manual and multiple other tools that go along with that. It's actionable hands-on real-world content. So everything that we talk about, all the skills and techniques taught and discussed can be used in people's everyday life and specifically as it relates to their work lives. It's participant driven, that group process is really important. And I already mentioned this, but the idea is not for it to duplicate or take the place of existing vocational services. The idea is that it would be a complimentary program that would address barriers that IPS and supported employment and other vocational models are not designed or intended to address.

So, who does this, how do we do this? So, this is a little bit from our pilot phase. Also we have a current study, which I'll talk about at the end, but facilitators in our pilot phase included PhD level, and so that was me, we had masters level providers, and we're also currently in our study, using IPS providers. So those supported employment specialists will be delivering this. There's a multitude of implementation tools that we use. We have

a facilitator guide that provides session by session content and process. And also weekly upfront training and weekly group consultation. Consultation strongly focuses on the case conceptualization aspect. So really understanding each of those individual participants, what's going on with them, what are their capabilities and barriers and how can we adapt CBTW while maintaining those core elements in order to best serve that individual. And also it's a place where we can discuss successes and challenge and troubleshoot barriers as they arise. Then I think importantly, it also involves a monthly fidelity assessment by an independent assessor, and then providing that feedback. So there's an audit and feedback element. In terms of the core elements of the intervention, I have a few slides on this, but I'll just give you a brief overview so you can maybe have a little bit of understanding. So the first element is a focus on bolstering healthy thinking. So that's your cognitions circle. We also have an element on personal narrative, which we added to this version. It's not typically an aspect of a CBT intervention, but the idea is that people with SMI, have sort of a fragmented and incomplete sense of self and especially sense of self as a worker. A lot of people, even if they have a decent work history, it may be sort of all over the place. So they may not have a good sense of themselves, what it is that they want to do and how they might be successful. So we added in narrative exercises to try to build that up a little bit. Another core element is a focus on behavioral patterns and also emotional patterns. So, things you might think about like work-related coping, managing difficult emotions at work and interpersonal strategies. And then lastly, we have all of this sort of culminates in a work success element where we really manifest this idea that work success isn't just something that happens through osmosis, but it's something we have to actively manage. And also just this idea that works success is scary. And for all of us, you get that job you've been going for, and it's amazing, but it's also scary because you have to go do it. So we bring that sort of out into the open and have a discussion of that. And then at the very last session, participants make their own personalized work success plan with elements and pieces that are important for them. So the idea is that all of the techniques and everything that they've learned throughout the 11 weeks culminates into this really living, breathing plan that they make for themselves. I'm not going to go over this, but this is the conceptual model. These ovals are the sort of core underlying elements and how they might benefit these different pieces. You can see here and how that relates to work success, there's a lot here. And then in the bottom, right, this like grayed out box is the idea that vocational services, of course, this is not an exhaustive list of everything vocational services offers, but there are many other sorts of factors and elements that go into play here, that are important, but that we are not sort of overlapping there.

So, here is how each of the specific content maps onto each of our core elements. I don't expect you to look at all of this, but you can see that throughout, I'll show on the next slide each of the session topics, but you can see how some of this sort of works and what this involves. So these are the actual session topics. So the first four sessions involve

bolstering healthy thinking about work. So we start with thoughts, thoughts being more amenable to change, and this also gives us a great opportunity to sort of introduce what this is and what this means, and then introduce our main typology or our strategy for sort of identifying and assessing and changing those unhealthy thoughts related to work. It builds on itself, so we start really, really basic and we're able to make adaptations based on the needs of the group. So for example, if you have somebody with more cognitive barriers or neurocognitive metacognitive barriers, you can start at a lower level and then build from there. Sessions five through ten, which are highlighted in blue, focus more on the behavioral components that are important here. Barriers to work, session five, is referring to cognitive and behavioral barriers to work, and then it kind of goes from there. It also deals specifically with sort of interpersonal effectiveness at work, and then 11 and 12 deal specifically with the work success component. The sort of orange here is referring to the narrative exercises, which are sprinkled throughout the sessions. And again, that narrative piece is designed to enhance the sense of self as a worker, and I do have an example of that as we go on. So the session structure is very similar to a basic CBT session structure. One thing I'll identify is that at the start of each session, participants all go around and they give an update on their progress towards their work goal. It's sort of a check-in and that's really helpful. It's also really helpful as people do have success, that they're able to share that, and others can sort of learn from that and everyone can sort of celebrate that a little bit. We also, at the very end, assign a sort of like homework that asks people to apply what we talked about: the skills, the techniques in the real world, hopefully in a work setting and if not, just in something in they're real world lives. This is an example just cause it's hard to imagine what this is, of a sample cognitive restructuring exercise and how it works when we're demonstrating how the CBT model works and how it relates to work. So all of the scenarios and most of the content in the manual came from our developmental phase and the real examples that veterans were experiencing in their lives. And so we used all of those. And these are the same sorts of things we hear over and over again, right? Like, I'll go with the second one: After putting in a job application, the employer calls and asks you to submit to a standard background check. You can have many thoughts about this. One might be: no one will hire me because I have a felony. So if you have that thought, which is perhaps accurate, but maybe not that helpful if you want to get this job, you might feel frustrated, resentment and fear, so your behavior is that you might avoid that situation. You don't call the employer back, you feel sort of hopeless that you're not going to get this. Okay. And so what does that result in? You don't get the job. So we provide these examples so people can see why it's even important to consider our thoughts here. Here's a sample narrative exercise that comes from the very first session. So we asked people to write about their work story, which is like a life story, but specific to work. And we provide several different probes that people could use, or they don't have to, but the idea is this gets them starting to think about themselves. We find that many people with SMI, even

though they've had many conversations about work and how they want to approach it, they maybe haven't thought about it this way and why work is important to them beyond just income, but this really gets their mindset stimulated in thinking about that. So this is usually very meaningful and then participants have a chance to share when they're done sort of writing this out.

I will say just a bit about how we developed this. This was initially developed based on an old intervention, that was a six month intervention for people with schizophrenia who were seeking non-competitive work positions. And so we did a substantial overhaul. We took three cohorts of veterans through this who had a range of mental illnesses and they were unemployed and receiving supportive employment. We made modifications after each wave, incorporating feedback from participants, vocational staff and the facilitators themselves. So this resulted in the design of manuals, participant manuals and the facilitator guide and a full intervention protocol. I'll say quickly what we found here. There was strong engagement, dropout rates for low, and the majority of participants attended two thirds or more of total sessions. We used the satisfaction with Services Scale to assess acceptability. Participants were highly satisfied and believed that this program helped them reach their work goals. They also found that vocational staff found that this was really, really useful. They liked it a lot, and the veterans who were getting it just thought it was very helpful. I'll just talk about some of the areas that participants identified when we asked them qualitatively, if it helped and how. They mentioned improvements in areas like motivation to work, self-efficacy, sense of self as a worker and especially hope and belief that work is attainable. That one came up a lot. When we asked about specific components that were useful, they mentioned things like changing that unhealthy thinking, that behavioral coping strategy, and just being able to reflect on themselves as a worker, something some of them had never done before in this way. Then of course, that group process, which I think really helps with that piece, when we think about that hope is attainable. People can do this and have great success.

So now I'm going to talk about the current study that I'm sort of here to speak about. So next then, the final phase of this research was to conduct an open trial with a larger number of participants. So, this was a pre-post open trial. We did not have a control group here. We wanted to know again about these employment outcomes over time now that we had a finalized intervention that wasn't under construction, it was finalized. We wanted to take a look at, does this seem to help employment above and beyond supported employment? And then also, not only did people get jobs, but did they continue working them? So, did it have any effects on steady, competitive worker status? So, we took 50 through 52 participants in eight group cohorts through the program. 44 of them were unemployed at baseline. We had this small group of eight who were employed, but they were at risk for negative outcomes. They received the 12 week finalized manualized CBTW and supported employment at the same time. Then we measured work outcomes

at baseline, which mapped on to the 12 weeks before this study, post CBTW so post-treatment, which was at 12 weeks, so when they finished it, and then again at the six month follow up, and today I'm going to focus on those six month follow up findings. So again, our inclusion criteria: folks had to have a diagnosis of an SMI, which was somewhat broad here was schizophrenia spectrum or any psychotic disorder, any bipolar disorder, depression, or PTSD, which is usually considered under the SMI umbrella in the VA. They had to also be currently receiving supported employment services and they had to have a competitive work goal. Exclusion criteria was they couldn't have a cognitive or medical condition that would prevent participation. So something like dementia, and we did not have this one come up. Also anyone who maybe got a previous CBT intervention that was geared towards competitive work would not be included. So what were our specific outcomes? I mentioned them quickly before, so we were interested in employment status, we were interested in did people attain a job during the study, and did people attain steady worker status, especially at that six month follow-up. So that's defined as working at least half of the follow-up period. We also just wanted to take a look at hours people were working and the wages they were earning. So the second set of outcomes for our six month arm of this study were more on the job outcomes. So for people who were working, we asked about work effectiveness using the work and health interview, which is rated by just one item on the days you've worked in the past month: how effective were you in your job? And so this is rated from 0% to 100% effective with of course higher ratings indicating more effectiveness. The other aspect of the work and health interview assesses work productivity by five items. So I've given an example here during the past two weeks, how often did you lose concentration at work? So, these Likert scores are then converted to percentages, which reflect reduction in work productivity. So in this case, higher scores actually indicate greater work productivity disruption. And so, it also produces a general work productivity score, which is a mean of the five items. So of course we obtained a written informed consent; participants then received the 12 week course of group based CBTW, which of course is our finalized protocol and they were concurrently receiving SE services. We assessed work as our main outcome and psychosocial outcomes as our secondary at baseline, post-treatment, which was at that 12 week mark once they finished CBTW, and then our follow-up point was six months later. Participants received $30 for each of their assessments that they completed.

So this is a background on who participated. The mean age was around 50 and notably at baseline participants had been receiving vocational services for over a year on average. So some of them had really struggled on getting a job. You might look at the total column here to the right, I've compared unemployed and employed people because we had this sort of weird split, where most people were unemployed, but we had the employed folks too. But if you look at the total, most were male as would be expected in a veteran population. There's sort of a split between white and black veterans who participated.

And then we can see there's sort of a split based on diagnoses. Some veterans had multiple diagnoses and in this table, we include the primary one. So not surprisingly, you had a large number with schizophrenia spectrum disorders, some with mood disorders and then relatively fewer with anxiety and PTSD. So how did we sort of analyze this data over time? We use repeated measures, analysis of variance, which just examined changes in our continuous work outcomes over time from baseline to 12 weeks to six months. We looked at individual time points using within group T tests, and then our Cohen's D effect sizes characterized the extent and nature of those effects and tests of significance were at less than 0.05 for these work outcomes. Our primary outcome being employment status; you might look at the red bars here when we just look at the number of people who are employed. So, because we had that small little cohort of employed folks at baseline, which was 15.4%. By 12 weeks, that raised to 57.7% who were employed and then by the six month follow-up, it was 72.5% who were employed at that time. So we see this nice increase over time. Some other key numbers: of those who were unemployed, which is really the question we're asking, 75% who are unemployed at baseline, got a job during the six month study period. 78.8% was the overall competitive employment rate. It's a little bit different because we had those workers at baseline. I will say, and it's in one of the subsequent slides, that everyone who was working at baseline maintained their jobs, and those were the folks who are at risk for negative outcomes and for job loss, which is why they were referred to us for the study. Of those who had worked during that follow-up period, 73% became steady workers. So they worked at least 50% of that six month follow-up post-treatment period. So there's a little bit less to see here, but I still thought it was meaningful to put this up when we just look at the hours that people are working. So this includes everybody. So even people who work zero hours, but you can see that at baseline, most people were not working. And that goes up across the 12 weeks and six months. So this is a significant increase, which is not surprising because we had so many more workers by 12 weeks and six months. Now we look at wages and we see the same pattern, right? So most people weren't working at baseline so we have a low number there and it continues to increase across 12 weeks and then at six months.

So now we kind of go to the more on-the-job outcomes. There's a little bit less we can really conclude here in large, part because our samples of working participants were small at baseline. The workers reported relatively low work effectiveness, 46.9%. But then we see that shoots up for the workers at 12 weeks, up to 88.7%. And then it stays very consistent at six months. So our much larger group of participants at this point are still reporting high levels of work effectiveness with 100 being the top there. Now work productivity, these are our five questions that we asked people that were then converted to percentages. So we can see that overall participants at 12 weeks and six months reported low levels of productivity disruption. There are a couple of meaningful items here in which people did report higher levels of work disruption, and I will talk about that in a second. So in terms of our sort of conclusions, overall there was a very strong job

acquisition, right: three quarters of participants who are unemployed, got a job. There were many steady workers. So, of those people who are working at all during that followup, 73% became steady workers so they worked at least half that six month period. Generally we noted a positive work trajectory. So mostly after getting a job, most people worked and they worked more, increasing hours and wages across that period and there were very few job losses. Again, I'm going to compare this to that VA program evaluation data, where we find that only one third of veterans gain competitive work by the time they finish up with supported employment. So what's our bottom line? So we have promising preliminary evidence that this intervention may be a beneficial compliment to our existing vocational services, especially for non-responders. Although that's still an open question, but this has given that the average length of service receipt was a year at baseline, which is a long time. So as far as on-the-job outcomes, we're really limited about what we can say here, because we had so few workers, especially at baseline, but it seems like there was this trend of improved effectiveness and most people who are working at 12 weeks and six months reported high levels of effectiveness. Of course, this is self-report. Overall, there was low levels of work disruption in terms of productivity, with a couple of noted impairments, especially fatigue at work. People continue to report higher high levels of fatigue and also loss of concentration. This actually really fits well with some of our preliminary studies where we asked about these factors that were continuing to get in the way and fatigue, physical and cognitive fatigue, as well as mental health continued to be identified as some major barriers. So I think those two findings really fit with that and obviously warrant further study and addressing.

So I obviously have to mention the many study limitations that we have here, the big one being that we had no control group, and we can't draw any causal conclusions. We didn't have a long-term follow-up beyond six months. This seems important because for people with SMI, particularly people with schizophrenia, change can take place more slowly and over longer periods and so being able to capture that, especially for an intervention like this, seems especially important. We have some qualitative data that we assess during our developmental phase, but of course we don't know by what pathways or core elements people are getting better if they are, or which of these elements sort of influenced outcomes. If we had a better sense of that, we might be able to make a briefer or more targeted intervention. Also notably we didn't have IPS fidelity data. We had that CBT fidelity data, which looked good, but we didn't know what people were getting otherwise. We also don't know whether any adaptations were made. So we don't know, for example, if supported employment specialists were working on CBT stuff like healthy thinking with veterans who were enrolled in our program. So we don't have a sense of actually what was going on there. I did want to mention the feasibility that we published in the earlier 12-week outcome paper. We noted low dropout rates and there were no statistically significant differences between dropouts and others. The majority, 70%, attended seven or more sessions, seven sessions was our sort of benchmark to say people

got a dose of this intervention, seven out of 12. We also noted strong fidelity across facilitators from different backgrounds. So PhD clinician, masters level providers, and we even had a graduate psychology student trainee who is at the master's level. So we noted that across folks from different backgrounds, they could learn this model and deliver it with good fidelity. So, this sort of leads to the next study, which we just started October 1st. This is a VA health services research and development funded study, our work well study. So this is a fully powered randomized control trial at three VA vocational sites. So we're actually implementing CBTW in the vocational programs that are providing supported employment. The intervention will be delivered by vocational staff. So by the supported employment specialists, and we're looking at as our main outcome, again, competitive work and steady work as well. And we're also looking at some of those psychosocial outcomes that are important, and that, of course, the VA cares about and we care about, that people are doing better in their lives. Then lastly, the third aim of our study is we're really trying to understand implementation: is this something that we could do within regular practice and within regular vocational programs, can vocational providers successfully deliver this with fidelity? All of the programs that we're involved with in this study, all of our sites are high fidelity IPS programs. We want to understand too, how this could be done within existing service structures and possible modifications that might need to be made. In doing so, we hope to understand strategies to promote uptake and sustainability, and those strategies that we're using I mentioned earlier on that sort of implementation slide, where we're talking about training and ongoing consultation and fidelity feedback. So I think that that is all I have. And then I will flip through my references here. So these are all of our CBT studies based on that five-year course of research and the development of this, in addition to the open trial pilot studies, including our most recent studies where we looked at those secondary psychosocial outcomes of that open trial as well, of course, of the many brilliant researchers who are doing work in this field as well that I've cited here, but I'll kind of go back. I think that's what I have right now. I don't know if people have thoughts or questions.

Gretchen Grappone:

Yeah. So we had a few questions come in while you were speaking and if there are more questions please post them in the chat box. So the first question, and I think you've probably addressed this in your feasibility study, but how do clinicians and people who receive services access this treatment?

Dr. Kukla:

Well, right now, it’s just in a research phase. So we haven't implemented this outside of our research studies. And so the hope would be that if our current RCT, which is a four year study, that has just begun if, if we see that this works and, you know, people are

getting better and doing better than the control group over time, and that we can implement this into regular vocational services, the hope would be that the next step would be to roll this out to a wider to the wider VA, and that it would become available to veterans. Then potentially then of course, outside of just the VA that this would become available at that stage.

Gretchen Grappone:

Okay. I know that there's some people from the VA who are planning on attending this, so have you finished recruitment for your current study?

Dr. Kukla:

No, actually that's a great question. Recruitment starts in January. So, our three sites are the Indianapolis VA, the Hines VA, which is right outside Chicago, and the St. Louis VA.

Gretchen Grappone:

So if there's anyone from those VA's on this webinar right now, do they contact you or do they talk with the supported employment people at their site?

Dr. Kukla:

Yeah, they can absolutely contact me. My email is here and also my university email as well, but yeah, absolutely contact me or you could contact the folks in those programs at those sites too, if you prefer.

Gretchen Grappone:

Great. Next question. We had, how would it interface with peer support for veterans?

Dr. Kukla:

That's another excellent question, and that's not something we've studied. I don't know whether peer support could deliver something like this or to the extent to which peer support is involved in other aspects of care or services with vocational services. I certainly think there could potentially be a fit, we've worked with peer providers, of course, across all of our mental health clinics and rehab clinics at the VA. So I certainly think that there could be a role. We just haven't looked at that yet.

Gretchen Grappone:

Great. Another question we just had posted: were there any veterans who are receiving a sort of community treatment in addition to supported employment in the study?

Dr. Kukla:

Yeah, we did have, and we have had, several who are assertive of community treatment in the VA; it goes by a couple of different names, but essentially, yeah, we had veterans who were involved in assertive community treatment who are receiving PRC. We had many who were receiving housing assistance services. So our HUD-VASH programs, as well as our domiciliary programs, that's a residential program, probably most folks know that, but we actually had some of our groups taking place at the Dom at that time. And we were well embedded with our HUD-VASH programs, as well, as they're all providing these employment services too. You know, this time around for our study that just started and that we're recruiting for in January, it's a little bit different because we're doing everything virtually right now. In the past, and as this was designed to be an in-person group intervention, now we've transitioned to doing everything over video, like zoom or over the telephone for folks who don't have that capacity to do internet stuff. So, yeah, it's a really interesting thing, but I think it gives us a lot of opportunities to reach veterans who may be receiving other services and maybe referred to vocational services. In the VA compensated work therapy is sort of that umbrella that supported employment is under, but I think it does give us this opportunity to reach a wide veteran sort of group.

Gretchen Grappone:

The next comment thanks you and says, it's always challenging to determine the effectiveness of any support effort when the primary benchmarks are self-report based. Do you find that to be true?

Dr. Kukla:

So the question is it's difficult to determine the effects when these are self-report outcomes?

Gretchen Grappone:

Yes.

Dr. Kukla:

Yeah absolutely. And I think we've tried to address that by looking at, well work is our primary outcome either way, but we get self-report outcomes from participants, but then we also sort of confirm them with vocational providers. It is really difficult, I think, especially our secondary outcomes or psychosocial outcomes, like health-related quality

of life, recovery attitudes, suicidal thoughts is obviously a major emphasis at the VA. So it can be really challenging when you're just looking at self-report. I think obviously adding now that we have this rigorous RCT and we have this active control group, it may be helpful to balance against some of those effects where you might see both groups improve. Right. And so the question will be, does the CBTW group improve more? So it might help accommodate some of those self-report effects that you would otherwise get when you have an open trial without a control group. But certainly it's something that I think across all of our studies, especially when we ask people what they think we did, you know, our qualitative aspects, you know, most people are going to say this is great, but we also saw that people got jobs, and they not only got jobs with the help of their SE specialists, but we saw them, and this is a little bit anecdotal, which is of course why I didn't include it here, but we saw people going and getting jobs themselves. So, they were going and doing that process on their own and we really saw those changes happen throughout those 12 weeks, which was, you know, obviously wonderful to see, and, and we'll see if that plays out in this next study.

Gretchen Grappone:

Great, we have another question. It says, will you be accepting veterans for your second study who are receiving services from different VA programs or hospitals, the three that you mentioned?

Dr. Kukla:

Right now, we're just doing our three sites. So, no is the answer. But as I said, in the future, my hope would be that, if this is beneficial and does help veterans above and beyond the existing services, that the next step then would be hopefully to roll this out on a wider scale. So no right now, but in the future, hopefully stay tuned.

Gretchen Grappone:

Well, I want to thank you for presenting this research and for doing this research. I know it's not generalizable yet, but what you've presented is so impressive and so needed. I just want to finish up with one last question, being a CBT clinician and sometimes having a hard time convincing people, that group is an okay thing versus an individual CBT intervention. So, did you at all have trouble engaging people in the group aspect of this?

Dr. Kukla:

That's a wonderful question. We do have folks who say, "I just want individual, I don't want to talk to other people." They tend to be younger, the younger veterans as we work with veterans across the whole age spectrum. So we certainly had that come up and I

think individual is great, but I think group is so beneficial and we sort of twisted their arm and said, well, not twisted their arm, they gave informed consent. Right? Exactly. We don't twist arms, but we do tell people, listen, give it a try and if you don't like it, you know, you don't have to stick with it at all, but it can be really helpful. I think for work, especially, it can be really helpful to hear the experiences and the stories and what others have gone through. And obviously I think that our core elements are key here, but I also think the group process of understanding that you're not alone and that, you know, getting in fights with people at work or walking off the job and storming off, that this is something that a lot of people have experienced or having to explain to an employer, why you have a felony on your record and how to do that. It's a much stronger and more effective message, and a more hopeful message coming from other folks in the group, other participants than coming from me. So, I mean, certainly this is something that, you know, individually the same elements can apply, but I just think that group process is so important. We will always have the people who don't prefer to do group, and that want to do individual, or they have lots of anxiety about that, but we always ask them to, you know, just give it a try and see what they think and sometimes they make a lot of connections with the other folks in the group. And that's really wonderful, too.

Gretchen Grappone:

Excellent. Well, thank you so much for your presentation and for your work. We will be posting the video of this on our website in the next couple of days because there's some people who were interested in seeing your presentation again. So, thank you so much. And the final thing is, I will be sending you all a survey, so hopefully you can take five minutes and give me some feedback about the presentation, and what you'd like to see in the future. So thank you everyone for your participation today. Goodbye.

Dr. Kukla:

Thanks for having me. Take care, everyone. Bye.