Okay. Well, hello, everybody.
Welcome to our CMIPS seminar.
CMIPS is the acronym for our Center for Methods
in Implementation and Prevention Science.
I'm Donna Spiegelman, the Director of the Center,
and this seminar is being co-sponsored by the Dissemination and Implementation
Science Methods Core, the NIH T32 training grant,
Implementation Science Research in Methods,
and R3EDI, the Rigorous, Rapid,
and Relevant Evidence Adaptation and Implementation
to Ending the HIV Epidemic Implementation Science Hub.
We're very pleased to welcome our guest,
Dr. Rani Elwy,
who’s Professor of Psychiatry and Human Behavior,
and Professor of Behavioral and Social Sciences
at Brown University.
She is a health psychologist, health services researcher,
and an implementation scientist
who examines patients’ access to
uptake of mental health care,
the effectiveness and implementation
of complementary and integrative health services
for treating mental health disorders and pain,
and she works on crisis and risk communication between patients, families, providers, and health systems.

Dr. Elwy is the Founding Director of the Brown Research on Implementation and Dissemination to Guide Evidence Use BRIDGE Program, which sounds like a sister program to our own here,

Co-Director of Implementation Science in Advance,

Rhode Island Clinical Translational Research, and Implementation Scientist

in the Biobehavioral Sciences Core

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Co-Director of Implementation Science in Advance,
across the entire VA healthcare system. Additionally, Dr. Elwy is a Fellow of the Society of Behavioral Medicine and the recipient of a VA Research Center Scientist Award.

So, clearly, she’s got her bona fide in implementation science all across the spectrum.


And, Dr. Elwy, would you prefer to give your talk and then take questions, or would you like to have people pop in questions into the chat as you go along?

So I have some funding grants and just wanted to provide those disclosures, and also that my views are mine alone and not that of the VA or the federal government.

When I think about why I feel so passionate

And as you see, I actually took out the word trials and put in studies and I’ll explain why in a minute.

So when I think about why I feel so passionate
about implementation science...

Actually I just realized that just so you know,

I can't actually see the chat here in the system that...

So yeah, so yeah, thank you very much.

You know, I'll take care of it. (indistinct)

Thank you.</v>

So when I think about why I'm so passionate

about implementation science

or how I really just fell into it, two things come to mind,

and I'm very well aware

that I'm talking to a very quantitatively strong group,

so at least here are some statistics for you.

So the first is that we all know that on average

it takes 17 years for 14% of research to make its way into practice.

But that's really not enough of a change,

we still have a long way to go.

And then the other statistic is that 85% of federal research

is wasted every year due to the fact

that we do not move our evidence into practice,

and this equates to about $70 billion per year,
to implementation science
and decide to invest in our program at Brown.
I feel very fortunate to have grown up in the VA healthcare system as an implementation scientist.
Our national implementation science program is called QUERI,
which is the Quality Enhancement Research Initiative.
And under the leadership of Amy Kilborn, Dr. Amy Kilborn,
we now have over 50 centers who partner with up to 70 or more different program offices and regional partners around the country.
One of the programs that I am PI of,
with three other colleagues,
is the BRIDGE program, which is in Bedford, Massachusetts.
And it’s one of these five year five plus million dollar grants where we have three hybrid type three trials that we are doing all at once, implementing three different evidence-based practices,
and so that’s what I’m gonna be talking about today.
I brought my implementation science knowledge and training from the VA into Brown five and a half years ago,
and we recently rebranded our implementation science core as the Brown Research on Implementation and Dissemination.
And as you all know here, we just don’t have enough training programs, we don’t have enough capacity building programs for implementation science, and so a lot of us are just starting to like implement our own as a result. So I just wanted to talk about hybrid designs and trials, but I’m actually gonna try to convince us all to use the language of hybrid studies from here on out and I’ll explain why.

So we all know the original paper that came out in 2012 by Jeff Curran, Mark Bauer, Brian Mittman, Jeff Pyne, and Cheryl Stettler, that was really seminal.

I was just starting my implementation science training in this year at the Implementation Research Institute, and everyone was so excited about these different hybrid designs, the one, the two, the three. I know that many of you already know what these are. I’m just gonna be focusing today on the three where really the primary aim is on testing the effectiveness of the implementation strategies.
to increase the uptake of the evidence-based practice.

When this paper came out, Brian Mittman was one of my mentors and he said, you know, they really should have said right from the beginning that every randomized trial is always a hybrid one, and so they’ve actually started to really change that language. And so just recently they published, this was from last December, reflections on 10 years of using hybrid designs, and they tried to make a good case for why it’s really much more important to be calling these hybrid studies. And I’m happy about this because this... And I know that, again, I’m talking to a very quantitatively savvy group.

Not all things in the real world can be randomized, and so we have had to do studies that I would consider a hybrid but didn’t fit under the definition because it wasn’t a randomized control trial. So in these updated recommendations, they really have three things that they want people to take away. Replacing the term design in favor of the word study
because, as I just said, many people are applying hybrids and non trial designs and it is possible to conduct a hybrid study to answer questions about intervention effectiveness and implementation in a wide range of study design.

They offer in this paper, four questions to help people decide which of the hybrid studies that they should be conducting, and I’ll tell that to you in a minute, and they’ve also really emphasized how you can build cost. And I know that we have some cost people in the audience, how to really bring in cost into hybrid studies, because when our ultimate goal from all of this work is to implement and sustain our evidence-based practice, cost is such a huge and driving factor for that. So these are the four questions that are asked in the paper. What is the nature of your effectiveness data? How much do you expect the intervention will need to be adapted? How much do you know about implementation determinants? And how ready are you to evaluate real world implementation strategies?
If you know a lot about your effectiveness data, if you feel that there needs to be some components of adaptation built into your actual aims, if you already have a good sense of what your implementation determinants are, your barriers and facilitators are, and if you feel that you can develop and evaluate those real world implementation strategies to address those determinants, then you’re probably ready for a hybrid three or if not at least a hybrid two. But if you’re more on the end of I don’t know, then you probably wanna go to more of a hybrid one. And so this paper really helps people think that through more than the original one. So this is gonna be the crux of what I’m gonna be talking about today. When I think about what we want to achieve in implementation science, I think of these three big buckets, and I’m sure that there are other ones we can definitely have a conversation about why I haven’t included others. But I think of testing strategies because strategies are what is going to make us be able to get things implemented uptake in the real world.
But it has a lot of different factors to it. You need to specify and operationalize your strategies, you have to randomize on strategies, and for some people that’s a very new thing, you’re not randomizing on the intervention, you’re randomizing on the strategies, and tracking. You know, I often say that as implementation scientists, our job is just to track, track everything, track adaptations, track whether they were fidelity consistent, track your strategies, and especially if you’re doing something across a lot of sites, that’s a lot of tracking. So we’ll talk about that. I also think that we really need to be focusing on assessing outcomes, these always need to be guided by a theory, model or framework. You need to do this over multiple time points. One time is not enough.  

One strategy might be leading to a better outcome, but when you use other strategies, maybe those outcomes aren’t so good, and so we really need to know those differences. And one of the most important things,
and this has been a message I’ve had to give to a lot of my clinical trialist efficacy researchers, our measures need to be pragmatic. Please don’t use a 60 item measure in your implementation study, it’s not gonna be used in the real world. Please don’t include a two hour clinical structured interview to assess outcomes, again, not gonna be used in the real world, really focusing on pragmatic, easy to use, transferable measures. And then finally planning for sustainability. If we don’t plan, it will not happen, and that’s also a very hard message for people to hear. How do I know, if I’m doing a hybrid type one, that whatever I’m implementing is gonna be effective? And I say, let’s just pretend that it will be. Let’s find out what is happening during that trial that actually can inform our next steps and help us think through, you know, who is gonna own this eventually. And obviously this involves a lot of engagement with the partners, community based, health system based that we’re gonna be needing to eventually sustain our efforts.
When I think about the theories, models and frameworks I use, I always have a process model, so in the VA we have this QUERI implementation roadmap that everyone can use. It's very foundational, but it works in every case, so we have a pre-implementation phase, an implementation phase, a sustainment phase.

It looks like you always go in one way around this, but you can go back and forth, especially in the pre-implementation and implementation phases. So we use this to guide our work and this is really applicable and we'll talk more about these details, but it's something that you should consider to have a process model to drive what your steps are of your work. In our Bridge QUERI Program, which is testing the uptake and hopefully sustainability of three evidence-based practices, these are each in a hybrid type three trial. So they're simultaneously happening led by three different people and their teams. We're working with veterans who have opioid use disorders, we're working with veterans who have been recently released.
from an incarceration setting, and then we have veterans who are engaging in criminal activities and are going through the veteran treatment court. Veteran treatment courts are actually based in the community, but we work with our veteran justice outreach group within the VA to work with that. These are not easy to solve problems, this is a vast amount of effort on these people. The Homeless Overdose Prevention Expansion Project, HOPE, is really trying to implement an opioid overdose education and naloxone distribution to reduce overdoses. So that’s the evidence-based practice there, and that is led by Dr. Amanda Midboe at Palo Alto. The PIE Project is a peer support initiative. It’s a Post-Incarceration Engagement Project where we’re really helping to work with veterans when they come out of jails for social support, skill building, linkage to care. And then we have MISSION-CJ, which is very long acronym I’ll tell about it in a second, where we are aiding veterans in case management, assertive outreach, hybrid treatments, linkage support.
Also really trying to make sure that we are examining the health equity needs of our veterans as well as how we can help them stay housed if they’re at risk for homelessness. My job in all of this is I run our implementation core, and here we are trying across all these three projects to have similar phases, similar measures, similar designs. So that’s been a real learning experience for me to simultaneously work with three different trials at the same time to really make sure that we are capturing data on a widespread basis. Here are my three MPI colleagues. Keith McInnes is running the PIE Project with his team, David Smelson is running the MISSION-CJ Project, and Amanda Midboe is running the HOPE Project. It’s definitely a village that’s doing this. And what’s really exciting when your work is totally aligned with policy, and I really want people to think about that with the types of work that you do, because policy is actually going to help you with your sustainability.
So this is from the February State of the Union, and there were three parts of this that completely aligned with the work that we are doing. So expanding peer support services in the VA. Two of our three evidence-based practices, the PIE and MISSION-CJ, are being implemented by peer support specialists. So we need more of them in the VA, and so the federal government is funding this. We’re trying to reduce homelessness. So this is also a focus of the Biden Administration for veterans. And then we’re also expanding outreach to justice involved veterans, which is a very big part of the MISSION-CJ Project as well as PIE. So we can see that we have a lot of policies support behind this and we just also need the funding too. So just a brief thing about HOPE, and just to sort of maybe state the obvious to people, I am not the content experts with any of these, I’m the implementation scientist. My colleagues who run these projects also have implementation science expertise, but we needed a central core to oversee all of these.
And so Amanda is working with HOPE in five sites that are in California, Nevada, and Hawaii, with veterans who have a diagnosis of an opioid use disorder, a stimulant use disorder or are being prescribed opioids. The PIE Project, the Post-Incarceration Project, really works intensely with veterans when they’re coming outta incarceration and coordinates with our healthcare for reentry a veteran office and also our housing. The HUD-VASH is taking housing vouchers from the federal government and then pairing that with veteran supported housing and other support services. There are four components to PIE, linkage and referral, skill building and goal setting, community reintegration, and social and emotional support. So right now PIE is being implemented in six sites, other sites have either previously implemented it or are no longer implementing it. And then MISSION-CJ, which is our most complex intervention, is Maintaining Independence and Sobriety through System Integration Outreach.
MISSION was developed 25 years ago by David Smelson and has had a whole bunch of evidence behind it, but it’s pretty complex. They build it into the criminology concept of risk, need, responsivity, where they’re trying to identify which person in the criminal justice system, how can we tailor what they need to support them. And so they have core services of critical time intervention, empowering prosocial change, dual recovery therapy, peer support, and then they also offer some vocational and educational support and trauma-informed care, and they are implementing this across eight sites. David actually has a really massive $12 million HEAL grant where he’s doing this in even greater sites, so I really don’t know how he’s managing, but there’s a lot of MISSION implementation happening around the country right now. So HOPE has five sites, PIE has six sites, and MISSION has eight sites. My job is to say how are we gonna do this all. How can we keep similar methods across everything that we’re doing?
And so again, we’ve used the roadmap model, process model, and we have a really strong pre-implementation phase. And I will just also say, I don’t know if anyone saw it, but maybe four months ago, Lisa Saldana came out with a paper with some colleagues that showed across a large swath of papers that they reviewed that studies that had a very in-depth pre-implementation period actually were more successful in their implementation efforts later. So a lot of people, you know, they wanna just dive in and I say embrace this period. Even when you have an effective evidence-based practice you wanna implement, you still need to know about a new site, you still need to know what the clinical workflow is, you still need to know what are the anticipated barriers and facilitators implementing something. And so from there, we’re not gonna change what our evidence-based practices are, but what we’re gonna do is we’re gonna think how can our strategies address these and how can we create any adaptations but without changing those core components. So really, you know, let yourself be immersed in this phase.
Yeah, of course.

(audience conversing indistinctly)

(audience member speaking indistinctly)

(audience member speaking indistinctly)

Yeah, I don’t know if the Zoom audience can hear,

but there's some conversation around

how difficult it is to get RO1 funding

to have a substantial pre-implementation phase

even when you already have an evidence-based practice

and whether the VA is different.

I do think the VA is different,

but we have built this into RO1 grants,

and in fact, I will say that what was really interesting

for my colleagues who...

So what I do at Brown

is work with a lot of efficacy researchers

who are building an implementation science

into their grants.

So I have several colleagues who do suicide prevention work,

and they were taking a suicide prevention

an intervention called STEP into an inpatient setting.

And it has a lot of evidence-based,

they're just moving it to a new setting and it's an RO1,

and the program, the POs from NIMH came back and said,

you need to do, as part of this,
a bunch of formative evaluation with a health system leadership before you can do the rest of the aims. They weren’t saying we’re not gonna fund your project, they said you need to build in a pre-aim before your aim one. And so I worked with the team to build a formative evaluation phase because the STEP had never been in an inpatient, it had always been used outpatient, and the program office said, we’re not gonna fund it until you know more about what you’re gonna go into, and so that was very positive. It didn’t come from the reviewers, it came from the program office, so you know, that’s a positive thing. So yes, I will say you kind of have to limit yourself. You could go crazy and spend a lot of time, but like we lot a lot ourselves. And unfortunately we started this in October of 2020 when the VA was still dealing with a lot of challenges with COVID and virtual work and also about a month and a half before the vaccines were implemented. So this was not a good time to do a lot of informative work,
I'll tell you, but anyway, we did it. And then our implementation is a lot of the training of...

You know, because in a hybrid three, the goal is to get the people at the sites to do the implementation.

You are helping to direct that, you’re providing them with support through your strategies, but you should not be implementing that in the hybrid three because that’s not real world.

And so we have, in the HOPE project, social workers, and in the other team, PIE and MISSION-CJ, we have peer support specialists and we need to train them to do this, and so we spend a lot of time on that and implementation.

And then obviously as we go through, we’re also assessing our outcomes but they are a secondary aspect. And then sustainability.

So we have just finished three years of our trial, see I slipped, three years of our study, and we’ve launched year four, and so some of our sites have gone through the implementation and are moving towards sustainment assessment.

So there’s kind of like a...
Well, it's a stepped wedge design, so we're not there with all of them right now. So again, I'm not the statistician on the project, but I just wanted to let you know that we're doing cluster randomized step wedge trials, in parentheses, studies, as I try to transition to this language. But our overall goal is really to estimate the effect of what it's like to transition to a higher intensity implementation strategy package from a baseline lower intensity strategy package. On each of the effectiveness outcomes that we're using, we're gonna use mixed effects regression models, we'll have a fixed effect before the implementation strategy package. I keep saying package but we do know because we're tracking these things really well that not all of our implementation strategies are being used despite all our best efforts. So we're trying to track individual strategies within each of these higher intensity states and lower intensity states. And then also we will, we are trying to do some balancing and you know, we did that prior, you know,
to look at the different site characteristics of our different wedges.
And we have had sites drop out, we’ve had sites that we’ve added in, it has not been textbook perfect by any means.
I want to ask a few questions.
Yeah, but I may not be able to answer.
In terms of your primary outcome of analysis,
we thought bundle slash package.
But as we are doing a lot of tracking of those strategies,
I think that our analysis is gonna be by the individual
so they don’t overlap.
We tried really hard to make sure our bundle of strategies
in the higher intensity do not overlap
with the bundle of strategies in the lower intensity.
So if only a few
of the higher intensity strategies get used,
we’ll know that those are higher intensity,
but they may not be the whole package.
That is definitely a difficult thing
to get people to use all of them. And I will tell you about those strategies in just a second.

So now I’m gonna move into the testing strategy. So as you remember, I said really important to achieve what our goals, we need to randomize some strategies, we need to do a lot of tracking, we need to do a lot of specifying and operationalizing.

And one of the things I really wanna get across is this, nothing about me without me motto that was developed in the late 90s, early 2000s, about patient-centered care, and I would argue that this is absolutely necessary for doing an implementation study. Because as you’re developing your implementation strategies, you are doing this in concert with your sites, with your partners, with the champions, with everyone that you’re gonna be working with.

And I think the reason this is so important is because, successful implementation is going to be because of trust. And Alison Metz wrote a paper
in "Implementation Science Communications" last year.

on sort of thinking of trust in a conceptual way across implementation studies, and she talks about intrapersonal trust and interpersonal trust. But I believe that in any shape or form, this is why the pre-implementation work is so important, you are building trust through those efforts. And so people realize cause you got funding, you’re not just trying to write a publication, that you’re actually trying to change care and improve care and make lives better. And so if people can see that as you’re doing your formative work, then I think that that is the basis for your successful implementation. I like to show this slide about the nine buckets of implementation strategies. Even though it’s the earlier paper on implementation strategies by Byron Powell and colleagues, it’s really hard for people to conceptualize 73 implementation strategies, but when you think about them in nine buckets, I think that’s much more helpful. And so when you look at them,
you can imagine trust being part of all of this. You know, when you’re assessing people for readiness, when you’re trying to do interactive assistance, when you’re doing adaptations, when you’re trying to develop relationships and training people, supporting clinicians, engaging consumers, et cetera, trust is such an important part of that. People wanna know like, why are you interested in doing this? So in addition to our process model of the QUERI implementation roadmap, we also have a model that’s helping us examine the various determinants that we’re going to be needing to consider throughout. And this is saying that there are three main components that we need to consider, intervention, the evidence based practice, the practice setting, the context of what we’re implementing,
and then the wider ecological system, which is very much a thing to think about from a sustainability perspective. But what’s different about their suggestions is that, again, it’s not just a one-time assessment. How does this change over time? So at the pre-implementation phase, it may look like one thing, at the implementation phase, it may have a different feeling about it, and then at the sustainment phase, we might see things. So we need to have a constant process by which we’re examining that. And in fact, Enola Proctor recently published a paper on 10 years of implementation outcomes according to her implementation outcome framework. The critiques that she has of the literature is that people are just doing one-time assessments of implementation analysis, that’s just not enough. So this is just an example from HOPE about how we’re sort of doing this across the three phases of the roadmap and then guided by The Dynamic Sustainability Framework. So in phase one,
they did 52 interviews of various people at the sites,
and HOPE is still in the phase two and phase three stages,
as are all the other projects.
So there’s been 21 interviews so far in implementation phase,
21 interviews so far in sustainment phase.
But really doing interviews with the housing,
supportive housing staff, the prescribers for the Naloxone,
other key staff, pharmacists,
social workers and veteran patients.
And we’re using a rapid directed content analysis approach
with really guided by
The Dynamic Sustainability Framework construct.
So when we decided on this proposal,
we had years of research building up to this
and so we decided that we were going to use facilitation
as our implementation strategy.
But when I say that, it sounds so funny,
because facilitation is like literally like 10 things.
It’s a bundle in itself, so it’s a natural bundle of things.
And so we’re trying to use, you know, engagement,
identifying champions, action planning, staff training,
problem solving, technical support,
which is different from technical assistance, I’ll just say.

So technical support is a much more hands-on process and audit and feedback process.

So lots of things go into facilitation, it’s a naturally existing high intensity bundle. And then we start with the more lower intensity bundle,

which is either education outreach or academic detailing.

They’re very similar. HOPE uses academic detailing, the other projects use education outreach.

But this is more to really have these targeted structured visits, we’re delivering tailored training and we’re doing technical assistance as in contact us if you have a problem as opposed to us contacting you.

So it’s much more lower intensity.

I would love for our results to be really strong in the lower intensity

because that’s gonna be much more sustainable.

But that’s an empirical question so we will...

It really comes from the world of pharmaceuticals, I think,

people would show up and have like a one-on-one and say,

"Dr. Spiegelman, let me tell you

about this medicine that I have that can help patients with diabetes,”
and they’ll have like a one-on-one conversation and really just tell them about it. And so we’ve taken that and made it into, I mean, and we’re not dealing, but other people have made that into more of a one-on-one strategy just to inform. It’s more of an educational activity.

So the good news is there’s lots of tracking supports available for us out there that are getting published. The bad news is they’re a lot of work. So in 2020 our colleagues in Little Rock Arkansas who are really have been the group that have been defining what facilitation is, doing lots of trainings, they have a manual, if you need that let me know, but it’s probably listed in that paper. But in this paper they actually, as an appendix, gave a Excel tracking sheet. This is how you can track facilitation and we use this, we’ve adapted it a little bit because we’re also tracking the stage of implementation in which people are at, but we can see what type of event.

So when you have facilitation,

you have an external person who’s part of the team,
you have an internal facilitator at the site and you’re working one-on-one, but the internal facilitator is the one who’s doing the work. So our peer support specialists, our social workers are the ones doing the work. And so we are tracking all types of communication they have, we’re tracking the type of personnel involved at the site, we’re tracking the facilitation activity codes, which of the various things of facilitation are happening. Really importantly, we’re tracking how many hours and minutes each facilitation activity takes. And so clearly we know what we do on the external side, what our research staff does when they reach out to the peer support specialist or the social worker, what we don’t know is what happens on their side. And so we have these check-in calls with them, it might just be 15 minutes just to say like, what did you do this week? Who did you talk to? And that’s really essential because to ask people to complete this type of tracker would be really difficult to do. We actually also adapted this
so that we could add in some education and academic detailing outreach to this so that we didn’t have to have more than one tracker.

(audience member speaking indistinctly) I'll come to that. (laughs)

(audience member speaking indistinctly) Yeah, no, this is really, thank you for...

'Cause I was gonna say this and what has been so essential about this is because we know what type of personnel it is,

we know how much time they spend, we can actually estimate their salary and we know how much every facilitation activity took.

Yes, we’re doing that. It was actually a requirement of the project to do that.

So we’ve created our own sort of Excel dashboard, it’s not really a dashboard because it’s not updated automatically, but we’re sort of tracking every project.

This is the PIE project with its six sites to see whether people are in pre-implementation and implementation.

So we’re sort of using these trackers to find out where those are.

And then here is a snapshot of how we can sort of examine those different facilitation activities.
The pie chart on the left shows us the different support staff who are involved in the facilitation activities. So we are working with either the social worker or the peer support specialist, but then they’re going on and working with other people too.

And then we see on the right side, all the different activities that’s happening in facilitation, and you can see that some are more popular than others, and so this is why we know that not all are getting used.

And then the bottom left shows us how much time in minutes is being spent. And so obviously site one and four are doing great, like they’re really spending a lot of time on this and the other sites are spending less time, that doesn’t necessarily mean that they’re worse or better, it’s just there’s so many different dynamics that go into any organization in any site. And so, you know, this’ll be something we’ll have to examine when we do our analysis.

But it could be really important to know, does more time lead to better outcomes? Who knows?

So how are we gonna assess these outcomes? So again, remember guided by a theory model framework.
multiple time points as outcomes change over time and involving pragmatic measures is really key. So on the left column is all the pragmatic measures that we said and/or how we are going to conceptualize some of these things. So at the top we have an organizational readiness for implementing change scale, we have the three quantitative assessments of acceptability, appropriateness and feasibility, which align with the Proctor model. We are looking at four of the re-aim outcomes in terms of implementation outcomes, reach, adoption, fidelity to the implementation, and sustainability. And so each of these is being assessed in different ways, slightly, the measures stay the same across all three studies, but the re-aim ones are a little bit different depending on the project. So these are the two scales that we’re using, scale packages, organizational readiness for implementing change, and then the implementation outcome measures.
Yes, oh.

(audience member speaking indistinctly) They’re really kind of basic.

(audience member speaking indistinctly) Oh, interesting. Yeah, I haven’t heard that section.

I did reach out to him at one point, because I work with a lot of clinical trials, they were like, is there a cutoff point for these scales, and Brian was like, "Oh no, we’re nowhere near having that kind of data.”

But I agree that they’re really basic and we do use them at three time points, luckily they are not exactly next to each other, like they’re like a six months to 12 months apart.

Well, each of those has four questions. Yeah, this has 12.

(audience member speaking indistinctly) We’ve also, I think, only given the feasibility to some people, I don’t think the feasibility has been relevant for everybody.

Oh, there’s something in the chat. ORCHA’s big, this is 12 item.

Yeah, there’s some statement that they’re having, people are having trouble hearing the questions.
So the questions are about just the relevance and the usefulness of these implementation outcome measures because people find them very repetitive and not really informative, and I think there’s more work to be done in this space for sure.

(audience member speaking indistinctly)

Oh, yeah, that’s great to think about.

You have an international audience.

Oh, wonderful. I’m glad this time works. Thank you.

So in our dashboard we are collecting the data, so this we can do it automatically.

So we send out a red cap survey to people, they complete it, and it transitions into our Excel spreadsheet automatically.

So this is actually some very good part of having these three projects and being able to collect the data that way.

So we have sort of some assessments, this is by site of where people are with their mean scores, and then we can sort of compare the scores across the different projects as well.

The challenge here is that everybody’s not doing the same measurement at the same time, so we try to stay on top of this and sort of remind people
that it’s a little bit more challenging than I hoped it would be. Just looking at reach for HOPE, you know, maybe the bottom is the best to look at. We just had a technical expert panel meeting on November 7th, so a lot of these more recent information on reach and adoption, implementation, just came from that November 7th meeting. So you can see that the percent versus six months post implementation has definitely gone up in the opioid education and naloxone distribution. So this all very positive, no statistics here, we’re just tracking it at the moment. We’re also looking at how many people were offered it, how many case managers trained, and one site has just started implementation in this case. Go back a second? Yeah. There’s a very interesting issue. that arises in looking this data, which is, you know, we always think about privacy of individual, but actually in some of the work I’ve done now, we found that there are privacy issues all concerns by facilities
where like it could be embarrassing to say Palo Alto

that they were only at 19%

and they could even get in trouble or lose their funding.

And so I’m wondering-

I shoulda probably. (laughs)

Yeah, we probably should’ve DM’d.

Maybe I’ll go on, so no one’s looking at that anymore.

Yeah, well, I mean I probably should have done it here too.

So yeah, I mean I think it’s like, you know...

I think everyone knows that people are working really hard.

We’ve done a lot of qualitative work
to show that the reasons why people don’t offer it,

like veterans get offended that you’re offering it to them,

like, is one, you know, like other social workers said

that it was not within their scope of work,

you know, like scope of practice.

So we have a lot of barriers that we’ve identified

that we’re trying to address,

and obviously some of those things

we need to raise to a higher level

to say like we go to the National Social Work Agency

and say, ”How can you help us?”

Because we want social workers to be able to do this,
but they don’t think it’s in their scope of practice.

So yeah, so those are the types things that we are working on.

Then we look at how many veterans have been released from jail in the PIE Project,

the Post-Incarceration Engagement,

and we can see how many we actually served in our project.

You know, there’s six sites on the bottom,

so this is more just to give you an idea,

don’t have to look at the details,

but just to how we’re trying to track things.

And then we also look at

the different total encounters post release.

So it’s just, you know, some projects are just starting,

like we know, so we don’t have very much data in them there.

And then in MISSION,

we are tracking who is trained at each of the sites.

And this is actually a really difficult one

because we’re working with a community organization,

which is the veteran treatment court,

and so we’re now going completely outside of the VA.

to do this, so it’s really challenging.

Who’s trained, who’s implementing

of those who have been trained,

how many veterans have been served,
and how many mission encounters have happened,
and mission encounters are pretty complex.
So the fact that there are over a thousand already
after year three is really great news.
Can you remind us what a mission encounter is?
Yeah, mission encounter is,
I'll just quickly scroll back 'cause I won't be able to remember it all.
it's several different evidence-based practices.
There's a critical time intervention, pro-social change,
dual recovery therapy, peer support sessions.
So lots of things happening,
and this is to keep veterans out of the jail basically.
Sorry, close your eyes as I scroll back down.
It's all so interesting,
but we have 10 minutes left.
Okay, yeah,
so here are some of our effectiveness outcomes,
which we're not assessing yet,
but we're gonna look at linkage to care, overdose rates,
criminal recidivism, et cetera.
So from planning for sustainability,
I'll just go and just give you a high level overview
of what we're trying to do to do this.
We just started year four,
we've decided this is the right time
to really start engaging our partners.
We talked about this at the November 7th meeting.
And so just as a paper,
this is a really useful paper to look at
in terms of thinking about how do you design
post dissemination and sustainability.
I really have learned a lot from this group.
And we’re collecting a lot of qualitative data,
as I said,
we’re actually putting that into our dashboard
to sort of see what qualitative data emerges
from each of the three phases of pre-implementation,
implementation and sustainment,
all guided by The Dynamic Sustainability Framework.
This was a poster presented last year at the DNI conference.
And we’re using this tool,
the Program Sustainability Assessment Tool,
which is freely available online,
developed by Doug Luke at Wash U.
We do not have people fill out this 40 item survey,
and this is like for our program partners.
What we do instead is when we have our conversations
like we just had with the technical expert panel meeting,
we’ll choose a few of these concepts to talk about.
So what are we gonna need
in terms of organizational capacity to keep this running?

What is the funding going to be like?

How do we adapt this to continue to make it useful?

What information do you still need?

So we are using this more in a conceptual way,

and I do this with a lot of my NIH funded projects too.

This is a very short and sweet pragmatic measure

called PRESS to get at sustainment use.

So these three questions, Donna, are being asked to people.

So we are trying to see,

when we’re done with the implementation effort,

are people using PIE, are people using HOPE,

are people using MISSION now that we’re no longer actively implementing?

And then just as a cost piece that you brought up,

we are using the coins,

which is built on the sticks of coins

as for cost of implementing new strategies.

The stick is the stages of implementation completion,

both have been developed by Lisa Saldana.

So we are actually taking these eight steps

of the stick through our tracker,
we added them to our facilitation tracker, and we’re deciding which of our activities are in pre-implementation, implementation and sustainment, and then we already have that data on how many hours and minutes, the personnel involved, and we are capturing those costs. I’ll just say that we use the same exact approach in a Cory funded paper. This just came for Cory funded project, this paper just came out. I only leave it here just to show like a completed cost of implementation. You know, I’m not an economist, I led this, it took me out of my comfort zone, but I’ve decided that if I can do it, anyone can do it. And so really just wanna wrap up and say this is a gigantic village project, I think team science is everything. Everyone on here has something to contribute and it’s absolutely not me, it’s all of these people that we have made this possible, and we’ll have our final results in two years. So we’ll stay tuned to see how effective everything has been. So questions. (audience member speaking indistinctly) The question here is,
Can we hear about power consideration for effectiveness versus implementation outcomes with hybrid studies one through three.

Specifically, how much should we consider power for implementation outcomes in hybrid two and three studies?

We did actually, not me, we did do power analysis on our hybrid threes.

We estimated how many veterans we would need to include across all sites, so not just one site because we're aggregating data, and I think we have met that bar, but I would be very happy to put you more in touch with our statistician if you...

I'm gonna capture this person's name and I'll put them in touch with our statistician.

But yes, it's necessary to power because we are going to be using these regression analysis to determine whether which types of strategies actually led to increased uptake, but also the uptake is one implementation outcome, but we wanna look at the other implementation outcomes too.

Yeah, I think I actually have it in my proposal.
in my laptop somewhere that I could look up, but I think we had to do a milestone report of how many providers or people we thought we would train, peer support specialists, social workers, so we have that for every project, how many veterans that they would then serve.

So we have that and we kind of have it by time, so after year one, year two, year three, of course when we wrote this proposal, COVID had not happened. We just submitted this in December of 2019, so we absolutely got behind on that. So we didn’t follow the milestones despite best efforts as best as we can. Yes, so the provider piece is important, but then we also are learning all about their challenges with talking to veterans.

Like the fact that we could get a provider really bought into this, trained, willing to implement it, but if their initial conversations with veterans are not positive, then that’s a challenge too. So we’re trying to interview veterans to learn more too.

(audience member speaking indistinctly) Oh, I’ll repeat.
The question is about how do you build trust by showing up when you have real world challenges of, you know, you aren’t funded on a project at that point. In this project were funded to do this, but we also had... Often, by the time you get to a hybrid three, we’ve already built relationships. These sites are new to us, but our program partners are not new, and so we had their backing to help us. But for people who are just starting out doing this, I often have had calls from, you know, a full professor saying, "I’ve never done this before. How do I do it?" And I literally say to them, "Please go have coffee with someone." Like, they’ll say, "The only thing I’ve ever done is I’ve gone to a clinic and I’ve hung up flyers for my project." That’s the extent of their engagement, and I get it, like all they needed is to recruit people from that site. That site had to say,
Sure, you can recruit people, but we’re not gonna help you. This is something you do on your own.

But I say, you know, yes, it takes time and effort, but try to meet with a clinic head, somebody, and just do not tell them what you wanna do. Go meet with them and say, "I would love to learn more about what matters to you. What are you trying to work on? What are your priorities? What keeps you up at night? What would you love to address?"

They’ll tell you seven things right off the bat. One of those things might already align with what you wanna do.

And at that point though, they feel like you’re listening, and you can say, well, I have this idea, and you can start that conversation.

If, for example, they don’t say anything related to what you wanna do, then step back and go, well, clearly there’s a mismatch.

You know, and they’re the ones who are living, breathing this day to day, and maybe your idea needs to change a little bit.

But I love the idea of starting with asking questions.
and showing up as opposed to coming in with a fully developed specific aims page

and saying, I really wanna do this, yeah.

Is that what you meant? Yeah.

And someone says,

it’ll be interesting to have an in-depth session on the methodologies you...

Sorry, I can’t read this thing, there’s a little thing.

Oh, that you’ll apply for analysis of the stepped wedge design.

Yes, luckily that isn’t me,

but so in our implementation core,

we have a qualitative core and we have a quantitative core,

and I meet with them.

I’m a stronger qualitative person,

that doesn’t mean I haven’t done quantitative analyses,

but our quantitative statistician is Dr. Tom Berry,

he’s at BU,

also our head economist Dr. Laura Saban is at BU,

and so we meet with them regularly
to talk through the different issues.

But Tom has the homeless opioid use incarceration perspective

as well as incredible statistical knowledge.

So it’s a great partnership.
And so maybe we have to end,

but I can say that Rani has provided her email address as you can see here so I’m sure you’ll welcome further comments and questions.

Yes, absolutely, I’d be very happy to.

Thank you so much.

Thank you.

Thanks, everyone.

I really appreciate it, great to see you all.