Unidentified Male: Okay. Our fourth research speaker is Elizabeth Gifford, and she’s going to be talking about tobacco treatment in residential addiction programs.

Elizabeth: Good morning, everyone. I’m very glad to be with you. And, it’s working. All right. So, I’m going to be talking with you today about a service-directed project, a query project that is focused on implementing tobacco treatment in substance use disorder residential programs. I want to, I want to pause first to acknowledge my extraordinary research team, which is composed, really, of research collaborators and also operational partners.

Why do we care about tobacco implementation in substance use disorder patients in particular? The gains that we’ve seen, of course, in tobacco control have not been realized among our substance use disorder and mental health disorder veterans in particular. And, we know that the morbidity and mortality is extraordinarily high. There are synergistic effects between alcohol and tobacco, for example, that make it a particular concern for that population.

So, when we began this work, this is actually some preparatory work we did. Our operations partners were interested in what was happening in terms of tobacco implementation for our veterans with substance use disorders. They were also interested in what was happening in our residential treatment programs more broadly. There was sort of a black box sense about those programs. They often didn’t use CPT codes. It was hard to understand what was happening there.

So, we did a study, developed some methods to identify through the administrative data what was happening. And, we found that 80% of our SARRP [PH] veterans, and that stands for substance abuse residential rehabilitation treatment programs, we actually tobacco users. This wasn’t confirmed biochemically. And, even more concerningly, they, only about a third of these likely tobacco users were being diagnosed and 11% were being diagnosed and treated. So, significant gaps in care.

We did a follow-on study to explore barriers and facilitators interviewing staff across about 15 SARRPs to understand why they weren’t doing more diagnosis and treatment of tobacco dependence. One of the most important reasons was that they felt that their patients that weren’t interested in it, and that in fact, it wasn’t really important relative to other treatment goals related to other primary, what they saw as primary substance use disorders.

Another, I just want to point out one of the most disturbing barriers I’ve ever seen, which was that smoking together builds rapport. There was sort of a culture in some these centers related to socializing, which they saw as a positive goal, and that some staff members in some of the centers believed that they could facilitate effective socialization and rapport-building through smoking together.

So, given that we were looking implementing in complex programs, and that we were also looking at implementing a multi-component, evidence-based approach, which is tobacco cessation, which incorporates screening and brief intervention, pharmacotherapy for all patients, particularly patients with mental health and substance use disorders, who may require even more treatment, more intensive treatment than other. We thought that facilitation would be a promising intervention.

And, we used the facilitation manual and program developed by Joanne [PH] Kershner [PH], and she trained our facilitators and gave us some early consultation. And, the benefits of facilitation are that they involve a partnership, a real partnership with the site, where you bring in external facilitators who partner with the internal team that actually does the implementation. They provide expertise and support, they create these meaningful, useful relationships. And, then they can apply a broad number of quality improvement and implementation interventions, really as needed to meet the specific needs of the site.

So, our program involved three intervention sites, and each of which we matched with two control sites. The intervention itself involved two site visits. So, there was an engagement site visit and then there was a follow-on kind of activation site visit that really got everybody moving. So, the engagement phase involved three months of preparation, and then the active phase involved a 10-month intervention. And, then we had a six-month follow-up.

And, we used essentially a multiple baseline design, interrupted time series with staggered onset, as well as the control groups to control for secular trends, differences in, a difference in differences analysis and affirmative evaluation, which I’m, I’m actually not going to have time to discuss here.

So, this is what it looked like in terms of our process, our facilitation process. We had two external facilitators, one with previous facilitation experience, one who was an SME. The champion team at the site, we did do staff surveys and interviews with rapid, another rapid analysis technique to provide feedback about kind of what the staff at the site were thinking about what was happening there. Did the two site visits, and we did ongoing coaching monthly for 13 months. But, we also allowed them to have consults as needed. So, if they wanted more meetings, they could have more meetings with their facilitators. Some of them did and some of them didn’t.

So, this is, really represents what we chose to focus on as our facilitation intervention. This is a very complex thing to do. When you’re doing a facilitation intervention with complex components of both the site context and the evidence-based practices, there’s a lot of dynamic moving around. I found it helpful as a behavior analyst to have some principles to consider as we move forward. And, that, the title is really about those principles, to remember that what we were doing was we were working to create conditions that would initiate and reinforce and sustain change. That was our job as a facilitation team.

And, we focused on things like audit and feedback and resources, as well as that interaction between the champion team and the facilitators. Many of the things that you see in those boxes are actually tools that we developed in collaboration with operations partners. So, social marketing and messaging campaigns, specifically targeting staff in this program, training, toolkits, a dashboard that we developed and our rapid mind-mapping, which was our quick analytic strategy for our qualitative interviews.

Why is it dancing? I’m sorry. It must be hitting something. Apologies to the folks at home.

All right. So, this picture is a site, just a quick picture. That’s happening again. This is a quick picture of what—we used a graphic that, to sort of demonstrate to the sites what the results look like. Our toolkit, our dashboard and I just want to mention about the dashboard. This is actually an innovation that I’m proud of in particular. This was something that we really contributed to operational partners.

One of our sub aims was to try to understand not only what was happening in terms of pharmacotherapy, which we knew we could do, but also what we could understand in terms of counseling. So, we had to develop some methods looking at new titles. We built on some methodology for health factors developed by HERC. And, this dashboard that we developed actually became the foundation for other dashboards looking at alcohol and opioid abuse prescribing practices.

So, our hypotheses really focused on the change from the pre-intervention period to the active intervention period and similarly, the change in the pre-intervention period to the post-intervention period. And, we did use a difference in differences framework, which really looks at the changes in those trajectories, comparing the intervention group and the control group, or the intervention sites and the control sites.

So, one of the things that’s important, of course, with our difference in differences approach is that you really need to be, pay careful attention to your control programs and your matched controls. So, we spent a lot of time focusing on that. We really reviewed all of the administrative data. We actually confirmed that with one of our partners, the Deputy Director of MHRTPs, Jennifer Burden [PH], because she had access potentially to information that we didn’t have access to. And, most importantly, we looked at the pre-intervention trends.

So, this is just an example. It’s a little complicated, but the colors represent one treatment, or one intervention site and two control sites with the dark bars representing the intervention sites. And, you can see we did, I think a good job of controlling for, or matching rather our intervention sites and our control sites. We looked at patient level characteristics as well. At the time, actually, that this started, we weren’t really able to look at race. Race data was still, hadn’t been, was not valid, frankly, in the administrative data. But, we found here that there were some differences in race with more white and fewer black patients at our intervention sites. So, we controlled for that in our regression models and adjusted, and it made very little difference, actually.

So, our results, we did find a significant, I think meaningful increase in our pre to active implementation period change for tobacco dependence pharmacotherapy in our intervention programs in comparison to our control programs. And, we also saw significant increase in our pre-to-post intervention change. And, this is for all pharmacotherapy. The lines look like this. That, the first line is the engagement site visit. The first thick red line is the ending of the engagement period. And, the second thick red line is the ending of the active intervention period.

So, much of these results were driven by increases in nicotine replacement therapy at the site. So, we saw a 14% increase from pre to active implementation periods, and a 17% increase in terms of the difference between our pre and post-intervention periods.

And, when you look here, you see that this was really a reflection of the sustainment of the changes that occurred during the post period for the intervention sites, while there was actually a decrease in NRT replacement therapy prescribing in our control sites, which you can see reflected in the numbers here.

So, we made a number of changes. We supported the sites in facilitating a number of changes that occurred during the intervention phase. And, I just want to mention two sort of principles that we tried to work with the whole time that we were doing this. One was when you think of it in terms of reinforcing change, you want to, of course, give people short-term gains, right. This is hard work to do, to implement. And, you’re getting staff to really go against the grain. So, we tried to help them get quick, easy wins. For example, you know, we set up some training during our second site visit. They, of course, did all of the logistics. We put it on the action plan in the green column. They loved having stuff in the green column, right.

And, there were other simple changes we supported them in making. They had, their tobacco class was actually the exact same time as their most popular treatment group, which was a DBT treatment group. So, we suggested they reschedule that. They did, and lo and behold, participation increased in that group. But, then there were other—so, along with this issue of making short-term gains, there’s another issue, which is how do you capitalize on this engagement with this team to make changes in the context that will support long-term gains, that will reinforce them over the long-term for sustainability.

So, we were also thinking about what can we do to make a difference here that will actually change how providers interact every day, how staff interact every day and simplify that process of behavior change for them, cue that process. So, we did a lot of work with them supporting things like getting a template that had evidence-based interventions and tobacco goals into the mental health suite, so that it was easier for staff to put treatment plan goals related to smoking into the treatment plans. And, we included, they included tobacco goals on the veterans’ forms that they filled out before their extended team meetings, so that they also had an opportunity to, you know, sort of keep conscious those goals about tobacco and bring them into those discussions.

We did other more technical changes, too. We supported them in implementing, you know, evidence-based, valid assessments vague or strongs and that required in some places actually, you know, working with CAKs [PH] to get things changed, their local CAKs for whether it was the RN who did those intakes or the PA. So, encourage people to really consider both of those. How do we support sites in the short-term and reinforce this pattern of behavior? And, how do we facilitate them making changes in their environment that will continue to sustain them?

So, in conclusion, you know, I think, I want to, I guess, emphasize a couple of things that David and Amy mentioned yesterday. One is just like healthcare is a dynamic human process, facilitation is a very dynamic human process. And, some of the things that they talk about in terms, in the facilitation manual itself, actually, is that it’s really a process of helping and not telling. And, we all know the limitations of telling. It is endemic to our system. It, it, you know, the problems with telling created the whole field of implementation science. And, I think we need to be careful and remember that we, that helping is going to have a more powerful impact when that’s warranted. And, the process of facilitation involves really enabling staff to do what they can in their own site to facilitate this. But, we also help them by engaging actively with them.

And, in line with this, we used a variety of techniques and a variety of tools that really emerged out of our work with the variety of different operations partners. So, I think we and they both benefitted from that, those processes.

So, in terms of limitations, there are, of course, some limitations to, potential limitations to generalize ability that are endemic to the difference in differences assumptions. And, our next steps, we’re going to be looking at our counseling data, which we’re very excited to do. But, also really want to understand in more detail were there particular sites driving these kinds of effects, what was happening at the sites in terms of affirmative evaluation, where do we do a better job of dealing with issues versus not as effective of a job, and other sorts of interesting questions.

So, I want to just thank everybody for listening to me on this early, final morning of the conference. And, that’s it.

[Applause]

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