

2023 KT Online Conference: Knowledge Brokering

Presenters:

Dr. Dina Gaid and Dr. Kate Perepezko

Sponsored by AIR's Center on Knowledge Translation
Disability and Rehabilitation Research (KTDRR)

<https://ktdrr.org/conference2023/index.html>

Transcript for audio/video file on YouTube:

<https://youtu.be/u1nDCoNc93A>

KATHLEEN MURPHY: What we're going to do next is have a panel on knowledge brokering. And we are going to be joined first by Dr. Dina Gaid. She's a postdoctoral fellow at the University of Saskatchewan. And she will be talking about introduction to knowledge brokering in Canadian rehabilitation settings, so perfect for our conference funded by the National Institute of Disability Independent Living and Rehabilitation Research. Welcome, Dr. Gaid.

DINA GAID: Thank you so much. So first of all, I would like to thank you all for giving me the opportunity to present at this conference. I'm happy to be with you today. So I'll be talking about knowledge broker as an active knowledge translation strategy in Canadian rehabilitation settings.

And before I start, I would like to let you know that I'll be sharing some question polls to answer during the presentation just as an interactive type of presentation. So as a learning outcome, today I'll introduce the concept of knowledge brokering to you through knowledge translation lens. So I'll present it as a storytelling format.

So starting with research practice gap, knowledge translation interventions, and then knowledge brokers in term of definition, profile, roles, challenges, and training. So it has been estimated that it can take up to 17 years for only 14% of research findings to be adopted into clinical practice. And here, as you can see the numbers, that up to 45% of patients don't receive care based on research evidence.

And up to 50% healthcare intervention are not based on research evidence. And also, up to 25% of intervention that may be not needed for patient and sometimes cause potential harm. And specifically for rehabilitations, only 44% of physiotherapists use research evidence to inform their practice. So it seem that the research practice gap can negatively impact the health outcomes for individuals and communities.

Here to compare between the effectiveness of different knowledge translation intervention I just will ask you one question. So Elizabeth, can you please post the first question poll, which is in your opinion, what is the most effective knowledge translation intervention? And you have options here, like distributing educational materials, educational meetings, change agents, audit, and feedback, and outreach visits.

So please just in your opinion, what the most effective type of knowledge translation intervention? And we have kind of three seconds to answer.

So maybe I can't see it in my end. But are people responding or not? But can you please, Elizabeth, stop the polling. Great. So it seems to be kind of having various opinions. But the most one is outreach visits. Great. So we're going to know now the right answer. Thank you, Elizabeth. Please close the poll. Thank you so much.

So here, KT intervention has been classified into passive and active intervention. So passive intervention is educational meetings, educational materials as the first option. And those ones are able to improve professional practice behavior up to 5% only. While active intervention, like audit and feedback, as you choose, educational outreach visits, and interactive meetings can improve it up to 10%.

While the most effective one-- and this is probably the right answer-- is using intermediary agents or change agents. And those one including knowledge brokers and opinion leaders can improve practitioner practice behavior up to 12%. So it seemed that having active intervention or using active intervention is more effective, especially when there is an agent or a human force to drive the knowledge translation process.

So here, we can discuss now knowledge broker as a type of those intermediary agents. So knowledge broker is defined as one of the human forces, which bring people together to build relationships and uncover needs, share ideas and evidence aiming to improve job productivity. So knowledge brokers have been utilized as a promising solution that can reduce research practice gap by linking research and clinical worlds together.

So why are we interested in knowledge brokers? Why knowledge brokers? First, knowledge brokers have been widely used in various fields and in different contexts. Also, knowledge brokers are known to be effective in changing practitioners' practice behavior in many healthcare sectors, including rehabilitation.

And here, again, I ask you my second question. In your opinion, what are the roles a knowledge broker can play? What exactly they can do? So please, Elizabeth, post the second poll. Great. So as you see, they can seek and share information. They can link researchers and clinicians, or provide education, or promote inter-professional exchange, or evaluate the KT context process and outcome.

So which of those roles do you think that knowledge broker can do or can play? So giving kind of 10, 15 seconds for everyone to answer.

OK, I think, Elizabeth, you can close the poll. Thank you. Great. It's again kind of normal distribution between all options. But I think the most common ones are promote inter-professional exchange and share information. So you're all right for this question. Thank you, Elizabeth. Can you close the poll please? Thank you so much.

So they can actually play various roles, starting with information manager role, which is seeking and sharing relevant information, delivering key information to a specific audience, and also improving access

to evidence in their clinical sites. Second, they can play as linking agents, like build relationships among people, link researchers, and clinicians, and other stakeholders, creating opportunity for knowledge exchange.

They can also play as a capacity builder, like developing skills, establishing a common language among different stakeholders, providing education, and mentoring in their clinical sites. They can also work as a facilitator, like promoting inter-professional knowledge exchange, support knowledge user to integrate research findings in the local context.

And lastly, they can also work as evaluators. So they can evaluate the KT process and outcomes and also, evaluate their own performance. So they can do all activities expected to implement evidence in the clinical sites. And now, a number of knowledge gaps were identified in the literature related to knowledge brokering in Canadian rehabilitation context.

And this was the focus of my PhD thesis. So the goal of my research projects were to explore that profile of knowledge brokers in terms of their characteristics, work activities, and training, also identify barriers in facilitator to use knowledge broker in rehabilitation settings, and also to describe the existing training opportunities for knowledge brokers in Canada.

And this is a kind of overview of my research projects that I conducted to address those gaps. And to fill out those gaps, we conducted four research projects. The first one was a realist review to describe the common patterns of knowledge brokers in term of context mechanisms and outcomes. And we follow comprehensive steps, like clarify research question, search for evidence, appraising study, extract data, and synthesize evidence.

After searching five electronic database, nine studies were included. Also the second one was objectives. The objectives of the survey was to describe the profile of knowledge brokers working in rehabilitation in term of sociodemographic and professional characteristics, work activities and training. For knowledge broker it was a cross-sectional online survey for knowledge brokers.

And around 198 eligible participants were included in the data analysis for the survey. The third project was a qualitative study across a semi-structured interview to identify the factors likely to influence the use of knowledge broker within rehabilitation settings in Canada. And around 23 knowledge brokers participated or have participated in the interview. And interview guide consists of 20 questions based on CFIR framework.

And the last project was environmental, like Canada-wide environmental scan to identify and describe current educational training opportunity for knowledge brokers in Canada and also to determine whether those opportunities meet the competencies related to the five roles of knowledge brokers or not. And around 51 knowledge broker training programs were included in the data analysis.

So in terms of findings for sociodemographic information, the findings indicate that the majority of knowledge brokers, around 71%, were located in Central Canada, Ontario, and Quebec, and 27% in western Canada, and only few participants, 2%, in eastern Canada. In term of professional characteristics

in term of skills, knowledge brokers should have interpersonal skills, like trustworthy, credible, creative, good listener, flexible, and enthusiastic, should have communication skills, like strong oral and written communication, and be an active listener.

Research skills, they should have research skills, being aware of the best source of evidence, and able to gather and critically appraise the research evidence, and also mediation skills, able to build effective relationships, encourage collaboration, and identify common goals. So all of those types of skills are needed for a knowledge broker to be able to play their roles.

In terms of professionals, again, I ask a question in that in your opinion, what the best profession of someone to be a knowledge broker? So please, Elizabeth, post the third question. So you have options, like clinician, researchers, or manager. Which profession of these are probably the best for someone to be a knowledge broker?

We can stop the poll here. Thank you, Elizabeth. And the results? Great. So you chose researcher and then clinician. It's kind of midway of the right answer. Thank you, Elizabeth. You can close the poll right now. Thank you.

So as for the findings from our survey showed that knowledge broker are mainly or most of them are clinicians. And some are researchers, managers, and others, like research coordinators, graduate students, and those type of professions. So they're mainly clinician.

And the one who identified themselves as clinicians, when we ask them about their clinical experience, most of them indicate that they kind of expert. They have more than 20 years clinical experience. So the right answer is knowledge brokers are mainly experienced clinicians, as we can see one bare facilitator is being insider, being someone within the team.

And this is really facilitated the role to promote the use of evidence as they know exactly their local context needs and their peers's needs. So mainly or commonly they are clinicians. And they can be researchers. But they need to be insider in their clinical contexts.

Then in term of titles, knowledge brokers really use many titles that can be used interchangeably. So some of them keep their professional titles, like physiotherapists, occupational therapists. Some of them have some clinical titles as well, like clinician champion, clinical educator, clinical practice leads. And some have some knowledge translation title, like knowledge mobilization specialist or research coordinator.

So all of those type of titles really refer for someone that can play the five roles of knowledge brokers or even one, or two, or three roles. In work activities, after calculating the weighted average for each role, the most frequent role for knowledge brokers were linking agent followed by capacity builder and information manager. While at task level, it seems that knowledge brokers tend to perform self-directed task, which is search for evidence, and avoid time consuming task, like develop knowledge broker and organize conferences.

In term of their enablers, or facilitator, or the factor that really can facilitate the role of someone to work or to perform knowledge brokering activities, they need to have these type of skill sets, like communication, and mediation, and research skills, and interpersonal skills. They need to have these personal attributes, like motivation, flexibility, and confidence. They need, as we said, to be insider in the clinical sites.

They need to have a constant networking with their stakeholders and also to know their needs. They need to have access to resources and access to information to be able to access the evidence they need for their local sites.

In term of barriers, there's a lot of barriers. For example, lack of time, as we said they are mainly clinicians. So they already have their clinical caseload. So doing knowledge broker beside their clinical work there's still kind of lack of time to do brokering activity, lack of financial support, lack of incentives.

They need training. They need specialized training to do brokering activities. The lack of awareness of knowledge broker of the existing training opportunity, lack of evaluation of knowledge brokering performance. We can say that there is a evaluation framework for knowledge brokering roles.

And also, they need a type of organizational support and community support, like a community of practice for more access to information and resources necessary for their roles. For training, the question is, I have to get a certificate in knowledge translation to be able to work or perform knowledge brokering activities. Can you please-- yes, thank you, Elizabeth.

So it's a true or false. I have to get a certificate to be able to do brokering activities or-- I think five seconds is OK for this poll. Thank you, Elizabeth. You can close the poll right now. So the answer is false. I can't say probable for everyone. Yes. Thank you, Elizabeth. You can close it.

So yes, from the survey findings, we can say that most of them don't receive training. So around 62 of them, they don't receive any formal training to perform brokering activities. While we can say in educational background, you will find that many of them have graduate degrees, like higher credential activities to be able to have this research experience.

So we can say that they compensate the lack of training with higher educational credential. So the right answer that few of them receive formal training. But most of them have higher educational credential to compensate this lack of training.

Again, another question for training, how I can start working as a knowledge broker? Please, Elizabeth, post the question. Yes. So do you think we should apply for this position, talk to my manager, obtain a certificate, or involve myself in research activities? Which is the right answer in your opinion?

Can you share the results please? Involve myself in research activities? Yes, it's a kind of right answer. But again, I clarify it more here. Thank you, Elizabeth. You can close it. So here, you can see when we ask most of knowledge broker how you start your brokering activities, we find that yes, it's a job post. There is a post. And they apply.

But also, many of them, around 45%, they volunteer to have this role. So they talk to their manager, involve themselves in research activities. And they were the first one who raised their hands to be involved in any type of brokering activities, or implementation activities, or knowledge translation initiative. So this is type of yes, they volunteer to do this role. And this indicates what extent they are motivated individuals.

They are one really have this type of interpersonal skills and initiative to be involved in the process. So talk to your manager and make yourself available and involved. And this is the best way to involve in a brokering activities. Again, in the training or for the training opportunities, the available training opportunities is available in three Canadian provinces, in Ontario, Quebec, and British Columbia.

And we found that in British Columbia many training was responsible by regional groups, like Fraser Health Authority and Vancouver Coastal Health. While in Ontario and Quebec, most of the training were offered mainly in universities with high tuition fees. And again, the mapping process of the available training opportunities in Canada showed the primary focus of the training was in developing brokering activities or brokering skills to fulfill competency role.

And the second focus was in research skills to perform evaluator role. On other hand, the training developers paid less attention in other types of skills and competencies. So less attention for communication skills and facilitator role, mediation skills and linking agent role. So those type of skills and role really not covered well in the available training opportunities.

So we can conclude that a comprehensive and accessible training opportunity to cover all the knowledge broker roles and competencies is still needed. So now we answer the main four gaps. So in the demographic information, we can say that knowledge brokers are skillful expert clinicians. They mainly do linking agent role and do time-saving tasks.

The main factor that influence their performance is time, resources, support, and training. And the training, a comprehensive training, is still needed or need to be developed for knowledge brokers. For future research and for what we still need to know, we still need to develop a valid tools that can measure the knowledge broker attributes or competencies.

We still need for a comprehensive training, as we said, for knowledge brokers. And we still need to measure the evaluation for knowledge broker performance, like have a framework and a tool for knowledge broker performance, and need to establish a community of practice, national community of practice, for knowledge brokers as support for them, as an organizational support.

And we still need evaluation for patient health-related outcome, professional outcomes, and economic outcomes for knowledge brokers. And thank you so much for your participation. And this is my email for any questions later on. And happy now to answer your questions. Thank you so much.

KATHLEEN MURPHY: We're going to be joined now by Dr. Kate Perepezko, who is from another NIDILRR funded project. And she will be discussing a program, Making Older Adults More Capable,

Lessons Learned, Implementing an Aging-In-Place Program. She's a postdoc at the National Rehabilitation Research and Training Center at the University of Pittsburgh.

KATE PEREPEZKO: Great. Thank you so much for that introduction. And thanks, everyone, for sticking through till the end of the session today. My name is Kate Perepezko. And I'm a White woman with brown shoulder-length hair and glasses. And I'm wearing a gray sweater.

I'm currently a postdoctoral associate at the National Rehabilitation Research and Training Center on Family Support at the University of Pittsburgh. And today I'll be sharing some information about the implementation of an aging-in-place intervention.

So before I get started with the main content for this presentation, I do want to acknowledge and thank NIDILRR for funding this project. I also want to thank the Johns Hopkins School of Nursing, where CAPABLE was initially developed and tested. And I want to thank our community partners, interventionists, and project team members who have been instrumental in the delivery of this project.

So the program I'm describing today is called CAPABLE, or the Community Aging in Place Advancing Better Living for Elders program. CAPABLE aims to help older adults safely and independently age in their homes. This intervention is person-centered, which means it focuses on the older adults by helping them complete assessments, set goals, solve identified problems, and obtain minor home modifications and adaptive equipment to help them achieve their goals.

CAPABLE is delivered by an interprofessional team that consists of an occupational therapist, a registered nurse, and a local handy worker. And CAPABLE was initially developed for participants who are aged 60 or older, are cognitively intact, and individuals who report at least some difficulty in performing an activity of daily living, such as bathing, dressing, or grooming.

So this slide shows the timeline for this program. It is typically delivered over the course of four months. And during this time, the older adult receives up to six visits with an occupational therapist, up to four visits from a nurse, and up to \$1,300 for in-home modifications or adaptive equipment.

Each visit with our interventionist team lasts between 60 to 90 minutes. And a key component, like I mentioned, for this program is the older adults setting goals for themselves and really driving the brainstorming strategies with this interprofessional team. So to accomplish that over the course of the study, the number of visits and the duration of the study can vary based on what the older adult sets as their goals.

CAPABLE has been shown to improve several health and financial outcomes for older adults. And some of the past studies on CAPABLE have demonstrated the effectiveness of CAPABLE in reducing disability in older adults, decreasing Medicaid spending for low-income older adults, and lowering inpatient and long-term service use.

So given this success, CAPABLE has grown to over 40 sites across the United States. However, when we began our project that I'll be describing in more detail, which was about three years ago, CAPABLE

had not been delivered and tested in an Area Agency on Aging, which is a group that offers home and community-based services, like home-delivered meals, caregiver support, and home modifications.

CAPABLE had also never involved care partners, who we define as family members or friends who provide some type of unpaid support for an older adult. So this is problematic because our growing older adult population frequently relies on care partners, as well as home and community-based services for support and aging in place.

Therefore, with our current projects, we attempted to address some of these gaps by evaluating the implementation of CAPABLE with an Area Agency on Aging and care partner inclusion. So how are we conducting this study? With the permission of Johns Hopkins, we are implementing two project phases over a five-year period. And we're using a hybrid trial type I design.

For this presentation, I am going to describe these phases and some of the lessons that we've learned at each stage. And I'm hoping this will be helpful for others who are implementing similar projects. So first, I'll describe phase one, which focused on determining how to implement CAPABLE through a regional Area Agency on Aging and with care partner involvement.

For this phase, we conducted focus groups with administrators and case managers in Allegheny County. And we also completed some telephone-based interviews with older adults and care partners who were interested in learning more about CAPABLE and potentially participating in CAPABLE. And after we collected all of this information, we used it to develop an implementation plan and piloted the program among a sample of 12 older adults and care partner dyads.

So from this first phase we gathered information about barriers and facilitators to implementing CAPABLE with care partners through an Area Agency on Aging. We used the Consolidated Framework for implementation research to guide our analysis of this data. And on this slide, I am showing some of the major facilitators and barriers that we identified.

The facilitators are labeled with a plus sign. And the barriers are labeled with a minus sign. And this is too much to go through for the presentation today. So I'll just focus on a few key barriers that we considered.

But I will encourage you to read this paper that I've shown here. And I've listed the reference at the end of this presentation, as well, that goes into more detail about this specific phase of our study, if you're interested. So one major barrier to implementation that we identified was program complexity.

The number of interventionists we had for CAPABLE, the length of the program, and the addition of a care partner into the scheduling of visits all contributed to this increase in program complexity that served as a barrier for implementation. In addition, some of the older adult participants that we were interviewing and who participated in the pilot mentioned that they already received other services in their homes. And the addition of our interventionist team added confusion for some of the participant dyads.

Another barrier we identified was related to client needs and resources. So despite planning and collaborating with the Area Agency on Aging, before we conducted our pilot stage, we initially received

many participant referrals for that pilot stage that did not meet our eligibility criteria. So those were two major barriers that we took and used the information from this phase of the study to inform the implementation of CAPABLE on a larger scale, which I'll describe next.

So we're currently in our trial phase of the study, where we're scaling up the implementation plan and working on telling our story through different dissemination activities. On this slide, I have a flow chart of our participants in CAPABLE. The first row of this flowchart shows the Area Agency on Aging groups and the number of referrals that we've received from each of these groups.

Next, we have the number of referrals who actually enroll in the program. And then we have some participants who enroll in the program and drop out for various reasons. So I've listed some of the more common reasons in that next row.

And on the bottom, we have the number of completed participants, which has been increasing after we've addressed some implementation barriers that I will describe next. So we currently have 50 dyads enrolled in CAPABLE. And our overall goal is to enroll 90 dyads by the end of this project.

So during this trial phase, we're monitoring the progress of program implementation using multiple sources of data to identify barriers to implementation as they arise. And I wanted to just show and share some barriers that we've identified so far. And I'll provide some strategies that we've developed to address these barriers as well.

First, through tracking our communications with the Area Agency on Aging, we recognize that we were receiving a limited number of referrals for participants, roughly two per month per agency. Additionally, we again found that the referrals we were receiving were not all meeting eligibility criteria. And we recognized we had an enrollment rate of 53%, meaning that about half of our referrals were screening out for different reasons.

We also found that participants who were enrolled in the program were taking a long time to complete the program or had to drop out at different points. So this translated to a program completion percentage of 63%. So these were all areas that we identified that could be improved upon with some different strategies.

So in order to address the barrier of receiving few referrals from the Area Agency on Aging, we met with those agencies to identify any specific reasons they felt there were for this low referral rate. One thing that they reported was that our eligibility criteria was too restricted, which reduced the number of referrals they could provide us with. And more specifically, we had initially requested referrals for older adults who had enrolled in that Area Agency on Aging within the last year.

But because this criterion did not impact the fidelity of our program, our research team ultimately decided to expand the eligibility criteria to include any enrollee in the Area Agency on Aging. In addition, we started sending routine updates. And I've included an example on this slide on the right side. With these updates, we showed staff how many referrals we were receiving each month and tried to highlight the staff members who were providing the most referrals.

Another area that we were trying to address was the poor program fit. So we tried to prioritize educational meetings with staff members of the Area Agency on Aging. We also updated each staff member who provided a referral with updates on the status of their referral. For example, if a person they referred ended up enrolling in the program, we let that staff member know.

And if their referral decided not to enroll or screened out for a specific reason, we provided them with that information as well. Lastly, we addressed our problem of low program completion by modifying and tailoring the intervention delivery. We tried to best meet the participant needs.

For example, some participants were able to achieve their goals for CAPABLE within that recommended four-month time frame. Whereas, others required some more time to complete their goals. So we tried to be as flexible as possible while maintaining program fidelity.

We also decreased the time between receiving a referral, conducting our baseline research visit, and conducting the first program visit with our occupational therapist. And we found this effort helped to reduce confusion for our participants because they remembered the program and the goals that they set, which was very helpful.

And on this slide, I have another tool that we developed that we're using to communicate the program impact and demonstrate participants who are a good fit for CAPABLE. So we send out these participant summaries to the Area Agency on Aging staff. And in these summaries you can see we try to highlight the goals that participants in CAPABLE set, the strategies they use to achieve these goals, and the end results of their program participation.

And we found that these summaries are helpful for staff members who provide us with referrals because they can recognize the impact of CAPABLE for their clients and also see who might be a good fit for the program. In conclusion, during this presentation I described three major takeaways from this project, where we were implementing CAPABLE with care partners through an Area Agency on Aging.

First, communicating regularly with study partners and interventionists is very helpful for identifying implementation barriers as they arise. Second, sharing success with the team during the program implementation can help to reinforce the study purpose, as well as the needs of the study.

Lastly, adopting project activities while maintaining intervention fidelity can help to improve retention for the study, or the program. And I also wanted to provide some of the references that supported this presentation. And again, I'll draw your attention to the last reference, where we have a larger description of the study that I discussed today.

And here's my email if we don't cover all the questions that are at the end of the session today. Thank you.

KATHLEEN MURPHY: Great. Thank you so much, Dr. Perepezco. Dr. Gaid, could you join us, come back on camera now? And I know some people may be new after the break. And I did just want to give a quick visual description of myself, since I didn't do that when we came back.

So I'm Kathleen Murphy. I direct the Center on KDTRR. And I'm a White woman with shoulder-length blonde hair. And I'm wearing blue frame reading glasses. And I wonder if you wouldn't mind doing the same, Dr. Gaid?

DINA GAID: Yes, sure. So I'm a kind of black hair or ... black eyes, and wearing black top with a gray jacket.

KATHLEEN MURPHY: Perfect. Thanks. And thanks for remembering to do that.

DINA GAID: Thank you.

KATHLEEN MURPHY: So we did have a couple of questions for you, Dr. Gaid. And so one of them is, do knowledge brokers exist for linking research to patients as they do research to clinicians?

DINA GAID: Mainly knowledge brokers or the concept of brokering is for knowledge between research and clinician or research world and clinical world. While the link between research and patient is there. But they are not called as a knowledge broker. But they call it as a patient partner or clinical educator.

So someone as a nurse case manager or a clinical educator, they provide education or patient education for the patients with chronic condition, like diabetes, COPD, cancer, those chronic conditions that they need ongoing consultation and education for the patients. There is someone to educate the patient about the strategy and self-management strategy for the patient.

So yes, they are there, but in different title and different skill sets because knowledge brokers should know the language for research and for clinician. The one who talk to the patient should have the skills to simplify the language or make it lay language for patient to understand and be able to manage or self-manage themselves. So yes, they are there in a different title and maybe kind of alternative skills or different type of skills to talk to patients and make it more simple to them.

KATHLEEN MURPHY: Interesting. Because I think in the US the term has been picked up more generally. It helps to really think about our language and be precise.

DINA GAID: Yeah.

KATHLEEN MURPHY: Someone else is asking, Roberto Sandoval, how do the knowledge brokers assess the impact of information shared and the effectiveness of their information dissemination?

DINA GAID: They assess their impact on the knowledge translation process outcome, like the implementation outcome itself. So they measure to what extent the patients adapt or adopt the use of clinical practice guidelines, for example, or the evidence. So there is a different or a lot of type of measuring outcomes that can be measured, like adaptation and adoption of the evidence, and penetration to what extent the physician use the evidence, to what extent the physician accept the guidelines.

So there is acceptability, adoption of the evidence, penetration of the evidence into the clinical sites at clinician level. And the second level is patient level, so measuring health-related outcome for the patient, what extent the patient are improved at different also measuring outcomes. So there is three type or three level of evaluation, at professional level, at patient level, and at organizational level.

So the success of the KT process itself, it reflects some of the success of the knowledge brokering effectiveness or to what extent they are effective in translating or moving the evidence into practice. So they are not measuring the role of knowledge broker. The role of knowledge brokers themselves, as we said, there is no evaluation tool or evaluation framework for knowledge brokering competencies or role.

But we still can evaluate the KT process outcome itself. And this reflect to what extent the knowledge broker were successful in the roles.

KATHLEEN MURPHY: Yeah, I would imagine too, especially since you listed some traits that have to do with demeanor. So it is kind of hard to evaluate a personality. We do have some questions also for Dr. Perepezko, as we are kind of getting into talking about interventions, if we're talking about evaluation. So Liz Angelovski is wondering if you adapt your program after the identification of each barrier? And if so, if you could explain that process?

KATE PEREPEZKO: Yeah, that's a great question. So I think with the data sources that I showed to you, we're collecting those throughout the program. We have meetings with our interventionist team, so the occupational therapist and the nurse, every month and with our research team every week. And during those meetings, we really try to discuss any barriers to implementation and work out ways that we can address those barriers and implement the adaptation when possible, as long as it fits within the framework of CAPABLE, and like I mentioned before, it doesn't affect the fidelity of the program.

So the communication examples that I provided with you, those were things that we developed during the course of the implementation process. And we're kind of still implementing the program and addressing barriers as they come. So I would say it's an iterative process.

KATHLEEN MURPHY: And you mentioned one of the things that was changed was the selection criteria. And so I inferred that what you meant is-- because in the beginning, you said that participants needed to be cognitively intact. So was that the criterion you changed?

KATE PEREPEZKO: No, so we initially required that all referrals from the Area Agency on Aging were new, which we were defining as enrolling in the AAA within the past year. But that was the criterion that was too restrictive.

So we ended up just taking anyone who was enrolled in the AAA regardless of when they enrolled. And that was the criterion that we adjusted. The cognitive impairment, unfortunately we can't enroll anyone that has severe cognitive impairment because the goal setting and brainstorming are pretty critical to CAPABLE's success.

So we need the older adults to be able to actively participate in those processes.

KATHLEEN MURPHY: OK, that's interesting because there's a lot of interest, as you know, in this conference on disability of all kinds. So Susan Lynn is noting that she spoke to someone in New England who said CAPABLE was available through Medicaid waiver. But they encountered a problem in implementation.

The state had a rule that anyone accompanying a nurse into a patient's home had to be an employee of a home health agency. Laura Gitlin-- I don't know if this person, but Susan Linn does. Laura Gitlin said the workaround was to not use nurses and have the OT screen for nursing consult. So she's noting that that's a barrier. Are there other barriers you think would influence scale up of CAPABLE?

KATE PEREPEZKO: So that's something that we're trying to study with this program. We're hoping that the AAA in Allegheny County will be able to take what we've learned and implement it through as part of their services. But I think an issue that we're finding is just finding the right fit for the program and making sure that the services are delivered in a timely fashion.

So of course, having enough people to deliver the program and meet with these older adults for the different visits that they need is an issue. I know that Dr. Gitlin is studying, I think, an OT early version of this. So I would suggest looking at those as well if the nurse is an issue in your region. And look out for a paper from us in the future. We'll be publishing on the different barriers that we've identified with this larger implementation of CAPABLE.

KATHLEEN MURPHY: OK. I think we also had a couple of questions that registrants posed that I think might be interesting to explore. So I mean, both of you are looking at really interventions, so trying to train. Or you've done studies of a program. And do you have thoughts about how that knowledge might be extended to influence policy?

DINA GAID: On my end, policy, I kind of touch it in my presentation as knowledge brokers need a type of organizational support or make it a priority of the healthcare organizations to move evidence into practice because if the organization itself not very the role of knowledge broker or the moving evidence into practice or not encourage clinician to take evidence-based clinical decisions, this will not really help knowledge broker to do their role.

So we need to have a policy decision to adopt evidence-based decisions. So this can really prioritize and help and favor the role of knowledge broker and make clinician put some time of their clinical work in research activities or being involved in implementation activities. But if the organization itself-- and this was one of the barriers, the organizational support-- if the organization of itself doesn't support evidence use, this was kind of a barrier for the whole system, or the whole process, the whole knowledge translation process.

So yes, a policy or organizational decisions or a vision really can impact the KT process.

KATE PEREPEZKO: Yeah, I would agree with what Dr. Gaid said. I think from my limited experience with policy work, it seems that demonstrating anything you can with numbers is generally effective or at least that first step in working towards policy change. So showing whatever the impact is in health outcomes

specifically or most likely cost savings is one of the best ways to show that a program or intervention might be effective.

KATHLEEN MURPHY: That makes a lot of sense. And another thing that we've just in our knowledge translation work with policymakers over the years, in the United States it's very important to identify state-level cost savings or whatever it is to make it relevant to a specific state. And Pamela Toto along those lines is pointing out that Medicaid programs vary by state.

And so I don't know if that's true of Canada, Dr. Gaid. The nursing requirement is likely a state-specific rule. In that case, the providers could partner with a home health agency for the nursing and even occupational therapy provision. It's happening anyway outside of Medicaid, which is a US program that provides support for healthcare for certain people by some of the programs implementing CAPABLE across the country.

But Pamela is also pointing out that currently a fidelity requirement of CAPABLE is that it includes nursing. So do you see any flexibility moving forward? Or do you think it would always have to be nursing?

KATE PEREPEZKO: I think for CAPABLE it was developed in a school of nursing. And they feel very strongly that is an important requirement for the program. And all of the evidence is based off of the inclusion of a nurse. So like I mentioned and the other attendee had said, Dr. Gitlin is studying some other interventions that are helping people age in place. So I think that those will be interesting to keep an eye on.

KATHLEEN MURPHY: I think your presentations have already basically covered this in quite comprehensive ways. But if we were to recap-- someone else has said my main focus is KT work tailored to clinicians. I would like to know how best to engage and approach them, as many have limited time or interest. So is there like one key takeaway among the many tips that you've offered?

DINA GAID: Yeah, I think the question for me, right?

KATHLEEN MURPHY: Mm-hmm.

DINA GAID: Yeah, so I think, as we said in the presentation, first of all is to look to your manager as this type of manager support. So if the manager really supports your decision, supports your interest, and if your clinical caseload or clinical schedule allow you to do that. And if yes as a part time or even few hours a week, you can discuss with your manager what the type of activities that needed based on a need assessment in your local clinical sites.

So you as an insider in your clinical site you know your peers's needs or your colleagues' needs. So you know exactly the type of education they need, the type of training, what really skills they need to improve. So from after deciding that, so after you have agreement with your manager, decide what exactly you can offer and they need.

You can start develop your tool or skill sets. So you can attend many-- there's a lot of many, many webinars and KT education opportunity available for free online. So you can start attending conferences, webinars so you can kind educate yourself about knowledge translation, how to implement that, how effectively can translate the evidence to your peers.

And you can also seek a collaboration with a university. So many of the clinical sites really affiliated to universities. So you can also take advantage of that to being involved in some research activities with university professors. So you can be guided and mentored by those professors or KT specialists.

So it's kind of involving yourself step by step until you feel yourself confident to do this on your own. So it's a type of continuing professional education activities that you need to do with an agreement in your organization. So your organization should support your decision. And you should be motivated to do these activities. So it's kind of like a journey. But I think you're going to enjoy it.