**2019 Online KT Conference:**

**Innovative KT Strategies That Work**

*Panel: Innovative Synthesis Strategies*

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>> ANN OUTLAW: All right, welcome back everyone to in the day, we have an exciting panel planned. Innovative synthesis strategies. Our first panel presentation will be given by Dr. Howard White. He is the chief executive officer of the Campbell Collaboration and the founding executive director of the international initiative for impact evaluation. And he is led the program of the World Banks Independent Evaluation Group. He started as an academic researcher at the international institute of social studies in The Hague. And the institute of development studies, the University of Sussex. As an academic, he leans towards work with policy relevance and work in the policy field and believes in academic rigor as a basis for policy and practice. His other interests are running and walking, preferably long distances in remote places and reading English history. He presentation is innovative approaches to knowledge translation, evidence platforms and evidence portals. If you have any questions during this panel, please ask them in the chat box, and we will address these following the last presentation of the panel. And as a reminder, the pull-down menu has an option for all panelists and attendees, please select that one so we can all participate in the discussion. Howard, are you ready to begin?

>> HOWARD WHITE: Yes, thank you.

>> ANN OUTLAW: Thank you.

>> HOWARD WHITE: Here we go, I'm going to be talking about different approaches to knowledge translation with particular focus on evidence platforms and evidence portals. By way of background, I would like to first talk about what I call the evolution.

So over the last 30 years now, there's been an evidence revolution or the evidence architecture over four waves starting with results agenda in the 1990s but I'm going to focus on the second, third, and fourth waves of the rise, the rise of systemic review, and in particular focus on knowledge brokering.

So here we have what I call the knowledge broker or knowledge translation pyramid which gives an overview of the evidence architecture. We're going to come back to the slide later, so don't worry. Basically, I convoyed in this slide, as you move up the pyramid, then there's a heavier degree of knowledge translation. So, we have at the bottom of the pyramid of data and many people conflate data with evidence these days. But data is not evidence. People will say, we've got the data and now we're going see what works. You're not just from having the data. You need to go ahead and analyze the data from studies and those studies, reviews and so on. We will come back to that as we go through the stages.

Here we are at the bottom. And data isn't just about having data being available. It's about the infrastructure that helps data be better and more useful. So, in particular, in the field of disability research, it's simply having a measure of disability understanding, where disability, where it's most common and what is associated with disability and often associated with people with disabilities. So, there are a couple of well-known questionnaire approaches to measuring disability. The long version of that can take a couple of hours. And it doesn't have clear cut or defining disability or not. It's more of a spectrum. So, some researchers in the field, I've worked with them in the past, find that actually maybe it's not that useful. More preferred is the disability group, the Washington group on disability statistics, particularly their set of straw questions which and a number of questions around particular areas such as hearing, whether people are impaired or seriously impaired in those areas.

But it's focus is significantly on severe disabilities. So again, there's some movement. But the important point is that we're going to have good data, we want to have a common definition of what we mean by disability and a clear understanding that's usable in different context across different context is a good starting point. So, data important, doesn't mean having numbers but is having numbers comparable and understood on the national and international levels.

Then of course the data we have, we use to undertake studies. And what we have seen over the last 15 to 20 years of the second revolution is the growth of impact evaluations. Impact evaluation, probably all know, want to tell you where the intervention you're looking at made a difference or not. So, you're F you're undertaking seeing glasses for elderly people to improve the social life of people including those who are having different stages of dementia, well, is that achieving that? You captain just look at what happens to those people. You have to see what happens to those people with the intervention compared to what happened compared to the absence of the intervention. And we do that generally, there are approaches to doing it, but we do it most commonly by using a randomized control trial. Some are assigned to having the treatment and others are assigned to alternative treatment or usual services. And as we see on the left-hand side, trials have grown rapidly over the last 15 years. This is a snapshot from pub med. And you see around 900, to a thousand studies. We have a steady growth over recent years. The drop of 2019 because it hasn't finished yet. And so, you would expect to see when we do this graph a year from now 2019 as well. So, this is good news. There's increasing amount of evidence about what works, what works here, and increasing amount of evidence about what works and be able to prove people with disabilities.

Where we haven't grown research like this is important not to base what we want to do in any particular context, policy to think about what programs is most effective. We want to start a new program in a new area, look at what seems to work elsewhere. We shouldn't base that on single studies. There's often too much hype around a single study. Actually, a list showing what the first intervention tends to find larger studies. One reason attempts to take the programs, often ineffective so they may work on a small scale but for other reasons don't work on a larger scale. Or might work in one context but not work in another population or another context.

So, it's important to for us to hold over this. And we do that using systemic reviews. And the third way of evidence revolution has been the rise of reviews, in over the last 10 years or so. In health-related fields which includes disability research, they have been going on for longer. But in most field, and you see the same is true on the right-hand panel on the slide, has been a pattern of abuse in the last 10 years or so. So systemic reviews are an approach to systemic survey, all available bay evidence, so typical review will find several thousand so 10,000, 15,000, 20,000 studies in the search which have been screened against very clear exclusions criteria to see which are eligible to be included for the particular question you're trying to answer with that review. And all of the studies have to be coded and synthesized and the findings have to be pulled systemically. And being systemic in this way seeks to avoid the biases that are present in traditional reviews so. It's not sufficiently widely known, there's a whole host of biases that affect both studies and also affect reviews. And so, when someone tells me, oh, I'm going to commission this or that expert to review on this particular field because she's the expert in the area. So, we asked her to review. I would say, just save your money. Just and her what she thinks because that's what it will say. They have biases. And even unconsciously or subconsciously, will select evidence in a way that supports what they already believe, and find ways to ignore marginalized efforts that doesn't agree with what they think. Systemic reviews can't do this. Systemic reviews have to include all relevant, can't exclude it if you don't like the findings or the person or whatever. So, given much more reliable overview. So, the rise of systemic reviews which depends evidence-based help was built on systemic review, there's a great move to what works and having knowledge about what works across a whole range of policy areas.

So, moving up the evidence pyramid is what I'm doing, I've skipped over databases. Databases briefly can be specified for a particular type of literature. So, health database, which relates, is restricted to the effectiveness studies and control, designs that say whether the program is effective or not and systemic reviews. And it has nice functionality for mapping and so on as well. The name is there on the slide. I suggest you have a look at it. Not now, please but attend of the webinar tonight, please go to epistimoikos. And there are other databases in different domains, and I'll come back to disability in a little while. So, moving up to evidence maps, showing visually in a way that allows for users to navigate the evidence. And learn something more about the landscape of the literature. So, what we're seeing on the screen on this slide is evidence in gap map produced by the collaboration funded by (indiscernible) in low- and middle-income countries and. When you do a map like this, the rows are ordered by intervention categories and subcategories. So, we have health as a category there. That's broken down, rehabilitation and so on. And we have the outcomes across the domains and then we have health, education. So actually, the matrix was used for the intervention and outcome categories in this particular map. So, they appear both in the intervention categories and the outcome categories. And then we have a different subcategories. And at any one set of the map, you will get an idea of what research exists in that particular cell.

So here we see highlighted is the cell which shows primary and secondary education and the impact on social and life skill, development with people with disabilities. This map is focused on the studies, both physical and mental. And half is mental health. And we included in the map primary studies and systemic reviews so each bubble with the bubble in the map represents a set of studies and the larger bubble, the more studies they are. And we have done critical appraisal of the studies. It means to assess the risk of bias very various reasons which might be high attrition, not following systemic procedures and very view. So, the largest orange bubble there is primary studies. So, a number of low-quality primary studies and then one medium, high quality study for this particular cell. There are several factors driving low quality in this literature. One is very small sample size. Many of the studies haven't determine what had the sample size should be. They seem to be seriously underpowered and. The second is absence with critical group to actually see if the intervention is measuring the effect of the intervention. And then we have smaller bubbles with systemic reviews. In the map on the last side, just under 102 primary studies and 56 reviews on this map. So quite a lot of reviews compared to the overall literature. And if you're using a map, you can click on any cell.

When you click on the cell, what you get on the left-hand panel is a list of the studies in that set on the map. And you can click on a column heading or a row heading and get a list of all the studies in that column or row. So, here's the top study, talking in terms of top of the list. Not top of anything else. It's actually alphabetical by study title. So, a study on academic achievement in people who are hard of hearing in Ethiopia. And scroll down. You will see, you've got a link to the URL for the study itself. So, the maps don't just allow you to navigate the data, they allow you to study, navigate so you can see the literature in this particular area. And they also allow you to access all the studies of the database. It might take you to a publishing payment for the journal where you just get the abstract of the article. Can't do anything about that. But it does get you to the page of where the article is open access. We have an open access copy we found. And we put that into the map. So, navigating the literature but also actually accessing literature as well. And maps approved usually popular in recent years. And the key take-away from the map is basically the literature and we found more so than expected. And uneven distributed. So, most of the studies come from three country, China, India, and turkey. There are very few indeed. We did only search on the English language, so might be Latin American literature which you are that we're missing out but there's not that much in other country, some in south Asia, some in Pakistan, but many other countries have (indiscernible). So, most in the help intervention areas, much less around livelihoods, very little around disability rights. Hardly any studies there.

This is not only producing maps; the organization does maps but doesn't have anything yet on disability. This say map produced by a UK based nonprofit. Sight savers have done several maps related to different sight related issues. It's map here is different. So, the Campbell map. And in this map, every bubble is a study. So, in the Campbell map, each bubble represents a separate study, high or low quality. And reviews and the size of the bubble represent the number of studies. And in this case, every single bubble, every circle is a study and the color of the circle as in the Campbell map represents the quality of the study, the findings and risk of bias in that study, and they also which we don't do is represent what the study is actually find. So, you see the far-left column, strongly in Faye investigator the intervention, inconclusive of the intervention or have weak evidence of the intervention. So, we take for example the QCC column, quality critical care. Most heavily populated. And you will see the reviews are spread mostly in the strong evidence but mostly low-quality reviewing. We go down to weak, fewer reviews but they're better quality. So, the problem with this approach is, I can't actually tell what you the evidence says overall because it looks mixed. And I don't believe in mixed evidence. I see a picture like that, well, we need to do a proper review. Or we do a review across this whole area. So, I'm more in favor of maps that tell you what is out there. I'm less inclined to say what the evidence says.

So now we move up the evidence knowledge translation pyramid and knowledge evidence platforms so. Evidence platforms are online resources that allow you. So KDRR has a knowledge translation library. You see it on the slides, and this gives access to resources without knowledge translation. So, this is the knowledge translation library on the page. And look on the left, and you will see a list of sub menu items to help you navigate this particular platform. So again, they have an online evidence resource. Where you can access different types of documents like guidelines. And so on. So, it's a platform of accessing disability related to resources at a global level. So, across the world. This is the third platform. Restricted to authorized users. I'm not one so I can't tell you what's inside. I've never been inside. But I imagine it's really good. So, if anyone know, feel free to tell us what's in there. So that's three examples of platforms.

And then there are disability platform, not evidence platform. This is a platform of general disability resources. But it's not in particular strong evidence orientation. So, resources like the which may or may not act, we don't know what the evidence, we don't know what's necessarily going to be found on this platform. So, the platforms make the evidence available. But you have to look at the evidence and interpret it.

So now back to the evidence architecture pyramid. Moving to the top three levels. And the important thing about the top three levels is they allow you to make a decision based on the evidence without having to go back and solve the evidence. All take you back to the studies. And this single digits S a very nice thing, I love reviews, but a review can be 200, 300 pages long. So many don't have the time to read that or interpret how to choose the findings.

So, the top three levels broke the evidence into a much better degree. So, here's the evidence you decide what to do. Guidelines say, look at the evidence, recommend you do this. And checklist say, looked at the evidence, just do this. Don't think about it, just do this. Let's look at three examples.

This is a teaching and learning tool kit. It's run by the what works here in New England. The education endowment foundation. And they have taken 34 interventions which they think will improve learning outcomes. For each of the 34 interventions, the review of the global evidence. And all the evidence points to the landing page which you see here, they present the evidence in three metrics. The first is cost. So high or low costs. The second is strength of evidence which is how good is the evidence. And one to five stars is review. One lock or five locks, one lock is no randomized control. And finally, the last column impact is about what the impact of the intervention on a child learning outcomes in terms of months of schooling. So, having the curriculum is the equivalent is the equivalent of two months of schooling. If you're sort, you will see feedback is effective. And learning, very low cost.

Actually, very expensive, sets a child back by four months. So bad thing to do. So, the portal allows people to make decisions and two thirds use this portal to make decisions how to allocate school resources.

So, the world health organization doesn't have guideline, various things including disability. And countries around the world use the guidelines to inform their guidelines. And this is a quote from the guidelines producing guidelines and who producing guidelines must be based on high quality reviews. So, institutionalizing the evidence for reviews.

An example of checklists. This is from NICE. Here in the UK, does guidelines based on reviews. An example of guidelines for how care home for people with dementia. National health Scotland. So specific, you should do or that in order to make people feel more comfortable.

So, all of this has been, we have what I call the evidence revolution. And I would like everyone to join the evidence revolution. Last slide is you have to think about where do you fit in. You can be working with demand side to increase demand for evidence or someone on the supply side producing or using any element of what I call the evidence revolution. Thank you.

>> ANN OUTLAW: Thank you so much Dr. White. Sorry to speed you up. But we would love to have our next panelist join. Our next panelist is Katy Sutcliffe, she is an associate professor at the EPPI center institute of education university college London. She is the deputy director of the department of health and social care reviews facility which produces research synthesis to support the department's policy decisions. She specializes in developing systemic review methods for producing policy relevant evidence. In particular, qualitative and mixed methods evidence in approaches for identifying the key ingredients in underlying mechanisms of interventions. Her presentation is title systemic reviews for a complex world, new avenues in evidence synthesis. Please and your questions in the chat box. I see some of you guys are doing. And I'll facilitate a discussion at the end of all three of the panel presentations. Katy, are you ready to begin?

>> KATY SUTCLIFFE: Yes, I am. Thank you very much. Thank you for attending this evening in. This session, I'm going to kind of follow on from what Howard has been talking about. I'm going to be thinking about how systemic review methods are being extended and adapted making sure they're as useful as possible. And making them as useful for possible for people looking to implement the findings in practice.

So, a systemic reviews are as Howard was saying a widely recognized tool for understanding intervention effectiveness, appropriateness, and feasibility. And the robustness and comprehensiveness of the method ensures that the evidence is reliable and of course, affective policy and practice decision making requires nothing less.

But the liability despite the reliability, researchers are beginning to question whether systemic reviews can be more useful and usable. So, this quote is an extract from an interview by a colleague, policy makers about how they use evidence in systemic reviews. And you can see in the quotes, they recognize some systemic reviews are perhaps too general or too broad. And others are so specific that there's little that is transferable. So, they give the example of a systemic review on dance among women over the age of 75 saying it's interesting and potentially quite useful. But it's not helpful in helping us to think about how we send as a service commission physically activity across number of different options.

So, there's a question here about the utility of systemic reviews. And the second quote in the blue box at the bottom comes from an excellent paper by John Ioannidis. It examines redundant or serving competing interests. And one of the conclusions is that many reviews are published not may be misleading and few are useful. So, this presentation focuses on how we can continue to develop methods to ensure that we produce robust and useful for intended audiences.

So why might a systemic review have limited usefulness? We have decades of experience of working with policy makers in both national and local Government. And this engagement is a recognized that sometimes the standard narrow questions asked in reviews and not kinds of questions that policy makers are asking as in the previous slide of the example of the policy maker talking.

So rather than requesting for a single answer to a single question, for example, is intervention x effective for outcome y? Policy makers come to us and they ask, so what exactly is the extent of the problem and the nature of the problem? It's in older women a pressing issue in my area or they might ask, which of the range of possible interventions should we invest in. So even if I know that dance for the women affected, is it more effective than other interventions and more cost effective? And they might ask will interventions will be suitable, will they work in my context or country going on international evidence. And they also often ask, so how exactly should we implement and deliver the interventions?

In addition to the more complex questions policy maker us, they have begun to Grand Prairie billion the idea of complexity. Many are considered complex in that they involve multi-interacting components. And in particular, social interventions such as many education intervention, public health interventions including dance interventions in both interactions between human beings and so they're particularly complex as they're affected by the nature and beliefs of both the recipient and the provider. So, for example, I take a dance class, a Zumba class every Saturday morning. And occasionally my teacher asks a friend to stand in for her as she did a few weeks ago. And the stand in teacher does the same dances but it's completely different vibe in the class. It's much tougher. And many of my class won't come when they know the stand in teacher will be there. So, an added layer of complexity of having human beings in interventions.

So, without examining and reporting the variation within interventions and intervention contexts examined in the systemic review, the features that make them tick are left unknown. So, decision makers are left unsure exactly what to implement and how.

Systemic review is a recognized in the need to Grand Prairie billion the complexities. And this quote is from a really interesting set of papers on handling complexity that you might be interested in. Here you can see the saying, when the methods for conducting reviews were originally developed, the process of reviewing the literature was treated as relatively straight guard. Complexity existed but reviews tried to simplify the complexities in attempts to make comparative claims. In general, the research included in systemic reviews approach research from a classic reductive stance. Increasingly, people interested in apt dog published interventions from reviews have found that this reductive stance eliminates details that are crate car length for them to understand whether the intervention is feasible and likely to work in their context, with their populations, and at what cost.

So, solutions to these issues are constantly evolving. And I'm going to take you through some potential solutions for analyzing the usefulness of systemic reviews. First, I'll talk you through guidance for describing and reporting on the features of complex interventions evaluated in systemic reviews. And then secondly, I'll take you through two more analytic methods which are trying to identify which aspects of complex interventions are vital to the you can success of the intervention. And the two approaches intervention component analysis and qualitative comparative analysis.

So, the first example is guidance on describing complex interventions in systemic reviews. So, this is a paper by systemic review as an international group that I was fortunate to work with. And we make the point that providing detailed information about interventions is vital more minimizing research waste. And while this issue about research waste is being addressed to some degree in primary research, we need to tackle it in systemic reviews.

So, the pay patients and policy makers cannot implement as effective if the details of the interventions are not known. The reviews should be able to compare the details of interventions and consider whether and if so how to implement interventions in their setting.

So, in the guidance, we suggest that reviews consider the details of interventions at all stages in the systemic review in the planning, the conduct, and the reporting. So, from the point of developing a protocol to consider potential dimensions that might impact on outcome. During data extraction, the developer draws an existing tools such as the checklist to ensure you capture the important dimensions of different interventions and where intervention is miss, you may wish to contact your authors. And use if findings about the details to help you interpret your findings. And key to all of it is in a report for the. ISIC review provided detail to the count the intervention characteristics variation as this is the vital information that decision makers require

So, this table is very small, and you can look in the payer to see more detail, but it's an example of the level of detail that can be reported in systemic review on intervention features. For example, this table captures the intervention, the why it's supposed to work. Required in the procedures to the what, the type of provider and provision and location and the timing, et cetera, et cetera. This huge amounts of information in this table. That service commissioners and provides people looking to implement and the kind of information that they need. The idea is if they're all similar in terms of the effectiveness, a commissioner or practitioner could say well this particular version of the intervention looks like something we could implement here, might work well in our situation and looks feasible in our context. But similarly, it might help reviewers or users to detect consistent associations between particular features of an intervention and outcomes we might see a particular feature being reported in the more effective interventions in systemic review.

Which leads me on to the next examples I'm going share with you. So, intervention component analysis is the first example of an analytical method. Attempting to look at these associations. So detailed descriptions and it seeks to identify the critical features of complex interventions.

So, the intervention come Moe innocent analysis approach differs from the guidance and framework on the previous paper as it doesn't suggest to be using a standard framework to capture details. ICA methods from qualitative research, drawing on people's views and experiences and using an inductive or bottom approach to categorizing intervention features. There are three key stages. The first is to describe intervention features and inductive approach used to categorize features using information provided in the paper itself. And using this approach, helps us to overcome inconsistencies in the language used and capture important differences between interventions.

The second stage involves looking within the paper. In the discussion section primarily. To gather the authors insights on the strengths and weaknesses of the intervention. We're using what we describe as informal evidence, authors reflections and accounts of feedback from those involved in the trial. So not strictly speaking research evidence but offers valuable insights from people who are on the ground implementing the intervention. And the final stage, again, uses this type of informal evidence but not to look at intervention features but to consider and focus on implementation. For example, the training or the context in which it is delivered.

Intervention analysis was developed in response to direct request from policy makers during a specific review for the department of health and social care in England. So, with completed review, looking at the effectiveness of a range of interventions to reduce medication errors on children. Medication error, I mean healthcare practitioner prescribes a medicine or the wrong dose, causing help. And among the range of interventions that we examined, we found that electronic interventions are moving from a paper had based system to an electronic version looked promising. But some identified showed increased harms and one study increased mortality among children following the electronic system. So, the review commissioners naturally asked, so if we're going to recommend this or going to be implemented in the hospitals, what does a successful pediatric electronic system look like? What are the key features? How should hospitals go about implementing electronic prescribing? And how can we avoid the harms in some studies?

So, in stage one, the inductive approach enables us to develop these interventions. We found they differed along four key dimensions. The first was the type of system. Some hospitals brought in commercially available systems or what we call off the peg system. And other hospitals modified a commercially available system, used the patients and other hospitals developed their own homegrown systems from scratch. The second dimension was to do whether the systems implemented were generic systems designed for use with adults or tailored for use with children specifically. The third dimension, whether or not they include what we call the front-end decision support. So front end decision support is where features are intentionally accessed by clinicians involving support tools. So, you would call up the dose calculator and put in the age and date and the system would calculate the appropriate dose, avoiding simple math errors. Others included back end features and the back-end features tended to be more safety features to prevent errors. For example, a system would allow a prescription to be processed unless all the relevant fields, age, weight, et cetera, have been completed. In the rows are the studies included in this review. The four studies off the peg tools at the top. And then we have move to the next, we have the customized ones below that. And then move to the next, homegrown packages. And finally, we have two package types that where it was unclear which type of system was being used. The different columns indicate the different features of intervention. So, for example, this first column indicates whether each study used pediatric specific system or not. And where a cell is shaded in gray, this indicates the feature is present. So, for example, the study in the first row was a not a pediatric system and the only features were two back end features, so alerts and mandatory fields. They had no front-end features described as part of their system. You can see generally the off the peg tools had fewer front-end decision support features. The three studies marked in red in the first column are those which resulted in harmful outcomes in. One study, that was an increase in mortality. The bottom study is actually qualitative for reasons I don't have time to go into now, but two key studies so move to the final stage of the animation. You can see that they involve minimal or no front-end decision support. And appear to be quite different from most of the other studies included in the review.

So, having looked at the features of those interventions, we then move to looking at the informal evidence, on the strengths and weaknesses of the different features. And we can see that 15 out of 20 of the commented that front end decision were particularly valuable. So those missing in those two studies. With one concluded that positive results are might not be achievable with only nominal decision support. Fewer studies commented on the back-end type of features. And additional, we had some commenting on potential pitfalls with front end decision support. This is the kind of information which is useful when designing in that particular hospital.

So, in stage three, we consider these issues around development and implementation. Again, drawing on informal evidence. And we found five key themes emerged. One consistent theme was in support of customization. Almost three quarters commented on the importance of customizing for children or warned against using offer the peg adult tools with children. Other key things were to engage during development, cost with the system, and ensure infrastructure is adequate and appropriate.

So, having looked at the three stages of ICA, it's clear that the methods or balance or tradeoff between rigor and insight. Using informal evidence is not the same as using research data but not withstanding the limitations, it was a useful source of critical insight into the strength and limitations of the intervention. And this informal evidence is, you know, an evidence source that's currently underutilized. So, we did make efforts to mitigate the weaknesses. We looked at other research which helped to verify the implementation themes. But we also as you would have seen, really explicit about the extent of this informal data and inconsistencies across the studies.

So, the final example is qualitative comparative analysis. Another analytics strategy to identify critical intervention components. Time is short. But I did have previously give another webinar on this if you're interested. So, if we move to the next slide, briefly to answer a similar question to ICA, essentially get at the key feature mechanisms rather than what works on average. But more systemic in the approach. And unlike ICA, it quantifies the level of association between components and successful outcomes. I'll skip through this. Since we're short of time and people can understand some more about GCA using the previous webinar.

So systemic reviews are unquestionably the most robust and rigorous med to support policy and practice. We need to continue to evolve ways to ensure that the systemic reviews are useful and usable if they're to avoid and left gathering dust on the shelf. And on a very final slide, I have some additional readings that people might be interested in.

>> ANN OUTLAW: Thank you so much, Dr. Sutcliffe. Now I'll turn things over to Francesca Gimigliano. She is an associate professor of physical and rehabilitation medicine, president of the school of speech and language therapy and delegate for the chancellor of communication and third missions at the University of Campania Luigi Vanvitelli in Italy. She is the chair of the Cochran rehabilitation communication committee and one of the editors of the Cochran rehabilitation eBook. She’ll present on this eBook project and discuss how to deliver key messages to different audiences. Dr. Gimigliano, are you ready to begin?

>> FRANCESCA GIMIGLIANO: Yes, thank you, Ann. And good pronunciation on my last name. Thank you.

>> ANN OUTLAW: Thank you. I practiced.

>> FRANCESCA GIMIGLIANO: It's not an easy one. So, this is the simple outline on my presentation. I will give you a brief introduction to Cochrane and Cochrane rehabilitation and speak about the Cochrane rehabilitation eBook which is one of the most important activities that we are running within Cochrane rehabilitation.

As you might be familiar with, Cochrane is thousands of researcher, professionals, patients and career, and people interested in health. Who has the mission to promote evidence and informed decision making by producing high quality accessible systemic reviews and research evidence?

Cochrane responsible for the preparation and maintenance of systemic reviews. The graphic looks responsible to support contributors in this area and that is a point of contact between Cochrane and the communities. The scope of developing and implementing the use in the preparation of Cochrane reviews. And the Cochrane fields which are focused on a dimension of healthcare, a condition or a topic. And representing the interests of dimension. Both graphic groups and fields is the main mission, the knowledge translation.

In Cochran rehabilitation, our main aim is to function as a bridge between rehabilitation stakeholders and Cochrane groups. We have both two that is on the side to facilitate the work of review group. And to ensure that Cochrane reviews are relevant and accessible to our community.

The Cochrane strategy to 2020 is focused on knowledge translation as well. In fact, Cochrane priorities are to facilitate the production of Cochrane systemic review. Able to make sure that as many people as possible worldwide can access them. And use this evidence and the decision making.

In the strategy, Cochrane has identified four different occurrences that would be the consumers and public, practitioner, policy makers and managers, and researchers and research founders. We identified four similar audiences for our eBook. With only difference that we are assimilated the researchers to the practitioners and the research founders to the politicians’ side. And we have that students is a specific target audience.

Let's coming to the details of the eBook. It would be updated, and belle include all Cochrane systemic reviews related to rehabilitation. You can see the full list of the editors of the eBook.

The eBook is financed and coauthored by European physical rehabilitation medicine bodies alliance, which includes the medical specialists and your fee Yan physical rehabilitation medicine and European academy rehabilitation medicine. And produced in collaboration with the University of Campania and Marche Polity Technique. The eBook production can be summarized in nine steps. The first step which considered completed is to hold the reviews to the rehabilitation by the Cochrane rehabilitation review group. Huge effort to target all the Cochrane systemic reviews related to rehabilitation to this moment. Of course, this is a continuous process. And in this publication, which is recent, the result of the effort made in 2018. And it resulted at reviews, out of the interests because actually using the rehabilitation interventions. This is for sure an impressing showing the to the rehabilitation. And just rehabilitation community needs to be considered as a major stakeholder in all Cochrane work.

To the creation of an eBook index. Our book and index we initially draft the index after consulting the table of contents and the most reference and updated rehabilitation books. And we decided to inquire all rehabilitation professionals. Including physical therapies, therapy, psychologies, speech therapies and psychologists, in order to make sure that our index would be globally validated. This is the first time that the eBook is actually validated with such process.

We are currently working on watching the reviews that have been previously talked. The content of the final draft of the index. And doing this we have realized that there are not all the topics were actually informally covered by the Cochran review group. And we have decided that we're on an exercise to put in evidence with system gaps in Cochrane production and redundancies. Next slide, please. The following flowchart described the process that leads to the production of the eBook context. The universities are marked. Our guided to prepare the summaries of the Cochrane systemic reviews and for each Cochrane review, we have to prepare four different summaries for the different identified target audiences. Each will be reviewed for the first time inside Cochrane community. And in the second step, this summary will be reviewed by European bodies alliance. At the end ever, I will revise the summary and the summaries would undergo the approval of the European bodies’ alliance as well.

and you will see how the eBook website will look like. For each review, you will have the reference to the full. You have the abstract and the plain language summary. And then volunteer the targeted summaries.

The summary for clinician targets all clinician and the rehabilitation professional. It will up this summary will have to be approved by the European, the delegates of the European society of physical rehabilitation medicine that represents our clinicians. As a general guidance, we ask the residence in the first, we know and what we don't know about intervention. In a second part of the longer systemic review, then which were the main outcomes, what was the intervention included, which were the groups, and other paragraph giving information about the number of prior and total number of participants included them. Brief but accurate description of the main results considering the summary of findings table and that when this is possible. And the final part paragraph with the conclusions based on the main results of the systemic review and considering the paragraph from the practice. And also using the schema or the plain language summary guidance development by Cochrane.

The summary for students instead the target of course on medical, the students, this summary will have to be approved by the ums board delegates. So, which is the body inside European alliance responsible for education. And a reference guide that we asked the residence students to prepare the summaries including the first brief description of the disease. Then a description of the investigated intervention. The aim of the review. And the summary of the results as described in the Cochrane systemic review plain language summary. And finally, comment and if the evidence could change in the future. We consider that students might be very interested in our research might change our current testament of findings. Because might be interested in making this research by themselves.

As for the summary for the managers and policy maker, we asked for the approval of the ums section delegates. Or present our policy maker the magazine. And summaries designed to be brief and straightforward. We ask the residents to write a description of the terminology of the disease and the cost of the disease and the treatment. To describe the treatment and the investigate treatment is from the standard treatment or alternative, including whatever possible the international alliance. We ask them to give brief, very brief summary of the main results as described in the plain language summary. And to write a conclusion about rehabilitation.

Finally, summary for consumers with target would rehabilitation patients and care givers. And the only recommendation that we gave was to write the summaries in a clear and simple language. When they explain to patient his pathology and possible treatments and to be focused on rehabilitation patients.

The following steps will be to translate the eBook in different languages. To make sure to publish it not only on the website but also the rehabilitation interests. And to continue to update the eBook.

The eBook presents an important answer to Cochrane KT strategy. As it targets all Cochrane audiences so specific summaries and translations. And then the same time it is a systemic election Of KT products.

It will be a tool that will determine the priorities of ready production.

Help creating stable relationship with the stakeholders assembled in the production. And be hard and relevant understandable and visible KT product. And lead informed decisions.

If you're interested in having more information about the Cochrane rehabilitation eBook, you can read this paper published on European journal. The eBook will be officially launched in May 2020 during the next congress of European society of physical and rehabilitation magazine.

Last but not least, if you wish to know more about Cochrane rehabilitation, I would like to collaborate with us, you can visit our website. Or myself. Thank you for your attention.

>> ANN OUTLAW: Thank you very much. At this time, I would like to invite our reactors and all the panelists to turn on their web cams. Thank you. First action, I would like to give Dr. Gimigliano a chance to answer questions that came up. Is the eBook going to be open access?

>> FRANCESCA GIMIGLIANO: It will.

>> ANN OUTLAW: Great.

>> FRANCESCA GIMIGLIANO: It will be open access.

>> ANN OUTLAW: Great. And then Margaret and, will medical rehabilitation issues specifically or disproportionately experienced by women be addressed in the eBook?

>> FRANCESCA GIMIGLIANO: Yeah. I'm not sure I understood the question well. If the question is if women issues and rehabilitation issues will be addressed, the answer is yes.

>> ANN OUTLAW: Great. And a follow up to that, she's concerned that the sources that you're using to generic content may not have sufficient information about the information gaps so in other words

>> FRANCESCA GIMIGLIANO: Oh, sorry. For interrupting you. The only source that we are using are the Cochrane systemic re---sorry, Cochrane systemic reviews of rehabilitation interests.

>> ANN OUTLAW: Great. So that totally makes sense. Thank you. A question earlier that arose for you, Dr. white, is could you describe what the difference is between strength of evidence rating and confidence?

>> HOWARD WHITE: Okay, so that would be the same. I thought the question was about the well, I forgot in the you've got two dimensions. One is what is the evidence says. So strongly supporting the intervention, weakly supporting the intervention or inconclusive showing mixed effects from different studies or different outcomes. And then the competency evidence relates to the quality of the studies. So, we could have low confidence or middle of high and depending on the way in which the study was conducted and reported. And there are standardized instruments for appraising study. We shouldn't say quality because used shorthand. There might be reasons why you have low study findings like attrition that are not really a reflection of low quality. Suffer a lot of attrition. So much higher in the control booth than the treatment booth. And no fault of the researchers. They can't do anything much about that given their design and budgets. But it does give us confidence study findings. So, do we really trust the findings? So, we saw walk through QCC, reviews saying how it's effective. Strong evidence in favor. But they were low findings.

>> ANN OUTLAW: Excellent. Ashley, let us know if that answers your question. I think it was very clear Dr. Howard. One more question for you Dr. Gimigliano, how often will you update the eBook? And how will you differentiate between the older and newer versions?

>> FRANCESCA GIMIGLIANO: We will constantly do it because as soon as the new Cochrane systemic review that are published, we will assign for them to some residence for making the summaries. And we have not thought about having it (indiscernible) at the moment. But because we will have a website where all this information will be. And then when we will have a hard copy of the eBook, probably ask.

>> ANN OUTLAW: Thank you. And going back to the question before, since systemic reviews only include the limited number of studies that meet the inclusion criteria for research design, are there ways that you can think that their findings should be triangulated with other sources of knowledge?

>> FRANCESCA GIMIGLIANO: Yes, but it's not in the scope of the eBook actually.

>> ANN OUTLAW: Definitely. Thank you for that clarification. Now I would like to turn things over to Janet. Are you there, Janet? What strategies have you found to be effective in delivering message to consumer? Public in the work that you're doing? Okay. It looks like she's having trouble with her audio. So, Kate, may I pass this on to you while we work on Janet's audio?

>> KATE DUNN: Sure. My strategy to be effective in delivering messages, well, Howard you really struck a chord with me today when you mentioned that some of the documents that get released at the end are over 200 pages. And to go through all of that content is a bit overwhelming for some audiences such as decision makers or patients and care givers and their families. So, my advice or my expertise here would be to say, choose your audience and choose the messages that need to go along with that audience. So, if you're talking to care givers of a specific group or maybe even their patients, drilling down what is the most important information from that review or from the book of information that you found. And starting there. It might not be the end of it, but it's certainly a good start.

>> ANN OUTLAW: Thank you so much. I think they're working on Janet's audio. We have just a few minutes left. Janet, are you able to talk with us? Okay. That's unfortunate. You've offered such great perspectives throughout the day. But you can go ahead and chat in any of your responses or just talk as we're going.

It looks like those are the questions that have come in. From the chat box. If you have any final questions, I invite you all to type them into the chat box and if not, we can close up. All right. Well, I wanted to thank all of you for joining us. Thank you to our panelists and our esteemed reactors. We appreciate you spending your day with us. And for providing your insights. So, thank you all. Have a wonderful rest of your day. And we will see you on Friday.