**Webisode 3 – Turning knowledge into action**

Presenter: Carol Vigurs (EPPI-Centre, UCL)

YouTube video:<https://youtu.be/1TS0HuLC0t4>

JOANN STARKS: Welcome to another session from EPPI-Centre Evidence Tools, Products, and Projects. This series of brief webisodes will introduce the audience to several tools, products, and projects of the Evidence for Policy and Practice Information and Co-ordinating Centre, or EPPI-Centre.

Based at University College London's Institute of Education, the EPPI-Centre focuses on the development of systematic reviews and studies the use of research evidence. I'm Joann Starks from the Center on Knowledge Translation for Disability and Rehabilitation Research, or KTDRR, at American Institutes for Research.

The Center on KTDRR is sponsoring these webisodes with support received from the National Institute on Disability, Independent Living, and Rehabilitation Research, or NIDILRR, in the US Department of Health and Human Services. This session focuses on turning knowledge into action.

Our presenter is Carol Vigurs, research officer at the EPPI-Centre. Carol's interests include diabetes education, children, and young people, young offenders, youth at risk, systematic reviews, and rapid evidence assessment. Welcome, Carol. I will now hand things over to you.

CAROL VIGURS: Thank you. So I'll be talking a little bit about how the National Institute of Health and Care Excellence in the UK, also known as NICE, how they work to turn knowledge into practice by combining the research evidence and stakeholder knowledge to create health and social care guidelines. And the EPPI-Centre is part of the NICE Collaborating Centre for health and social care. And we contributed to the systematic reviews of policy and practice.

So I think there's general agreement that the aim of evidence based practice should be to integrate the best evidence from research with clinical and social care policy practice. Some might say that's a bit easier than done. The barriers set out by practitioners in research about evidence use tend to find it varies our findings, the research evidence, assessing it, interpreting, and applying that current best evidence.

So first point, the research is spread thinly over many, many journals. And practitioners say that a heavy workload and a lack of time is a barrier to finding the research. So for practitioners who are interested and indeed required to stay on top of the latest research in her field, she finds that on top of the usual duties, it might take up to 53 minutes, on average, to find research evidence that's necessary to offer a clinical question. So 39 minutes of it is just looking in databases, and then just getting the articles, another 25 minutes on top.

When we're talking about barriers to assessing and interpreting, the question of once you found that relevant research, one would have to ask oneself, how reliable is this one study? How relevant is it to my practice and population? And do I have all the information I need, in that one article, that I need to put this into practice?

In addition, other barriers may be to apply. And well, there's a whole field of study about implementation alone. But some of the common barriers to implementation suggest that even when evidence is available, it's not always implemented.

Often, it's just assumed that implementation somehow just happens. And implementation is not always related to the quality of the evidence. So weaker evidence may be implemented and stronger evidence neglected.

Finally, authority to change current practice-- a study of research used amongst nurses said that they didn't feel they had the authority to change patient care procedures. On top of that, they just didn't have the time on the job to implement and test new ideas.

The National Institute of Health and Care Excellence, known as NICE, was created in '99 with the express purpose to overcome the problems of variation of access and quality in service provision. So by creating recommendations for good practice in population and condition specific guidelines, the aim is to provide practitioners with consistent and up-to-date research evidence to underpin their practice.

So soon after that, collaborating centers were established, of which EPPI-Centre is a part. And sometime after that, the first social care guideline was produced. And this reflects the drive, the current policy drive, to integrate both health and social care in practice. And soon I took on the remit of producing guidelines for social care, as well as guidelines for clinical guidelines.

So we meet the committee. Here we have members of our service guideline for people with learning disabilities and behavior that challenges. I think you can see a speech and language therapist, an economist, and one of our experts by experience.

So NICE publishes an open invitation for committee members who are interested in the topic. And the committee is comprised of practitioners and academics, representatives from patient groups and charities, and experts by experience. Our experts by expense are people with lived experience of the topic area.

And NICE provides additional support, perhaps in terms of extra time and people who work to support them to make sure their voice is heard. Committees typically consist of more than the three you see here, around 20 to 25 individuals, including support workers and observers. We meet every two months or so over a period of between two or three years.

So what can we do to overcome these barriers individual practitioners experience? Well, in finding the necessary research, we have systematic review methods for searching for the relevant literature. We have an information scientist who develops the search strategy based on the concepts developed in the scope, population intervention and so on.

The search is often broad to capture a range of different study designs that can also arrange the different questions that have been approved by the stakeholders. Searches of bibliographic database can cover hundreds of journals of crosscutting disciplines, as well as gray literature from organizations.

In assessing the evidence, we use systematic review tools there, too. We use standardized checklists to assess the quality and relevance of each study. The role of the review team is to guide the committee on the strengths, the limitations, and the relevance of that research evidence for each of the review questions they've developed.

When interpreting the evidence in our group, we provided reading material in an easy read format for the whole committee, so the experts by experience get extra time to consider the evidence before meeting with support. And then on committee day, we consider the evidence of effectiveness and cost effectiveness together and what this would mean in practice.

The guidance committee considers not just the effectiveness of an intervention, but also the feasibility, acceptability, and resource impact of their recommendations. And then, in applying the research, the interpretation of the research evidence is taken together with the practice experience and the experience of our experts by experience and to clear recommendations that say what to do and how to do it. And this is for the practitioners, the service providers, and commissioners of services.

So you can see, in this sense, stakeholders are part of the production of the recommendations into guideline. And they're also part of its dissemination. Following on from that, NICE monitors the impact of the uptake of these recommendations in national audits, reports, surveys, and indicators.

So when we think about the best available evidence for different kinds of questions, we're not limiting ourself to randomized controlled trial. Because different kinds of questions are going to need different kinds of evidence. For instance, for a guidance such as this one on how one should organize services so they work in a joined up way, our kind of questions might be what are the skills and competencies necessary to develop service capacity in the community.

Or how should services implement care pathways? Or what are the fears and experiences of people who use services? So this is going to require careful interpretation of the evidence and also its applicability to our specific topic, our population, and the policy and regulatory context. So research evidence of the recent past is enhanced by the knowledge of experts and professionals and people who deliver services who can give it that grassroots experience of services as they are now.

The committee can also request an expert witness to give evidence to the committee and answer questions, perhaps relating to the gaps in the literature. Or they can give rich accounts of innovations and service, how they function in practice, or their own experiences. But evidence of effectiveness is not the only impact measure that's important to people. And in practice, NICE recognizes the fact that evidence isn't always of a good quality, and it's hardly ever complete. This is especially true of the emerging social research literature.

So the committee that's developing NICE guidance, they're required to make judgments of two types-- scientific value judgments, and that's about interrupting the quality and significance of the evidence available, and also social value judgments that relate to society rather than science. And this captures the moral issues that arise in health care. So it's not just about what works, but what's about right and fair. The committee can also make recommendations for future research.

So the National Institute for Health and Care Excellence then takes a national approach to the problems of time and workload and interpretation that individual practitioners face in developing best evidence practice. And the transparency and rigor of this process that ensures the practitioners can be competent, these recommendations are based on the best available evidence.

The slide here shows a page of findings from a survey published this year. And it reflects NICE's survey of what their stakeholders think of them. So as this is developed by stakeholders from their professional practice and also people who use services as well as research evidence, finally, it provides that authority to practitioners wishing to implement these recommendations. It's also widely used by people who use services. These recommendations set out what they can and should expect and how they should be cared for in a consistent and evidence based way.

So taking it all together, the context of research use includes the issues, the people operating in this field, their different perspectives from people who use services and people who deliver them, and the different questions that need answering or prioritizing.

So the process is users of research identify the issues that require guidance, then a consultation of different perspectives for understanding these issues and understanding and developing the scope. A guidance committee is formed, representing stakeholder groups. And all of this has the stakeholder perspective.

The guideline then commissions a review of the evidence, which is the research production part. The review team synthesises this evidence. And the committee interprets this evidence in order to create recommendations, also using their knowledge of the day-to-day context of practice, filling in any gaps of research evidence with practice knowledge to create guidance to help with decision making.

And then, finally, we go around a circle again. We also generate recommendations for future research based on gaps identified in the review process. This is then fed back into the National Institute for Health Research in the UK, whose sole purpose is to identify and fund pragmatic, patient-centered research into those gaps in their literature that are felt to get in the way of this decision making process, again linking research production to research use.

So thank you very much for listening. If you'd like to know more, we have a website for EPPI-Centre, if you'd like to know more about our work, or if you'd like to know more about health and social care guidelines, the National Institute of Health and Care Excellence.

We have been known to tweet. And you can contact me directly on this email. If you'd like to know what people with learning disabilities feel about taking part in guidelines, you can hear them speak for themselves with the following link at YouTube.

JOANN STARKS: Well, thank you very much, Carol, for sharing the EPPI-Centre experience and turning knowledge into action. We also want to thank our funding agency, NIDILRR, for supporting this and other webcast activities. Please look for the other sessions in this series on the EPPI-Centre evidence tools, products, and projects.