

# Evidence-Based Practice, Part 2

[VIDEO TRANSCRIPT]

Welcome to evidence-based practice improving practice, improving outcomes part two. My name is Anne Dabrow Woods and I'm the Chief Nurse of Wolters Kluwer health medical research division which is composed of Lippincott Williams & Wilkins and Ovid technologies. In this section we're going to talk about the JBI tools and resources and how they fit into the evidence-based practice methodology. But before we get started let's go back and review what evidence-based practice is. Evidence-based practice is taking the absolute best research evidence, combining it with clinical expertise, along with the patient preference, what the patient wants. Doing all three of those things, using that to base your practice decisions, will improve patient outcomes. The solution to evidence-based practice is the Joanna Briggs Institute. It integrates evidence into practice, makes evidence actionable, and improves patient outcomes. So let's take a look at what it actually does. As I said in part one, the evidence-based practice resources from the Joanna Briggs Institute actually fit very nicely into the methodology of evidence-based practice which are: searching, finding the evidence, appraising the evidence, implementing the evidence, and then evaluating whether what you have done has made a difference. JBI has several different resources to use under each of these sections. Under "Finding the Evidence" it has the systematic reviews, the evidence summaries, the systematic review protocols, and the technical reports. Under "Appraising the Evidence" it has different evidence tools whether you are a novice appraiser or you're an expert appraiser of the evidence. It has JBI Rapid, the Journal Club Summary, and TAP. Under "Implementing the Evidence" JBI has a whole resource section that can be used at point of care as well as for deeper dives into the research literature. It has the best practice information sheets, recommended practices, the JBI policy and procedural manual builder, the consumer pamphlet sheets, which are basically patient education sheets, and JBI CAN-Implement which takes research evidence from clinical guidelines and translates

it so it's specific for your institution. And then the final stage that JBI has is all about evaluating practice outcomes and they have two tools to do that: JBI PACES and POOL and COOL. Using all those pieces will transform your organization into a true evidence-based practice organization. So how do you get started? Well the first step in any evidence-based practice methodology is you have to have a good clinical question. The better your clinical question the better your search results are going to be. And what most people use today is a PICOT format. PICOT meaning looking at your patient population, who are you interested in studying, what's the intervention you're interested in looking at, what's your comparator for your intervention, what is the outcome you're looking for, and then what is the time frame that you want to see the change in practice? If you put all those pieces into your clinical question you can then use those terms to do your search and you'll get a better search results. So the next step is the search. Once you've developed your clinical question you actually have to do your search. And the best way to do this is to partner with a medical librarian because they are absolutely the experts in doing search across a variety of databases. They will help you choose the correct search terms. First of all help you formulate your question, choose the correct search terms and then help you choose the right platform in databases over which you should search. They are expert at using their Boolean modifiers, words like and or which will help make your search result much more specific. And they can also help you search the grey literature which is information you would not normally find if you didn't know how to search for it. So under "Searching and Finding the Evidence" JBI has a whole library of evidence-based information at your disposal. They have systematic review protocols, the library of systematic reviews, the evidence summaries, the best practice information sheets, and the technical reports. So let's take a look at all those. The systematic review, as I said, is the top level of evidence that you should be basing any of your practice changes on. The systematic review walks through a certain step analysis that you have to undertake to actually do a systematic review. That is it helps you develop the question, establish the inclusion criteria, develop the strategy of how you're actually going to do the search. It walks you through appraising the quality of all the results that you get and then it helps you pull out the

information that's necessary to put into your recommendations and your implications for practice. So the systematic reviews have all those pieces in it and they're found within the JBI library. The evidence summaries are basically a synopsis of the information that is pulled out of the systematic reviews - again very quick reference for health care providers on the go who need information at point of care and who do not have time to read a couple hundred pages that's in a systematic review. The best practice information sheets are another excellent resource. They are based for and used for clinicians at point of care. They're based on the latest practice recommendations and systematic reviews and they give you a step-by-step on how to take care of certain patients in certain clinical situations. And many of them have algorithms built in so you can go step by step knowing what to do for your patient. The recommended practice sheets are a really nice additive that JBI has put together. They're basically the procedures. How do you do an intervention or a procedure? What do you need? What type of equipment do you need? What's the best practice regarding that procedure? What are the occupational and safety provisions that you need to know when doing the procedure and then what does the evidence summary say about that procedure? So these are also included in your policy and procedure manual as well. The (second) the third step after step two is step three which is critically appraising the evidence and this is really really important because as healthcare providers many of us were not taught how to critically appraise evidence. We were basically taught to take evidence at face value. And what we know is that there's a lot of information published each year and not all of it is sound science and we should not be basing our interventions that we do with our patients based on every research study that you look at. It needs to be based on the best evidence and many times those are gonna be your systematic reviews and your meta analyses. But it's very, very important that you know how to appraise evidence. So when you praise clinical evidence you're looking at several things. Is it valid? Is it reliable? Is it going to be applicable for practice? Is there bias inherent in the study that you need to identify? What's the strength and the magnitude of the recommendations that are given by the research authors? JBI has tools developed for you to actually do critical appraisal of the evidence. Those four tools are Rapid, Summary, TAP, and the

JBI Journal Club. So let's take a look at Summary first. Now Summary is the tool - it stands for a system for the unified management of the assessment and review of information. This is the tool that is going to walk you through step by step how to actually do a systematic review. Summary has multiple components within it and it will assist you in conducting the systematic review based on feasibility, appropriateness, meaningfulness, effectiveness, and it also looks at the economic evidence. It walks you through the system using a system called CReMS which is built into summary and that's a comprehensive review and management system. And basically it helps you keep all your information together in one place that you pull together for all your searches. So CReMS and Summary are very very useful tools if you're going to be actually doing systematic reviews. So CReMS has different ways to appraise evidence. They have different tools Qari, Mastari, Notari, and Actuari and these different tools actually look at different types of evidence. So they have tools that look at qualitative research, quantitative research, economic research, and actually tools that will appraise clinical practice guidelines. This is really important because when you do a systematic review you're looking at all the different types of evidence that are out there and available. So using the CReMS analytic models will allow you to evaluate all the different types of evidence and then pull together your systematic review. Very very useful tool for those who do systematic reviews. Let's take a look at Rapid. Rapid is a really great tool for people who only want to look at one original research study at a time. And the great thing about rapid is that it looks at all different types of research studies. So it looks at studies that are related to prognosis, to risk, to interventions, to cost, to experience, diagnosis, and it actually can be used to appraise the systematic reviews. So the rapid system preloads the appraisal questions based on the type of study it is. And these research questions have been vetted through the research to be valid and reliable questions. So by answering these you'll know that you're doing a very good appraisal of the research literature. You then are able to extract data out of your study and then you are actually then able to put in what the author concludes is the answer and what you conclude is the answer or the evaluation of the research based on your analysis of the study. This is very very important because a lot of times what an author states is the

conclusion, or the result is not what you see when you take an in-depth look at the science behind it, or the analytics behind it. So using Rapid will quickly show you whether you are looking at sound science or not. TAP, the thematic analysis program, this program looks at qualitative research. It puts similar methodologies that they use for Rapid against qualitative research. You're able to extract information out of an original qualitative study and build your conclusions and recommendations. JBI Journal Club - this is an absolutely fantastic tool especially for institutions who are just starting to implement evidence into practice. It actually takes a group of people through the evidence appraisal system, teaches them how to do it together as a group. So with the journal club they built in five steps to actually do the evidence appraisal through the journal club. They're very very easy to do. And the key thing about this is the librarian can track all the sessions that are going on within a healthcare institution. Now why is this important? Well in most healthcare institutions you have multiple specialties on different floors. So you may have people up in critical care, you may have people on a medical surgical unit, and the studies that you want to look at may not necessarily be the same thing. So you need to make sure you pick the right study for the right group so it holds their interest and then you're able to teach them something about evidence appraisal. And using the journal club allows you to have multiple studies being appraised at the same time within an organization. And your librarian or the key person on the journal club, the key administrator is able to track what's going on. So let's talk about implementing the evidence. Implementing the evidence is very very important because even if you have evidence available, unless you're putting it into practice, it's not going to make a big difference in our patient lives. So for implementing the evidence, the first thing you need to do is understand the healthcare levels, providers expertise in a certain area. Then you need to develop a plan to educate them. And then you (got it) then you need to institute that educational program, and then you need to actually implement the evidence and integrate it into practice. Well JBI has tools that actually have already done all that for you. They have the JBI manual builder which assembles policy procedures using all the latest JBI evidence as well as global evidence into a policy and procedure manual that you can use for your healthcare providers,

physicians, nurses, allied health, to then use and deliver care. It is always based on the latest evidence that's available and it's periodically updated so you know that your staff is going to be practicing based on the latest evidence standards. This consumer pamphlet builder is a tool that assembles the latest evidence into information that patients can understand. So it's written at the correct literacy level for patients and it's based on the latest evidence. And then CAN-Implement allows you to take clinical practice guidelines and make them specific for your facility or for your institution no matter what geographic location you're in. So let's take a look at the manual builder. Now in JBI they've broken down all their content into multiple specialties. Right now there's 14 of them. So they've broken them down into 14 different specialties although they're adding new specialties on continuously. So you have the ability to then purchase the entire manual or you could purchase the manual or just have it available for certain units based on what their specialty is. The key thing about the manual is that it is updated on a periodic basis so you know that your healthcare providers are always using the best evidence. The consumer information sheets again as I said, they're a great tool for our patients because patients read things (that are) and they take them to heart and they actually start doing these interventions when they're not based on sound evidence. So the consumer information sheets use the latest evidence and they pull together information that's written at the patient level or correct literacy level and patients can use that information when they go home. Now the beautiful thing about consumer pamphlet builder is that you can customize it specifically for your institution. And you can have them in different formats so you could go for a two-sided format, here's a tri-fold format, you can do whatever you need to do for your institution and it can be customized for your institution. So you'll know that if a patient gets discharged from a hospital you know that you can send them back to you if they have questions. So let's take a look at "CAN Implement". Well CAN Implement looks at all the clinical practice guidelines that are out there and it makes them specific for your specific institution. Now why is that important? Well if you live in say the Los Angeles area, your hospital probably does everything it needs to do for all patients but if you work in a smaller institution, say out in the middle of Montana, you may be working at an institution where you

don't have certain specialties available to you and you need to make sure that the care that you're delivering is based on the latest standards. And Can Implement actually walks you through clinical practice guidelines, pulls out the information that you can use that is specific to your specific institution, and you can put that into practice. So you know no matter what geographic location, what size of institution, you know that your nurses, your doctor's, your allied health professionals are delivering the best care for your patients that are specific to your size and institution. Step 5 which what I consider the most important part of this whole evidence-based practice methodology is evaluating whether or not the practice changes we've made has improved patient outcomes. Why is this important? Because if we don't know if what we've done has made a difference in a good or a bad way then it doesn't matter. We need to know if it's made a difference and we need to know if it's harmed patients so we can stop doing that. And using the tools under the evaluate process can help you do that. So these tools actually look at measuring outcome data. They actually will analyze the data results for you and they'll help you to determine whether what you've done has made a difference in your patients' outcome. JBI has several tools, they have the PACES tools with stands for Practical Application of Clinical Evidence System and that's the clinical audit tool that use at point of care, helps to identify problems immediately and it actually can then help you formulate recommendations to improve practice. POOL and COOL are basically the exact same product. They look at patient outcomes. POOL is used for inpatient settings or when we talk about people as patients and COOL is when we talk about patients as clients. So it's commonly used in mental health settings or outpatient settings. So PACES allows you to look through their database of clinical questions that have already been developed, clinical audit criteria based on the audit criteria that we have to look at across the globe and it allows you to pull up which one you want to look at. The outcomes that you were actually evaluating that are outcomes that are vetted by the evidence to show to make a difference in patientcare. The PACES Data collection tool is used at point of care by nurses and doctors right at point of care, they go into the patient, they just check boxes, and then the system actually is able to formulate the answers for them. So this is an example of an intervention that was done on a unit

called Zach 4. And this intervention as you see when they originally did the audit they were very very low on their outcome scores. However, after doing education about the intervention and making sure that everyone was practicing the same way, they were able to use the PACES tool to go back and re-audit the care that was being delivered. And as you can clearly see here now, they've reached their benchmark of a hundred percent across all the different units. So PACE allows you to look at a clinical outcome and decide whether or not you're doing a good enough job and if you aren't it tells you what to do to fix it and then you can reuse the tool to re-audit and see if you've actually done a better job. POOL and COOL actually pull the data from cases, the outcome data and they take a look at it, and they can help you benchmark against different units within a hospital system as well as different hospitals within a large hospital system. So as you can see here, this is an example of urinary catheter associated infections, and as you can see here in the beginning the hospital systems were doing pretty well. But then they drop below the baseline. What they did here is they re-educated everyone and then you can see that their outcomes got much improved because of the re-education. Well after a few months we all know that care starts to decline after a few months unless you're continually educating people about what the best care is. Again their levels dropped, they did another re-education and their numbers went up. So this clearly shows you using the POOL and audit tools that you can actually show that by using clinical audit criteria and education you can actually improve patient outcomes. So what's the final step? Well the final step is to take everything you've learned from your evidence-based practice journey, from the way you've improved clinical outcomes, and you need to disseminate it. You may need to disseminate it across the rest of your institution, you may need to disseminate it across healthcare as a whole. And to do that you should publish your information in peer-reviewed journals so people can improve practice based on the steps that you've already done. The other part, this really important, is many hospitals are moving to the electronic health care record and we need to make sure that we get our clinical outcomes information and our practice changes embedded within the electronic health care record so it works seamlessly with patient care workflow and then it can be built into practice. So in conclusion the Joanna



Briggs takes healthcare evidence, it makes it actionable, and then makes you have the ability to integrate evidence into practice so you can improve your patient outcomes. Evidence-based practice is something that needs to start with each and every healthcare provider across the globe. Only then will we be able to improve care and improve our patient outcomes. Thank you very much.