Iowa’s Application of Rubrics to Evaluate Screening and Progress Tools

John Hosp: Welcome to the live chat! We are ready to go, so feel free to submit questions.

Question 1: What were some of the methods the developers used to predict sensitivity? Were different population demographics (e.g., ELLs, race/ethnicity) looked at for their technical adequacy?

Answer 1: Many developers are using logistic regression; however some are using receiver operating characteristic curve (ROC) analysis to get an approximate cut score and then using a classification accuracy matrix for sensitivity. Examination of disaggregated groups varies by developer. Some do a lot; others only a little. The more recent the tool, the more likely there seems to be disaggregated analyses. Most are careful to have a representative sample across different demographic categories though—even if not disaggregating.

Question 2: If there is an intervention that someone has developed, does it need to be evidence-based or data driven before a district can pilot it or can the district pilot the program and evaluate its efficacy?

Answer 2: The NCRTI differentiates evidence-based from research-based. EB would entail something that has specific research demonstrating its efficacy; RB is something based on research on efficacy, but that has not itself been tested. As such, it would be good for a district to pilot and evaluate a program when implementing it, but I would be careful to monitor implementation fidelity and relate the results to other research.

Comment 1: Thanks for the response. I feel that as we develop protocols and universal screens, this is the piece that has the real potential to make a difference in how soon and how effectively we can intervene to improve outcomes.

Response 1: I agree. The sooner we can intervene, the sooner we can improve outcomes.

Question 3: Did you limit the reviews to only those tools that were listed on the in-state survey?

Answer 3: No. Although that was the starting point, some responses to the survey were general rather than listing specific tools. The groups decided to then include other tools that would fit the
general category or other parallel tools. However, the process was not designed to review every possible tool, so it is not an exhaustive list.

Question 4: What were the "big ideas" from the Iowa study that are applicable to researchers as they develop and/or test universal screens and protocols for implementation in the RTI model?

Answer 4: I think these would differ for different groups doing this work as one group may put more importance on cost and another on time, for example. But some of the important points relate to effectiveness and efficiency. Make sure the tool does what it is supposed to as best you get make it, and with the least amount of time and cost. I know these are big demands, but time and cost/resources are consistently reported as the two biggest barriers to teaching. Another one is to ensure that the criterion measure is a good one. Just because it is widely used, does NOT mean that it is technically adequate. If you start doing some research into the technical adequacy of some popular tools, you'll find that there really has not been a lot of work done on them.

Question 5: Is there a good primer you can recommend for understanding all the references to things like logistical regression?

Answer 5: There are some good books similar to "Statistics for Dummies" that are geared for practitioners who want to read about statistics but not do them. Offhand, I can't recommend any, but looking for ones that may include "a practical guide to" or "consumers guide to" often are the best are explaining why and how statistics are used rather than the crux of what they do or how they work. Also, some research articles that use the methods will do a good job of explaining them—the problem is finding a good article that does this. Paul Vogt has a dictionary of statistics and methods that I find is helpful in explaining specifics sometimes.

Question 6: Was it difficult to get information from the publishers?

Answer 6: Most information was available without having to contact publishers, but in the cases where they needed to be contacted, they have been quite helpful.

Question 7: As we work toward developing cost efficient and valid screens and pm tools, what groups (National Center on RTI?) would provide technical support and advice for developing tools?
Answer 7: I don't think that is part of the mission of the NCRTI, but looking at the standards incorporated in different evaluative rubrics such as those of the NCRTI could be informational. There are organizations that focus on tool development and assessment or measurement practices as well as researchers and developers that have the expertise. My perspective is that it is better to collaborate or get feedback from some of the experts in the area rather than relying on a specific group or organization for technical support. There are plenty of researchers with expertise in this area that are willing to collaborate.

Question 8: What is your opinion on the need to develop tools that are effective in "less than ideal" conditions? As I look at the wording on recent RFAs on the acceptableness of tools and instruments that are "able to work" versus "will work" under real world conditions, I worry about the disconnect between what we spend our research dollars on and what schools need. Is technical adequacy greatly impacted by real world vs. ideal conditions?

Answer 8: In intervention research, we have efficacy and effectiveness--efficacy is the "able to work" and effectiveness is the "under real-world conditions". There has been less of a focus on these with tool development and validation though. Ideally, I want to see both from a tool--that it can actually do what it is designed to do and that it can be implemented reliably in schools and the data used to make decisions that improve outcomes for students. They are potentially very different questions.

Question 9: There was a report on RTI instruments. Which you felt were reliable and valid and others not. The study listed the procedures of your study but did not list the instruments you measured. For example: were they DIBELS or AIMSweb?

Answer 9: Since the process is still taking place, we cannot share that information. Once the reviews are complete I believe a list of the tools reviewed will be available.

Comment 2: Thanks for the information. This web chat has been helpful; I appreciate the time the center and John have given us today. This opportunity is invaluable to me in my work and in my developing thinking process on research design, RTI implementation, and how to improve outcomes for students.

Response 2: You're welcome. It was my pleasure. Thanks to you all for your interest.

John Hosp: Thank you for joining the chat and for your interest in the topic.