How to use the AGREE II Instrument presented by Caroline Zwaal, Health Research Methodologist at the Program in Evidence-based Care at McMaster University.

featuring a story of implementation from Manitoba Health

Introduction
Welcome to the ninth webinar in the Spotlight on Knowledge Translation Methods & Tools series presented by CHNET-Works! and the National Collaborating Centre for Methods and Tools. In this episode we are joined by two advisors on tap to discuss the AGREE II Instrument. Caroline Zwaal is a Health Research Methodologist at the Program in Evidence-based Care at McMaster University, and has completed over 100 evaluations using the AGREE II Instrument. Joselito Montalban is a policy analyst in the Public Health branch of Manitoba Health, and will speak to his experience of using the AGREE II Instrument to update an existing guideline with Manitoba Health.

Purpose of AGREE II
The Appraisal of Guidelines for Research and Evaluation (AGREE) Instrument was designed to give users insight into the quality of clinical guidelines, and as a validated instrument is widely considered the gold standard for guideline appraisal. All too often, readers understand a guideline’s initial question and final recommendations, but not enough about the process that leads from one to the other. The goal of the AGREE II Instrument is to shed light on guidelines’ methodology to bring attention to the presence of bias, the guidelines’ evidence base, and the usability of the document. To this end, the AGREE II Instrument serves three functions:

1. To help assess methodological quality of guidelines

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2. To guide the development of guidelines
3. To inform users on what information ought to be reported in guidelines

Structure of the AGREE II
In judging the quality of clinical guidelines, the AGREE II instrument assesses 23 separate items, which are grouped into six domains. The six domains (scope and purpose, stakeholder involvement, rigour of development, clarity of presentation, applicability, and editorial independence) span the breadth of methodological considerations relevant to a guideline’s quality. Within each domain, items are rated on a 7-point scale to reflect how well that item is reported in the guideline.

Rating Domain Items
AGREE II recognizes that rating elements of a guideline can be a subjective process. To help standardize this process, the instrument comes with an accompanying online user’s manual, which features definitions, examples, and helpful tips. The manual also provides criteria and considerations for how to rate each item. In the manual, criteria refer to the specific elements that reflect the operational definition of the item; consider them the letter of the law for item rating. Conversely, considerations are provided to help inform the assessment and offer guidance on what should receive a higher score.

Combining Ratings
In order to increase reliability, it’s recommended that AGREE II assessments are completed by multiple reviewers for each guideline. Fortunately, the user’s manual provides comprehensive instructions on how best to combine scores from more than one reviewer within a domain so that the end result is a fair representation of the group’s results. Additionally, by using My AGREE PLUS on www.agreetrust.org, users can input their individual ratings and receive a combined result from the system without having to do any calculation on their own! However, it is important to note that the AGREE II instrument does not provide an overall score for a guideline; rather it offers scores for each domain which can be weighed according to the reviewer’s
priorities, and used as a starting point for discussion among reviewers.

**My AGREE PLUS**
My AGREE PLUS is a collection of three platforms to support individuals and groups in using the AGREE II instrument. In addition to supporting individual appraisals through the website, My AGREE PLUS allows users to join group appraisals of a single guideline as well as coordinate a group appraisal and track progress. The goal of My AGREE PLUS is to make collaboration easier when assessing guidelines using AGREE II.

**AGREE II in Practice: Story from Manitoba Health**
In 2012, Manitoba Health started the updating process of the provincial 2009 tuberculosis protocol with the impending release of the new National Canadian Tuberculosis Standards. Soliman Guirgis, in consultation with the TB Protocol Updating Working Group, used the AGREE II instrument to standardize the updating approach and process. The team was reluctant to update the protocol unilaterally without input from the intended audience. Ideally, they wanted the protocol revisions to be shaped by stakeholder opinions while still adhering to a validated tool.

So they created a self-administered questionnaire for stakeholders and the protocol users with questions based on the six domains and 23 items of the AGREE II instrument. In creating the survey, Soliman’s team was able to seek feedback from protocol users while ensuring the subject of feedback matched the evidence-based approach of the AGREE II. In this sense, rather than being used to evaluate the existing protocol, the AGREE II was adopted as a way to draw out ideas from stakeholders and guide changes.

The feedback received based on the AGREE II survey was both rich and valuable to Soliman and the working group. For example, answers from the Clarity of Presentation domain shed light on the impracticality of storing data in appendices rather than within the

A resource from the National Collaborating Centre for Methods and Tools [www.nccmt.ca](http://www.nccmt.ca)
text. Other revisions based on user feedback included shortening the protocol from 128 pages to 15 pages, including a clearly stated focus, improving the layout, and clarifying the acronyms used throughout. Ultimately, over 100 health care professionals from a wide range of backgrounds shared their opinions and helped to shape the updated protocol, all guided by the AGREE II instrument.

Conclusion
Assessing the quality of guidelines can be a daunting task, and many public health professionals may be uncertain how to do it or where to start. The AGREE II instrument represents an excellent resource for individuals and groups assessing methodological quality of a guideline, developing a guideline, or hoping to understand the type and amount of information that ought to be reported in a guideline. The wealth of resources available online at www.agreetrust.org makes using the AGREE II easy and effective. Soliman Guirgis adapted the AGREE II to help Manitoba Health seek stakeholder feedback in the design of their own protocol. He is just one of many people using the tool to ensure high-quality guidelines are informing public health decision-making.