

# Context Assessment for Community Health (COACH) tool

## Pragmatic Testing and Content Validity Data

## Summary of Pragmatic properties

The COACH tool had an overall objective pragmatic score of 15 out of 20. According to our objective pragmatic assessment, the COACH tool's strengths include being available in the public domain, having acceptable language, and not requiring training for administration. The COACH tool lost scores because interpretation of the total score is not clearly outlined.

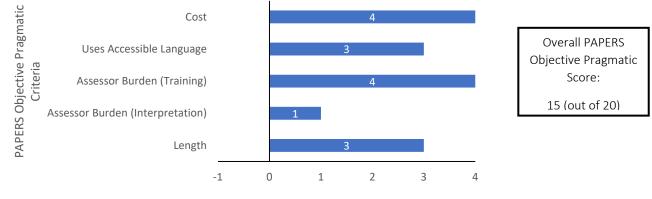
Based on three RNAO stakeholders, the COACH tool was rated 2.3 out of 4 for likelihood to use. The COACH tool has an overall stakeholder facing assessments score of 13.8 out of 24.

## **Tool Pragmatic Properties**

Tools were assessed for pragmatic properties with the PAPERS tool (Stanick et al. 2019); a validated tool for measuring a tool's acceptability, ease of use, appropriateness, and usefulness. Objective pragmatic properties were assessed by two research assistants independently and with consensus for each tool. Stakeholder facing pragmatic properties were assessed independently by at least two stakeholders (e.g., champions) for each tool. A mean score was calculated from participants' responses for each of the stakeholder facing PAPERS survey questions.

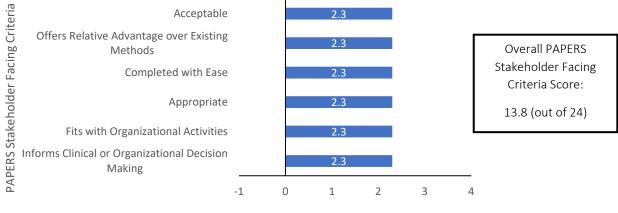


## PAPERS Objective Pragmatic Criteria (Click <u>here</u> for Scoring Details)



Scores

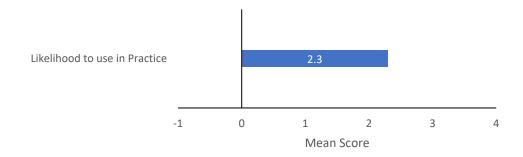
PAPERS Stakeholder Facing Criteria (n = 3 stakeholders). Click <u>here</u> for Scoring details.



Mean Scores



*Likelihood to Use the Tool in Practice (n = 3 stakeholders). Click <u>here</u> for Scoring details.* 



# **Content Validity**

## Summary of Content Validity

• According to our assessment using an adapted version of a checklist by Mokkink et al. (2010), the COACH tool has evidence of content validity.

Content validity refers to the degree to which the content of the tool is an adequate reflection of the construct being measured. In the case of the COACH tool, this refers to the extent that knowledge users can use the COACH tool to assess barriers/facilitators to knowledge use and monitor knowledge use according to the following constructs:

- Resources
- Community engagement
- Monitoring services for action
- Sources of knowledge
- Commitment to work
- Work culture
- Leadership
- Informal payment



General Requirements		Yes	No
1.	Was there an assessment of whether all items refer aspects of the	Х	
	construct to be measured?		
2.	Was there an assessment of whether all items are relevant for the study	Х	
	population? (e.g., age, gender, disease characteristics, country, setting)		
3.	Was there an assessment of whether all items are relevant for the	Х	
	purpose of the measurement instrument? (discriminative, evaluative,		
	and/or predictive)		
4.	Was there an assessment of whether all items together comprehensively	Х	
	reflect the construct to be measured?		

Adapted from: Mokkink, L.B., Terwee, C.B., Knol, D.L., Stratford, P.W., Alonso, J., Patrick, D.L., Bouter, L.M. and De Vet, H.C. (2010). The COSMIN checklist for evaluating the methodological quality of studies on measurement properties: a clarification of its content. *BMC medical research methodology*, *10*(1), 1-8.

According to our assessment using an adapted version of a checklist by Mokkink et al. (2010), the COACH tool has evidence of content validity:

Content Validity Requirement 1:

- The relevance of COACH tool items in measuring context in low- and middle -income countries were assessed by 8-12 experts, a panel of participants across four countries (Bangladesh, Nicaragua, Uganda, and Vietnam), and by an international panel of eight experts.
- The panel of experts rated the relevance of each item on the scale; item-content validity was used to measure the proportion of participant that agree on each item's relevance and scalecontent validity was used to measure the relevance of each item to each dimension of the COACH tool (Bergström et al., 2015).
- Focus groups discussion was completed with each panel of participants to assess content validity and to explore whether additional factors affecting implementation in their setting exists but are not captured by the COACH tool.



## Content Validity Requirement 2:

• Given the diversity of countries/health systems represented by the participants/experts described to perform content validity assessments, we believe that the items in the COACH tool was adequately assessed for their relevance with the study population (Bergström et al., 2015).

## Content Validity Requirement 3:

• Despite, the low calculated validity index per item and per scale during phases of content validity testing, the tool developers stated that the participants reported that the subscales of the COACH tool evaluated components of context in their setting during the focus groups (Bergström et al., 2015).

#### Content Validity Requirement 4:

• During tool development, the same experts mentioned above entered comments regarding each dimension in addition to rating the perceived relevance of items (Bergström et al., 2015); We infer that this process could have been used to assess whether all items together comprehensively reflect the construct measured, though this is not stated explicitly.

#### Limitations:

• From our assessment, there does not appear to be any flaws in the design or methods of the study.

## References

 Bergström, A., Skeen, S., Duc, D.M., Blandon, E.Z., Estabrooks, C., Gustavsson, P., Hoa, D.T.P., Källestål, C., Målqvist, M., Nga, N.T. and Persson, L.A. (2015). Health system context and implementation of evidence-based practices-development and validation of the Context Assessment for Community Health (COACH) tool for low- and middle-income settings. *Implementation Science*, *10*(1), 1-15. https://doi.org/10.1186/s13012-015-0305-2



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- Stanick, C. F., Halko, H. M., Nolen, E. A., Powell, B. J., Dorsey, C. N., Mettert, K. D., Weiner, B. J., Barwick, M., Wolfenden, L., Damschroder, L. J., & Lewis, C. C. (2019, Nov 20). Pragmatic measures for implementation research: development of the Psychometric and Pragmatic Evidence Rating Scale (PAPERS). *Translational Behavioral Medicine*. https://doi.org/10.1093/tbm/ibz164