

# LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND  
CHANGE TEAMS MAKE LASTING  
IMPROVEMENTS IN HEALTH CARE

## Organizational Readiness for Implementing Change (ORIC)

### Pragmatic Testing and Content Validity Data

#### *Summary of Pragmatic properties*

The ORIC tool had an overall **objective pragmatic score** of **16** out of **20**. According to this objective pragmatic assessment, the ORIC tool’s strengths include being available in the public domain, having acceptable language, not requiring training for administration, having some instructions for interpreting scores, and having less than 50 items.

Based on three RNAO stakeholders, the ORIC tool was rated **1.7** out of **4** for **likelihood to use**. The ORIC tool has an overall **stakeholder facing assessments** score of **13.3** out of **24**.

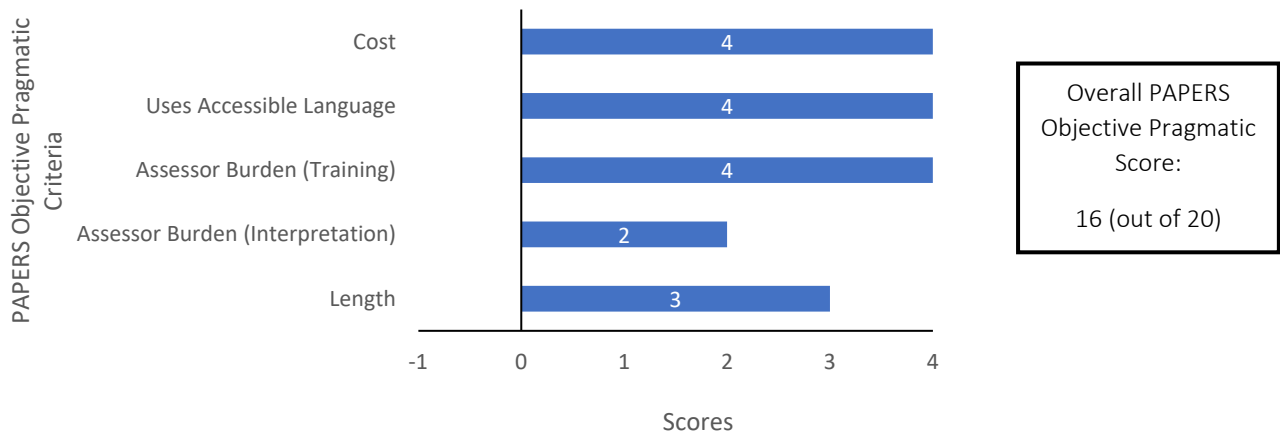
### Tool Pragmatic Properties

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.

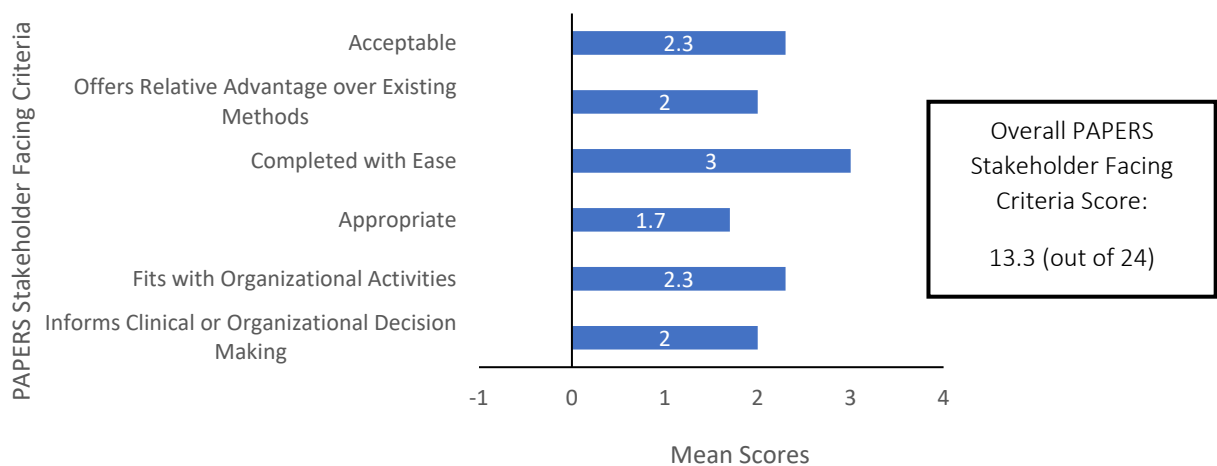
# LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND CHANGE TEAMS MAKE LASTING IMPROVEMENTS IN HEALTH CARE

## PAPERS Objective Pragmatic Criteria - Scoring details below



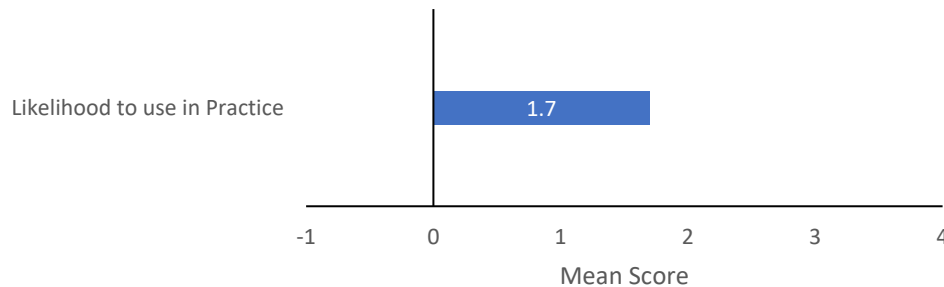
## PAPERS Stakeholder Facing Criteria (n = 3 stakeholders) - Scoring details below



# LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND CHANGE TEAMS MAKE LASTING IMPROVEMENTS IN HEALTH CARE

*Likelihood to Use the Tool in Practice (n = 3 stakeholders) - Scoring details below*



## Content Validity

### *Summary of Content Validity*

According to our assessment using an adapted version of a checklist by Mokkink et al. (2010), the ORIC 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 ORIC tool, this refers to the extent that individuals can use the ORIC tool to assess barriers/facilitators to knowledge use and monitor knowledge use according to the following factors of organizational readiness:

- Change commitment
- Change Efficacy

# LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND  
CHANGE TEAMS MAKE LASTING  
IMPROVEMENTS IN HEALTH CARE

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

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 of content validity using an adapted version of a checklist by Mokkink et al. (2010), the ORIC tool has evidence of content validity.

#### Content Validity Requirement 1:

- The tool developers constructed the ORIC tool’s factors and items according to Weiner (2009)’s theory of organization readiness for change. The relevance of each item for each ORIC factor were assessed by 98 students enrolled in undergraduate, masters, and doctoral programs in health policy and management at a university located in the southeastern United States (Shea et al., 2014).

#### Content Validity Requirement 2:

- Content validity was tested on a convenience sample of 98 students enrolled in undergraduate, masters, and doctoral programs in health policy and management at a university located in the southeastern United States. Further, the ORIC tool was field tested with non-governmental organizational staff ( $n = 311$ ) during the implementation of a mobile technology used for evaluating and monitoring health programs (Shea et al., 2014).

# LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND  
CHANGE TEAMS MAKE LASTING  
IMPROVEMENTS IN HEALTH CARE

## Content Validity Requirement 3:

- The tool developers identified theoretical determinants that were predictive but different from the two factors (change commitment and change efficacy) that the ORIC tool was meant to measure. Regarding change commitment, the tool developers stated that change valence, or the extent that individuals value the change is a strong theoretical determinant. Regarding change efficacy, the tool developers stated that individual's knowledge of tasks and the availability of resources are strong theoretical determinants (Shea et al., 2014).
- To differentiate between the ORIC factors and their theoretical determinants, the sample of 98 students were split into two groups. One group rated the change commitment items on the extent that they are perceived to measure change commitment or change valence. Similarly, the other half of the group rated the change efficacy items on the extent that they are perceived to measure change efficacy, knowledge of task or availability of resources (Shea et al., 2014).
- The authors reported that four of the five change commitment items were perceived on average to measure change commitment. The tool developers retained the one item that was perceived to measure change valence more than change commitment for future testing. All the change efficacy items were perceived to measure change efficacy more than knowledge of tasks or availability of resources. These assessments demonstrated that the ORIC tool can evaluate change commitment and change efficacy and is discriminative in measuring these factors from their theoretical determinants (Shea et al., 2014).

## Content Validity Requirement 4:

- The ORIC tool and its items were constructed according to Weiner (2009)'s theory of organization readiness for change. The items in the ORIC tool were evaluated by the extent that they were perceived to measure change commitment and change efficacy and not the theoretical determinants of these two factors. Hence, we can argue the ORIC tool items comprehensively measures organization readiness in implementing change through measuring its two theoretical factors (change commitment and change efficacy) (Shea et al., 2014).

# LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND  
CHANGE TEAMS MAKE LASTING  
IMPROVEMENTS IN HEALTH CARE

## Limitations:

- One notable limitation stated by the authors relating to content validity was that the sample of 98 students were health care professional or staff. However, the tool developers argued that these students understood health systems or were exposed to health care environments during their studies. Hence the student perspectives were still relevant (Shea et al., 2014).

## References

- 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.
- Shea, C. M., Jacobs, S. R., Esserman, D. A., Bruce, K., & Weiner, B. J. (2014). Organizational readiness for implementing change: a psychometric assessment of a new measure. *Implementation science*, 9(1), 1-15. <https://doi.org/10.1186/1748-5908-9-7>.
- 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>.
- Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation science*, 4(1), 1-9.