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# Compendium of Research Instruments

**Instrument Title:**

Organizational Readiness to Change Assessment (ORCA)

**Instrument Author:**

Helfrich, C. D., Li, Y. F., Sharp, N. D

**Source:**

Helfrich, C. D., Li, Y. F., Sharp, N. D., & Sales, A. E. (2009). Organizational readiness to change assessment (ORCA): Development of an instrument based on the promoting action on research in health services (PARIHS) framework. *Implementation Science*, 4(1), 38-51.

**Source Author:**

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**Abstract:**

**Background:** The Promoting Action on Research Implementation in Health Services, or PARIHS, framework is a theoretical framework widely promoted as a guide to implement evidence-based clinical practices. However, it has as yet no pool of validated measurement instruments that operationalize the constructs defined in the framework. The present article introduces an Organizational Readiness to Change Assessment instrument (ORCA), organized according to the core elements and sub-elements of the PARIHS framework, and reports on initial validation. **Methods:** We conducted scale reliability and factor analyses on cross-sectional, secondary data from three quality improvement projects (n = 80) conducted in the Veterans Health Administration. In each project, identical 77-item ORCA instruments were administered to one or more staff from each facility involved in quality improvement projects. Items were organized into 19 subscales and three primary scales corresponding to the core elements of the PARIHS framework: (1) Strength and extent of evidence for the clinical practice changes represented by the QI program, assessed with four subscales, (2) Quality of the organizational context for the QI program, assessed with six subscales, and (3) Capacity for internal facilitation of the QI program, assessed with nine subscales. **Results:** Cronbach's alpha for scale reliability were 0.74, 0.85 and 0.95 for the evidence, context and facilitation scales, respectively. The evidence scale and its three constituent subscales failed to meet the conventional threshold of 0.80 for reliability, and three individual items were eliminated from evidence subscales following reliability testing. In exploratory factor analysis, three factors were retained. Seven of the nine facilitation subscales loaded onto the first factor; five of the six context subscales loaded onto the second factor; and the three evidence subscales loaded on the third factor. Two subscales failed to load significantly on any factor. One measured resources in general (from the context scale), and one clinical champion role (from the facilitation scale). **Conclusion:** We find general support for the reliability and factor structure of the ORCA. However, there was poor reliability among measures of evidence, and factor analysis results for measures of general resources and clinical champion role did not conform to the PARIHS framework. Additional validation is needed, including criterion validation. © 2009 Helfrich et al; licensee BioMed Central Ltd.

**Descriptors:**

n/a

**Number of questions:**

77 items with 5-point Likert response formats, taking about 15 minutes to complete as a web-based version

**Response Options:**

n/a

**Validity:**

n/a

**Reliability:**

Cronbach's alpha for scale reliability ranged from 0.74 to 0.95, with authors describing reliability as being poor for 3 evidence scales. Article describes Convergent Validity in detail.

Researchers should review article for full details of psychometric properties estimates.

**Subscale/Factors:**

Evidence, Context, Facilitation

**Sample Descriptors:**

Adult

Quality Improvement project staff

**Sample Items:**

For each of the following statements, please rate the strength of your agreement with the statement, from 1 (strongly disagree) to 5 (strongly agree)

(Research) The proposed practice changes or guideline implementation:	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree Don't know/
a) are(is) supported by RCTs or other scientific evidence from the VA	1	2	3	4	5
b) are(is) supported by RCTs or other scientific evidence from other health care systems	1	2	3	4	5
c) should be effective, based on current scientific knowledge					

**Measure Descriptors:**

Organizational readiness

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**Article Availability:**

<http://www.scopus.com/inward/record.url?eid=2-s2.0-68749087418&partnerID=40&md5=a03dbdf58670e56f396fe0f303ffe6ec>

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