

Supplementary File 2: PRISMA-ScR Checklist

Title of the scoping review:

Identifying Dimensions and Components of Organizational Readiness for Knowledge Translation Implementation in Type I Medical Sciences Universities in Iran: A Scoping Review

Corresponding author:

Hamed Hosseinzadeh

Section	Item	PRISMA-ScR Checklist Item	Reported in Manuscript (Yes/No/Partial)	Location in Manuscript (Page/Line or Section)	Specific Evidence from Included Studies (Examples)
TITLE	1	Identify the report as a scoping review.	Yes	Title	Title includes "A Scoping Review"
ABSTRACT	2	Provide a structured summary.	Yes	Abstract	Includes Objectives, Methods, Results, Conclusion
INTRODUCTION	3	Rationale for the review.	Yes	Introduction (paras 1-4)	Gaps in KT in LMICs and Iran specifically
	4	Explicit review questions/objectives.	Yes	Introduction (last para)	"identify the dimensions and components..."
METHODS	5	Protocol registration.	No	N/A	Not applicable
	6	Eligibility criteria.	Yes	Methods: Inclusion/Exclusion	Clear criteria listed
	7	Information sources.	Yes	Methods: Stage 2	PubMed, Scopus, WoS, Google Scholar, MagIran, SID
	8	Search strategy.	Yes	Methods: Stage 2; Supp File 1	Search terms listed; full strategies in supplement
	9	Study selection process.	Yes	Methods: Stage 3; Fig 1	PRISMA flow diagram included
	10	Data extraction process.	Yes	Methods: Stage 4	Described extraction and categorization

	11	Data items.	Yes	Methods: Stage 4; Results	Dimensions/components extracted (Table 3)
	12	Synthesis methods.	Yes	Methods: Stage 5; Results	Qualitative content analysis described
RESULTS	13	Study selection numbers.	Yes	Results; Fig 1	PRISMA diagram (4540 → 14 studies)
	14	Characteristics of sources.	Yes	Results; Table 2	Summary of 14 included studies
	15	Key findings.	Yes	Results; Table 3, Fig 2	5 dimensions, 14 components, conceptual model
	16	Results synthesis.	Yes	Results narrative; Discussion	Synthesis across studies presented
DISCUSSION	17	Summary of evidence.	Yes	Discussion sections	Synthesized per dimension
	18	Limitations.	Yes	Limitations section	Discusses database access, generalizability, etc.
	19	Conclusions.	Yes	Conclusion section	Summary and recommendations
FUNDING	20	Funding sources.	Yes	Funding section	"The author(s) received no financial support..."

Appendix: Mapping of Included Studies to Review Objectives

Study (Author, Year)	Contributed to Which Dimension(s)	Type of Study	Key Contribution to Synthesis
Attieh et al. (2013)	Organizational Dynamics, Change Process, Institutional Readiness	Review/Theoretical	Provided core theoretical concepts
Attieh et al. (2014)	Organizational Support, Motivation, Leadership	Delphi Study	Validated dimensions via expert consensus
Barata et al. (2018)	Collaboration, Knowledge Translation	Consensus Conference	Highlighted inter-organizational collaboration
Chavarkar et al. (2021)	Organizational Readiness Assessment	Tool Validation	Adapted OR4KT for DNP contexts

Gagliardi & Dobrow (2016)	Organizational Context, Collaboration	Qualitative	Identified conditions for integrated KT
Gagnon et al. (2018)	Multi-dimensional OR assessment	Tool Development	Developed transcultural OR4KT tool
Gagnon et al. (2011)	Theoretical framework for OR in KT	Protocol/Methods	Proposed comprehensive instrument development
Grandes et al. (2017)	Validity/Reliability of OR tool	Psychometric Study	Validated Spanish OR4KT
Guleid et al. (2022)	Timely Evidence Production, Institutional Capacity	Qualitative	Contextual facilitators/barriers during COVID-19
Kalbarczyk et al. (2021)	Institutional Climate, Self-efficacy, Resources	Mixed-methods	LMIC-focused tool development
Kalbarczyk et al. (2024)	Institutional Climate, Change Efficacy, Leadership	Quantitative	Determinants of readiness in LMICs
Gagnon et al. (2014)	Review of OR instruments	Systematic Review	Identified valid/reliable OR measurement tools
Atiyeh et al. (2013)	Theoretical components	Review	Synthesized ORC theories in healthcare
Gagnon et al. (2011)	Measurement approach	Methods Paper	Outlined instrument development protocol

Notes on Synthesis Methodology (for Reviewer Transparency)

1. **Coding Process:** Two researchers independently extracted factors related to organizational readiness from each study. Discrepancies were resolved through discussion.
2. **Thematic Development:** Initial codes were grouped into 14 components based on semantic similarity.
3. **Dimension Formation:** Components were then clustered into five broader dimensions through iterative consensus meetings.
4. **Study Weighting:** While all studies informed the synthesis, empirical studies (e.g., Kalbarczyk et al., 2021, 2024; Guleid et al., 2022) provided primary data, while conceptual papers (e.g., Attieh et al., 2013; Gagnon et al., 2011) provided theoretical framing.

1. Attieh, R., et al. (2013). "Organizational readiness for knowledge translation in chronic care: a review of theoretical components." *Implement Sci* 8: 138.
 - a. **BACKGROUND:** With the persistent gaps between research and practice in healthcare systems, knowledge translation (KT) has gained significance and importance. Also, in most industrialized countries, there is an increasing emphasis on managing chronic health conditions with the best available evidence. Yet, organizations aiming to improve chronic care (CC) require an adequate level of organizational readiness (OR) for KT.

OBJECTIVES: The purpose of this study is to review and synthesize the existing evidence on conceptual models/frameworks of Organizational Readiness for Change (ORC) in healthcare as the basis for the development of a comprehensive framework of OR for KT in the context of CC. **DATA SOURCES:** We conducted a systematic review of the literature on OR for KT in CC using Pubmed, Embase, CINAHL, PsychINFO, Web of Sciences (SCI and SSCI), and others. Search terms included readiness; commitment and change; preparedness; willing to change; organization and administration; and health and social services. **STUDY SELECTION:** The search was limited to studies that had been published between the starting date of each bibliographic database (e.g., 1964 for PubMed) and November 1, 2012. Only papers that refer to a theory, a theoretical component from any framework or model on OR that were applicable to the healthcare domain were considered. We analyzed data using conceptual mapping. **DATA EXTRACTION:** Pairs of authors independently screened the published literature by reviewing their titles and abstracts. Then, the two same reviewers appraised the full text of each study independently. **RESULTS:** Overall, we found and synthesized 10 theories, theoretical models and conceptual frameworks relevant to ORC in healthcare described in 38 publications. We identified five core concepts, namely organizational dynamics, change process, innovation readiness, institutional readiness, and personal readiness. We extracted 17 dimensions and 59 sub-dimensions related to these 5 concepts. **CONCLUSION:** Our findings provide a useful overview for researchers interested in ORC and aims to create a consensus on the core theoretical components of ORC in general and of OR for KT in CC in particular. However, more work is needed to define and validate the core elements of a framework that could help to assess OR for KT in CC.

2. Attieh, R., et al. (2014). "Organizational readiness for knowledge translation in chronic care: a Delphi study." BMC Health Serv Res **14**: 534.
 - a. **BACKGROUND:** Health-care organizations need to be ready prior to implement evidence-based interventions. In this study, we sought to achieve consensus on a framework to assess the readiness of health-care organizations to implement evidence-based interventions in the context of chronic care. **METHODS:** We conducted a web-based modified Delphi study between March and May 2013. We contacted 76 potentially eligible international experts working in the fields of organizational readiness (OR), knowledge translation (KT), and chronic care to comment upon the 76 elements resulting from our proposed conceptual map. This conceptual map was based on a systematic review of the existing frameworks of Organizational Readiness for Change (ORC) in health-care. We developed a conceptual map that proposed a set of core concepts and their associated 17 dimensions and 59 sub-dimensions. Experts rated their agreement concerning the applicability and importance of ORC elements on a 5-point Likert scale, where 1 indicates total disagreement and 5 indicates total agreement. Two rounds were needed to get a consensus from the experts. Consensus was a priori defined as strong ($\geq 75\%$) or moderate (60-74%). Simple descriptive statistics was used. **RESULTS:** In total, 14 participants completed the first round and 10 completed the two rounds. Panel members reached consensus on the applicability and importance of 6 out of 17 dimensions and 28 out of 59 sub-dimensions to assess OR for KT in the context of chronic care. A strong level of consensus ($\geq 75\%$) was attained on the Organizational contextual factors, Leadership/participation, Organizational support, and Motivation dimensions. The Organizational climate for change and Change content dimensions reached a moderate consensus (60-74%). Experts also reached consensus on 28 out of 59 sub-dimensions to assess OR for KT. Twenty-one sub-dimensions reached a strong consensus ($\geq 75\%$) and seven a moderate consensus (60-74%). **CONCLUSION:** This study results provided the most important and applicable dimensions and sub-dimensions for assessing OR-KT in the context of chronic care. They can be used to guide the design of an assessment tool to improve knowledge translation in the field of chronic care.
3. Barata, I., et al. (2018). "A Research Agenda to Advance Pediatric Emergency Care Through Enhanced Collaboration Across Emergency Departments." Acad Emerg Med **25**(12): 1415-1426.
 - a. In 2018, the Society for Academic Emergency Medicine and the journal Academic Emergency Medicine (AEM) convened a consensus conference entitled, "Academic Emergency Medicine Consensus Conference: Aligning the Pediatric Emergency Medicine Research Agenda to Reduce Health Outcome Gaps." This article is the product of the breakout session, "Emergency Department Collaboration-Pediatric Emergency Medicine in Non-Children's Hospital"). This subcommittee consisting of emergency medicine, pediatric emergency medicine, and quality improvement (QI) experts, as well as a patient advocate, identified main outcome gaps in the care of children in the emergency departments (EDs) in the following areas: variations in pediatric care and outcomes, pediatric readiness, and gaps in knowledge translation. The goal for this session was to create a research agenda that facilitates collaboration and partnering of diverse stakeholders to develop a system of care across all ED settings with the aim of improving quality and increasing safe medical care for children. The following recommended research strategies emerged: explore the use of technology as well as collaborative networks for education, research, and advocacy to develop and implement patient care guidelines, pediatric knowledge generation and dissemination, and pediatric QI and prepare all EDs to care for the acutely ill and injured pediatric patients. In conclusion, collaboration between general EDs and academic pediatric centers on research, dissemination, and implementation of evidence into clinical practice is a solution to improving the

quality of pediatric care across the continuum.

4. Chavarkar, M. G., et al. (2021). "Revising an Organizational Readiness Tool for Doctor of Nursing Practice Projects." *Nurse Educ* 46(3): 170-173.
 - a. BACKGROUND: Students conducting doctor of nursing practice (DNP) projects can experience barriers that cause delays, frustration, and poor-quality projects. PROBLEM: For successful initiation and timely completion of quality projects, organizational readiness for change (ORC) evaluation is essential, yet ORC tools are not currently part of most DNP project requirements and curricula. APPROACH: The purpose of this project was to revise a reliable, validated ORC tool with 12 DNP student participants and evaluate its utility for DNP projects. OUTCOMES: Doctor of nursing practice students completed the revised Organizational Readiness for Knowledge Translation (OR4KT)-DNP tool and rated the tool as being high in acceptability, learning, and educational impact. Students who indicated that they had complications during project initiation scored lower than their peers on the OR4KT-DNP tool and scored higher on the student survey for utility. The OR4KT-DNP tool can serve as the foundation for a successful DNP project initiation.
5. Gagliardi, A. R. and M. J. Dobrow (2016). "Identifying the conditions needed for integrated knowledge translation (IKT) in health care organizations: qualitative interviews with researchers and research users." *BMC Health Serv Res* 16: 256.
 - a. BACKGROUND: Collaboration among researchers and research users, or integrated knowledge translation (IKT), enhances the relevance and uptake of evidence into policy and practice. However, it is not widely practiced and, even when well-resourced, desired impacts may not be achieved. Given that large-scale investment is not the norm, further research is needed to identify how IKT can be optimized. METHODS: Interviews were conducted with researchers and research users (clinicians, managers) in a health care delivery (HCDO) and health care monitoring (HCMO) organization that differed in size and infrastructure, and were IKT-naïve. Basic qualitative description was used. Participants were asked about IKT activities and challenges, and recommendations for optimizing IKT. Data were analysed inductively using constant comparative technique. RESULTS: Forty-three interviews were conducted (28 HCDO, 15 HCMO) with 13 researchers, 8 clinicians, and 22 managers. Little to no IKT took place. Participants articulated similar challenges and recommendations revealing that a considerable number of changes were needed at the organizational, professional and individual levels. Given the IKT-absent state of participating organizations, this research identified a core set of conditions which must be addressed to prepare an environment conducive to IKT. These conditions were compiled into a framework by which organizations can plan for, or evaluate their capacity for IKT. CONCLUSIONS: The IKT capacity framework is relevant for organizations in which there is no current IKT activity. Use of the IKT framework may result in more organizations that are ready to initiate and establish IKT, perhaps ultimately leading to more, and higher-quality collaboration for health system innovation. Further research is needed to confirm these findings in other organizations not yet resourced for, or undertaking IKT, and to explore the resource implications and mechanisms for establishing the conditions identified here as essential to preparing for IKT.
6. Gagnon, M. P., et al. (2018). "Development and Content Validation of a Transcultural Instrument to Assess Organizational Readiness for Knowledge Translation in Healthcare Organizations: The OR4KT." *Int J Health Policy Manag* 7(9): 791-797.
 - a. BACKGROUND: Implementing effective interventions in healthcare requires organizations to be ready to support change. This study aimed to develop, adapt transculturally, and assess the content and face validity of the Organizational Readiness for Knowledge Translation (OR4KT) tool. The OR4KT was designed to measure the readiness of healthcare organizations to implement evidence-informed change across a variety of services. METHODS: Based on systematic reviews of the literature, a Delphi exercise, and expert consultation, we first generated an initial pool of items. Second, we developed and assessed content validity of the pilot OR4KT questionnaire in English. Third, we created French and Spanish versions using a sequential forward and backward translation approach, and transcultural adaptation by a consensus process. Finally, we conducted pilot studies in three contexts - the Basque country region (Spain), and the provinces of Québec and Ontario (Canada) - where 30 experts assessed the face validity of the three versions of OR4KT. RESULTS: We selected 59 items, grouped in 6 dimensions (organizational climate, context, change content, leadership, organizational support, and motivation) for the final English version of OR4KT. Translation and transcultural adaptation did not identify any content or language problems. Our findings indicate that the English, French and Spanish versions of OR4KT are linguistically equivalents and have high face validity. Only minor revisions to the wording of some items were recommended. CONCLUSION: The OR4KT holds promise as a measure of readiness for knowledge translation (KT) in healthcare organizations. The validity and reliability of the three versions of the OR4KT will be assessed in real-life contexts of implementation of evidence-based changes in healthcare.
7. Gagnon, M. P., et al. (2011). "Measuring organizational readiness for knowledge translation in chronic care." *Implement*

Sci 6: 72.

- a. BACKGROUND: Knowledge translation (KT) is an imperative in order to implement research-based and contextualized practices that can answer the numerous challenges of complex health problems. The Chronic Care Model (CCM) provides a conceptual framework to guide the implementation process in chronic care. Yet, organizations aiming to improve chronic care require an adequate level of organizational readiness (OR) for KT. Available instruments on organizational readiness for change (ORC) have shown limited validity, and are not tailored or adapted to specific phases of the knowledge-to-action (KTA) process. We aim to develop an evidence-based, comprehensive, and valid instrument to measure OR for KT in healthcare. The OR for KT instrument will be based on core concepts retrieved from existing literature and validated by a Delphi study. We will specifically test the instrument in chronic care that is of an increasing importance for the health system. METHODS: Phase one: We will conduct a systematic review of the theories and instruments assessing ORC in healthcare. The retained theoretical information will be synthesized in a conceptual map. A bibliography and database of ORC instruments will be prepared after appraisal of their psychometric properties according to the standards for educational and psychological testing. An online Delphi study will be carried out among decision makers and knowledge users across Canada to assess the importance of these concepts and measures at different steps in the KTA process in chronic care. Phase two: A final OR for KT instrument will be developed and validated both in French and in English and tested in chronic disease management to measure OR for KT regarding the adoption of comprehensive, patient-centered, and system-based CCMs. DISCUSSION: This study provides a comprehensive synthesis of current knowledge on explanatory models and instruments assessing OR for KT. Moreover, this project aims to create more consensus on the theoretical underpinnings and the instrumentation of OR for KT in chronic care. The final product--a comprehensive and valid OR for KT instrument--will provide the chronic care settings with an instrument to assess their readiness to implement evidence-based chronic care.
8. [Grandes, G., et al. \(2017\).](#) "Validity and reliability of the Spanish version of the Organizational Readiness for Knowledge Translation (OR4KT) questionnaire." Implement Sci 12(1): 128.
 - a. BACKGROUND: Organizational readiness to change healthcare practice is a major determinant of successful implementation of evidence-based interventions. However, we lack of comprehensive, valid, and reliable instruments to measure it. We assessed the validity and reliability of the Spanish version of the Organizational Readiness for Knowledge Translation (OR4KT) questionnaire in the context of the implementation of the Prescribe Vida Saludable III project, which seeks to strengthen health promotion and chronic disease prevention in primary healthcare organizations of the Osakidetza (Basque Health Service, Spain). METHODS: A cross-sectional study was conducted including 127 professionals from 20 primary care centers within Osakidetza. They filled in the OR4KT questionnaire twice in a 15- to 30-day period to test repeatability. In addition, we used the Survey of Organizational Attributes for Primary Care (SOAPC) and we documented the number of healthcare professionals who formally engaged in the Prescribe Vida Saludable III project within each participating center to assess concurrent validity. RESULTS: Cronbach's alpha for the overall OR4KT was .95, and the overall repeatability coefficient was 6.95%, both excellent results. Confirmatory factor analysis supported the underlying theoretical structure of 6 dimensions and 23 sub-dimensions. There were positive moderate-to-high internal correlations between these six dimensions, and there was evidence of good concurrent validity (correlation coefficient of .76 with SOAPC, and .80 with the proportion of professionals engaged by center). A score higher than 64 (out of 100) would be indicative of an organization with high level of readiness to implement the intervention (sensitivity = .75, specificity = 1). CONCLUSIONS: The Spanish version of the OR4KT exhibits very strong reliability and good validity, although it needs to be validated in a larger sample and in different implementation contexts.
 9. [Guleid, F. H., et al. \(2022\).](#) "Experience of Kenyan researchers and policy-makers with knowledge translation during COVID-19: a qualitative interview study." BMJ Open 12(6): 8.
 - a. Objectives Researchers at the KEMRI-Wellcome Trust Research Programme (KWTRP) carried out knowledge translation (KT) activities to support policy-makers as the Kenyan Government responded to the COVID-19 pandemic. We assessed the usefulness of these activities to identify the facilitators and barriers to KT and suggest actions that facilitate KT in similar settings. Design The study adopted a qualitative interview study design. Setting and participants Researchers at KWTRP in Kenya who were involved in KT activities during the COVID-19 pandemic (n=6) were selected to participate in key informant interviews to describe their experience. In addition, the policy-makers with whom these researchers engaged were invited to participate (n=11). Data were collected from March 2021 to August 2021. Analysis A thematic analysis approach was adopted using a predetermined framework to develop a coding structure consisting of the core thematic areas. Any other theme that emerged in the coding process was included. Results Both groups reported that the KT activities increased evidence availability and accessibility, enhanced policy-makers' motivation to use

evidence, improved capacity to use research evidence and strengthened relationships. Policy-makers shared that a key facilitator of this was the knowledge products shared and the regular interaction with researchers. Both groups mentioned that a key barrier was the timeliness of generating evidence, which was exacerbated by the pandemic. They felt it was important to institutionalise KT to improve readiness to respond to public health emergencies. Conclusion This study provides a real-world example of the use of KT during a public health crisis. It further highlights the need to institutionalise KT in research and policy institutions in African countries to respond readily to public health emergencies.

10. Kalbarczyk, A., et al. (2021). "A mixed methods study to develop a tool to assess institutional readiness to conduct knowledge translation activities in low-income and middle-income countries." *BMJ Open* **11**(10): e050049.
 - a. OBJECTIVE: This paper describes the development of a tool for assessing organisational readiness to conduct knowledge translation (KT) among academic institutions in low-income and middle-income countries (LMICs). DESIGN: A literature review and stakeholder consultation process were conducted to identify constructs relevant for assessing KT readiness in LMICs. These were face-validated with LMIC stakeholders and organised into a Likert-scale questionnaire. PARTICIPANTS: The questionnaire was distributed to researchers based at six LMIC academic institutions and members of a global knowledge-to-action thematic working group. OUTCOME MEASURES: An exploratory factor analysis was used to identify underlying dimensions for assessing institutional readiness to conduct KT. RESULTS: 111 respondents with varied KT experiences from 10 LMICs were included in the analysis. We selected 5 factors and 23 items, with factor loadings from 0.40 to 0.77. These factors include (1) institutional climate, (2) organisation change efficacy, (3) prioritisation and cosmopolitanism, (4) self-efficacy, and (5) financial resources. These factors accounted for 69% of the total variance, with Cronbach's alpha coefficients of 0.78, 0.73, 0.62, 0.68 and 0.52, respectively. CONCLUSIONS: This study identifies a tool for assessing readiness of LMIC academic institutions to conduct KT and unique opportunities for building capacity. The organisational focus of these factors underscores the need for strategies that address organisational systems and structures in addition to individual skills. Future research will be conducted to understand determinants of these factors and develop a comprehensive set of capacity building strategies responsive to academic institutions in LMICs.
11. Kalbarczyk, A., et al. (2024). "Determinants of factors affecting readiness of academic institutions to conduct knowledge translation in low- and middle-income countries." *Frontiers in Public Health* **11**: 13.
 - a. Introduction Capacity building strategies have been used to improve uptake of knowledge translation (KT) activities among academic institutions, but little is known about their effectiveness, contextual responsiveness, and adaptability. Many of these strategies target individuals while few address institutional gaps. This research describes the determinants for conducting KT (or readiness to conduct such activities) at the institutional level across diverse LMIC contexts to inform the development of capacity building strategies. Methods We conducted a survey to assess organizational readiness to conduct KT to public health researchers and practitioners from six academic institutions in Bangladesh, Ethiopia, DRC, India, Indonesia and Nigeria and members of a global knowledge-to-action working group. We assessed the frequency of barriers and facilitators to KT and their relationship to age, gender, country, and KT experience. We then performed logistic regression to identify determinants of five underlying factors demonstrated to influence KT readiness in LMICs (Institutional Climate, Organization Change Efficacy, Prioritization and Cosmopolitanism, Self-Efficacy and Financial Resource) along with their composite score, which represented an overall readiness score to conduct KT. Results A total of 111 responses were included in the final analysis. Participants represented 10 LMICs; a majority were 30-49 years old (57%) and most were male (53%). Most participants had professional foci in research (84%), teaching (62%), and project coordination (36%) and 59% indicated they had experience with KT. Common facilitators included motivated faculty (57%) and dedicated personnel (40%). Funding (60%), training (37%), and time (37%) were the most frequently reported barriers. In the adjusted model, age, gender, country, and professional focus were significantly associated with at least one factor. Prior experience with KT was significantly and positively (OR = 9.07; CI: 1.60-51.58; $p < 0.05$) associated with the overall KT readiness to conduct KT. Discussion Different KT readiness factors are relevant for younger (institutional climate) vs. older (self-efficacy) academic professionals, suggesting value in cross-generational collaborations. Leadership and gender were both relevant for organizational change efficacy indicating a need to engage leaders and promote women to influence organizational change. Institutions in different countries may be at different stages of change; readiness assessments can be used to systematically identify needs and develop targeted strategies.
12. A systematic review of instruments to assess organizational readiness for knowledge translation in health care
Gagnon, M. P., et al. 2014

Background: The translation of research into practices has been incomplete. Organizational readiness for change (ORC) is a potential facilitator of effective knowledge translation (KT). However we know little about the best way to assess ORC. Therefore, we sought to systematically review ORC measurement instruments.

Methods: We searched for published studies in bibliographic databases (Pubmed, Embase, CINAHL, PsychINFO, Web of Science, etc.) up to November 1st, 2012. We included publications that developed ORC measures and/or empirically assessed ORC using an instrument at the organizational level in the health care context. We excluded articles if they did not refer specifically to ORC, did not concern the health care domain or were limited to individual-level change readiness. We focused on identifying the psychometric properties of instruments that were developed to assess readiness in an organization prior to implementing KT interventions in health care. We used the Standards for Educational and Psychological Testing to assess the psychometric properties of identified ORC measurement instruments.

Findings: We found 26 eligible instruments described in 39 publications. According to the Standards for Educational and Psychological Testing, 18 (69%) of a total of 26 measurement instruments presented both validity and reliability criteria. The Texas Christian University -ORC (TCU-ORC) scale reported the highest instrument validity with a score of 4 out of 4. Only one instrument, namely the Modified Texas Christian University - Director version (TCU-ORC-D), reported a reliability score of 2 out of 3. No information was provided regarding the reliability and validity of five (19%) instruments.

Conclusion: Our findings indicate that there are few valid and reliable ORC measurement instruments that could be applied to KT in the health care sector. The TCU-ORC instrument presents the best evidence in terms of validity testing. Future studies using this instrument could provide more knowledge on its relevance to diverse clinical contexts.

13. Atiyeh, R., et al. (2013). "Organizational Readiness for Knowledge Translation in Chronic Care: A Review of Theoretical Components". *Implement Sci* 8:138. a. Background: With the persistent gaps between research and practice in healthcare systems, knowledge translation (KT) has gained importance and relevance. Also, in most industrialized countries, there is an increasing emphasis on managing chronic diseases with the best available evidence. However, organizations aiming to improve chronic care (CC) require an adequate level of organizational readiness (OR) for KT. Objectives: The aim of this study was to review and synthesize the available evidence on conceptual models/frameworks of organizational readiness for change (ORC) in healthcare as a basis for developing a comprehensive OR framework for KT in the context of CC. Data sources: We conducted a systematic review of the OR literature for KT in CC using Pubmed, Embase, CINAHL, PsychINFO, Web of Sciences (SCI and SSCI), and others. Search terms included readiness. Commitment and change; readiness; willingness to change; organization and administration; and health and social services. Study selection: The search was limited to studies published between the start date of each bibliographic database (e.g., 1964 for PubMed) and November 1, 2012. Only articles that referred to a theory, a theoretical component of any framework or model, in OR that was applicable to the healthcare domain were considered. We analyzed the data using a concept map. Data extraction: Pairs of authors independently screened the published literature by examining their titles and abstracts. Then, two identical reviewers independently assessed the full text of each study. Results: Overall, we found and combined 10 theories, theoretical models, and conceptual frameworks relevant to ORC in healthcare described in 38 publications. We identified five main concepts, namely organizational dynamics, change process, readiness for innovation, institutional readiness, and personal readiness. We extracted 17 dimensions and 59 sub-dimensions related to these 5 concepts. Conclusion: Our findings provide a useful overview for researchers interested in ORC and aim to build consensus on the main theoretical components of ORC in general and OR for KT in CC in particular. However, further work is needed to define and validate the core elements of a framework that can help assess OR for KT in CC.
14. Gagnon, MP, et al. (2011). Measuring organizational readiness for knowledge translation in chronic care. *Implement Sci* 6:72. a. Background and Objectives: Knowledge translation (KT) is essential for implementing research-based and contextualized practices that can address the multiple challenges of complex health problems. The Chronic Care Model (CCM) provides a conceptual framework to guide the implementation process in chronic care. However, organizations that aim to improve chronic care require an adequate level of organizational readiness (OR) for KT. Existing instruments on organizational readiness for change (ORC) have demonstrated limited validity, and are not designed or adapted for specific stages of the knowledge-to-action (KTA) process. Our goal is to develop an evidence-based, comprehensive, and valid instrument to measure OR for KT in health care. The OR for KT instrument will be based on core concepts retrieved from existing

literature and validated by a Delphi study. We will specifically test this tool in chronic care, which is of increasing importance to the health system. b. Materials and Methods: Phase I: We will conduct a systematic review of ORC assessment theories and tools in health care. The theoretical information retained will be synthesized in a concept map. A bibliography and database of ORC tools will be developed after evaluating their psychometric properties according to educational and psychological testing standards. c. An online Delphi study will be conducted among decision-makers and knowledge users across Canada to assess the importance of these concepts and measures at different stages in the KTA process in chronic care. d. Phase II: A final OR tool for KT will be developed and validated in French and English and tested in chronic disease management to measure OR KT regarding the adoption of comprehensive, patient-centered, and systems-based CCMs. e. Discussion: This study provides a comprehensive synthesis of current knowledge on explanatory models and tools for OR KT. In addition, the project aims to build greater consensus on the theoretical underpinnings and instrumentation of KT in chronic care. f. The final product—a comprehensive and validated instrument for KT—will provide chronic care settings with a tool to assess their readiness to implement evidence-based chronic care.