

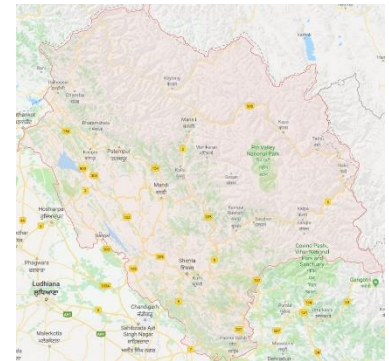
# Assessing readiness of health facilities to implement quality improvement interventions in Himachal Pradesh, India

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The Government of Himachal Pradesh in India (at right) implemented a state-wide quality of care program (QoCP) program that emphasizes the use of quality improvement (QI) methods as well as the previous quality assurance approaches. This is a large undertaking and the government was interested in identifying the initial strengths and weaknesses in their ability to implement the program. Readiness is a useful measure of how prepared an organization is to implement because the more ready that an organization is the more likely it will achieve desired results<sup>1</sup>.



## Model:

Organizational readiness is important for successful and effective implementation of an innovation. The R = MC<sup>2</sup> heuristic specifies three key elements of readiness.

$$\text{Readiness} = \text{Motivation} \times \text{Innovation-Specific Capacity} \times \text{General Capacity},$$

<sup>1</sup>Scaccia, J. P., Cook, B. S., Lamont, A., Wanderman, A., Castellon, J., Katz, J., & Beidas, R. S. (2015). A practical implementation science heuristic for organizational readiness: R=MC<sup>2</sup>. *Journal of Community Psychology*, 43(4), 484-501.

We divide these further into subcomponents, as seen below.

Subcomponent	Definition
<b>Motivation</b>	<b>Degree to which we want the innovation to happen</b>
Compatibility	Whether this change fits with how we do things
Complexity-Simplicity	How difficult the change seems
Relative Advantage	If this change seems better than what we are currently doing
Priority	With all of the things we have to do, how important is this change.
Observability	How easy it is to see small wins in the short term
Trialability	How easy it seems to test the change in small steps
<b>Innovation-Specific Capacities</b>	<b>What is needed to make this particular innovation happen</b>
Innovation-specific Knowledge & Skills	Whether there is enough knowledge and skills to make the change
Program Champion	If there is an important person(s) that supports the change
Supportive Climate	If there's essential support from the organization to enable the change
Inter-organizational Relationships	Are the needed connections to operate the change (e.g., other people, units and/or organizations) in place
<b>General Capacities</b>	<b>Our overall functioning.</b>
Leadership	How effective our leaders are
Culture	The norms and values about how we do things here
Climate	How people feel about being in this group
Innovativeness	How we feel about change in general
Structure	How well are we organized in terms of units and communication
Staff Capacity	How experienced and skillful the staff are, and how many people we have
Resource Utilization	How good are we at obtaining potential resources

The readiness monitoring tool (RMT) is a practical instrument that been developed from the R=MC<sup>2</sup> organizational readiness model to help inform and tailor training, technical assistance, and quality improvement strategies to foster successful and effective implementation<sup>2</sup>. The RMT has been primarily utilized within coalition and healthcare settings in the United States. This study describes the process for adaptation of RMT to a low resource setting and reports initial results on the organizational readiness to implement a QI innovation in this setting.

<sup>2</sup>Scott, V. C., Kenworthy, T., Godly-Reynolds, E., Bastien, G., Scaccia, J., McMickens, C., ... & Wandersman, A. (2017). The Readiness for Integrated Care Questionnaire (RICQ): An instrument to assess readiness to integrate behavioral health and primary care. *American Journal of Orthopsychiatry*, 87(5), 520.

**Study Design.** A multi-step approach was used to adapt the RMT for assessing the readiness three levels (state, district and health facility) an Indian state to implement a quality improvement program to improve maternal health.

- I. A US-based committee with domestic expertise in using the RMT simplify the tool language while maintaining semantic equivalence.
- II. The revised instrument was administered to a pilot sample of health system staff at each level.
- III. A focus group provided recommendations for further refinement.
- IV. The instrument was then translated into Hindi for the health facility level and a local team reviewed both language versions side-by-side for accuracy and completeness. An implementation team provided technical assistance and training for administration at all levels.

**Population Studied.** English-speaking leadership at state and district levels in five pilot districts of Himachal Pradesh, India and Hindi-speaking leadership (Medical Officer, Staff Nurse) at health facilities in each district. 105 respondents at all three levels completed the assessment.

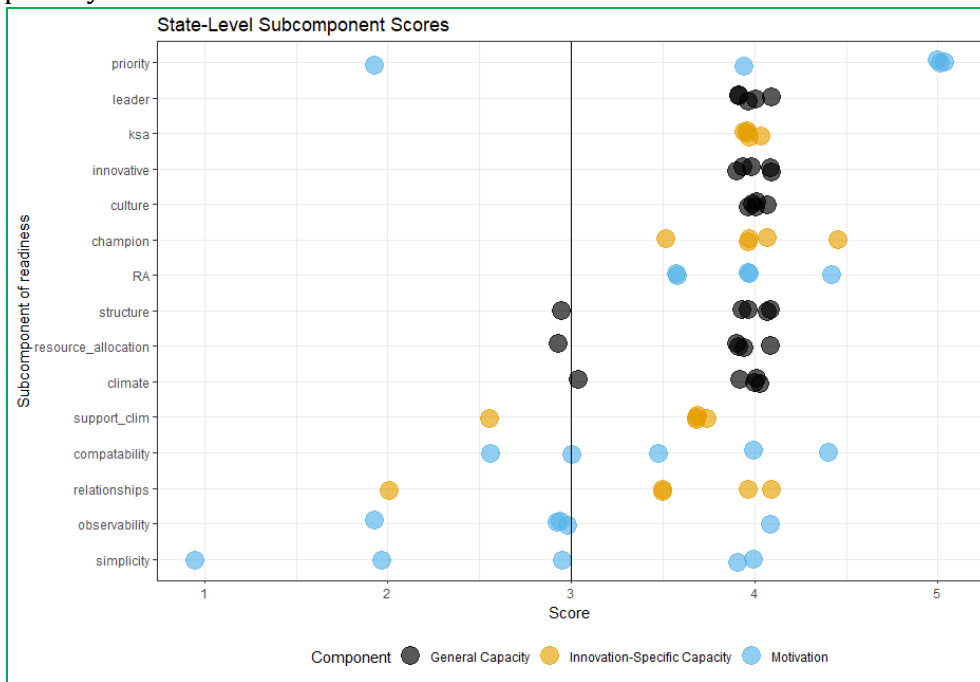
Sample size for administration of RMT

Level	Number of officials trained in QoC			RMT respondents (percent who responded)			
State	5			5 (100%)			
District	Kangra	5		Kangra	4 (80%)		
	Chamba	4		Chamba	4 (100%)		
	Solan	7		Solan	4 (57%)		
	Mandi	4		Mandi	4 (100%)		
	<b>Total</b>	<b>20</b>		<b>Total</b>	<b>16 (80%)</b>		
Health Facility		Medical officers	Staff Nurses	Matrons*			
	Kangra	8	17	1	Kangra	6 (75%)	15 (88%)
	Chamba	5	12	1	Chamba	3 (60%)	9 (75%)
	Solan	10	16	1	Solan	6 (60%)	13 (81%)
	Mandi	10	34	0	Mandi	8 (8%)	24 (71%)
	<b>Total</b>	<b>33</b>	<b>79</b>	<b>3</b>	<b>Total</b>	<b>23 (70%)</b>	<b>61 (77%)</b>

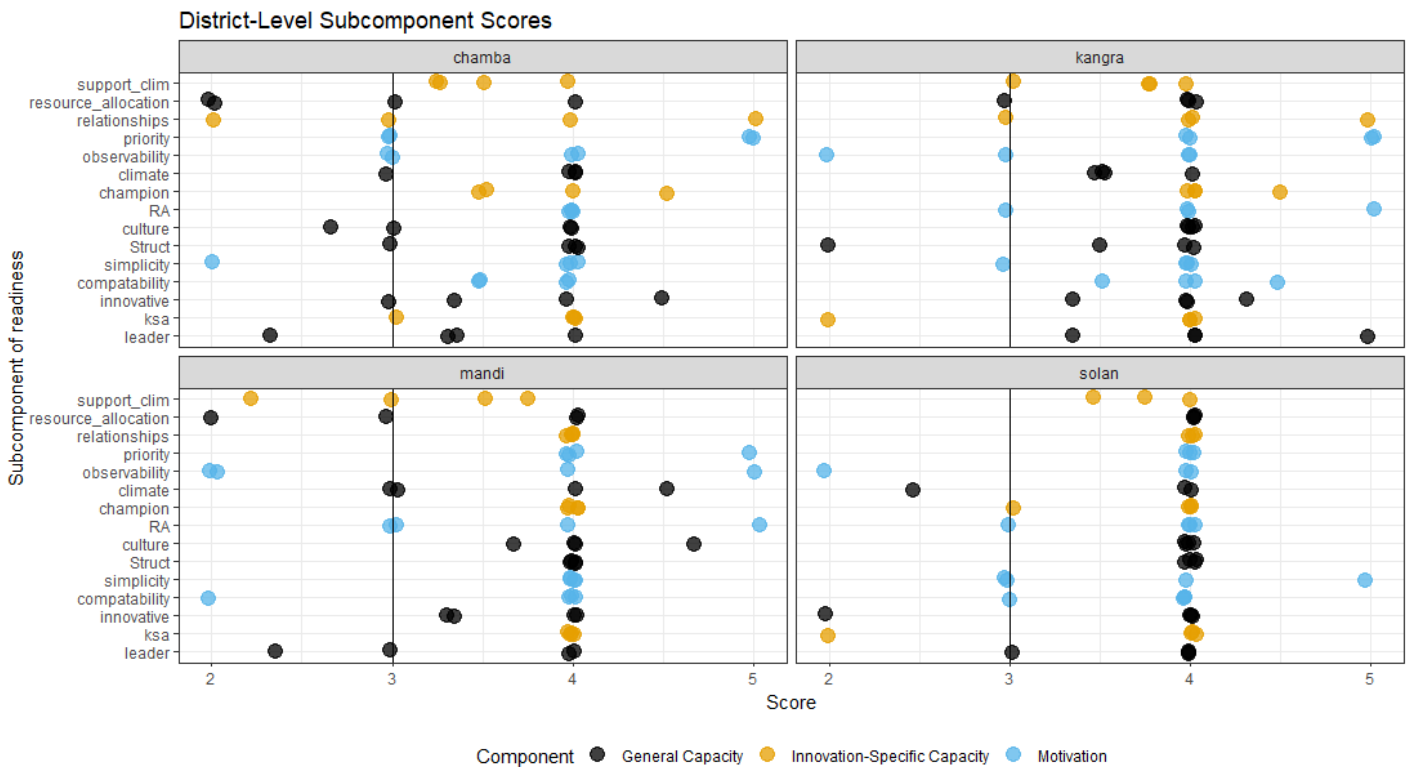
\*RMT was not administered to matrons

**Principal Findings.**

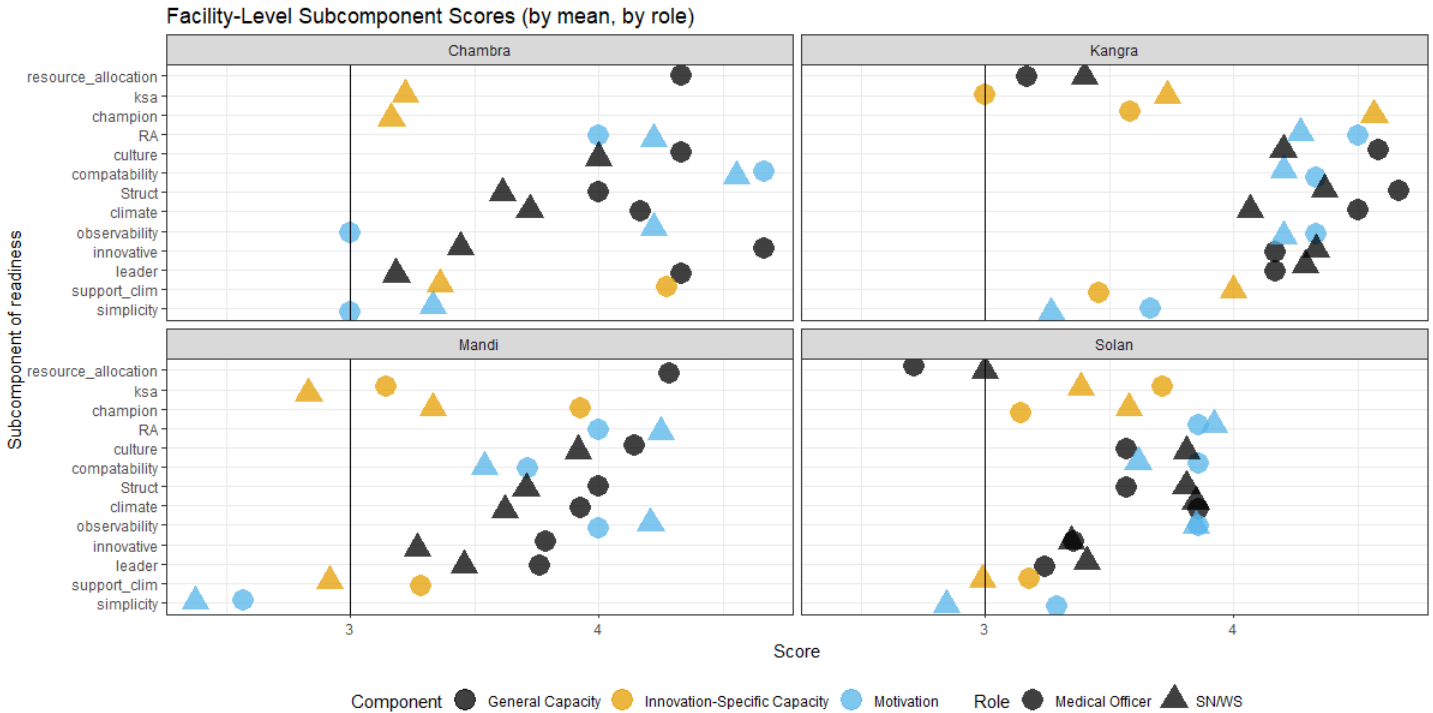
*State-Level.* At all levels, the readiness across all dimensions was moderate. State-level respondents noted that they believed the QoCP program was a priority for them.



*District-level.* On the whole, respondents in all four districts rated themselves highly. We did not see significant variation in any of readiness subcomponents. We did see clustering around “Agree”, which suggests that the scale may need to be revised to allow for more variation.



**Facility Level.** Ratings on motivation or innovation-specific capacity subcomponents did not vary by district.. Ratings on health facility general capacity subcomponents did vary significantly by district  $F(3,20) = 3.76, p < 0.05$ . Reports from Kangra were highest. There was no difference in the motivation subcomponents by role;  $t(3) = 0.33, p = 0.76$  or innovation-specific capacity subcomponents by role  $t(2) = 1.22, p = 0.34$ . There were significant differences between reported general capacity subcomponents by role;  $t(5) = 3.38, p < 0.05$ .



**Conclusions.** We were able to adapt the RMT for use in low resource settings. Findings of readiness, including differences in perception of capacity across roles is consistent with findings from other administrations of the tool. We found no evidence of significant lack of readiness in this setting.

**Implications for Policy and Practice:** This research study shows that understanding how the RMT works in different settings helps determine if universal implementation strategies can be designed. As of this date, we have also used a version of the RMT with French-speakers implementing mental-health case management intervention. From this limited study it appears that tailoring and adaption are most appropriate at the facility level and across roles. Further research is needed to identify appropriate change management strategies.

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