

Supplemental Table. Ratings Across All CFIR Domains and Associated Implementation Barriers

Domain	Barrier	JHCAIH	SRS	WashU (SSD)	ICF/ CMKC	KKI	UW
<u>INTERVENTION CHARACTERISTICS</u>							
Intervention Source	Stakeholders have a negative perception of the innovation because of the entity that developed it and/or where it was developed.	1	0	0	0	0	0
Evidence Strength & Quality	Stakeholders have a negative perception of the quality and validity of evidence supporting the intervention.	2	1	1	1	1	1
Relative Advantage	Stakeholders do not see the advantage of implementing the innovation compared to an alternative solution or keeping things the same.	3	3	3	3	3	2
Adaptability	Stakeholders do not believe that the innovation can be sufficiently adapted, tailored, or re-invented to meet local needs.	0	0	0	0	0	0
Trialability	Stakeholders believe they cannot test the innovation on a smaller scale within the organization or undo implementation if needed.	0	0	0	0	0	0
Complexity	Stakeholders believe that the innovation is complex based on their perception of duration, scope, radicalness, disruptiveness, centrality, and/or intricacy and number of steps needed to implement.	3	1	0	2	1	3
Design Quality and Packaging	Stakeholders believe the innovation is poor quality based on the way it is bundled, presented, and/or assembled.	0	0	0	0	1	0
Cost	Stakeholders believe the innovation costs and/or the costs to implement (including investment, supply, and opportunity costs) are too high.	2	2	1	1	0	3
<u>OUTER SETTING</u>							
Patient Needs & Resources	Patient needs, including barriers and facilitators to meet those needs, are not accurately known and/or this information is not a high priority for the organization.	1	2	2	2	2	1
Cosmopolitanism	The organization is not well networked with external organizations.	3	0	0	0	0	0
Peer Pressure	There is little pressure to implement the innovation because other key peer or competing organizations have not already implemented the innovation nor is the organization doing this in a bid for a competitive edge.	0	3	1	0	1	0
External Policy & Incentives	External policies, regulations (governmental or other central entity), mandates, recommendations or guidelines, pay-for-performance, collaborative, or public or benchmark reporting do not exist or they undermine efforts to implement the innovation.	0	0	0	1	1	0

INNER SETTING

Structural Characteristics	The social architecture, age, maturity, and size of an organization hinders implementation.	0	2	2	0	0	0
Networks & Communications	The organization has poor quality or non-productive social networks and/or ineffective formal and informal communications.	1	0	3	2	0	0
Culture	Cultural norms, values, and basic assumptions of the organization hinder implementation.	0	1	1	1	0	1
Implementation Climate	There is little capacity for change, low receptivity, and no expectation that use of the innovation will be rewarded, supported, or expected.	2	1	2	1	0	0
Tension for Change	Stakeholders do not see the current situation as intolerable or do not believe they need to implement the innovation.	1	1	1	2	1	1
Compatibility	The innovation does not fit well with existing workflows nor with the meaning and values attached to the innovation, nor does it align well with stakeholders' own needs and/or it heightens risk for stakeholders.	3	1	1	2	2	0
Relative Priority	Stakeholders perceive that implementation of the innovation takes a backseat to other initiatives or activities.	1	0	0	2	1	1
Organizational Incentives & Rewards	There are no tangible (e.g., goal-sharing awards, performance reviews, promotions, salary raises) or less tangible (e.g., increased stature or respect) incentives in place for implementing the innovation.	3	2	2	1	2	0
Goals and Feedback	Goals are not clearly communicated or acted upon, nor do stakeholders receive feedback that is aligned with goals.	0	1	1	0	0	0
Learning Climate	The organization has a climate where: a) leaders do not express their own fallibility or need for stakeholders' assistance or input; b) stakeholders do not feel that they are essential, valued, and knowledgeable partners in the implementation process; c) stakeholders do not feel psychologically safe to try new methods; and d) there is not sufficient time and space for reflective thinking or evaluation.	1	0	1	1	0	0
Readiness for Implementation	There are few tangible and immediate indicators of organizational readiness and commitment to implement the innovation.	2	2	1	1	0	0
Leadership Engagement	Key organizational leaders or managers do not exhibit commitment and are not involved, nor are they held accountable for implementation of the innovation.	1	1	2	2	0	0
Available Resources	Resources (e.g., money, physical space, dedicated time) are insufficient to support implementation of the innovation.	3	0	0	3	0	3
Access to knowledge and information	Stakeholders do not have adequate access to digestible information and knowledge about the innovation nor how to incorporate it into work tasks.	2	0	0	1	0	0

CHARACTERISTICS OF INDIVIDUALS

Knowledge & Beliefs about the Intervention	Stakeholders have negative attitudes toward the innovation, they place low value on implementing the innovation, and/or they are not familiar with facts, truths, and principles about the innovation.	2	1	1	1	2	1
Self-Efficacy	Stakeholders do not have confidence in their capabilities to execute courses of action to achieve implementation goals.	1	1	0	0	0	1
Individual Stage of Change	Stakeholders are not skilled or enthusiastic about using the innovation in a sustained way.	2	1	0	2	1	1
Individual Identification with Organization	Stakeholders are not satisfied with and have a low level of commitment to their organization.	0	0	0	0	0	0

IMPLEMENTATION PROCESS

Planning	A scheme or sequence of tasks necessary to implement the intervention has not been developed or the quality is poor.	0	0	0	0	0	2
Opinion Leaders	Opinion leaders (individuals who have formal or informal influence on the attitudes and beliefs of their colleagues with respect to implementing the intervention) are not involved or supportive.	0	0	1	0	0	0
Formally Appointed Internal Implementation Leaders	A skilled implementation leader (coordinator, project manager or team leader), with responsibility to lead implementation of the innovation, has not been formally appointed or recognized within the organization.	2	1	1	1	0	0
Champions	Individuals acting as champions who support, market, or 'drive through' implementation in a way that helps to overcome indifference or resistance by key stakeholders are not involved or supportive.	2	1	1	0	0	0
External Change Agents	Individuals from an outside entity formally facilitating decisions to help move implementation forward are not involved or supportive.	0	0	0	0	0	0
Key Stakeholders	Multi-faceted strategies to attract and involve key stakeholders in implementing or using the innovation (e.g., through social marketing, education, role modeling, training) are ineffective or non-existent.	2	1	1	1	1	0
Patients/Customers	Multi-faceted strategies to attract and involve patients/customers in implementing or using the innovation (e.g., through social marketing, education, role modeling, training) are ineffective or non-existent.	3	1	3	3	1	3
Executing	Implementation activities are not being done according to plan.	0	0	1	1	0	2
Reflecting & Evaluating	There is little or no quantitative and qualitative feedback about the progress and quality of implementation nor regular personal and team debriefing about progress and experience.	0	1	0	0	0	0

CMKC, Children's Mercy Kansas City; CFIR, Consolidated Framework for Implementation Research; FHCRC, Fred Hutchinson Cancer Research Center; JHCAIH, Johns Hopkins Center for American Indian Health; KKI, Kennedy Krieger Institute; SRS, Safe Return to School; SSD, Special School District of St. Louis County; WashU, Washington University; UW, University of Washington.