

Topic	Short Description	Inclusion Criteria	Exclusion Criteria
I. INTERVENTION CHARACTERISTICS			
A Intervention Source	Perception of key stakeholders about whether the intervention is externally or internally developed.	Include statements about the source of the innovation and the extent to which interviewees view the change as internal to the organization, e.g., an internally developed program, or external to the organization, e.g., a program coming from the outside.	Exclude or double code statements related to who participated in the decision process to implement the innovation to Engaging, as an indication of early (or late) engagement. Participation in decision-making is an effective engagement strategy to help people feel ownership of the innovation.
B Evidence Strength & Quality	Stakeholders' perceptions of the quality and validity of evidence supporting the belief that the intervention will have desired outcomes.	Include statements regarding awareness of evidence and the strength and quality of evidence, as well as the absence of evidence or a desire for different types of evidence, such as pilot results instead of evidence from the literature.	Exclude or double code statements regarding the receipt of evidence as an engagement strategy to Engaging: Key Stakeholders. Exclude or double code descriptions of use of results from local or regional pilots to Trialability.
C Relative advantage	Stakeholders' perception of the advantage of implementing the intervention versus an alternative solution.	Include statements that demonstrate the innovation is better (or worse) than existing programs.	Exclude statements that demonstrate a strong need for the innovation and/or that the current situation is untenable and code to Tension for Change.
1 Zoom = in-person			
2 Zoom < in-person			
3 Zoom > in-person			
4 Disadvantage of phone			
D Adaptability	The degree to which an intervention can be adapted, tailored, refined, or reinvented to meet local needs.	Include statements regarding the (in)ability to adapt the innovation to their context, e.g., complaints about the rigidity of the protocol. Suggestions for improvement can be captured in this code but should not be included in the rating process, unless it is clear that the participant feels the change is needed but that the program cannot be adapted. However, it may be possible to infer that a large number of suggestions for improvement demonstrates lack of compatibility, see exclusion criteria.	Exclude or double code statements that the innovation did or did not need to be adapted to Compatibility.
E Trialability	The ability to test the intervention on a small scale in the organization [8], and to be able to reverse course (undo implementation) if warranted.	Include statements related to whether the site piloted the innovation in the past or has plans to in the future, and comments about whether they believe it is (im)possible to conduct a pilot.	Exclude or double code descriptions of use of results from local or regional pilots to Evidence Strength & Quality
F Complexity	Perceived difficulty of implementation, reflected by duration, scope, radicalness, disruptiveness, centrality, and intricacy and number of steps required to implement.	Code statements regarding the complexity of the innovation itself.	Exclude statements regarding the complexity of implementation and code to the appropriate CFIR code, e.g., difficulties related to space are coded to Available Resources and difficulties related to engaging participants in a new program are coded to Engaging: Innovation Participants.
G Design Quality and Packaging	Perceived excellence in how the intervention is bundled, presented, and assembled.	Include statements regarding the quality of the materials and packaging.	Exclude statements regarding the presence or absence of materials and code to Available Resources.
H Cost	Costs of the intervention and costs associated with implementing that intervention including investment, supply, and opportunity costs.	Include statements related to the cost of the innovation and its implementation.	Exclude statements related to physical space and time, and code to Available Resources. In a research study, exclude statements related to costs of conducting the research components (e.g., funding for research staff, participant incentives).
II. OUTER SETTING			
A Patient Needs & Resources	The extent to which patient needs, as well as barriers and facilitators to meet those needs are accurately known and prioritized by the organization.	Include statements demonstrating (lack of) awareness of the needs and resources of those served by the organization. Analysts may be able to infer the level of awareness based on statements about: 1. Perceived need for the innovation based on the needs of those served by the organization and if the innovation will meet those needs; 2. Barriers and facilitators of those served by the organization to participating in the innovation; 3. Participant feedback on the innovation, i.e., satisfaction and success in a program. In addition, include statements that capture whether or not awareness of the needs and resources of those served by the organization influenced the implementation or adaptation of the innovation.	Exclude statements that demonstrate a strong need for the innovation and/or that the current situation is untenable and code to Tension for Change. Exclude statements related to engagement strategies and outcomes, e.g., how innovation participants became engaged with the innovation, and code to Engaging: Innovation Participants.
1 Client characteristics and presenting concerns - Facilitators			
2 Client characteristics and presenting concerns - Barriers			
3 Client - resources			
4 Client preference			
B Cosmopolitanism	The degree to which an organization is networked with other external organizations.	Include descriptions of outside group memberships and networking done outside the organization.	Exclude statements about general networking, communication, and relationships in the organization, such as descriptions of meetings, email groups, or other methods of keeping people connected and informed, and statements related to team formation, quality, and functioning, and code to Networks & Communications.
C Peer Pressure	Mimetic or competitive pressure to implement an intervention; typically because most or other key peer or competing organizations have already implemented or in a bid for a competitive edge.	Include statements about perceived pressure or motivation from other entities or organizations in the local geographic area or system to implement the innovation.	
D External Policy & Incentives	A broad construct that includes external strategies to spread interventions including policy and regulations (governmental or other central entity), external mandates, recommendations and guidelines, pay-for-performance, collaboratives, and public or benchmark reporting.	Include descriptions of external performance measures from the system. Include pandemic as an external incentive. Include statements that say how fast the switch had to happen.	
III. INNER SETTING			
A Structural Characteristics	The social architecture, age, maturity, and size of an organization.	Include statements relating to participant's home office space (IWK is now in their home therefore it's still in the domain of Inner Setting) Include statements about onsite physical office space (e.g., characteristics of the space and its effects)	Exclude statements about the availability of onsite office space to Available Resources

B Networks & Communications	The nature and quality of webs of social networks and the nature and quality of formal and informal communications within an organization.	Include statements about general networking, communication, and relationships in the organization, such as descriptions of meetings, email groups, or other methods of keeping people connected and informed, and statements related to team formation, quality, and functioning.	Exclude statements related to implementation leaders' and users' access to knowledge and information regarding using the program, i.e., training on the mechanics of the program and code to Access to Knowledge & Information. Exclude statements related to engagement strategies and outcomes, e.g., how key stakeholders became engaged with the innovation and what their role is in implementation, and code to Engaging: Key Stakeholders. Exclude descriptions of outside group memberships and networking done outside the organization and code to Cosmopolitanism.
C Culture	Norms, values, and basic assumptions of a given organization.	Inclusion criteria, and potential sub-codes, will depend on the framework or definition used for "culture." For example, if using the Competing Values Framework (CVF), you may include four sub-codes related to the four dimensions of the CVF and code statements regarding one or more of the four dimension in an organization.	
D Implementation Climate	The absorptive capacity for change, shared receptivity of involved individuals to an intervention and the extent to which use of that intervention will be rewarded, supported, and expected within their organization.	Include statements regarding the general level of receptivity to implementing the innovation.	Exclude statements regarding the general level of receptivity that are captured in the sub-codes.
1 Tension for Change	The degree to which stakeholders perceive the current situation as intolerable or needing change.	Include statements that (do not) demonstrate a strong need for the innovation and/or that the current situation is untenable, e.g., statements that the innovation is absolutely necessary or that the innovation is redundant with other programs. Note: If a participant states that the innovation is redundant with a preferred existing program, (double) code lack of Relative Advantage	Exclude statements regarding specific needs of individuals that demonstrate a need for the innovation, but do not necessarily represent a strong need or an untenable status quo, and code to Needs and Resources of Those Served by the Organization. Exclude statements that demonstrate the innovation is better (or worse) than existing programs and code to Relative Advantage.
2 Compatibility	The degree of tangible fit between meaning and values attached to the intervention by involved individuals, how those align with individuals' own norms, values, and perceived risks and needs, and how the intervention fits with existing workflows and systems.	Include statements that demonstrate the level of compatibility the innovation has with organizational values and work processes. Include statements that the innovation did or did not need to be adapted as evidence of compatibility or lack of compatibility. Include statements about equipment that was already being used at IWK prior to virtual care.	Exclude or double code statements regarding the priority of the innovation based on compatibility with organizational values to Relative Priority, e.g., if an innovation is not prioritized because it is not compatible with organizational values.
3 Relative Priority	Individuals' shared perception of the importance of the implementation within the organization.	Include statements that reflect the relative priority of the innovation, e.g., statements related to change fatigue in the organization due to implementation of many other programs.	Exclude or double code statements regarding the priority of the innovation based on compatibility with organizational values to Compatibility, e.g., if an innovation is not prioritized because it is not compatible with organizational values.
4 Organizational Incentives & Reward	Extrinsic incentives such as goal-sharing awards, performance reviews, promotions, and raises in salary and less tangible incentives such as increased stature or respect.	Include statements related to whether organizational incentive systems are in place to foster (or hinder) implementation, e.g., rewards or disincentives for staff engaging in the innovation.	
5 Goals and Feedback	The degree to which goals are clearly communicated, acted upon, and fed back to staff and alignment of that feedback with goals.	Include statements related to the (lack of) alignment of implementation and innovation goals with larger organizational goals, as well as feedback to staff regarding those goals, e.g., regular audit and feedback showing any gaps between the current organizational status and the goal. Goals and Feedback include organizational processes and supporting structures independent of the implementation process. Evidence of the integration of evaluation components used as part of "Reflecting and Evaluating" into on-going or sustained organizational structures and processes may be (double) coded to Goals and Feedback.	Exclude statements that refer to the implementation team's (lack of) assessment of the progress toward and impact of implementation, as well as the interpretation of outcomes related to implementation, and code to Reflecting & Evaluating. Reflecting and Evaluating is part of the implementation process; it likely ends when implementation activities end. It does not require goals be explicitly articulated; it can focus on descriptions of the current state with real-time judgment, though there may be an implied goal (e.g., we need to implement the innovation) when the implementation team discusses feedback in terms of adjustments needed to complete implementation.
6 Learning Climate	A climate in which: a) leaders express their own fallibility and need for team members' assistance and input; b) team members feel that they are essential, valued, and knowledgeable partners in the change process; c) individuals feel psychologically safe to try new methods; and d) there is sufficient time and space for reflective thinking and evaluation.	Include statements that support (or refute) the degree to which key components of an organization exhibit a "learning climate."	
E Readiness for Implementation	Tangible and immediate indicators of organizational commitment to its decision to implement an intervention.	Include statements regarding the general level of readiness for implementation.	Exclude statements regarding the general level of readiness for implementation that are captured in the sub-codes.
1 Leadership Engagement	Commitment, involvement, and accountability of leaders and managers with the implementation. One important dimension of organizational commitment is managerial patience (taking a long-term view rather than short-term) to allow time for the often inevitable reduction in productivity until the intervention takes hold.	Include statements regarding the level of engagement of organizational leadership.	Exclude or double code statements regarding leadership engagement to Engaging: Formally Appointed Internal Implementation Leaders or Champions if an organizational leader is also an implementation leader, e.g., if a director of primary care takes the lead in implementing a new treatment guideline. Note that a key characteristic of this Implementation Leader/Champion is that s/he is also an Organizational Leader.
2 Available Resources	The level of resources dedicated for implementation and on-going operations including money, training, education, physical space, and time.	Include statements related to the presence or absence of resources specific to the innovation that is being implemented.	Exclude statements related to training and education and code to Access to Knowledge & Information. Exclude statements related to the quality of materials and code to Design Quality & Packaging. Exclude statements about equipment that was already being used by clinicians prior to the implementation of virtual care and code to Compatibility.
3 Access to knowledge and information	Ease of access to digestible information and knowledge about the intervention and how to incorporate it into work tasks.	Include statements related to implementation leaders' and users' access to knowledge and information regarding use of the program, i.e., training on the mechanics of the program.	Exclude statements related to engagement strategies and outcomes, e.g., how key stakeholders became engaged with the innovation and what their role is in implementation, and code to Engaging: Key Stakeholders. Exclude statements about general networking, communication, and relationships in the organization, such as descriptions of meetings, email groups, or other methods of keeping people connected and informed, and statements related to team formation, quality, and functioning, and code to Networks & Communications

IV. CHARACTERISTICS OF INDIVIDUALS			
A Knowledge & Beliefs about the Intervention	Individuals' attitudes toward and value placed on the intervention as well as familiarity with facts, truths, and principles related to the intervention.		Exclude statements related to familiarity with evidence about the innovation and code to Evidence Strength & Quality.
B Self-efficacy	Individual belief in their own capabilities to execute courses of action to achieve implementation goals.		
C Individual Stage of Change	Characterization of the phase an individual is in, as he or she progresses toward skilled, enthusiastic, and sustained use of the intervention.		
D Individual Identification with Organization	A broad construct related to how individuals perceive the organization and their relationship and degree of commitment with that organization.		
E Other Personal Attributes	A broad construct to include other personal traits such as tolerance of ambiguity, intellectual ability, motivation, values, competence, capacity, and learning style.		
V. PROCESS			
A Planning	The degree to which a scheme or method of behavior and tasks for implementing an intervention are developed in advance and the quality of those schemes or methods. Planning was in the moment, iterative and focused on the most immediate needs. So early on, the virtual practice working group came together with the task of identifying what specific implementation supports were needed to start providing virtual care quickly . . . a dedicated focus on in the moment planning/responding early on in pandemic. Over time, especially with second and third wave, it was much more just integrated into routine operational planning between managers and their teams (with direction from the director). So based on the status of the pandemic and restrictions at the time, the decisions about what would be virtual vs in person would shift based on the needs of the care areas.	Include evidence of pre-implementation diagnostic assessments and planning, as well as refinements to the plan.	
1 Suggestions from Participants (facilitators)	Suggestions from participants related to the planning of the implementation of virtual care. (We want to distinguish between suggestions for planning vs what planning actually occurred).		
B Engaging	Attracting and involving appropriate individuals in the implementation and use of the intervention through a combined strategy of social marketing, education, role modeling, training, and other similar activities.	Include statements related to engagement strategies and outcomes, i.e., if and how staff and innovation participants became engaged with the innovation and what their role is in implementation. Note: Although both strategies and outcomes are coded here, the outcome of engagement efforts determines the rating, i.e., if there are repeated attempts to engage staff that are unsuccessful, or if a role is vacant, the construct receives a negative rating. In addition, you may also want to code the "quality" of staff - their capabilities, motivation, and skills, i.e., how good they are at their job, and this data affects the rating as well.	Exclude statements related to specific sub constructs, e.g., Champions or Opinion Leaders. Exclude or double code statements related to who participated in the decision process to implement the innovation to Innovation Source, as an indicator of internal or external innovation source.
1 Opinion Leaders	Individuals in an organization who have formal or informal influence on the attitudes and beliefs of their colleagues with respect to implementing the intervention	Include statements related to engagement strategies and outcomes, e.g., how the opinion leader became engaged with the innovation and what their role is in implementation. Note: Although both strategies and outcomes are coded here, the outcome of efforts to engage staff determines the rating, i.e., if there are repeated attempts to engage an opinion leader that are unsuccessful, or if the opinion leader leaves the organization and this role is vacant, the construct receives a negative rating. In addition, you may also want to code the "quality" of the opinion leader here - their capabilities, motivation, and skills, i.e., how good they are at their job, and this data affects the rating as well.	
2 Formally appointed internal implementation leaders	Individuals from within the organization who have been formally appointed with responsibility for implementing an intervention as coordinator, project manager, team leader, or other similar role.	Include statements related to engagement strategies and outcomes, e.g., how the formally appointed internal implementation leader became engaged with the innovation and what their role is in implementation.	Exclude or double code statements regarding leadership engagement to Leadership Engagement if an implementation leader is also an organizational leader, e.g., if a director of primary care takes the lead in implementing a new treatment guideline.
3 Champions	"Individuals who dedicate themselves to supporting, marketing, and 'driving through' an [implementation]" [101](p. 182), overcoming indifference or resistance that the intervention may provoke in an organization.	Include statements related to engagement strategies and outcomes, e.g., how the champion became engaged with the innovation and what their role is in implementation.	Exclude or double code statements regarding leadership engagement to Leadership Engagement if a champion is also an organizational leader, e.g., if a director of primary care takes the lead in implementing a new treatment guideline.
4 External Change Agents	Individuals who are affiliated with an outside entity who formally influence or facilitate intervention decisions in a desirable direction.	Include statements related to engagement strategies and outcomes, e.g., how the external change agent (entities outside the organization that facilitate change) became engaged with the innovation and what their role is in implementation, e.g., how they supported implementation efforts.	Note: It is important to clearly define what roles are external and internal to the organization. Exclude statements regarding facilitating activities, such as training in the mechanics of the program, and code to Access to Knowledge & Information if the change agent is considered internal to the study, e.g., a staff member at the national office. If the study considers this staff member internal to the organization, it should be coded to Access to Knowledge & Information, even though their support may overlap with what would be expected from an External Change Agent.
5 Key Stakeholders	Individuals from within the organization that are directly impacted by the innovation, e.g., staff responsible for making referrals to a new program or using a new work process.	Include statements related to engagement strategies and outcomes, e.g., how key stakeholders became engaged with the innovation and what their role is in implementation.	Exclude statements related to implementation leaders' and users' access to knowledge and information regarding using the program, i.e., training on the mechanics of the program, and code to Access to Knowledge & Information. Exclude statements about general networking, communication, and relationships in the organization, such as descriptions of meetings, email groups, or other methods of keeping people connected and informed, and statements related to team formation, quality, and functioning, and code to Networks & Communications.

6 Intervention Participants	Individuals served by the organization that participate in the innovation, e.g., patients in a prevention program in a hospital.	Include statements related to engagement strategies and outcomes, e.g., how innovation participants became engaged with the innovation. Note: Although both strategies and outcomes are coded here, the outcome of efforts to engage participants determines the rating, i.e., if there are repeated attempts to engage participants that are unsuccessful, the construct receives a negative rating.	Exclude statements demonstrating (lack of) awareness of the needs and resources of those served by the organization and whether or not that awareness influenced the implementation or adaptation of the innovation and code to Needs & Resources of Those Served by the Organization.
C Executing	Carrying out or accomplishing the implementation according to plan.	Include statements that demonstrate how implementation occurred with respect to the implementation plan. Note: Executing is coded very infrequently due to a lack of planning. However, some studies have used fidelity measures to assess executing, as an indication of the degree to which implementation was accomplished according to plan.	
D Reflecting & Evaluating	Quantitative and qualitative feedback about the progress and quality of implementation accompanied with regular personal and team debriefing about progress and experience.	Include statements that refer to the implementation team's (lack of) assessment of the progress toward and impact of implementation, as well as the interpretation of outcomes related to implementation. Reflecting and Evaluating is part of the implementation process; it likely ends when implementation activities end. It does not require goals be explicitly articulated; it can focus on descriptions of the current state with real-time judgment, though there may be an implied goal (e.g., we need to implement the innovation) when the implementation team discusses feedback in terms of adjustments needed to complete implementation.	Exclude statements related to the (lack of) alignment of implementation and innovation goals with larger organizational goals, as well as feedback to staff regarding those goals, e.g., regular audit and feedback showing any gaps between the current organizational status and the goal, and code to Goals & Feedback. Goals and Feedback include organizational processes and supporting structures independent of the implementation process. Evidence of the integration of evaluation components used as part of "Reflecting and Evaluating" into on-going or sustained organizational structures and processes may be (double) coded to Goals and Feedback. Exclude statements that capture reflecting and evaluating that participants may do during the interview, for example, related to the success of the implementation, and code to Knowledge & Beliefs about the Innovation.
E Accommodation	The idea that they are trying to work around a barrier that may have presented. Process/mechanism of working around that barrier.		
VI. IMPLEMENTATION OUTCOMES			
A Acceptability	The perception among implementation stakeholders that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory. Satisfaction with various aspect of the innovation (e.g. content, complexity, comfort, delivery, and credibility).		
B Adoption	The intention, initial decision, or action to try or employ an innovation or evidence-based practice. Adoption also may be referred to as "uptake." Uptake; utilization; initial implementation; intention to try.		
C Appropriateness	The perceived fit, relevance, or compatibility of the innovation or evidence based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem. Suitability; usefulness; practicability.		
D Feasibility	The extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting. Actual fit or utility; suitability for everyday use; practicability.		
E Fidelity	The degree to which an intervention was implemented as it was prescribed in the original protocol or as it was intended by the program developers. Delivered as intended; adherence; integrity; quality of program delivery.		
F Implementation Cost	The cost impact of an implementation effort . . . depends upon the costs of the particular intervention, the implementation strategy used, and the location of service delivery. Marginal cost; cost-effectiveness; cost-benefit.		
G Penetration	The integration of a practice within a service setting and its subsystems. Level of institutionalization? Spread? Service access? (Reach)		
H Sustainability	The extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations. Maintenance; continuation; durability; incorporation; integration; institutionalization; sustained use; routinization.		
VII. SERVICE OUTCOMES (IOM Standards of Care)			
A Efficiency	Avoiding waste (e.g., waste of equipment, ideas, and energy).		
B Safety	Avoiding injuries to patients.		
C Effectiveness	Providing care based on scientific knowledge.		
D Equity	Ensuring that the quality of care does not vary because of characteristics such as gender, ethnicity, socioeconomic status, or geographic location.		
E Patient-centeredness	Providing respectful and responsive care that ensures that patient values guide clinical decisions.		
F Timeliness	Reducing waits for both recipients and providers of care.		
VIII. CLIENT OUTCOMES			
A Satisfaction			
B Function			
C Symptomatology			
IX. CLINICIAN AND STAFF OUTCOMES			
A Satisfaction	Clinician's job satisfaction		
B Effectiveness	Are they still able to do their job effectively?		