

## Intersectionality-Enhanced Consolidated Framework for Implementation Research<sup>1</sup>

Figure 1 prompts consideration of intersectionality for a few key domains and constructs of the Consolidated Framework for Implementation Research (CFIR). These prompts are denoted with **green circles** in Figure 1. These spotlighted CFIR domains and constructs were identified as 'high priority' for enhancement with intersectionality by the Intersectionality & KT Framework Committee. Though all CFIR domains and constructs can be enhanced with intersectionality, the Committee prioritized these as the most important domains and constructs for KT intervention developers to begin considering intersectionality.

Original CFIR domain/construct descriptions, intersectionality-enhanced domain/construct descriptions, and intersectionality prompts related to each intersectionality-enhanced domain/construct description can be found in Table 1.

# Intersectionality-Enhanced Consolidated Framework for Implementation Research<sup>1</sup>

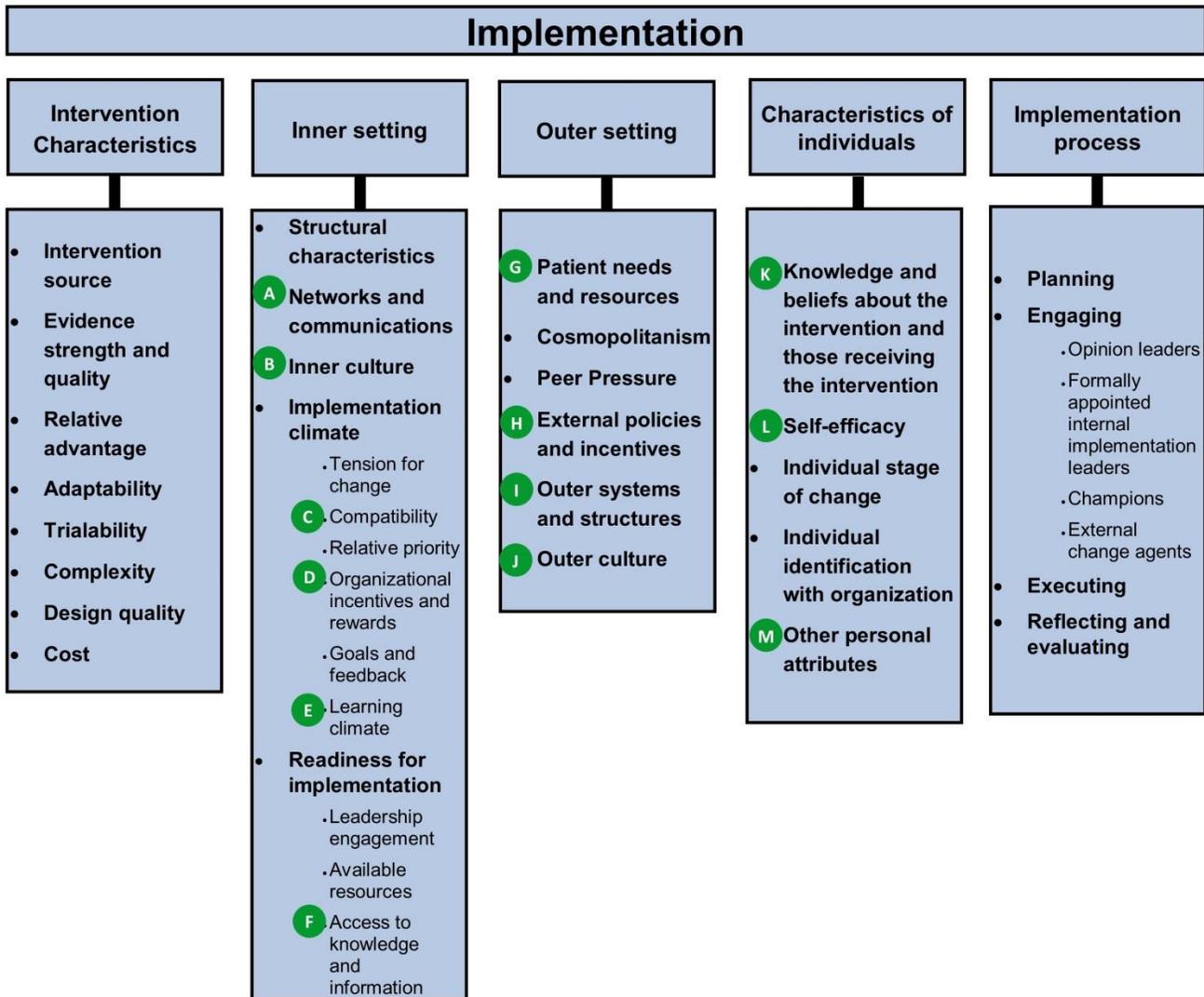
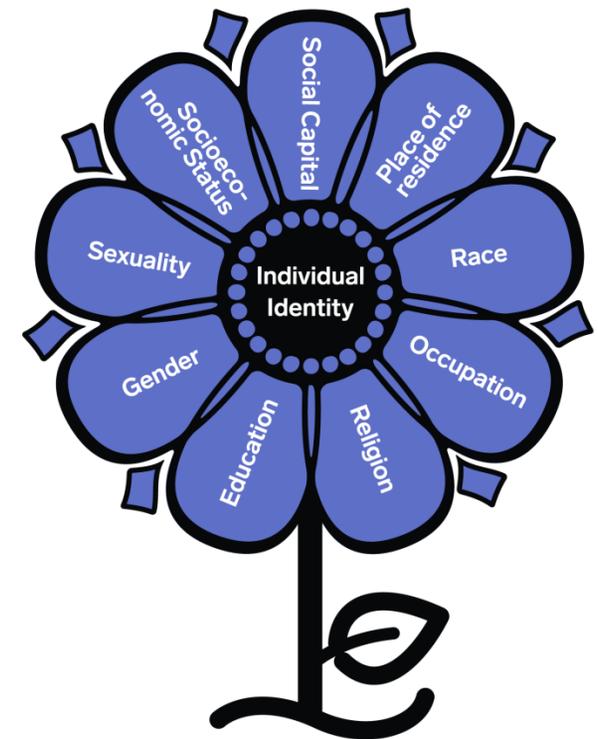


Figure 1. Intersectionality-Enhanced Consolidated Framework for Implementation Research.<sup>1</sup>

**Before working with the Intersectionality-Enhanced CFIR, it is important to reflect:**

- What is your relationship to the project's topic area? For example, consider your personal and professional experience, values, and interests.<sup>2</sup>
- Who is the patient/community population affected by the project topic area? Have we asked them how they would like to be involved?<sup>2</sup>
- Consider how different perspectives, that represent a range of intersecting categories, have been examined.
  - What are the general demographic characteristics of the patient/community population that experiences the health issue? Are these demographics reflected on the implementation team?
  - What are the general demographic characteristics of the health care providers that work in the area of health? Are these demographics reflected on the implementation team?

*Although these reflection questions use the term 'you,' they are not meant to be directive. Consider that both implementation teams and the field of KT are collectively using this reflective approach. We are in this together.*



**Figure 2.** Visualization of some intersecting categories<sup>3-5</sup>

**Table 1: Consolidated Framework for Implementation Research (CFIR) domain/construct descriptions, intersectionality-enhanced CFIR domain/construct descriptions, and intersectionality prompts for spotlighted CFIR domains and constructs.**

Column Legend			
CFIR Domain/ Construct	Domain/Construct Description ( <i>for more information, visit: <a href="https://cfirguide.org/constructs/">https://cfirguide.org/constructs/</a></i> )	Intersectionality-Enhanced Domain/Construct Description	Intersectionality Prompts for Intersectionality- Enhanced Domain/Construct
<b>CFIR Domain: Inner setting</b>	The ‘structural, political, and cultural context through which the intervention proceeds’ and the relationship between these elements.	The ‘structural, political, power, and cultural context through which the intervention proceeds’ and the relationship between these elements.	<ul style="list-style-type: none"> <li>• Who holds power within the organization? What intersecting categories do they represent? Are they similar intersecting categories to those whose behaviour is targeted for change?</li> <li>• How may these power relations affect the KT intervention (positively and/or negatively)?</li> </ul>
Networks and communications  	The nature and quality of webs of social networks and the nature and quality of formal and informal communications within	The nature, quality, and inclusivity of webs of social networks and the nature, quality, and access to formal and informal communications within an organization.	<ul style="list-style-type: none"> <li>• How might the principle of homophily (i.e., birds of a feather flock together) influence who has access to information and who does not? How might access to information impact the success of the intervention?</li> <li>• Who are the leaders (formal and informal) at the</li> </ul>

	<p>an organization.</p>		<p>organization? What intersecting categories do they represent? Are these leaders representative of the intersecting categories of those individuals expected to change their behaviour?</p> <ul style="list-style-type: none"> <li>• How might power structures influence informal communications? How might these communications affect the intervention?</li> <li>• How does the organization support different ways of communicating? How can different ways of communicating support the success of the intervention? <ul style="list-style-type: none"> <li>• This includes physical access to communications (e.g., computers) and accessibility of communications (e.g., website meets accessibility standards).</li> </ul> </li> <li>• How might social structures influence informal communication systems? How might these informal communication systems impact the success of the intervention?</li> </ul>
<p>Inner culture</p> 	<p>Norms, values, and basic assumptions of a given organization.</p>	<p>Norms, values, power structures, and basic assumptions (e.g., heteronormativity) of a given organization.</p>	<ul style="list-style-type: none"> <li>• What assumptions does the organization make about its staff? How might these assumptions influence the intervention?</li> <li>• What assumptions does the organization make about the population it supports? How might these assumptions about the population influence the intervention?</li> </ul>

			<ul style="list-style-type: none"> <li>• What are the values of the organization? How might these values influence the success of the intervention?</li> <li>• How are projects prioritized? How might the prioritization process influence the intervention?</li> <li>• What biases does the organization hold (hidden and overt)? Do these biases align, reinforce, or counter biases in the outer culture(s) (i.e., in broader society)? For example, does the organization assume the older adults are not active and frail?</li> </ul>
<p>Compatibility <i>(sub-construct to CFIR construct "Implementation climate")</i></p> 	<p>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.</p>	<p>The degree of tangible fit between individuals' intersecting social categories and the meaning and values attached to the intervention by involved individuals, how those align with individuals' own norms, values, ways of knowing, and perceived risks and needs, and how the intervention fits with existing workflows and systems.</p>	<ul style="list-style-type: none"> <li>• Does the intervention align with the values, norms, ways of knowing, and existing workflow of those changing their behaviour?</li> <li>• What assumptions are being made about the abilities of those expected to change their behaviour?</li> <li>• What assumptions are being made about the workflow of those expected to change their behaviour?</li> </ul>

<p>Organizational incentives and rewards</p> <p><i>(sub-construct to CFIR construct "Implementation climate")</i></p> 	<p>Extrinsic incentives such as goal-sharing awards, performance reviews, promotions, and raises in salary, and less tangible incentives such as increased stature or respect.</p>	<p>Existence of and access to extrinsic incentives such as goal-sharing awards, performance reviews, promotions, and raises in salary, and less tangible incentives such as increased stature or respect.</p>	<ul style="list-style-type: none"> <li>• Does everyone in the organization have the same access to organizational incentives and rewards? How might this reward access impact the success of the intervention?</li> <li>• Are there hidden or overt biases towards those who attain formal (e.g., promotions) or informal (e.g., stature or respect) organizational rewards? How might these biases influence the success of the intervention?</li> <li>• Is the range of values and preferences of those whose behaviour we are trying to change considered when establishing incentives? (i.e., do all people value the proposed or available incentives and rewards)?</li> </ul>
<p>Learning climate</p> <p><i>(sub-construct to CFIR construct "Implementation climate")</i></p> 	<p>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)</p>	<p>A climate in which: a) leaders, representative of diverse intersecting social factors, express their own fallibility and need and respect for team members' assistance and input; b) team members, representative of diverse intersecting social factors, feel they are partners and that their perspective is encouraged, essential, heard, valued, and considered knowledgeable in the change process; c) individuals feel</p>	<ul style="list-style-type: none"> <li>• How do leaders in the organization display vulnerability or considerations of power redistribution? How might this leadership behaviour influence the success of the intervention?</li> <li>• Do all individuals expected to change their behaviour have equitable access to sufficient time and space for reflective thinking and evaluation in multiple venues/means (e.g., do part-time staff or those who work from home have protected time for reflection)?</li> </ul>

	there is sufficient time and space for reflective thinking and evaluation.	psychologically safe to try new methods; and d) there is sufficient time and space for reflective thinking and evaluation in multiple venues/means (e.g., written reflection, discussion).	
<p>Access to knowledge and information</p> <p><i>(sub-construct to CFIR construct "Readiness for implementation")</i></p> 	Ease of access to digestible information and knowledge about the intervention and how to incorporate it into work tasks.	Ease of access to digestible information, available in accessible formats across user groups, and knowledge about the intervention and how to incorporate it into work tasks, based on individual intersecting social factors.	<ul style="list-style-type: none"> <li>• Does everyone involved in the intervention have access to information in a format that works for them?</li> <li>• Have individuals representative of different user groups contributed to the creation and dissemination of the knowledge?</li> <li>• Has the source of information been critically appraised by a diverse group of people occupying diverse intersecting categories?</li> <li>• How does literacy, health literacy, ehealth literacy, vision, numeracy, impact access and digestibility of information about the intervention?</li> <li>• Does the knowledge use universally understood analogies? <ul style="list-style-type: none"> <li>○ Avoid using culture-specific analogies (e.g., sports terminology such as "hit a home run")?</li> <li>○ Avoid using potentially offensive or triggering language (e.g., "in the trenches").</li> </ul> </li> </ul>

<p><b>CFIR Domain: Outer setting</b></p>	<p>The ‘economic, political, and social context within which an organization resides.’</p>	<p>The economic, political, geographical, environmental, physical, environmental, and social context within which an organization resides.</p>	<ul style="list-style-type: none"> <li>• How did the current structure (economic, political, geographical, environmental, structural (e.g., economic) and social context of the outer setting come to be (e.g., economic downturns, ideologies of government leaders, legal precedent)?</li> <li>• How have different spheres (e.g., economic, political, and environmental) intersected to produce the current outer setting?</li> </ul>
<p>Patient needs and resources</p> 	<p>The extent to which patient needs, as well as barriers and facilitators to meet those needs, are accurately known and prioritized by the organization.</p>	<p>The extent to which diverse patient perspectives, values, needs, as well as barriers (e.g., historical distrust of medical systems) and facilitators (e.g., high socioeconomic status) to meet those needs are accurately known, aligned with, and prioritized by the organization.<sup>6</sup></p>	<ul style="list-style-type: none"> <li>• Do we accurately and comprehensively understand the diverse patient experience related to this intervention?</li> <li>• How might a patient’s intersecting categories influence their experience related to this intervention?</li> <li>• How have diverse patient perspective, values, needs, and voices been incorporated by the organization?</li> <li>• How might previous work to integrate patient’s perspectives, values, and needs influence this intervention?</li> </ul>

<p>External policies and incentives</p> 	<p>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.</p>	<p>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 and that the creation and sustainment of these strategies addresses systems of power, inclusivity, and equity.</p>	<ul style="list-style-type: none"> <li>• To what extent are external strategies (e.g., policies, regulations, mandates, recommendations and guidelines, reporting) non-discriminatory and address institutional forms of marginalization (e.g., racism, sexism, ageism)?<sup>1</sup></li> <li>• How might institutionalized forms of marginalization (e.g., racism, sexism, and ageism) influence the success of the intervention?</li> <li>• To what extent are external strategies (e.g., policies, regulations, mandates, recommendations and guidelines, reporting) inclusive?<sup>1</sup></li> <li>• What assumptions do external strategies make about those expected to change their behaviour in the intervention (e.g., forms of (dis)ability, gender roles)?</li> <li>• Do external strategies and incentives reinforce stereotypes? If stereotypes are reinforced, how might this influence the success of the intervention?</li> <li>• Do all individuals and organizations have equal access to external strategies and incentives? How might this access influence the success of the intervention?</li> </ul>
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<p>Outer structures and systems</p> 	<p>N/A (not in CFIR)</p>	<p>The overlapping structures and systems of a given society, including systems of privilege and oppression (e.g., sexism, racism, ableism).</p>	<ul style="list-style-type: none"> <li>• What systemic forms of oppression exist (e.g., sexism, ableism) within institutions? Who holds power in institutions?</li> <li>• How are populations related to the intervention portrayed in the media?</li> <li>• What structural inequities exist within the health area or population the intervention impacts?</li> </ul>
<p>Outer culture</p> 	<p>N/A (not in CFIR)</p>	<p>The, norms, values, and basic assumptions (e.g., heteronormativity) of a given society.</p>	<ul style="list-style-type: none"> <li>• What assumptions does the society or community (outside the organization) make about those expected to change their behaviour in the intervention (e.g., what assumptions does society make about the emergency room nurses expected to deliver a new questionnaire on fall prevention)?</li> <li>• How might societal biases (hidden and overt) influence knowledge use? For example, does society respect the role of all health professionals equally (e.g., physiotherapists, nurses, physicians, physician assistants)?</li> <li>• How might the roles that individuals are expected to play within society (e.g., gender roles) influence knowledge use?</li> <li>• How does society view patients that are expected to use or be affected by knowledge</li> </ul>

			use (e.g., what biases does society hold regarding older adults)?
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<p><b>CFIR Domain: Characteristics of Individuals</b></p>	<p>The individuals responsible for carrying out the intervention or otherwise related to the intervention, their agency, and their relationships to each other and the intervention.</p>	<p>The individuals responsible for carrying out the intervention or otherwise related to the intervention, their agency, intersecting social categories, and their relationships (e.g., power dynamics) to each other, the intervention, and those impacted by the intervention (e.g., patients).</p>	<ul style="list-style-type: none"> <li>• What assumptions do individuals expected to change their behaviour make about those affected by the intervention (e.g., what do providers assume about patients in precarious housing situations)?</li> <li>• What assumptions are made about the agency of those expected to change their behaviour? What do they have control over?</li> <li>• How might the categories of the individuals expected to change their behaviour intersect? How might these intersecting categories affect individuals' interactions with others?</li> </ul>
<p>Knowledge and beliefs about the intervention and those receiving the intervention</p> 	<p>Individuals' attitudes toward and value placed on the intervention as well as familiarity with facts, truths, and principles related to the intervention.</p>	<p>Individuals' attitudes toward and value placed on the intervention as well as familiarity with and access to facts, truths, and principles related to the intervention and those receiving the intervention (e.g., patients, other health providers).</p>	<ul style="list-style-type: none"> <li>• How might an individual's intersecting categories (e.g., age, education, gender) influence their access to the facts, truths, and principles related to the intervention?</li> <li>• How might an individual's intersecting categories influence their knowledge and beliefs toward an intervention?</li> <li>• How might an individual's intersecting categories affect the value placed on the intervention in comparison to competing priorities?</li> </ul>

<p>Self-efficacy</p> 	<p>Individual belief in their own capabilities to execute courses of action to achieve implementation goals.</p>	<p>An individual's belief in their own capabilities (related to their intersecting social factors) to execute courses of action to achieve implementation goals.</p>	<ul style="list-style-type: none"> <li>• What, beyond an individual, may impact their self-efficacy (e.g., gender stereotypes)?</li> <li>• How might an individual's intersecting categories impact their self-efficacy to execute the intervention?</li> <li>• How might systems of oppression (e.g., racism, sexism, and ageism) affect individuals' self-efficacy to deliver the intervention?</li> </ul>
<p>Other personal attributes</p> 	<p>A broad construct to include other personal traits such as tolerance of ambiguity, intellectual ability, motivation, values, competence, capacity, and learning style.</p>	<p>A broad construct to include the intersection of other personal traits and social factors such as tolerance of ambiguity, motivation, values, competence, learning style. These individual traits and social factors interact with each other and other domains including the outer and inner setting (e.g., one's values regarding educational achievement will be influenced by social systems, such as sexism and racism).</p>	<ul style="list-style-type: none"> <li>• Reflect on our assumptions of what attributes we classify as modifiable by an individual. What external influences, beyond the individual, may be influencing these attributes?</li> <li>• Think broadly: what intersecting categories and personal dimensions may influence the intervention? What is the relationship between these categories?</li> <li>• Are the categories conceptualized in an additive or multiplicative way (e.g., values + learning style) or are they conceptualized as connected? <i>Focus on the interdependencies and mutual constitution of these categories as opposed to considering them as independent categories.</i></li> <li>• For those expected to change their behaviour,</li> </ul>

			<p>what intersecting categories may be most influential (e.g., the intersection of values and tolerance for ambiguity)?</p> <ul style="list-style-type: none"> <li>• How may an individual's life experiences shape the traits (e.g., education) that enable them to engage in the target behaviour?</li> </ul>
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**References**

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