

# DRAFT CFIR 2.0 Constructs and Definitions

*As of February 8, 2022*

**A note on terminology:**

In the table below, we use terms in brackets that users can replace with the terms relevant to their project:

- **Innovation:** The “thing” being implemented, e.g., a medication, medical device, behavior change intervention, technology – or any combination.(1)
- **Recipients:** The individuals who the innovation is designed to benefit, e.g., patients, students, citizens.

<p><b>I. INNOVATION DOMAIN: Characteristics of the “thing” being implemented, e.g., a medication, medical device, behavior change intervention, technology – or any combination.</b></p> <p>This domain captures <b>perceptions of 1)</b> constructs specific to [the innovation] being implemented and <b>2)</b> how those constructs may relate to implementation processes and/or outcomes. Users may wish to use objective measures of these constructs; however, perceptions have a greater influence on implementation outcomes than objective measures.</p> <p>It is important for users to define the boundaries between [the innovation] and the process used to implement [the innovation].</p> <ul style="list-style-type: none"> <li>• [The innovation] only includes things that persist after implementation is complete</li> <li>• The implementation process only includes things that are designed to end after implementation is complete; see Domain IV: Implementation Process and Strategy</li> </ul> <p>Users are encouraged to develop and add any (sub)constructs that will be useful to their project.</p>	
<b>Construct Name</b>	<b>Construct Definition</b> <i>The degree to which:</i>
Innovation Definition	Describe the [Innovation] including e.g., type, components, ideally using a standard reporting guideline.
Innovation Source	The group that developed and/or visibly sponsored use of [the innovation] is reputable, credible, and/or trustable.
Innovation Evidence-Base	[The innovation] has robust evidence supporting its effectiveness.
Innovation Relative Advantage	[The innovation] is better or worse than other innovations or current practice.
Innovation Adaptability	[The innovation] can be modified, tailored, or refined to fit local context or needs.
Innovation Trialability	[The innovation] can be tested or piloted on a small scale and undone.
Innovation Complexity	[The innovation] is complicated, which may be reflected by its scope and/or the nature and number of connections and steps.

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Innovation Design	[The innovation] is well designed and packaged, including how it is assembled, bundled, and presented.
Innovation Cost	[The innovation]'s purchase and operating costs are expensive.
<p><b>II. OUTER SETTING DOMAIN: Characteristics of the broader area within which the Inner Setting exists, e.g., hospital system, school district, state.</b></p> <p>This domain captures <b>perceptions</b> of 1) constructs that are specific to [the Outer Setting], e.g., healthcare system, school district, or state outside of [the Inner Setting] and 2) how those constructs may relate to implementation processes and/or outcomes.</p> <p>It is important for users to define the boundaries between [the Outer Setting] and [the Inner Setting] for accurate coding.</p> <p>Users may choose to code more than one [Outer Setting] as well as multiple levels in [the Outer Setting].</p> <p>Users are encouraged to develop and add any (sub)constructs that will be useful to their project.</p> <p><i>Note: Although these constructs are rooted within [the Outer Setting], the goal is to capture information emanating from [the Outer Setting] that is influencing implementation processes and outcomes within [the Inner Setting].</i></p>	
<b>Construct Name</b>	<b>Construct Definition</b>
Outer Setting Definition	Key attributes of [Outer Setting(s)] including e.g., boundaries, type, and nature.
Critical Incidents	Salient large-scale, often unanticipated events, (e.g., pandemic, flood, mergers, buy-outs).
Socioecological Characteristics	Economic (e.g., affluence), cultural (e.g., racism, ableism), and political (e.g., governance) beliefs, systems, and structures.(2)
Recipient Characteristics	[Recipient] characteristics (including demographics and health behaviors) and priorities, preferences, and needs.
Partnerships & Connections	Networks and relationships between [the Inner Setting] and entities in [the Outer Setting].
Market Forces	Competition and dynamics of supply and demand
Policies	Legislation, guidelines, regulations, criteria, recommendations from influential entities including e.g., government, accrediting bodies, professional associations.

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Performance Goals	Quality or benchmarking metrics or externally established service goals.
Financing	Funding provided by third-party or service reimbursements (e.g., foundations, government, insurance companies).
<p><b>III. INNER SETTING DOMAIN:</b> Characteristics of the area within which [the innovation] is being implemented, whether it is a formal system or broader community, e.g., hospital, school, city; the Inner Setting is the unit of analysis.</p> <p>This domain captures <b>perceptions</b> of <b>1</b>) constructs in [the Inner Setting] implementing [the innovation] (e.g., hospital, school, city) and <b>2</b>) how those constructs may relate to implementation processes and/or outcomes.</p> <p>It is important for users to define the boundaries between [the Outer Setting] and [the Inner Setting] for accurate coding. Users may choose to code more than one [the Inner Setting] as well as multiple levels in [the Inner Setting], e.g., hospital-level, unit-level, and team-level.</p> <p>Users are encouraged to develop and add any (sub)constructs that will be useful to their project.</p>	
<b>Construct Name</b>	<b>Construct Definition</b>
Inner Setting Definition	Key attributes of [Inner Setting(s)] e.g., function, location, size, age, boundaries.
Structural Characteristics	See subconstructs:
Physical Infrastructure	Layout and configuration of space and other tangible material features (e.g., HVAC systems).
Work Infrastructure	Organization of tasks and responsibilities, within and between individuals and teams.
Information Technology Infrastructure	Technological infrastructure for tele-communication, electronic documentation, and data storage, management, reporting, and analysis.
Relational Connections	Formal and informal relationships, networks, and interactions within and across structural, professional, or other [Inner Setting] boundaries.
Communications	Formal and informal information sharing.
Culture	See subconstructs:
Recipient-Centeredness	Shared values, beliefs, and norms around caring, supporting, and addressing the needs and welfare of [recipients].
Deliverer-Centeredness	Shared values, beliefs, and norms around caring, supporting, and addressing the needs and welfare of [deliverers].
Learning-Centeredness	Shared values, beliefs, and norms around ongoing collective efforts to improve and innovate as an integral product of work processes, as evidenced by capturing and using data to inform practice, speaking up, collaboration, and experimentation. (3–6)

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	Values, beliefs, and norms around continual improvement and innovation as an integral byproduct of work processes.(3)
Human Equality-Centeredness	Shared values, beliefs, and norms about the inherent equal worth and value of all human beings
<b>Construct Name</b>	<b>Construct Definition</b> <i>The degree to which:</i>
Tension for Change	The current situation is intolerable and needs to change.
Compatibility	[The innovation] fits with workflows, systems, and processes.
Relative Priority	Implementing and delivering [the innovation] is important compared to other initiatives.
Incentive Systems	Implementing and delivering [the innovation] results in incentives and rewards and/or disincentives and punishments.
Mission Alignment	Implementing and delivering [the innovation] is in line with the overarching commitment, purpose, or goals of [the Inner Setting].
Available Resources	See subconstructs:
Funding	Funding is available for employees to implement and deliver [the innovation].
Space	Physical space is available for employees to implement and deliver [the innovation].
Materials & Equipment	Supplies are available for employees to implement and deliver [the innovation].
Access to Knowledge and Information	Guidance and direction (including training) are accessible for employees to implement and deliver [the innovation].
<p><b>IV. INDIVIDUALS DOMAIN</b></p> <p>This domain captures <b>perceptions of 1)</b> constructs related to individuals, including their roles and characteristics, and <b>2)</b> how those constructs may relate to implementation processes and/or outcomes. Users may choose to aggregate roles to capture characteristics at the team-level. Individuals may hold more than one role.</p> <p>It is important for users to identify and define relevant roles and characteristics for their project; we recommend two phases of coding: <b>First</b>, code all statements about a person or group to their role and where that role is located (e.g., within the [Inner Setting] or [Outer Setting]); this captures the full story of each person or group under one construct. <b>Second</b>, code relevant characteristics for each role; this captures the nuance related to specific characteristics.</p>	

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<b>ROLES</b>	<i>Include <b>location</b> of each role (e.g., [Outer Setting] [Inner Setting]) along with <b>type</b> of role</i>
<b>Construct Name</b>	<b>Construct Definition</b>
High-Level Leaders	Individuals who have the highest level of authority because of their position, including key decision-makers, executive leaders (e.g., CEO), directors, etc
Mid-level Leaders	Individuals who are supervised by a high-level leader and who supervise others
Opinion Leaders	Individuals without a formal role in implementation but who are persuasive agents with informal influence on the attitudes and behaviors of individuals in other key [Roles]. (7,8)
Facilitators	Individuals or groups with subject matter expertise in implementing innovations who assist, coach, or support implementation.
Implementation Leads	Individuals who lead or champion efforts to implement [the innovation].
Implementation Team Members	Individuals who actively participate with a group of individuals who collaborate with and support the Implementation Lead in accomplishing implementation.
Other Implementation Support	Individuals or groups who provide support to implementation efforts but are not the Implementation Lead or part of the Implementation Team.
Deliverers	Individuals who are directly or indirectly involved with delivering [the innovation] to [recipients].  <i>Note: This role persists after implementation is complete.</i>
<b>CHARACTERISTICS:</b>	
Users can define relevant constructs based on theory for each [Role]. For example, theories related to leadership,(9) facilitation,(10,11) project management,(12,13) or individual-level behavior change(14,15) may define a different set of constructs. As a guide, we follow the generalized COM-B framework here.(16)	
<b>Construct Name</b>	<b>Construct Definition</b> <i>The degree to which:</i>
Opportunity	[Role] is available, has time allocated, sufficient assignment of authority and other factors conferred to the [Role] that are needed to fulfill the [Role].(16)
Capability	[Role] has the necessary intrapersonal competence, knowledge, and skills to fulfill the role.
Motivation	[Role] is committed to fulfilling role.(16)

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<p><b>V. IMPLEMENTATION PROCESS DOMAIN: Characteristics of the processes used to implement [the innovation].</b>                  This domain captures <b>perceptions</b> of constructs about the Implementation Process and Strategies used to adopt, implement, and/or sustain [the innovation] within [the Inner Setting]. The constructs in this domain are not prescriptive but are included as best practices.</p> <p>It is important for users to define the boundaries between [the innovation] and the process used to implement [the innovation].</p> <ul style="list-style-type: none"> <li>• Describe the overarching framework being used to guide the implement process (i.e., “process framework” (cite Nilsen) (e.g., Getting-to-outcomes)                         <ul style="list-style-type: none"> <li>○ Users may wish to add constructs and/or map CFIR constructs to the process framework being used</li> </ul> </li> <li>• [The innovation] only includes things that persist after implementation is complete; see Domain 1: Innovation Characteristics.</li> <li>• The implementation process only includes things that are designed to end after implementation is complete.</li> </ul> <p>Users are encouraged to develop and add any constructs that will be useful to their project, e.g., use of strategies included in the Expert Recommendations for Implementing Change Framework. (17)</p>	
<b>Construct Name</b>	<b>Construct Definition</b> <i>The degree to which [Roles]:</i>
Teaming	Join together, intentionally coordinating and collaborating on interdependent tasks. (18)
Assessing Needs	
Deliverers	Collect information about the characteristics of deliverers and their priorities, preferences, and needs.
Recipients	Collect information about the characteristics of recipients and their priorities, preferences, and needs.
Assessing Context	Learn about various aspects of [the Outer and Inner Settings] to inform implementation of [the innovation].
Planning	Outline roles, responsibilities, and tasks for implementing [the innovation] in advance.
Choosing Strategies	Choose and adapt implementation strategies to address barriers, leverage facilitators, and fit context (e.g., based on a context assessment) (17,19)
Setting Goals	Set implementation milestones and objectives to be achieved within a specified timeframe.

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Doing	Implement in small phases, steps or cycles of change that cumulatively build, before scaling up more broadly with continued optimization until [Innovation] becomes routine. (20)
Engaging	
Deliverers	Attract and encourage [deliverers] to deliver [the innovation]
Recipients	Attract and encourage [recipients] to participate in [the innovation]
Reflecting & Evaluating	See subcodes
Implementation Progress	Collect, discuss, and build shared understanding of quantitative and qualitative information that indicates the degree to which implementation outcomes are achieved.
Innovation Progress	Collect, discuss, and build shared understanding of quantitative and qualitative information that indicates the degree to which innovation outcomes are achieved.
Adapting	Modify [the innovation] and/or [the Inner Setting] for optimal fit and integration into delivery routines. (19,21)

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