Core Competencies for Implementation Practice

The Center for Implementation

Health Canada Santé Canada

Created by : Dr. Julia E Moore and Sobia Khan

The Center for Implementation

The Center for Implementation (TCI) supports organizations and teams that are looking to build capacity in implementation and knowledge translation, embed implementation science (IS) in their organizational processes, and/or implement evidence-based practices. Our mission is to accelerate the application of IS to improve outcomes. At TCI, we aim to apply implementation science in a way that makes sense to organizations to ensure that their change efforts have a positive impact on the health system.

We are "topic agnostic", meaning the stakeholders are content area experts and we bring the practical implementation science expertise. We have experience working on embedding implementation science in a range of topics including public health, healthcare, mental health, prevention science, education, and juvenile justice. We work with multiple types of organizations and agencies at local, provincial, and national levels.

For more information visit: https://thecenterforimplementation.com/

Our online implementation courses

Our core competencies for implementation practice are the foundation for our online course offerings. We offer three online courses. **Inspiring Change** is our free mini-course, which is often the first program people take. This offers an overview of what implementation science is and some techniques for using it to help you in your day-to-day work. It's a great option if you're new to implementation science and would like a better understanding of how it can help in your career or business.

Our two full courses (6-8 modules) are **Designing for Implementation** and **Implementation, Spread and Scale**. These are much more in-depth and offer comprehensive theories, models and frameworks that can be used to help with specific workplace challenges. We offer course certificates and our feedback from students has been overwhelmingly positive.

Learn more about our courses here: https://thecenterforimplementation.com/courses

PART I: ABOUT THE IMPLEMENTATION CORE COMPETENCIES

Why did we create the competencies?

I work in knowledge translation, are these relevant for my work?

It depends. **Knowledge translation** includes both dissemination and implementation. **Dissemination practice** refers to the sharing of evidence, ideally in a bi-directional manner. Underlying dissemination practice is **dissemination science**, the study of the most effective methods to distribute evidence. Dissemination practice should be informed by dissemination science. I**mplementation science** is the study of identifying the best ways to put research evidence into practice. Implementation practice involves using strategies or interventions to support people, organizations, and/or systems to use evidence to change practice. These competencies focus primarily on **implementation practice**. If you identify as someone who performs implementation practice, these competencies are for you.

Knowledge gained from implementation science research is rarely exchanged between those practicing implementation on the ground and the implementation researchers. To ensure higher quality implementation and improved outcomes, the field needs those responsible for delivering programs apply implementation in practical, thoughtful and proactive ways.

Core competencies are the knowledge, skills, attitudes, and behaviors needed to become adequately competent in performing certain actions or jobs. Effective training is based on the core competencies for those actions or jobs. For example, the public health core competencies form the basis of public health training programs. There is a growing body of literature on core competencies required to do implementation research, targeted to implementation scientists. However, the same progress has not been made on core competencies required to apply implementation, targeted to implementation practitioners. Building applied implementation capacity at the practitioner level can foster better implementation and overall improved population-level impact; therefore, understanding the core competencies for applying implementation at the front line is paramount.

This work was jointly funded by Health Canada and The Center for Implementation. It is freely available as a resource for any organization looking to building capacity in practical implementation.

Who are the implementation core competencies for?

The implementation core competencies described in this document outline the basic skill sets required to be able to effectively implement evidence-based programs and practices. **These are not the competencies required to do research in implementation or dissemination science.** We refer to people who are adopting these competencies as "implementation practitioners".

What does it mean to "apply implementation science"?

Implementation scientists research the most effective ways to implement evidence. We can use the results of their research to help inform many aspects of implementation. For example, implementation scientists develop **process models**, which tell us the key steps or stages to implement evidence. Implementation scientists also develop **frameworks** after they identify factors that affect multiple aspects of implementation (e.g., barriers and facilitators, contextual factors, factors affecting sustainability). How we create change is guided by **theory**, which describe the mechanisms by which we can change individuals, organizations, and systems.

The underlying assumption behind these competencies is that applying implementation science involves using existing theories, models, and frameworks to guide implementation; however, the competencies are not tied to any specific theory/model/framework, which allows the implementation practitioner to use the theory/model/framework that fit best in their context.

How can you use implementation core competencies?

These core competencies can be used in many different ways. Note that there are many competencies here, and one person is not expected to adopt all of the core competencies. For example, you could use the competencies to plan who in your organization will take on different roles. You could use the competencies to conduct a gap assessment and see where your organization has strengths and which areas are opportunities for improvement. The competencies can help you develop job descriptions, then hire and train new staff. The competencies can serve as the basis for the types of training staff receive.

What methods did we use to develop the core competencies?

We scanned the published and grey literature to identify core competencies for implementation practice. Six documents outlining (or including components of) core competencies for implementation practice were retrieved (the 6 existing documents are listed on the last page).

Table 1 presents an overview of the 9 activities and the 37 core competencies.

Table 1. Implementation Activities and Core Competencies

Implementation Activity	Implementation Core Competencies
Inspire Stakeholders and Develop Relationships	1. Build a shared understanding 2. Achieve buy-in for the evidence and the use of implementation science to put the evidence into practice 3. Develop and maintain trusting relationships 4. Practice active listening 5. Reflect on your own contributions to the relationship 6. Manage distress 7. Encourage dialogue and new ideas
Build Implementation Teams	8. Encourage a shared purpose 9. Develop the team 10. Manage conflict 11. Explore power dynamics 12. Highlight and affirm strengths and successes
Understand the Problem	13. Use data to understand the problem 14. Critically reflect on the problem 15. Support individuals/groups to prioritize
Use Evidence to Inform all Aspects of Implementation	16. Synthesize and appraise evidence 17. If an evidence-based practice is selected, use evidence and theory to select implementation strategies 18. Adapt the program, practice, and/or implementation strategies to the local context
Assess the Context	19. Assess readiness 20. Understand the system, context, and culture 21. Assess contextual fit 22. Understand power structures and adaptive challenges
Facilitate Implementation	23. Use process models and frameworks to guide implementation 24. Identify champions 25. Motivate leaders 26. Develop and execute an implementation plan 27. Address resistance to change 28. Develop action plans to resolve challenges 29. Conduct quality improvement cycles
Evaluate	30. Use a framework to guide evaluation 31. Assess implementation quality
Plan for Sustainability	32. Build capacity for sustainability 33. Assess factors that influence sustainability, spread, and scale up 34. Develop a sustainability plan
Brokering knowledge	35. Foster partnerships 36. Leverage opportunities 37. Encourage evidence-informed decision making

PART II: THE IMPLEMENTATION CORE COMPETENCIES

A. Inspire Stakeholders and Develop Relationships

One of the primary roles of implementation practitioners is to motivate and inspire others to action. "Inspire stakeholders and develop relationships" captures the essential elements of relationship building as the starting place to motivate and support change. This implementation activity relates to relationships directly within the organization/community that is attempting to change, while the "knowledge brokering" activity focuses on building connections between organizations and across systems.

1. **Build a shared understanding.** Use strategies to support colleagues and stakeholders at all levels to develop a shared understanding of the problem and next steps.

2. **Achieve buy-in for the evidence and the use of implementation science to put the evidence into practice.** Use persuasive language to strategically introduce implementation science and the evidence, highlighting benefits and opportunities to embed these into existing processes.

3. **Develop and maintain trusting relationships.** Develop trust by modeling authenticity, transparency and respect. Create space where stakeholders feel safe to discuss and share challenges. Space can be created through asking questions and structured facilitation processes; and physically created through meeting places and room set up.

4. **Practice active listening. A**llow others the time and space to express their thoughts, and hearing not only the words but the underlying message others are trying to convey.

5. **Reflect on your own contributions to the relationship.** Conduct self-assessments on an ongoing basis and consider the relationship's strengths and weaknesses.

6. **Encourage dialogue and new ideas.** Create opportunities to encourage sharing of ideas and introduce new ideas by asking questions.

7. **Manage distress.** Help stakeholders manage discomfort and distress with the implementation process and any conflict that may arise between stakeholders.

B. Build Implementation Teams

Implementation teams are responsible for operationalizing implementation plans. Implementation practitioners help and support the process of "building implementation teams".

8. **Encourage a shared purpose.** Promote development of strong implementation teams by encouraging a shared sense of purpose.

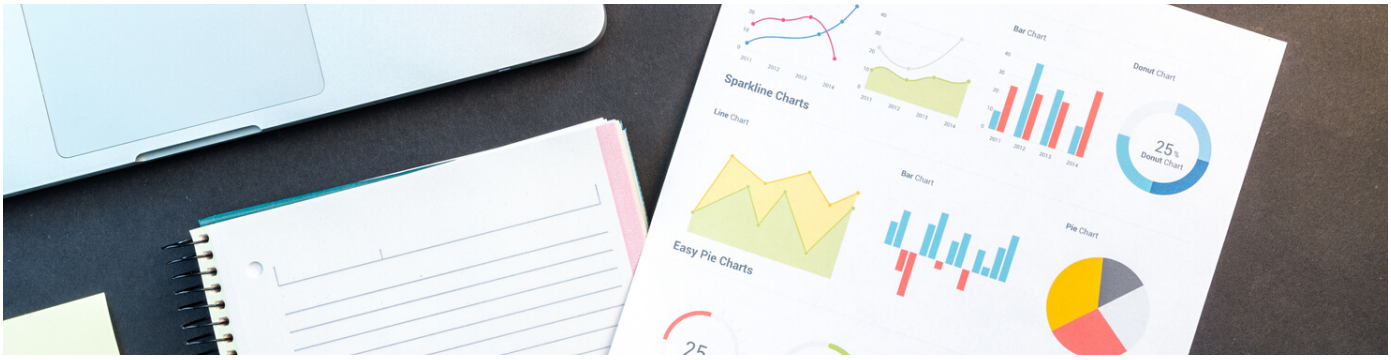
9. **Develop the team.** Collaboratively work with key stakeholders from the organization(s) to identify team members, create role clarity, develop decision-making and communication processes, goals, and work plans.

10. **Manage conflict.** Use group facilitation skills to manage potential or actual conflicts.

11. **Explore power dynamics.** Continuously assess power dynamics within the implementation team and between the implementation team and others in the organization/system.

12. **Highlight and affirm strengths and successes.** Be a cheerleader for the implementation team, motivating them by highlighting both big and small successes and strengths.

C. Understand the Problem



"Understand the problem" emphasizes the importance of deeply understanding the issue(s) and root causes. What are the needs? What is the practice gap? What do the data say? Given the complexity of implementation, it is essential to critically reflect on the problem, drawing on data from multiple sources. Finally, "understand the problem" is also about preparing people to focus their efforts on changeable gaps and needs. This requires integrating the use of data for problem identification and decision-making into the typical 'way of working' in order to assess and improve the implementation infrastructure, organizational processes, negotiable aspects of the change effort, and address broader system barriers.

13. **Use data to understand the problem.** Employ data-driven methods (e.g., needs assessment, gap assessment, stakeholder analysis, environmental scan, scoping or systematic reviews) to explore the problem from multiple angles. Confirm that the problem is both a gap and a need (i.e., a gap between the best available evidence on what should be done and what is actually happening, and there is a need for a solution).

14. **Critically reflect on the issue.** Seek opportunities to examine and reflect on the issue by considering multiple perspectives with the goal of understanding the core issue and possible root causes.

15. **Support individuals/groups to prioritize.** Use prioritization techniques to guide teams to prioritize needs, gaps, challenges and practices drawing from the data and critical reflections on the problem.

D. Use Evidence to Inform all Aspects of Implementation

Implementation is about using evidence to change practice. Evidence can come from research, experience, practice, evaluation or theory. The competencies associated with this particular activity show that it is important not only to implement evidence but also to use evidence to support other aspects of implementation.

16. **Appraise and synthesize evidence.** Critically appraise available evidence and programs/practices to: identify the problem, select a program/practice based on evidence that appropriately addresses the gap, assess barriers and facilitators, and identify strategies.

17. If an evidence-based practice is selected, **use evidence and theory to determine which implementation strategies address the underlying barriers and facilitators to change**. Create a consolidated version of the program using a logic model to display the underlying mechanisms of change.

18. **Adapt the program, practice, and/or implementation strategies to the local context.** Proactively and thoughtfully adapt the program/practice/implementation strategies focusing on adaptations that do not alter the components that are essential to achieving the desired benefit.

E. Assess the Context

Given that context significantly affects the decision to adopt evidence, its implementation and its outcomes, the core competencies related to the implementation activity to "assess the context" focus on assessing and understanding the context while considering the perspective of multiple stakeholders. Understanding the context will help guide the selection of strategies to overcome potential barriers and leverage facilitators.

19. **Assess readiness.** Using surveys and/or interviews, assess individual and organizational readiness for change.

20. **Understand the system, context, and culture.** Conduct a formal or informal assessment of the context, including barriers and facilitators at multiple levels (e.g., the system, the organization, the implementation unit).

21. **Assess contextual fit.** Assess the fit between the evidence, the system (e.g., political, funding), and the organization (e.g., culture and climate).

22. **Understand power structures and complex challenges.** Complex challenges are situations in which there are no solutions or too many solutions with no clear choices. To create adaptive solutions to complex problems, seek information on the individuals who have influence and power within and outside of the organization and implementation unit.

F. Facilitate Implementation

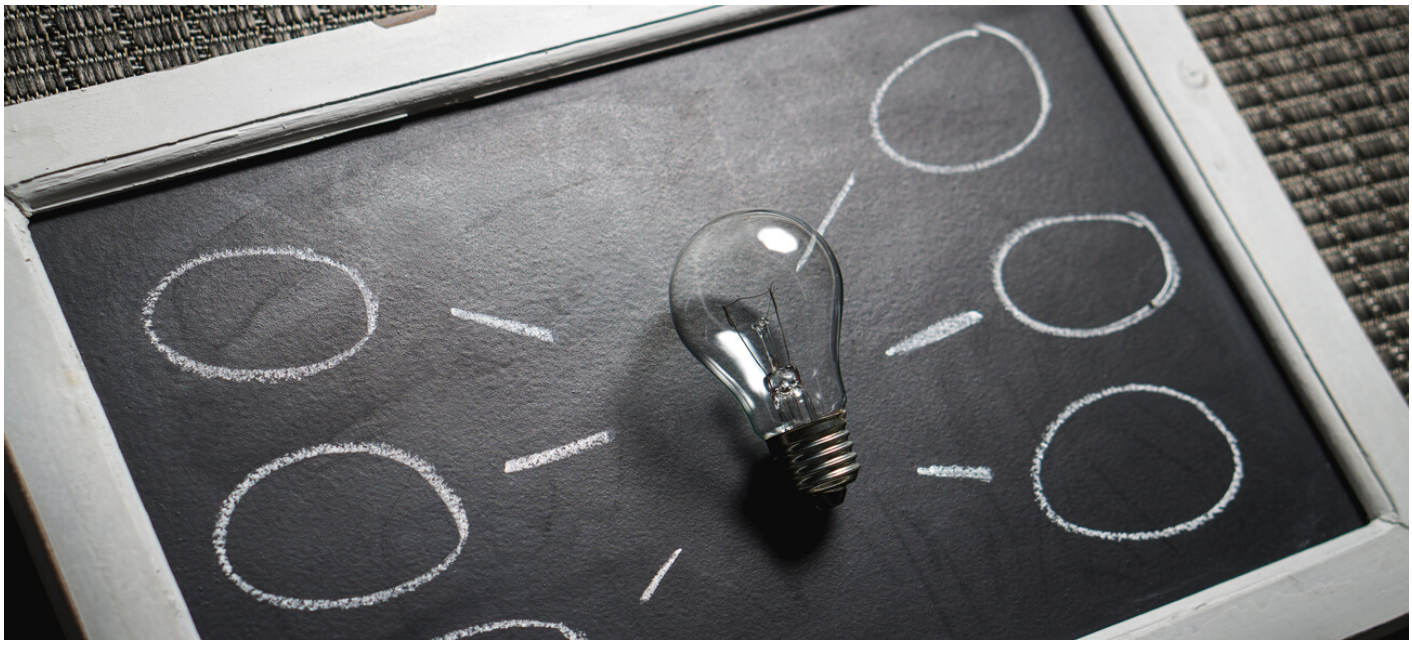
The process of implementation requires changes at multiple levels and among multiple groups of individuals; "facilitate implementation" focuses on ways to support those delivering the evidence to create and execute an implementation plan.

23. **Use process models and frameworks to guide implementation.** Select appropriate process models, frameworks, and tools to guide development of the implementation plan and specific steps in the implementation process (e.g., assessing readiness, context assessment).

24. **Identify champions.** Identify, engage, and mobilize champions who have influence at multiple levels: system, organization, unit, and team.

25. **Motivate leaders.** Use techniques (e.g., self- reflection and appreciative inquiry) to support leaders to understand their influence and encourage their active participation in inspiring change.

26. **Develop and execute an implementation plan.** Using a process model as guidance, outline the steps/stages, activities, and roles and responsibilities in the implementation plan. Stakeholder involvement is essential in developing the implementation plan.



27. **Address resistance to change**. Recognize, acknowledge and discuss potential losses, benefits, loyalties, and priorities at individual, group, and organizational levels related to the change.

28. **Develop action plans to resolve challenges**. Engage (or encourage others to engage) in action planning to resolve anticipated and unforeseen implementation issues.

29. **Conduct quality improvement cycles**. Use data throughout the implementation stage to critically reflect on and continuously improve the implementation plan, strategies, and practice/program. Maintain communication about improvement with key stakeholders.

G. Evaluate

Implementation practitioners are not always responsible for evaluation but should at minimum understand and apply the fundamentals of planning for measurement, monitoring, and evaluation of implementation projects (e.g., understanding logic models and mechanisms of change). In particular, it is essential to evaluate implementation quality.

30. **Use a framework to guide evaluation.** Using an evaluation framework, develop an evaluation plan to understand whether the recommended changes from the evidence will successfully achieve outcomes and capture implementation process measures. Conduct the evaluation collecting quantitative and qualitative data to understand whether and how the evidence is improving outcomes.

31. **Assess implementation quality.** Evaluate implementation quality (the degree to which a program is implemented as intended) using multiple metrics and data sources; track adaptations and consider the potential impact they may have on outcomes.

H. Plan for Sustainability

The ultimate goal of implementation is to create sustainable change. "Plan for sustainability" encompasses the ways in which implementation practitioners can plan for and support sustainability.

32. **Build capacity for sustainability.** Build evidence-specific and general implementation capacity among implementers and/or organizations. Capacity incorporates knowledge, skills, attitudes and motivation specific to the evidence and to implementation in general.

33. **Assess factors that influence sustainability, spread, and scale up.** Assess the fit of the evidence from a sustainability perspective. Conduct a formal or informal context assessment to understand the barriers and facilitators to sustainability, spread, and scale up.

34. **Establish a sustainability plan.** Guided by the context assessment, fit, and evaluation plan, and leveraging existing capacity, develop and execute a sustainability plan.

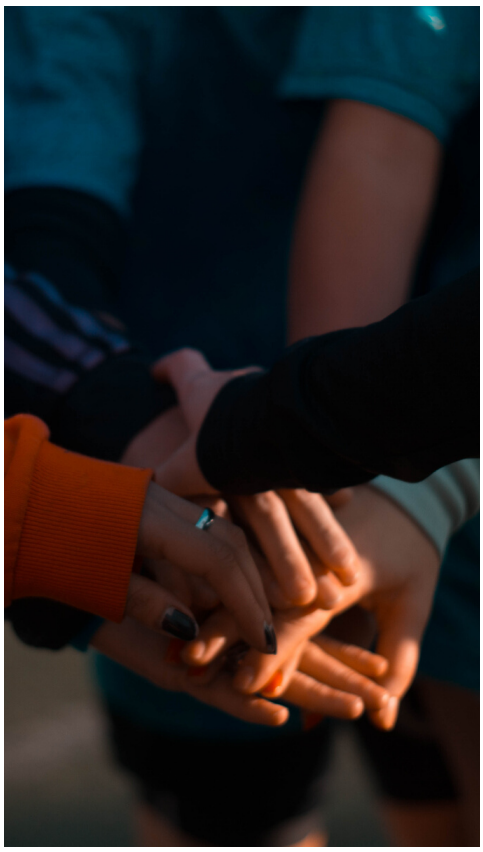
I. Brokering Knowledge

Knowledge brokers connect stakeholders across the system with one another. Moreover, they help individuals and organizations access information that facilitates the use of evidence in policy and practice. "Knowledge brokering" is an important role for implementation practice when implementation is happening beyond the walls of a single organization, or if more than one team within an organization is involved.

35. **Foster partnerships.** Network and foster partnerships and linkages with multiple stakeholder groups, including researchers, health care professionals, organizations, government, policymakers, patients, and community members.

36. **Leverage opportunities.** Identify opportunities and groups to influence policy, research agendas and practice-based work (e.g., communities of practice).

37. **Encourage evidence-informed decision making.** Encourage and support decision makers to access, appraise, adapt, and use evidence to inform decisions.



Part III: Values

In addition to the implementation core competencies, some of the competency documents that were reviewed included a section on philosophical principles, guiding principles, values, and personal attributes.

These principles and values have been synthesized into the following list:

a) **Empathy.** Being aware of and sensitive to the perspectives, thoughts, feelings, ideas, and experiences of others; respectfully valuing these contributions.

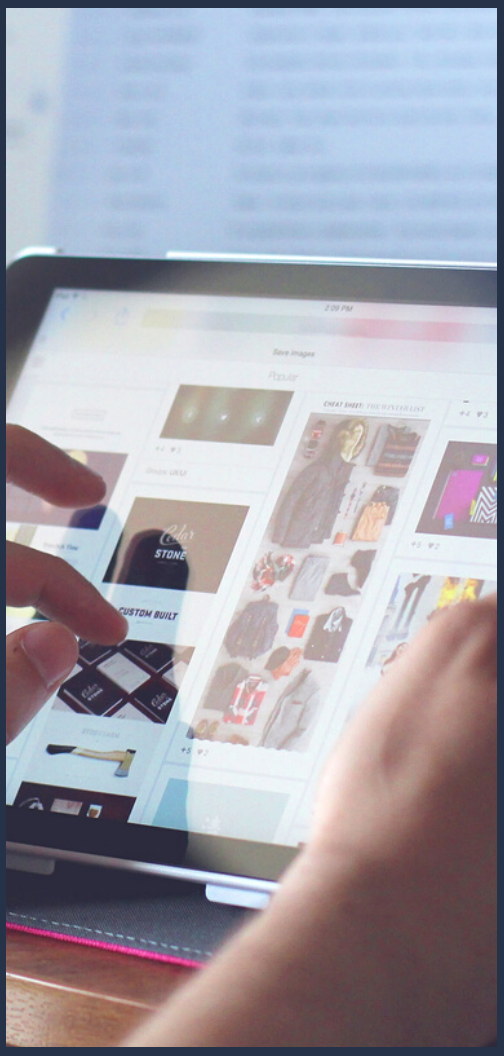
b) **Lifelong learning.** Having a positive attitude about learning and continuous improvement, being curious and asking questions.

c) **Patience and resilience.** Being patient and persistent through the process of implementation and being resilient in the face of resistance and other challenges.

d) **Valuing evidence and processes.** Understanding and valuing research and various types and sources of evidence, and believing that implementation should be based on evidence.

e) **Valuing transdisciplinary teamwork.** Believing in an atmosphere of collective collaboration and teamwork. Recognizing the added value of integrating evidence and perspectives from multiple disciplines.

Appendix A: Core Competency Source Documents



(click for hyperlinks)

Implementation Support Practitioner Profile (Metz et al., 2018)

National Implementation Research Network Foundation Strategy Practice Profiles (Metz & Easterling, 2016)

Knowledge Translation Program – Knowledge Translation Practice Core Competencies (Moore et al., 2018)

National Implementation Research Network – Active Implementation Practitioner Practice Profiles (van Dyke et al., 2017)

Knowledge mobilization and impact competencies (Bayley, Phipps, Batac, and Stevens, 2017)

Core Knowledge Translation competencies (Mallidou et al., 2018)