Understanding evidence: CDC tool

A summary of

How to cite this NCCMT summary:

Categories: Tool, Appraise, Synthesize

Relevance For Public Health
The tool, Continuum of Evidence of Effectiveness, outlines six dimensions of the best available research evidence to better understand a strategy's strength of evidence and effectiveness. Professionals can use the tool to assess the strengths and weaknesses of the research evidence of a particular strategy. They can also use the Continuum to better understand where the research on a strategy's effectiveness can be strengthened.

Description
This guidance document clarifies and defines standards of rigour across six key dimensions that make up the best available research evidence for evidence-informed decision making. Developed by the National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention (CDC), Understanding Evidence Part 1: Best Available Research Evidence outlines an educational tool to facilitate a common understanding and language of what is meant by the best available research evidence. Using this tool, program and policy planners can better understand research evidence and use evidence to decide which strategies to adopt.

The tool, Continuum of Evidence of Effectiveness, helps practitioners, policy-makers and researchers understand research evidence. The Continuum reflects only one type of evidence in evidence-informed decision making, the best available research evidence. The other two components include expereriential evidence and contextual evidence. The focus of this guidance document is on understanding standards of rigour for research evidence.

The Continuum of Evidence of Effectiveness is based on two aspects of the best available research evidence:

1. Strength of Evidence
   - How strong is the evidence in determining that the program or policy is producing the desired outcomes?

2. Effectiveness
   - Is the program or policy producing desired outcomes?

The Continuum can be used:
- to learn about the best available research evidence;
- as part of a process for making decisions about which strategies to implement; and
- identify which aspects of an initiative's research evidence could be improved.

To learn more about evidence-informed decision making, see NCCMT's Evidence Informed Public Health wheel and online learning modules.

Implementing the Tool
Who is Involved?

These summaries are written by the NCCMT to condense and to provide an overview of the resources listed in the Registry of Methods and Tools and to give suggestions for their use in a public health context. For more information on individual methods and tools included in the review, please consult the authors/developers of the original resources.
Practitioners, decision-makers, policy-makers and researchers can use the Continuum of Evidence of Effectiveness to better understand the best available research evidence. This tool was originally designed for the violence prevention sector, but can be used in many public health-related settings.

Steps for Using Tool

The Continuum of Evidence of Effectiveness tool assesses evidence across six dimensions:

- effect
- internal validity
- research design
- independent replication
- implementation guidance
- external and ecological validity

The dimensions are grouped as:

- well supported, supported;
- promising direction/emerging/undetermined (more research needed); or
- unsupported, harmful.

The guide provides clear definitions of each dimension, as well as guidance on how to better understand and apply the dimensions to an initiative overall.

Evaluation and Measurement Characteristics

Evaluation
Has not been evaluated

Validity
Not applicable

Reliability
Not applicable

Methodological Rating

Not applicable

Tool Development

Developers
Richard W. Puddy
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Method of Development

The Continuum of Evidence of Effectiveness was created by:

- reviewing the literature on evidence; and
- scanning existing registries and standards for classifying evidence from more than 42 sources across health and social services; and
- expert panel review (youth violence, self-directed violence, intimate partner violence, sexual violence, child maltreatment) and recommendations.

Feedback on the Continuum from experts in violence prevention (practitioners, researchers and policymakers) was synthesized to create the tool.

Release Date

2011

Contact Person

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### Resources

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