Measuring Implementation Strength

Introduction

Measuring the strength of programme implementation is an emerging evaluation approach to help understand the predictability of health outcomes and impact of proven interventions, why some programmes are more successful than others, and how changes in health outcomes can be attributed to a particular programme.

However, there is a lack of consensus about what are the most efficient approaches to generate implementation strength scores for a given health intervention or programme. In order to address this knowledge gap, we carried out a systematic literature review with the following aims:

- How is ‘implementation strength’ conceptualised in research studies?
- What are the components of programme implementation strength and how are they identified?
- How is implementation strength measured?

Methods

The review included evidence from peer reviewed journal databases and seminal grey literature. Data was extracted independently by three reviewers into a structured form.

Key features

‘Implementation Strength’ is a multidimensional concept. Studies were included which attempted comprehensive assessment based on index formation. Studies that relied on single indicators or compiling a few variables without theoretical underpinning were excluded.

Implementation research spans various academic disciplines and there is a significant potential for cross-learnings. The studies included were from mental health, medicine, public health, and education.

Key learnings

How is ‘implementation strength’ conceptualised?

There is ambiguity and no consensus on the definition of implementation strength in the literature. Based on assessing various definitions on a 3 point evaluation criteria of

1. Practicality
2. Measurability
3. Utility for stakeholders

we recommend Programme implementation strength to be operationally defined as ‘the pooled effect of dose, duration, specificity, and intensity of intervention - in order to determine how much implementation efforts are needed to achieve a meaningful level of change in coverage and health outcomes’

Operationally and conceptually it is distinct from the theory of ‘fidelity’.

IPO framework

Most studies focused on assessing ‘processes’ only—few studies have attempted to adequately combine ‘inputs and processes’ to conceptualize and generate indices of implementation strength.

What are the components of programme implementation strength and how are they identified?

Models, treatment protocols, guidelines, and expert opinion were all used to identify main components of implementation strength.

Commonly used components were: organisational structure e.g., leadership, human resources, information systems, and processes of services delivery, e.g. activities, types, availability, and quality of services. However, there was no uniform approach in defining and measuring implementation.

How is implementation strength measured?

A range of scaling and scoring systems are used to measure quantity and quality of implementation – no consistent pattern.

Simultaneously assessing and using contextual factors in the interpretation of implementation strength indices is well established.