

# Defining guidelines impact: the development of an impact planning tool



## BACKGROUND

Clinical guidelines are important tools for bridging evidence to practice. However, guidelines' impact varies, is generally unreported or narrowly studied. This may be due to the complex implementation strategies required and the challenge of linking these to results, especially long-term clinical outcomes. In Singapore, the Agency for Care Effectiveness (ACE) under the Ministry of Health develops national-level guidelines through an iterative process that plans for implementation and impact evaluation from early stages (Figure 1 below). During formative research and guideline development, gaps and multi-level barriers and facilitators are identified. Relevant national initiatives, services or healthcare policies and programmes are also mapped to enable the establishment of the guideline's role within the larger ecosystem of interventions. It also serves to engage key stakeholders (e.g. policy owners, key opinion leaders) who are well placed to implement the guideline.

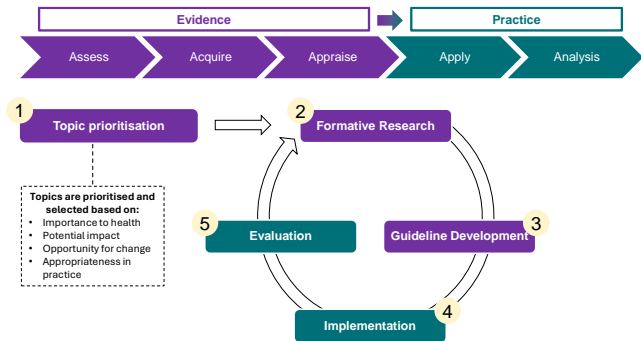


Fig 1. ACE's iterative process for guideline development and implementation

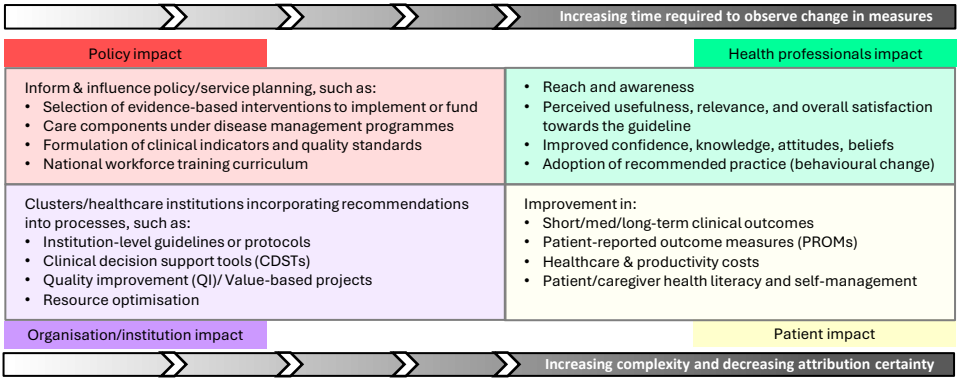
**OBJECTIVE** Barriers and facilitators to practice change are topic-specific and can span across patient, clinician, and system levels. Aligned to this, guidelines need to account for different stakeholders or systems needs. To reflect such complexity, an in-depth analysis of the context in which the guideline will operate is necessary to ensure appropriate impact definition. A one-size-fit-all definition remains limited and fails to reflect the full impact spectrum. The objective of this project was to develop a framework for guideline developers to identify impact areas and help guide implementation activities/evaluation, adapting from existing health research frameworks.

## METHODS

We set up an internal workgroup to establish definitions of impact for ACE's clinical guidelines, prioritise key impact areas and identify relevant measures or indicators. Health research impact frameworks (such as the CDC Science Impact Framework or Payback Framework) were searched, reviewed and compared to identify core domains. These domains were applied to guideline stakeholder groups and desired outputs.

## FRAMEWORK DEVELOPMENT

Based on the domains identified through our search, stakeholder groups were mapped to key output and outcome categories, and the framework populated with a suite of impact measurement areas. The overarching framework illustrates four core areas for guideline impact planning, expands from dissemination impact, supports the design of targeted implementation activities and helps prioritise engagement efforts.



While limitations exist across all four framework areas, these are particularly evident when planning to measure guideline impact on healthcare professionals and patient outcomes. Some examples are:

- Variable implementation timing and practice contexts
- Limitations with data (e.g. self-reported) and its availability
- Long/complex causal chains and attribution pathways, including multiple contributing factors, concurrent interventions, overlap with national initiatives and system-level changes

## CURRENT APPLICATIONS

In March 2025, ACE published its first two mental health guidelines on assessment and management of generalized anxiety disorder and major depressive disorder in primary care. The impact framework was used to guide the identification of impact focus for the two guidelines in the short term (1-2 years):

- Incorporate guidelines into mental health training programmes for health professionals
- Measure improved clinicians knowledge, attitudes, beliefs
- Facilitate the update of care components under disease management policy and national Healthier SG Care Protocols



Longer-term impact plans include measuring referrals from primary care to community psychological services and clinical outcomes such as improvement in PHQ-9/GAD-7 scores or functioning scores.

**CONCLUSIONS** While teams developing clinical guidelines are not directly involved in the execution of implementation plans, impact planning should be discussed early in guidelines work and reviewed regularly. This requires an understanding of the different spheres of guidelines' potential impact, based on users, stakeholders, and health contexts.