

Implementing and scaling up public health programs

The burden of chronic disease in Australia continues to increase with the prevalence of risk factors such as physical inactivity and poor diet.¹ In order to reverse these trends in the Australian population we need to 'scale up' chronic disease prevention programs and interventions that have been shown to work.

The World Health Organization (WHO) defines scale up as 'the deliberate effort to increase the impact of successfully tested health interventions to benefit more people and foster policy and program development on a lasting basis'.²

A Prevention Centre project, led by researchers from the University of Sydney, is working with policy and practice partner agencies to improve the reach of effective chronic disease prevention programs with a range of tools and resources for program implementation and scale up.

Supporting practitioners and researchers to make decisions and document the process of scaling up interventions will improve the quality of information reported and shared; and will inform future scaling up activities. More broadly, this will improve understanding of implementation processes and practice, build capacity in the prevention workforce and enhance the availability of research evidence.

Why prevention needs to capitalise on scale up?

Despite the abundance of interventions that have been effective at the small scale, they are rarely scaled up to population level. Barriers to scale up include poor alignment between the intervention and local context, lack of political and leadership support, and insufficient organisational resourcing.³

Successfully scaled-up interventions use research evidence systematically throughout the lifespan of the program, have strong systems supporting implementation, appropriate tailoring to the local context, effective governance, coordination and communication strategies, and sustainable funding models.

It is important to recognise that scale up is, at times, opportunistic. Past experience has shown it often occurs when an window of opportunity arises to address a specific issue within a limited timeframe. Having access to a range of evidenced-based interventions already proven to be scalable for when such opportunities occur could increase the likelihood of population-level implementation.⁴



Supporting practitioners and researchers in documenting the process of scaling up chronic disease prevention interventions will improve information shared to inform future scaling up activities and improve existing evidence gaps.



We must ask, is this an intervention that has potential to scale up and if so, what needs to be implemented, adapted or modified to achieve a wider population reach and impact, and still maintain its effectiveness at scale?



Without real-world testing to demonstrate intervention effectiveness, positive impacts and long-term successes are difficult to ascertain.



How do you decide a program is ready to scale up?

Before making any decision to scale up an intervention, an assessment of the intervention’s scalability needs to be made. We must ask ‘is this an intervention that has the potential to scale up’ and if so, what needs to be implemented, adapted or modified to achieve a wider population reach and impact, and still maintain its effectiveness at scale.⁵

Several factors need to be taken into consideration such as the costs of the intervention when delivered at-scale, the workforce and infrastructure available for delivering the intervention, the acceptability of the intervention by the population and the potential for sustainability at scale. The research team have developed the Intervention Scalability Assessment tool (ISAT) to support those making decisions to scale up an intervention.⁵

How do you scale up an effective intervention?





Interventions may be scaled up in different ways. In one of our projects we examined 40 real-world chronic disease prevention health interventions in high-income English-speaking countries. We identified four common pathways that interventions may go through when scaling up to the population level described below.

Scaling up pathway

The table below illustrates the four key steps usually taken for scaling up public health interventions. The different pathways reflect variations in how these steps are taken or omitted along the way. More than half (55%) of the interventions took a comprehensive evidence-informed pathway from conceptualisation to dissemination. However, many omitted one or more evidence generation steps (for example, efficacy testing or real-world trialling) prior to scaling up.⁶

Not all interventions can or should be scaled up. Determining the scalability of interventions from the outset is the first step in the scaling up process and the ISAT can assist in this process. Equally important is understanding the context and setting of the intervention that will be scaled up.

Four stages of scaling up

 1. Development	 2. Efficacy testing	 3. Real world trial	 4. Dissemination
Was the program developed from a theoretical basis?	Was a pilot test of the program conducted in a controlled setting to determine program efficacy?	Was a larger scale trial conducted in multiple real world settings/ locations?	Was there large scale dissemination at a community/population level? Was the program integrated into wider policy/strategy? Was the program replicated, adapted or commercialised for a wider population?
Theoretical basis	Efficacy testing	Real-world trial	Dissemination
vs	vs	vs	vs
Theoretical basis unclear	No efficacy testing	No real-world trial	No dissemination

How do we improve scale up?

The real-world practical experiences of successful scaled-up interventions can provide valuable learning for practitioners and researchers replicating these interventions elsewhere. However, a lack of comprehensive documentation and reporting of critical information on the process of scale up makes it challenging to learn from other examples.

What we do know is that the success of scaling up interventions is determined by a range of factors which can facilitate or impede at-scale implementation. Common aspects described in various frameworks⁷⁻⁸ that influence the likelihood of success and need to be adequately considered before and during scale-up are highlighted in the table below. This includes the intervention components, the implementation context, the decision-making process for scale up, the delivery organisations, workforce and resources, the strategy used to scale up the intervention and provision for sustainability.

While the ISAT provides practitioners with a step-by-step guidance for reporting the decision-making process of scale up, our Prevention Centre project has also developed guidance to support practitioners and researchers in the full process of scaling up chronic disease prevention interventions. The scale-up reflection guide includes a structured process for gathering information and documenting the key aspects of the scale up, together with some case studies. This project intends to improve the quality of information reported and shared among practitioners to inform future scale-up activities and help improve existing evidence gaps.⁹

Key aspects influencing the scale up of interventions

The intervention	This includes the components, intended aim and target population of the intervention. Interventions with simple components are generally easier to scale up. The perceived complexity of the intervention, its costs, how it fits with the needs of the intended population and how well it can be adapted to meet local needs may also determine scale-up success.
Context	The political, social and economic environment, including the political will or social appetite at any level for an intervention can enable or become a barrier to scale up as are key actors within that context.
Decision making processes for scale up	The decision-making process to determining potential scalability or readiness for scale up should include the gathering of evidence, outcomes of pilot tests or trials and assessing the relative advantage of the intervention over alternatives.
Delivery or user organisations	The delivery organisations or individuals (or 'user organisations') responsible for delivering the intervention and their attributes (such as organisational capacity, governance and leadership, staffing and training, resources and support) enable the delivery of the intervention at scale.
Scale-up workforce	The workforce is the group or individual(s) responsible for managing the scale-up process, and who may have been involved in the intervention development or testing. Having adequate resources for scale-up is important for facilitating a successful scale up.
Scale-up process and strategy	This includes the scope of scale up (extent of expansion and/or geography), whether it will be centrally delivered or decentralised and other resources or funding (including personnel) that may be available for scale up. Implementation strategies for how it will be disseminated, communication channels for delivery and advocacy (such as program champions) as well as engagements with relevant stakeholders are important and may influence the likelihood of success. Adaptations or modifications to the intervention for delivery at scale should be determined as well as this can impact fidelity.
Monitoring and evaluation	Monitoring and evaluation activities demonstrate the impact of the intervention and inform impact and outcomes, which may promote sustainability.
Sustainability	Provisions for the longer-term delivery of the intervention at scale need to be considered beyond the initial funding period.

References

1. Australian Institute of Health and Welfare. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2015. Australian Burden of Disease Study series no. 19. 2019 Canberra: AIHW.
2. World Health Organisation ExpandNet. Practical guidance for scaling up health service innovations. 2009.
3. Milat AJ, Bauman A, Redman S. Narrative review of models and success factors for scaling up public health interventions. *Implementation Science*, 2015. 10(1): p. 113.
4. Lee K, van Nassau F, Grunseit A, Conte K, Milat A, Wolfenden L, Bauman A. Scaling up population health interventions from decision to sustainability—a window of opportunity? A qualitative view from policy-makers. *Health Research Policy and Systems*. 2020;18(1):1-2. doi: 10.1186/s12961-020-00636-3
5. Milat A, Lee K, Conte K, Grunseit A, Wolfenden L, van Nassau F, et al. Intervention Scalability Assessment Tool: A decision support tool for health policy makers and implementers. *Health Res Policy Sys*. 2020;18:1. doi: 10.1186/s12961-019-0494-2
6. Indig D, Lee K, Grunseit A, Milat A, Bauman A. Pathways for scaling up public health interventions *BMC Public Health*. 2017;18:68 doi: 10.1186/s12889-017-4572-5
7. Yamey, G., Scaling up global health interventions: a proposed framework for success. *PLoS medicine*, 2011. 8(6): p. e1001049.
8. Simmons R and Shiffman J. Scaling up health service innovations: A framework for action. *Scaling up health service delivery*, 2007: p. 1-30.
9. Lee K, Crane M, Grunseit A, O'Hara B, Wolfenden L, Bauman A, Nassau FV. Development and application of the scale-up reflection guide. (publication forthcoming).



Visit the Prevention Centre's website to access further resources around implementation and scale up.

Our funding partners



Hosted by



Published August 2021