

Scaling up interventions: what's the evidence it will work?

The project: Pathways for scaling up public health interventions

Project lead: Professor Adrian Bauman, University of Sydney

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Key messages

- To improve health at a population level, public health interventions that have been found to be effective in selected samples need to be 'scaled up' and implemented more widely.
- Scaling up complex public health interventions is costly. It is important to be sure there is evidence the programs will work at scale before such an investment is made. There is evidence for how to scale up programs successfully, but it is unclear whether this advice is followed in public health.
- We conducted an international literature review of 40 public health programs in high-income countries that have been scaled up or implemented at scale.
- We mapped the programs against the four steps that represent best practice in building the evidence base for scalability: development, efficacy testing, real-world trial and dissemination.
- There are varied trajectories in how public health programs achieve widespread dissemination, and these do not necessarily follow recommended evidence-based practice.
- Almost half (45%) of the programs we studied did not follow the four best practice steps. Some programs went directly from the development stage to population-wide dissemination, without efficacy testing or a real-world trial.
- Many programs internationally had been rolled out without having the evidence in place to indicate they would work at scale.
- Policy makers and practitioners should assess the evidence trail for interventions they are considering scaling up.

This is the first study to map different pathways taken to scale up public health programs to reach the broader population



We mapped 40 international public health programs against best practice for scaling up



Many programs were rolled out



without evidence that they would work at scale

Why is this issue important?

Scaling up programs to state or national scale is a significant investment for governments. There has been little research that helps policy makers decide whether programs are 'scalable' (i.e. that they will work, be widely adopted, be acceptable, and be cost effective when rolled out at state or national level).¹

To provide this evidence, we need to test the effectiveness of programs against a control, for example, by introducing a program in one school and then comparing outcomes to those in another school in which there is no program. The next step is to trial them in different real-world situations.² A number of frameworks cover these steps but most are theoretical and we don't know whether they are being used in practice.

This study was the first to classify and quantify the different ways that public health programs in high-income countries are scaled up to reach the broader population.

What did we do?

We did a literature review of 40 public health programs in high-income countries that have been scaled up or implemented at scale.

We documented the pathways they followed so we could develop a conceptual framework of scaling up. The framework involved four stages: development, efficacy testing, real-world trial and dissemination.

We then mapped the programs against this framework to find out the extent to which this process was being adopted in the real world.

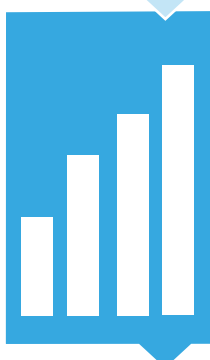
What did we find?



Scaling up of complex public health programs does not always follow all the steps we know are important to ensure they are based on evidence.



Many programs were rolled out without having the evidence in place to indicate they would work at scale.



We found four patterns in scaling up complex public health interventions:

1. Scaling up that follows all four stages of development, efficacy testing, real world trial and dissemination (55%)
2. Scaling up without testing the efficacy of interventions at scale (5%)
3. Scaling up without conducting a real-world trial (25%)
4. Scaling up without efficacy testing or a real-world trial (15%).



Programs are scaled up for many reasons, not just because there is evidence they will work at scale. Political pressures may be behind the roll out of some complex public health programs internationally.

What did we produce?

- 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
- Our findings have been integrated into the Prevention Centre's Complex Program Evaluation workshops for policy makers internationally, and into the Masters of Public Health, Public Health Program Evaluation course at the University of Sydney.
- The findings were presented at the World Congress on Public Health, Melbourne, 2017.

Why does it matter?

A range of contextual factors may lead to a program being scaled up. Sometimes they are scaled up because there is evidence to support scalability, but sometimes programs go straight to scale because they meet some other need, for example political or commercial.

Australian policy makers planning to follow the example of international programs should not assume the programs were based on evidence that they would work at scale.

We have identified steps that will assist policy makers and practitioners to use best practice when scaling up public health programs.



Mapping these pathways not only demonstrates the different trajectories that occur in scaling up public health interventions, but also allows the variation across scaling up pathways to be classified."

Sesquicentenary Professor Adrian Bauman
Lead investigator

Next steps

A logical next step would be to look at programs scaled up across the different pathways to establish whether the particular trajectory followed made any difference to the program's success. It is also important to study the policy and practice determinants that led to each pathway.

References

1. Milat AJ, Bauman A, Redman S, Curac N. Public health research outputs from efficacy to dissemination: a bibliometric analysis. BMC Public Health. 2011;11:934.
2. Milat AJ, Newson R, King L, Rissel C, Wolfenden L, Bauman A, Redman S, Giffin M. A guide to scaling up population health interventions. Public Health Research & Practice. 2016;26(1):e2611604.



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Findings brief: Pathways for scaling up
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Contact us:

Tel: (02) 9188 9520

Email: preventioncentre@saxinstitute.org.au

Website: preventioncentre.org.au

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