



### Whole-of-systems approaches to physical activity

#### Key messages

- Physical inactivity is a complex problem and there are no simple, single solutions.
- Effective action requires an integrated, system-wide approach in consultation with policy makers and stakeholders from multiple sectors.
- A whole-of systems approach highlights the inter-relationships, interactions and various perspectives in the systems that influence physical activity. It helps policy makers understand how different parts of the systems work and interact, and how and where to intervene to improve physical activity.
- Whole-of-systems approaches are built on a participatory process that brings together best available evidence, data and expert and local knowledge, enabling stakeholders to better align agendas for action.

### What is a whole-of-systems approach for physical activity?

A useful metaphor for understanding whole-of-systems approaches is that of a bicycle.



### Why are whole-of-systems approaches important for physical activity?

### There is no silver bullet

• Effective action depends on the engagement and coordination of many policy sectors; there is no single sector that can solve physical inactivity

## They help finetune the physical activity system

• Current levels of population physical activity are the product of the existing system - but rather than view the system as 'broken', we can finetune how it operates

# Whole-of-systems approaches provide a framework

• Whole-of-systems approaches can support better understanding of how the different parts of the system work and interact, and where and how to intervene to improve physical activity and other complementary outcomes



### How can I apply whole-of-systems approaches to physical activity?

There is a continuum of approaches to whole-of-systems thinking, ranging from conceptual mapping through to dynamic modelling.

### **Conceptual mapping**

Gives stakeholders the opportunity to explore the broad 'system space' and better understand the pathways and interrelationships between the multilevel factors that promote and impede physical activity

Collaborative process that can help build consensus about the nature of the problem, identify options for intervening and stimulate engagement with the potential range of policy responses required

No need to start from scratch as the maps developed by Rutter and colleagues for physical activity, or the map developed for Australia (see Figures 10 and 11 in Getting Australia Active III) can be adapted or developed further for a given purpose or context

### Dynamic modelling

Conceptual systems mapping can progress to dynamic simulation modelling. This is also a participatory process that can facilitate collaboration and help align agendas

Provides decision support tools to help manage complexity and navigate challenging decision-making environments. Models capture dynamics across populations and demographics, behaviours, workforce, and interactions between intervention effects

Brings together the best available evidence, data and expert and local knowledge, to produce a tool for testing alternative scenarios and assumptions, and forecast their likely impact on physical activity and other outcomes before they are implemented

**Getting Australia Active III (GAA III)** is an Australian guide for policy makers to support the implementation of a whole-of-systems approach to increasing population physical activity. This policy brief summarises key points from **Chapters 2.1 and 2.2** of this guide. For more detailed guidance and supporting evidence, you can access the full report at: **preventioncentre.org.au** 



Funding for this research has been provided from the Australian Government's Medical Research Future Fund (MRFF). The MRFF provides funding to support health and medical research and innovation, with the objective of improving the health and wellbeing of Australians. MRFF funding has been provided to The Australian Prevention Partnership Centre under the MRFF Boosting Preventive Health Research Program. Further information on the MRFF is available at www.health.gov.au/mrff