Background

By highlighting the importance of the structural determinants of health as root causes of health inequity, the 2008 final report by the Commission on the Social Determinants of Health encouraged broadening of the health promotion research agenda to include a focus on government policies and processes, alongside culture and societal values of populations [1].

Governments that apply the idea of Health in all Policies (HiAP) to strengthen health equity strive for durable and systematic approaches to pursuing intersectoral action that leads to healthy and equitable public policies. Thus, the implementation of HiAP typically involves instituting what Fafard refers to as "integrated governance" ([2], p. 2), in which governance structures and processes are used to facilitate policy coordination

interest as individuals who are engaged in and possibly managing aspects of the government system of HiAP implementation. For example, the implementation strategies of policy-makers may affect how resources are distributed to lead and support implementation activities. Policy-makers can use this framework to understand their own government systems, and to anticipate the potential challenges and impacts of various strategies for HiAP implementation.

A Systems Theory primer

Systems Theory emerged in the Twentieth century as a set of theories that encompassed multiple fields, including philosophy as well as basic and applied science (e.g. computing science) [25, 26]. It can be labelled a meta-theory in that Systems Theory searches for commonalities across biological, physical and social systems. In

state and their appointed political elites), intersectoral (the milieu of policy-makers and experts working with governance structures related to HiAP) and intrasectoral (policy-makers within policy sectors).

The implementation of HiAP often requires policy co-

As one example of how researchers can utilise this framework, in HARMONICS, we have drawn on it using a realist science approach to study the social mechanisms of HiAP implementation. Realist science draws on critical realism, which is an ontology that posits the existence of a world outside the observer that remains largely hidden from the observer, like the gears of a clock. Roy Bashkar (a key proponent of critical realism) incorporated systems thinking in his later work [51], and Mingers recently discussed several concepts that belong to systems theory [27], which we have actualised in HARMONICS. For example, the 'structure' of a system can be thought of as the sum of relations within a system, which we have represented as a series of components within subsystems in Fig. 1. 'Emergence' denotes properties of a system that are not held by any component of the system. This includes the outcomes of HiAP implementation that we focus on in HARMONICS such as sustainability. Finally, realist science generally aims to explain phenomena in ways that allow for complex generative mechanisms. For example, the explanatory case study methodology developed for HARMONICS uses "context-mechanism-outcomes pattern configurations" ([5], p. 464) to focus our

[illegible]

t ′ t t

[illegible]

t t t t t

[illegible], #10–162.

t t

[illegible]

t t t

[illegible]

Publisher's Note

[illegible]

t t

[1] [illegible], 209 [illegible] 5 1 8, [illegible]. [2] [illegible], 155 [illegible] 5 3 7, [illegible]. [3] [illegible], 75 [illegible] 2 3 5, [illegible]. [4] [illegible], 155 [illegible] 5 3 7, [illegible]. [5] [illegible] 40, 00251 [illegible], [illegible]. [6] [illegible], 155 [illegible] 5 3 7, [illegible].

Received: 22 March 2017 Accepted: 8 February 2018
Published online: 15 March 2018

1. [illegible]; 2007.
2. [illegible]; 2013.
3. [illegible]; 2011. [illegible] 24 [illegible] 2018.
4. [illegible]. 2014;29:19–28.
5. [illegible]. 2015;30(4):462–73.
6. [illegible]; 2010.
7. [illegible]; 2014.
8. [illegible]. 2013. [illegible] 20 [illegible] 2018.
9. [illegible] 2013;31:259–66.
10. [illegible]. 2012;57(1):25–33.
11. [illegible]; 2005.
12. [illegible]; 2013.
13. [illegible]; 2012.
14. [illegible]; 2009.
15. [illegible]; 2006.
16. [illegible]. 2011;26(1):55–64.
17. [illegible]; 2011.
18. [illegible]. 2009;15(5):868–72.
19. [illegible]; 2015.
20. [illegible]. 2001;323(7315):746–9.

39. [illegible]; 1991.
40. [illegible]; 1993.
41. [illegible]. 2001.
42. [illegible]; 2006.
43. [illegible]. 2013; 41(11 [illegible]):3–28.
44. [illegible], 1990-2010. [illegible]. 2011;45:194–205.
45. [illegible]; 2014.