3rd International Conference

on Public Policy (ICPP3)

June 28-30, 2017 – Singapore

Panel T04P01 Session 1

Wicked Problems in Public Policy – From Theory to Practice

Title of the paper

Lost in translation: policy implementation to address health inequities as a 'wicked' problem

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Date of presentation

Friday 30th June

Lost in translation: policy implementation to address health inequities as a 'wicked' problem

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Abstract: *Socially determined health inequities have been recognised as a wicked problem in health policy. This paper examines how theorists and researchers in public health have understood health inequities as a wicked problem, and proposed policy responses involving multiple public agencies or levels of government. We discuss three models of such inter-sectoral action on health inequities, and apply an 'Ideas, Institutions and Actors' analysis framework to examine strengths and weaknesses of each model. We draw on this analysis to ask whether the concept of wicked problems is useful in understanding health inequities as a policy problem.*

Key words: health inequity; wicked problem; public policy; social determinants of health

Introduction

Abundant evidence shows that the health of individuals and populations is strongly influenced by the social and economic conditions in which people live and work (Commission on the Social Determinants of Health, 2008, Marmot et al., 2010). It is estimated that social and economic conditions account for around 40% to 50% of population health outcomes, when assessed against the contributions of individual biology,

health behaviours and medical care (Marmot and Allen, 2014). Inequalities in the distribution of social, economic and personal resources within hierarchically structured societies, and inequalities in exposure to risks factors such as violence or racism, give rise to socially determined inequalities in health between population groups (Commission on the Social Determinants of Health, 2008, Marmot et al., 2010, Marmot, 2005). A number of specific social factors have been shown to affect health and health inequities. These social determinants of health (SDH) include (inequalities in) income (Korda et al., 2014), employment status (Employment Conditions Knowledge Network et al., 2007), educational attainment (Hetzel et al., 2004), housing status (Clair et al., 2016), exposure to racial discrimination (Turner, 2013), and conditions of early childhood (Brinkman et al., 2012) as well as access to healthcare (Korda et al., 2009). Social and economic inequalities also contribute to inequalities in risk factors such as smoking and obesity, which contribute further to inequalities in health (Krueger and Chang, 2008). In Australia, the Indigenous Aboriginal and Torres Strait Islander (hereafter, Aboriginal) people are subject to multiple forms of disadvantage and discrimination, and on most measures have significantly worse health outcomes that other Australians (Anderson et al., 2007, Australian Bureau of Statistics and Welfare, 2008).

Similarly, health inequalities also occur between countries. Comparisons of health status between high, middle and low-income countries show that measures such as life expectancy and child mortality vary widely, and again these differences are predominantly shaped by differences in political, social, economic, and environmental conditions, and in access to primary healthcare (Commission on the Social Determinants of Health, 2008). In comparisons between OECD countries, countries with higher levels of socioeconomic inequality tend to have greater inequalities in health between those of high and low

socioeconomic status (SES) (Wilkinson and Pickett, 2009). Health inequalities within or between countries understood to be caused in major part by political, socioeconomic or cultural inequalities have been defined as health *inequities*, on the grounds that they are both avoidable and unfair (Whitehead, 1992, Whitehead and Dahlgren, 2006). Here we adopt the normative stance that governments should take action on SDH to reduce health inequities as a matter of social justice.

Health inequities within countries are not simply marking a difference between poor health among the most social and economically disadvantaged and better health among the rest of the population. In fact, it has been shown that many indicators of health follow what is termed a social gradient, where average health outcomes are best among the group with the highest SES (whether measured by income, education or employment status), reduce stepwise for each step 'down' the SES scale, and are worst among those worst off.

Health inequities as a 'wicked problem':

The concept of wicked problems in social policy was introduced by Rittel and Webber (1973), and has since been applied in both academic (Head and Alford, 2015) and public sector (Australian Public Service Commission, 2012) literature in relation to a variety of issues in public policy. In the field of public health, the concept has been taken up in research and theorising on SDH and health inequities and how these can be addressed in public policy (Kickbusch, 2010, Petticrew et al., 2009, Signal et al., 2013). Health inequities in particular been characterised as a wicked policy problem in line with Rittel and Webber's description (1973) because they are perceived as (variously): difficult to define clearly as a policy problem; socially complex; produced by multiple causal factors with interdependencies; resistant to simple, linear policy solutions; and cutting across

responsibilities of public policy agencies (Kickbusch, 2010, Australian Public Service Commission, 2012). The term has also been applied to other related policy problems such as obesity and Aboriginal peoples' disadvantage and poor health (Australian Public Service Commission, 2012).

The application of the idea of wicked problems to issues in public health is part of a broader recognition in the field that, having amassed much evidence on the political, social and economic factors affecting health and its distribution in populations; the emphasis of research and advocacy should now shift to public policy, and questions of what governments are currently doing or not doing to address SDH and health inequities, and how they might act more effectively on SDH to improve health and reduce health inequities (Marmot, 2000). In this task it is seen to be important for public health researchers to understand and apply theoretical tools from political science or social theory (de Leeuw et al., 2014, Exworthy, 2008). This approach is adopted in our current program (Baum and Friel, 2017) of research focused on the intersections between public policy, SDH and health inequities in Australia.

In this paper, we firstly briefly review what the concept of wicked problems in social policy shares with other views of policy problems as complex, entrenched and resistant to simple policy responses; including contemporary analyses of the social determinants of health and health inequities. Secondly, we discuss ideas of inter-sectoral policy (involving multiple forms of policy action and multiple policy agencies) as a response to complex problems in social policy, including in relation to health inequities. We then move on to describe and analyse three models of inter-sectoral policy action on health inequities relevant to an Australian context. Here we draw on learnings from our previous research on Australian health policy (Fisher et al., 2016b, Fisher et al., 2016a), and current research on policy

implementation (Baum and Friel, 2017). To conduct our analysis we apply Howlett, Ramesh and Perl's (2009) 'Ideas, Institutions and Actors' framework to discuss strengths and weakness in each of the models described. Howlett et al. (2009) combine insights from a range of theories on policy to propose that policy actions across the policy cycle are determined through intersections between defining political ideas or beliefs about society, the norms and structures of the institutions charged with formulating and delivering policy, and the varying interests of the various individual or organisational actors involved in or influencing policy, within or outside government. Finally, we draw on our analysis to discuss the utility of the concept of wicked problems as a device for understanding health inequities as a policy problem.

Analyses of health inequities as a wicked or complex policy problem

Rittel and Webber's analysis of wicked problems in social policy has significant points of overlap with other analyses of policy problems as complex, subject to multiple causal factors or resistant to simple definition of problem or solution, and therefore difficult to address effectively in public policy. One such analysis lay with former British Prime Minister, Toby Blair's, view of entrenched health and social inequities as a policy problem of 'social exclusion', where members of highly disadvantaged social groups we seen as facing multiple personal or social barriers to participation in 'mainstream' society.

> Everyone knows that the problems of social exclusion - of failure at school, joblessness, crime – are woven together when you get down to the level of the individual's daily life, or the life of a housing estate. Yet all too often governments in the past have tried to slice problems up into separate packages - as if you could fix

> an estate by just painting the houses rather than tackling the lack of jobs or the level of crime (Blair, 1997: p.2).

As one can readily see, Blair's view of the complexity of social exclusion – multiple factors contributing to and inhering in the lives and circumstances of disadvantaged individuals – is immediately tied to a secondary problem concerning the conventional divisions between public policy agencies. This critique, in essence, asserts that the various institutions of public governance, while collectively employing a range of policy 'levers' capable of addressing complex problems, fail to do so effectively because each institution carries out its particular activities with little regard for others, and little coordination of understanding or effort. The lack of effective collaboration between public agencies to address complex problems has been explained as occurring because these institutions (conventionally) operate as 'silos', where activity answers to values, norms and vertical lines of accountability within rather than across institutions, and agencies compete with each other for resources (Kickbusch and Buckett, 2010). Although Rittel and Webber's original discussion of wicked problems (1973) does not advance this kind of institutional analysis explicitly, they do imply the potential for such a problem in their view that the world of public policy offers many, varying conceptions of problems and solutions, and that applying these 'solutions' singly or in mere, additive combination, is unlikely to resolve a wicked problem.

Head and Alford (2015) discuss the concept of wicked problems in social policy as one that applies a complex systems view of social systems. Systems theory, having its roots in biology and cybernetics, describes events in systems as 'complex' in that they are non-linear, influenced by multiple variables, and subject to negative or positive feedback effects (Fisher et al., 2014). Complex systems thinking has also been applied as a theoretical frame to think

about problems in public health and how polices might be formulated to take account of complexity in policy problems (Jayasinghe, 2011, Hawe et al., 2009); and to conduct public health research (Fisher et al., 2014, Signal et al., 2013). Ackoff (1974) [cited in Head and Alford (2015: p.713)] describes a 'systems' view of complex social problems in this way:

> Every problem interacts with other problems and is therefore part of a system of interrelated problems, a *system of problems* . . . I choose to call such a system a *mess* . . . The solution to a mess can seldom be obtained by independently solving each of the problems of which it is composed . . . Efforts to deal separately with such aspects of urban life as transportation, health, crime, and education seem to aggravate the total situation.

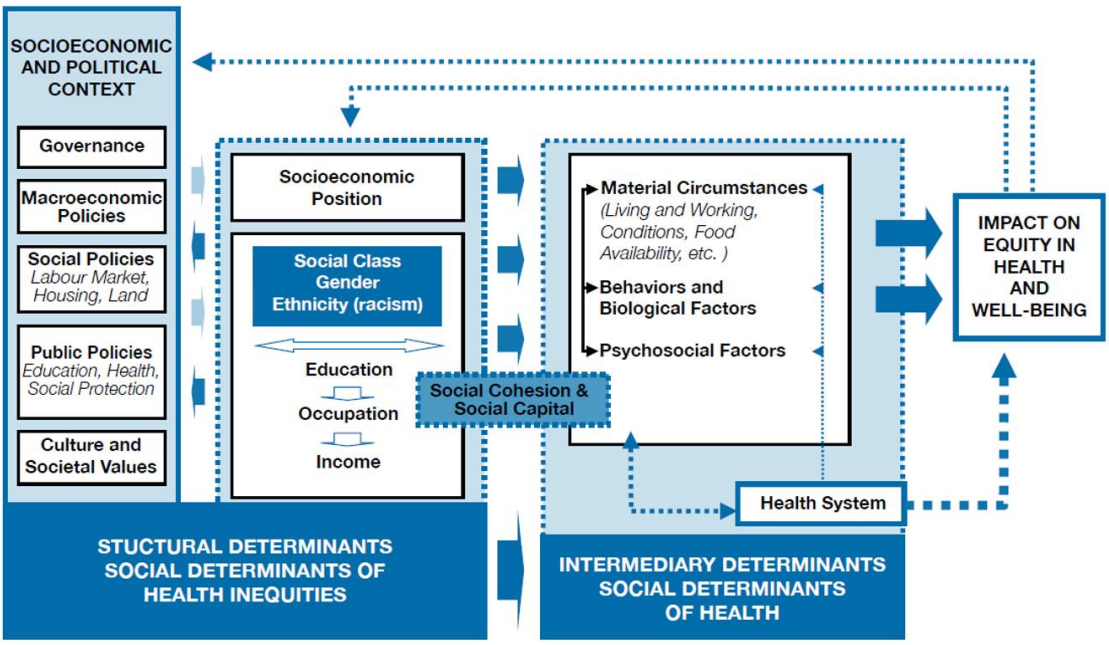
Rittel and Webber also apply systems thinking in their analysis, and Ackoff's description echoes their analysis of the inadequacy of policy responses to complex problems when actions are carried out by multiple actors or agencies bringing to bear differing, partial conceptions of the problem and solution.

In public health literature it is explicitly understood in theoretical discussion and modelling of social determinants of health and health inequities that the various specific factors identified in research as determinants of health such as childhood conditions, education, income or employment status, are likely to interact in complex ways as they shape the behaviour, psychology or physiology of the individuals or populations exposed to them, and ultimately affect mental or physical health (Commission on the Social Determinants of Health, 2008, Singh-Manoux and Marmot, 2005, Solar and Irwin, 2010). Furthermore, it is recognised that the political and economic structures of societies also interact in complex

ways to affect the *distribution* of conditions supportive of or damaging to health, and that this distributional effect is indeed the fundamental, underlying cause of health inequities (Commission on the Social Determinants of Health, 2008, Solar and Irwin, 2010). Thus complexity, and multiple causal factors are intrinsic to an evidence-based analysis of what might be termed the social production of health and illness, including the production of inequities in health between population groups and across the gradient of socioeconomic status.

Solar and Irwin (2010) have drawn on the accumulated evidence of SDH to propose a model of the social production of health inequities within hierarchically structured, socially and economically unequal societies. This model is shown in Figure 1 below. In this paper we adopt this model as an explanatory framework for understanding the complex political and socioeconomic causes of health inequities.

Figure 1: A conceptual framework for understanding social determinants of health and health inequities (Solar and Irwin, 2010)



When attention has shifted to questions of public policy action to address SDH in order to reduce health inequities, public health researchers and advocates have also reiterated the view noted above; that one significant structural barrier to such action lies with the siloed nature of government departments and agencies (Smith, 2013, Kickbusch, 2010), and their competing mandates, interests or ideologies (Commission on the Social Determinants of Health, 2008). On this analysis, governments' policy attention on 'health' is often preoccupied with provision of healthcare services to treat or prevent disease or injury (Baum et al., 2009) or with individualised programs to increase health literacy and healthy behaviours (Baum and Fisher, 2014); while the health impacts of, and potential health benefits for, public policy in other areas is poorly understood and underutilised.

Policy approaches to address wicked problems

Rittel and Webber's analysis (1973) seems to conclude that attempts by policy makers to address wicked problems are destined to be unsatisfactory because: a) differing, partial conceptions of the problem (coloured by institutional or political interests) will inevitably emerge and compete with each other to have their 'solutions' put into action; and b) actions taken will only affect one part of a complex conglomerate of interacting elements, and thus other factors contribution to the complex aetiology of the problem will continue to have their effects, and unintended, possibly negative side effects may well ensue.

The other approaches to understanding complex policy problems briefly summarised above, however, do not necessarily arrive at such a pessimistic conclusion. Instead they focus on the institutional or organisations aspects of complex policy problems and examine ways in which multiple forms of public policy action might be applied in complementary ways, to

address such problems more effectively. For example, Jayasinghe, applying a complex systems theoretical perspective, argues that policy responses to complex problems will be more effective when strategies are 'multi-pronged, and take into account the diversity of actors, determinants and contexts' (2011: p.1). Schensul argues that a complex systems approach to social policy indicates that 'change toward a goal will occur faster and more effectively when synchronized and supported across levels in a social system' (2009: p.241). The authors' own work applying a complex systems lens in public health research, arrived at similar conclusions about the need for complementary forms of action across multiple levels of organisation, including national and state governments and networks of service provider agencies acting at a regional level (Fisher et al., 2014). Signal et al. applied a complex system approach to analysis of interacting factors contributing to obesity in a disadvantaged population, in order to identify several key 'leverage' points where policy change could propagate salutary changes in the system of factors contributing to obesity (2013).

The answer posed by Tony Blair to the complex policy problem of social exclusion was for a more 'joined-up' approach to government whereby government departments and agencies work more effectively together (1997). In other words, the proposition of joined-up government asserts that complex policy problems can be made tractable by overcoming the obstacle of 'siloed' policy structures, and introducing processes of policy collaboration between government agencies. The idea of joined-up government has maintained considerable currency in literature on public policy ever since (Bogdanor, 2005), in a range of policy areas (Ryan, 2016).

In public health literature analyses of policy problems in health as wicked problems have been used to support arguments for more effective, cross-institutional approaches to policy action (Kickbusch, 2010, Kickbusch and Buckett, 2010). One of these is the 'Health in All

Policies' (HiAP) approach to public policy, where, by various means, government agencies across a range of portfolio areas are encouraged to understand the health implications of their policy decisions, and adjust their policies accordingly (Kickbusch and Buckett, 2010, Leppo et al., 2013). For example, under the HiAP approach adopted by the State government in South Australia, policy actors in the health sector have led processes to engage other policy sectors, to develop policies taking account of health; with some success (Buckett et al., 2011).

Other commentators on public policy and public health over the last 30-40 years have proposed similar approaches, building on the longstanding recognition that the public health and health inequities are largely socially produced phenomena, affected by the actions and inactions of governments in multiple ways (Irwin and Scali, 2007). Milio, for example, coined the term 'healthy public policy' to capture the idea of public health as central goal of policy in all areas (1987). The final report of the World Health Organisation Commission on Social Determinants of Health in 2008 argued that:

> Action on the social determinants of health must involve the whole of government, civil society and local communities, business, global fora, and international agencies. Policies and programmes must embrace all the key sectors of society not just the health sector (2008: p. 1).

The Commission comprehensively reviewed evidence on social determinants of health and health inequities, and presented a range of accompanying recommendations for policy action across three domains to: 'improve daily living conditions'; 'tackle the inequitable distribution of power, money and resources'; and 'measure and understand the problem

and assess the impact of action' (2008: p.2). Implicit in these recommendations is the idea that effective public policy on SDH to reduce health inequities requires complementary actions at two 'levels'; a 'higher' level of policy where decisions and structures in areas such as taxation policy affect the distribution of social and economic resources; and a 'lower' level of action in areas such as housing or education services, to improve the daily conditions of life.

At the same time, however, it is recognised in public health literature that advocating for such approaches and implementing then successfully to improve population health and reduce health inequities are two very different things; the latter may encounter some of the institutional and operational aspects of 'wickedness' foreshadowed by Rittel and Webber, and thereby fail to be effective (Carey and Friel, 2015).

In the remaining part of this paper we will draw on the authors' past and current policy research in Australia to consider three models of possible policy response to health inequities (as a complex policy problem) involving multiple government departments or other policy agencies, whether within or across levels of governance (e.g. national, regional or local governments, or other local/regional policy governance or delivery organisations). Hereafter we will refer to this as inter-sectoral policy.

Three models of inter-sectoral policy action on health inequities

We regard the three models of policy action outline below as relevant to understanding policy action on health inequities in an Australian context. Australia has a federal system of government where policy responsibilities are divided between the Commonwealth (national) government and eight regional State or Territory governments. The Commonwealth government has far greater revenue raising powers than the States through

taxation, and has shared funding arrangements with State and Territory governments to implement policy in a range of areas including public health and education services. These mixed arrangements commonly lead to blame-shifting between levels of government about perceived problems in public services (Woodward et al., 2010).

Our research (Fisher et al., 2016a) on public policy in Australia indicates a range of ways in which inter-sectoral policy concerned with SDH and health inequities can be approached, including whole-of-government policy, and various forms of inter-agency collaboration, whether between policy sectors within one level of government, between levels of government, or between publically funded services at a local level. In our analysis of the three models of action described below we apply Howlett et al. (2009) Ideas, Institutions and Actors policy framework and the conceptual framework for understanding SDH and health inequities described in Figure 1.

Model 1: Wrap around services for high-need groups

One common form of inter-sectoral action on health inequities, involving agencies within one level of government, (Fisher et al., 2016b) consists in policy strategies involving cooperative actions between healthcare, social policy and sometimes justice policy service agencies (e.g. medical services, drug and alcohol services, mental health services, social housing, police) directed towards helping population groups deemed to be vulnerable, or having 'high needs'; groups that are also likely to be subject to social and economic disadvantages. The perceived policy problem here is consistent with concepts of social exclusion and wicked problems insofar as the groups and individuals targeted by this approach are represented as embodying a complex mix of problems (e.g. some combination of chronic physical or mental illness, poverty, unemployment, limited education, poor

housing or homelessness, family abuse or neglect, drug or alcohol abuse, or involvement in the criminal justice system) (Fisher et al., 2016b). The proposed policy answer is one where multiple service agencies provide a 'wrap around' array of services to members of the target groups, such that their perceived multiple needs (deficits) can be ameliorated. Strategies for collaboration may include inter-agency meetings, individual case management, and cross-referral between agencies.

Our analysis indicates that this model of inter-sectoral action has several limitations as a policy structure for addressing health inequities effectively. The model applies a conception of health inequities as a policy problem that is limited to the poor health and other perceived problems of people within specified high-need groups (Fisher et al., 2016b). The institutional structures applied to the problem are also largely limited to social policy agencies and service providers, along with a role for police and the court system (Fisher et al., 2016b). Thus the model constructs the 'right' policy answer to health inequities in terms of a *service provision* response, which is the conventional *modus operandi* of social policy agencies in Australia, to remedially 'fix' the perceive personal deficits or 'lacks' on the target client group (e.g. illness, lack of skills or personal resources, lack of ability to control behaviour, lack of ability to compete in the job market, lack of access to housing). Deficit-based approaches to social policy have been criticised as perpetuating negative stereotypes of groups subject to disadvantage, as cultivating dependency (Empowered Communities, 2015), and as less effective than strengths-based approaches, which seek to support individuals or groups to identify and strengthen personal or social resources to maintain good health, and to exercise greater control over their own lives (Morgan and Ziglio, 2007). Furthermore, in our view, the model is deficient as a response to health inequities because of what is *not* included in it. The construction of the problem as one inhering in the

deficiencies of high need groups fails to account for the evidence showing that health inequities affect people across social classes, and are socially produced through the perpetuation of structural inequities in power, money and resources (Commission on the Social Determinants of Health, 2008). A deficit-based approach is also remedial, responding to problems that have already occurred and failing to take up the preventative approaches to health promotion widely recommended by public health advocates. An institutional approach limited to conventional healthcare, social and justice services fails to draw attention to the role of policy structures in areas such as taxation or employment policy that underpin structural socio-economic inequalities, and the roles of ideology and power in perpetuating those inequalities (Navarro and Shi, 2001). At the same time, the model in practice may become institutionally entrenched because it neatly fits the institutional norm of service provision (or 'intervention') as the conventional way of delivering social policy (Smith, 2014).

Model 2: Health in All Policies

A second model of inter-sectoral action that has gained currency in Australia (Delany et al., 2016) and elsewhere (Shankardass et al., 2012) is the 'Health in All Policies' (HiAP) approach. Our comments here are mainly based on our understanding of HiAP approach in South Australia (SA): author 2 has led research on this program (Delany et al., 2016). As with Model 1, for the most part this is a model of inter-sectoral action focused on collaboration between policy agencies within one level of government. Unlike model 1, where the emphasis of inter-sectoral action is on service delivery agencies, under the SA HiAP model the emphasis is on collaboration and communication between policy actors and decision makers working within government departments, and especially in relation to the agenda

setting and formulation phases of the policy cycle (Buckett et al., 2011). Mid to senior-level policy bureaucrats based within the health sector engage with similar policy actors in another department in an effort to: a) develop a shared evidence-based understanding of the actual or potential health impacts of the 'other' agencies policy decisions; and b) encourage the 'non-health' agency to formulate policy incorporating strategies to both improve health and to achieve its own policy goals.

A HiAP model of inter-sectoral action explicitly defines the policy problem to be solved in terms of the impacts of SDH on population health and health inequities, which require in turn 'health-literate' policy across sectors (Buckett et al., 2011). It starts from a premise that the institutional barriers between siloed government departments need to be breached in order to cultivate such healthy public policy (Kickbusch and Buckett, 2010). The model of action responds directly to this institutionalist construction of the problem. While this is all seemingly positive as a model of policy action capable of addressing health inequities as a complex or wicked problem (Delany et al., 2016), there are also some limitations in the approach that may obstruct its ability to deliver on this promise. As with the first model outline above, the question arises as to which policy sectors and agencies get involved in the inter-sectoral action. A HiAP approach does show itself capable of reaching sectors outside the 'circle' of social policy agencies noted in Model 1, to engage with policy agencies in areas such as urban planning, infrastructure, and regional development (Buckett et al., 2011). However, this still does not appear to engage with policy agencies most directly able to influence the distribution of social and economic resources. (For the SA HiAP program, the ability to do this is also constrained by the federal structure of Australian politics, whereby the national government controls many of the policy levers affecting socioeconomic inequalities.) Also, although the SA HiAP ostensibly adopts a systemic view of

the policy problem, the model in practice would appear to favour a more piecemeal approach; one that engages government institutions individually and opportunistically to identify forms of health-related policy action that a readily accommodated within their normal range of activities. Such actions, if implemented, may have benefits for those affected but it is not clear that they will add up to the kind of system approach contemplated in Figure 1. Furthermore, the siloed institutional priorities and practices of government departments (and senior managers within them) can continue to take precedence, with engagement in HiAP processes regarded as marginal rather that 'core business' (Delany et al., 2016). Finally, given that the SA HiAP model focuses on policy development within government departments, there are questions then raised about the extent to which policy commitments are actually implemented; especially if these are competing for funding with an agency's perceived core business activities.

Model 3: Systemic action

The third model of inter-sectoral policy action to address health inequities that we wish to consider is not one that is practiced in Australia; and nor do we specifically draw on any one international example. Instead the model outlined in based on recommendations arising from a review of health inequities in England led by Prof Michael Marmot; *Fair society, healthy lives: Strategic review of health inequalities in England post-2010* (Marmot et al., 2010). However, England is comparable to Australia insofar as both are liberal-democratic, high-income countries, currently controlled by neoliberal governments, and both face similar issues in relation to SDH and health inequities across the social gradient. The suite of measures recommended in the *Fair society, healthy lives* report cover a wide range of policy areas. It proposes actions in areas such as taxation, welfare policy and minimum income,

employment and education policy intended to reduce socioeconomic inequities. These are combined with recommendations for equity-literate policy measures to strengthen individual skills and capabilities for health, with particular foci on early child development and parenting, adolescent education, and lifelong learning. Higher-level policy actions concerned with reducing inequities in social and economic resources are also coupled with proposals for localised actions to strengthen communities and to improve the psychosocial environment in workplaces (Marmot et al., 2010).

Our aim here is not to contemplate the precise details of these various policy recommendations. Instead we would make a few more general, observational points about them as a model of inter-sectoral action to address health inequities. Although the recommendations do include some proposals for higher-level inter-sectoral governance, the idea of collaboration between government departments or service delivery agencies per sé is not a primary emphasis and does not appear to be a central principle of model design. Instead, the range of recommendations appears to be mainly based on the body of evidence accumulated for the report, regarding the impacts of specific social and economic factors on health, along with some evidence on specific programs shown to have health or health-related benefits, within the focus areas of policy. In our view the overall model adds up a far more systemic approach than that taken in either Models 1 or 2, with proposals for action across the range of higher-level and lower-level policy domains, as contemplated in Figure 1. Thus, although the framing of the policy problem is similar to that adopted in Model 2 – the need for a whole-of-government approach to SDH in order to reduce health inequities – the actual set of policy mechanisms and processes proposed in Model 3 seems far more adequate to that framing.

To elaborate on Model 3 a little further, we would like to venture some thoughts about the role of different kinds of policy action in addressing health inequities. In general terms, we suggest, the role of broad policy measures to re-distribute resources 'down' the scale of socioeconomic status – e.g. by increasing taxation on wealthy individuals or corporations in order to increase funding for public education distributed according the need – are well placed to address the social gradient in health by reducing socioeconomic inequalities. At the same time, however, complex problems manifested in the circumstances of individuals, and generally more common or more intense among those subject to particular forms of vulnerability or social disadvantage, will (for the time being) continue to make their presence felt. In principle, it seems that these problems are unlikely to be well dealt with by the construction of policy measures from the top down. Instead, it would seem far more appropriate that this aspect of health inequities as a wicked problem is left to local agencies and services (Hunter et al., 2011), which are given the resources and flexibility they need to tailor responses to the specific circumstances of individuals and communities. Again, there should be a strong onus here – at the local level – on actions to build individuals and community assets for health and wellbeing, rather than being limited to remedial, deficit based approaches (Morgan and Ziglio, 2007). It is the combination of such broad and localised measures, as is indicted in the structure of Model 3, which will be best placed to reduce health inequities as a complex problem. The significance of flexible, multi-disciplinary services working at a local level is borne out by evidence on the benefits of comprehensive primary health care as a means to address entrenched health inequities (Panaretto et al., 2014, Fisher et al., 2017). In this way, Model 3 would seem to be consistent with the conclusions of those applying complex systems thinking to problems in

public policy, about the potential benefits of complementary actions across different levels of socio-political organisation (Fisher et al., 2014, Jayasinghe, 2011, Schensul, 2009).

The main body of evidence that systemic approaches as described in Model 3 are actually capable of working to reduce health inequities in countries such as Australia or the UK is that which compares performance on health inequities across similar countries, and notes that in general inequities are lower in high-income countries with strong social democratic policies in place, which direct public spending into policy areas such as housing, education, employment, health promotion and public health, with an onus on reducing inequities (Marmot, 2013).

In light of such differences the analysis of factors in the policy environment assisting or preventing salient inter-sectoral action on health inequities shifts away from a focus on the role of public policy institutions as such and points us toward differences between policy 'regimes' and their respective political ideologies, values, and approaches to regulating 'the market' to protect the public interest (Esping-Anderson, 1990, Bambra, 2012). If we take evidence on differences in the policy approaches to health inequities between countries as a guide, then it suggests that implementation of Model 3 as a response to health inequities would have to be driven at least as much by political leadership based on political values as by collaboration between policy institutions.

Perhaps one might then view Models 1 and 2 (in a country like Australia) as formulations of inter-sectoral action on health inequities constructed in a political climate where more systemic policy action such as in Model 3 – while perhaps understood as preferable in theory – is seen to be unavailable in practice.

The concept of wicked problems as a way to understand policy responses to health inequities

In this paper we have stated a normative commitment at the outset to a principle of health equity, and also shown that we take the body of accumulated evidence on SDH seriously as a guide to the question of what will and won't work to address health inequities in a country like Australia. In this way we may be out of step with Rittel and Webber's (1973) more constructivist approach, which assumes that there are many ways to construct problem/solution ideas about health inequities as a wicked problem, *and* that there is no reliable way to distinguish between more or less adequate constructions. We would disagree with the latter contention.

However, here we ask what the idea of wicked problems has to offer when coupled with a commitment to health equity and an appreciation of evidence on SDH. To begin with, the concept of wicked problems in social policy can describe how different, partial explanations of complex policy problems can lead to political or institutional contestation about the 'right' policy solution, and to inadequate policy responses as various too-simple, linear approaches are applied (with little reference to each other), and fail to make much of a difference (Baum and Fisher, 2014, Baum, 2011). Thus, the concept of wicked problems applied to health inequities can be readily used to diagnose a problem of siloed policy agencies as a barrier to effective policy responses to health inequities, and to mount an argument in favour of an inter-sectoral, multi-disciplinary policy approach instead (Kickbusch, 2010). Although, in our view the approach encapsulated in Figure 1, presenting a model of the complex causes of health inequities, can be used to mount a very similar argument, and is better related to evidence (Commission on the Social Determinants of Health, 2008, Solar and Irwin, 2010).

However, when it comes to the three models of inter-sectoral policy action on health inequities considered above, and comparisons between them, our analysis suggests that the concept of wicked problems has little to offer. In our view, the concept as formulated by Rittel and Webber (1973) would likely lead (wrongly) to the conclusion that each of the models is equally very likely to fail in practice because, in the face of complex reality, the challenges of clearly defining the problem of health inequities and (thus) formulating an 'adequate' solution are just too great, and in effect make the problem intractable. Thus, contemplating health inequities as a wicked policy problem offers little if any way to analyse and compare the differing combinations of ideas, institutional practices and political interests that act to shape the three kinds of inter-sectoral policy action described, and influence their relative adequacy or inadequacy as forms of policy response to health inequities. Identifying and describing these kinds of factors, we have shown, is far more feasible when applying a different explanatory framework, which examines the role of ideas, institutions and actors in determining policy actions (and inactions) across the political cycle (Howlett et al., 2009). Furthermore, the evidence on differences in health inequities between countries applying differing approaches to public policy (Marmot, 2013) suggests that any perceived, inherent intractability of health inequities as a wicked problem is mistaken.

Furthermore, it may be that the concept of wicked problems applied to health inequities as a policy problem (just as with concepts of 'siloed' public agencies, or 'joined-up' government) lead to an over-emphasis on public policy *institutions* like government departments, and the beguiling idea of improving policy collaboration between institutions, as the key design principle required to achieve a more effective, inter-sectoral policy response to health inequities, when in fact what will really underpin a systemic approach to

health inequities is an understanding of the body of evidence on SDH, coupled with political leadership and commitments to equitable political values. Our analysis suggest that this kind of political environment may be necessary to take on the key part of the health inequities that the other two models do not seem able to tackle; the systemic and structural policy drivers of social and economic inequalities.

Acknowledgements

This work was supported by the NHMRC Centre of Research Excellence on the Social Determinants of Health Equity: Policy research on the social determinants of health equity (APP1078046)

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