

Guiding research into integrated health and social care in Australia: suitability of three global frameworks for local adoption

Gabriela Uribe, Carmen Huckel Schneider, Ferdinand Mukumbang, Hueiming Liu, Susan Woolfenden, Tabitha Jones, James Gillespie, Harriet Hiscock, Fiona Haigh, Sharon Goldfeld, Ilan Katz, Andrew Page, Vicki Giannopoulos, Paul Haber, Nick Goodwin, Teresa Anderson, John Eastwood and Michelle Cunich
(Information about the authors can be found at the end of this article.)

Abstract

Purpose – In this paper, we aim to test the usefulness and contribute to the further development of analytical frameworks that guide research into integrated health and social care initiatives.

Design/methodology/approach – This study uses case studies based in decentralised administrative areas within the New South Wales state health system using (1) the Innovative Policy Supports for Integrated Health and Social Care Programs Framework, (2) the Consolidated Framework for Implementation Research and (3) the Framework on the Emergence and Effectiveness of Global Health Networks to assess the quality of international policies and/or strategies and integrated health and social care networks.

Findings – This study facilitates and advances integrated health and social care knowledge, moving from the study of local initiatives to a higher-level taxonomy of integrated care initiatives and exploring the emergence and effectiveness of global integrated care knowledge exchange networks. This paper proposes the use of three different frameworks to assess enhancement of the integrated health and social care using an array of multi-level innovation efforts as case studies.

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Availability of data and materials: Data and materials used during the present study are available upon reasonable request from the corresponding author.

Authors' contributions: MGUG, MC, CHS, JG, JE, PH, TA, NG, SG, HH and FH conceived and designed the study. MGUG was responsible for the gathering the data, with assistance from CHS and JG. MGUG, CHS and MC conducted the analysis and interpreted the data. MGUG, HM, SW, IK, VG, TJ, CHS, FM, AP and MC drafted the manuscript. All authors made critical revisions, read and approved the final manuscript.



Research limitations/implications – This paper highlights the need for further research, and additional supports for formulating a single unified integrated health and social care framework that can assess innovations at multiple levels beyond local settings.

Practical implications – A stronger partnership with key stakeholders to enhance integrated health and social care research capabilities would be a feasible way to increase care and research capabilities in all sectors.

Social implications – Health and social care clinicians, consumer representatives, service managers, policymakers and network knowledge partners must co-design a unified framework that better reflects the large multi-level agenda for integrated health and social care system change.

Originality/value – This novel study examines the level of integration of local space-based health and social care interventions, develops a taxonomy of local health district and/or primary care network integrated care initiatives to locate the “local” within a broader policy context and evaluates the quality of international policies and/or strategies and integrated health and social care networks.

Keywords Integrated care, Global system, Frameworks, Local system

Paper type Conceptual paper

Background

Adversity has been defined as all negative experiences and conditions that include childhood maltreatment, parental mental illness, family violence, socio-economic deprivation, bullying and discrimination (Hall *et al.*, 2022). People who experience adversity have higher health and social needs from the community, primary care and hospital and social systems (Øvretveit, 2011). Those who suffer from social isolation and mental illness are even more likely to need additional supports. There is compelling evidence that people who experience severe adversity will have a higher prevalence of health, well-being and legal problems across their lifetime (Felitti, 2009; Loxton *et al.*, 2019; Coumarelos, 2012). Exposure to adverse childhood experiences such as domestic violence is linked to depression, alcohol and drug addiction, early mortality, decreased educational attainment and teen pregnancy (Loxton *et al.*, 2019; Richards, 2011; Herrenkohl *et al.*, 2008). The impact of this early severe adversity relates to later poor physical health and educational attainment, employment, socio-economic status, behavioural and mental health outcomes. Consequently, people who experience adversity have earlier morbidity and mortality compared to the general population (Felitti, 2009).

While the impacts of adversity in local communities have been recognised (Hall *et al.*, 2022; Loxton *et al.*, 2019), the challenge has been for social care systems to fully address the immediate (and life course) health and social needs of these groups in an integrated way. Historically, fragmented care has been characterised by a lack of early-life interventions, poor coordination between different health and social care providers and a lack of continuity of care. At a system level, fragmentation is manifested by the lack of sustainable integrated funding models, poor integrated governance and a lack of policies supporting data sharing across providers (Wodchis *et al.*, 2020; Amelung *et al.*, 2021).

The integrated health and social care approach is one mechanism for system transformation, seeking to improve outcomes of care (including patient-centred care for those facing adversity) by improved linkage of services of providers along the continuum of care (Amelung *et al.*, 2021). Specifically, the approach seeks health equity, improved care experiences, improved health and social outcomes, cost efficiency and improved experience of the workforce involved (Itchhaporia, 2021).

This paper analyses some recent Australian programs that address the needs of families living in disadvantaged geographical areas experiencing high levels of adversity. Integration across health and social services has used a spatial focus, drawing together area-based service providers and user populations to build co-designed initiatives while linking local and more general initiatives (Todd *et al.*, 2021).

Measuring the impact of the integrated health and social care approach remains a crucial aspect. Several integrated care frameworks have been developed to assess innovations in health, covering system change and the evaluation of care for specific populations at a local level (Cash-Gibson *et al.*, 2019; Collins *et al.*, 2023). The bulk of the work conducted involved measuring integrated care for older persons (Harnett *et al.*, 2020; World Health Organization,

2019) and the integration of primary and secondary health care (New South Wales Health, 2018). There is a well-established literature evaluating the relations of integrated health care at micro, meso and macro levels. There is little equivalent research that could guide the development of integrated health and social care initiatives. Most existing work does not go beyond description of clinical care at the local level (Briggs *et al.* 2018; Thomson and Chatterjee, 2023). There is a pressing need for evaluation of space-based initiatives, assessing their value at multiple levels such as local (referred to here at “inner” setting), system-wide (the “outer” setting) and global enhancements (e.g. through the generation of knowledge exchange networks for those working in integrated care services and research). Unfortunately, there is a lack of locally developed frameworks for evaluating integrated health and social care initiatives. To our best knowledge, a local health-led integrated care framework developed by the New South Wales (NSW) Ministry of Health has been utilised and operationalised to assess their real-time initiatives (NSW Ministry of Health and Government, 2018) using the quadruple aim theoretical underpinning (improving experiences for consumers and service provider as well as improving health and cost efficiency) (Olayiwola and Rastetter, 2020). However, this does not provide a clear local-led framework to go beyond health-based initiatives.

In this paper, we aim to test the usefulness and contribute to the further development of analytical frameworks that guide research into integrated health and social care initiatives. While a unified, comprehensive framework capable of assessing the integrated health and social care agenda and offering a step-by-step guide for evaluation would be gold standard, currently, there is a clear research gap.

Given the lack of local-based integrated health and social care frameworks, we are using three global and widely accepted evaluation frameworks: (1) the Innovative Policy Supports for Integrated Health And Social Care Programs Framework to examine the level of integration of local integrated health and social care interventions (Wodchis *et al.*, 2020); (2) the Consolidated Framework for Implementation Research (CFIR) to determine the specificities, content and taxonomy of context of integrated health and social care in the primary and secondary care network (Damschroder *et al.*, 2009) and (3) the Framework on the Emergence and Effectiveness of Global Health Networks to assess the quality of international policies/strategies and integrated health and social care networks (Shiffman *et al.*, 2016).

Methods

This study uses case studies based in decentralised administrative areas within the NSW state health system. Local hospital districts (LHDs) cover a network of public hospitals, linked to state-run community health and social services. Primary Health Networks coordinate nationally funded primary health services, especially general practice. The case studies all centre on integrated care initiatives addressing early life and life course adversity as well as knowledge translation.

We undertook a critical appraisal for choosing suitable frameworks to explore our case studies. Table 1 outlines essential context and characteristics for placing each framework against the studies.

Integrated care interventions were next assessed regarding how far they facilitate and advance integrated health and social care knowledge, practice and models of care at local levels by using the Innovative Policy Supports for Integrated Health and Social Care Programs Framework devised by Wodchis *et al.* (2020), which is based on substantial integrated care policy research undertaken by several teams in high-income countries (National Academy of Medicine, 2017; Leijten *et al.*, 2018; World Health Organization, 2016; Verma and Bhatia, 2016).

The core components of this framework and descriptions are presented in Table 2.

The LHDs and/or primary care networks (health system components) and social care providers (including community-based organisations) that form the integrated care

Table 1. Suitability and fitness of frameworks to assess system level and local initiatives

Frameworks	Integrated health and social care specific	Australian-led (local) framework available meeting assessment needs	Suitability characteristics and factors
The innovative policy supports for integrated health and social care programs framework	Yes	No	<ol style="list-style-type: none"> 1. Flexible structure and use of components 2. Allows for measuring levels of integration 3. Focused on measures tangible innovations and or changes in policies at service level (specific) 4. International usability
Consolidated framework for implementation research	No	No	<ol style="list-style-type: none"> 1. Flexible structure and use of components 2. Focused on measuring system level implementation of agendas (multiple initiatives in different systems) 3. Focused on assessing wider approaches beyond evaluation of specific user outcomes 4. International usability
Framework on the emergence and effectiveness of global health networks	No	No	<ol style="list-style-type: none"> 1. Purpose driven nature 2. Can be used to assess the emergence of the network 3. Can be used to assess the quality and the effectiveness of the network 4. International usability

Source(s): [Wodchis et al. \(2020\)](#), [Damschroder et al. \(2009\)](#) and [Shiffman et al. \(2016\)](#)

interventions are assessed utilising the widely used ([Kirk et al., 2016](#); [Skolarus et al., 2017](#)) CFIR ([Damschroder et al., 2009](#)). The CFIR framework is used to identify and explore how the elements of each case study are addressed under the context of integrated care.

The domains of this framework and its description are presented in [Table 3](#).

The Framework on the Emergence and Effectiveness of Global Health Networks ([Shiffman et al., 2016](#)) is used to assess the quality of the international initiatives and/or activities (including the International Foundation of Integrated Care (IFIC)) denominated “global policy learning”. This tool is fundamental for analysing the factors regarding why networks are formed more easily surrounding some issues than others and why some are more able to shape policy and public health outcomes ([Shiffman et al., 2016](#)). The domains of this framework and its description are presented in [Table 4](#).

Analysis of activities, initiatives and studies against frameworks

Policy innovation efforts in integrated care initiatives with social care approach. Using the framework devised by [Wodchis et al. \(2020\)](#), two initiatives, the Healthy Homes and Neighbourhood Initiative (HHAN) and the Camperdown Common Ground (CCG), were reviewed ([Supplementary File 1](#)).

HHAN is an NSW Health-funded inter-sectoral initiative developed by the Sydney Local Health District (SLHD) in 2015. HHAN aims to break the persistent and troubling cycles of inequity within our society by working with families in SLHD who experience adverse social

Table 2. Framework based on [Wodchis et al. \(2020\)](#)

Category ^a number and item	Description
Category 1: integrated governance, oversight and collaborations	Characterised by a unique form of governance or new collaborative partnerships between organisations in the health and social care domains. Programs can also be reported to have had significant changes in the governance structure of local health care systems, the extent of local collaborations required to establish and implement the programs or both
Category 2: integrated health and social care workforce and staffing requirements	Novel approaches undertaken to filling staff requirements and work roles are implemented. Broadening the roles of health and social care providers, creating new work roles, or developing new ways of working for existing health and social care providers. Programs with defined supportive workforce or staffing policies with new local efforts to have health and social care providers work jointly, with or without adding any new staffing roles or the creation of multidisciplinary team-based approaches
Category 3: integrated financing processes and payment methods	Recognised changes made to financing and payment policy as necessary supports for the integrated model. This may involve the creation of new budgets to ensure the entire cost of the health and social care services for the target populations is achieved. Total or combined budgets are established, new envelopes of funding for more centralised programs, and agreements to share the risk associated with delivering the integrated care among health and social care organisations including insurance companies and private health funds can also be mapped
Category 4: integrated data sharing and best usage of those data	Novel approaches to generating required data or information technology solutions. This may involve sharing patient information with one group (provider) to have access to the clinical records of another group (provider). Other forms may include staff sharing information about patients across the providers involved in delivering the integrated model. Secondary uses of data include integrated programs creating standardised reports about the progress of the integrated care program (such as the number of patients enrolled, usage, statistics on key clinical or social indicators) which are consistent with current approaches to monitoring programs or programs engage third-party external (such as university employees) groups to develop, undertake and maintain data and describe key outcomes of the integrated care program

Note(s): ^aAll categories sourced based on [Wodchis et al. \(2020\)](#)

determinants of health to address their complex needs ([Wodchis et al., 2020](#)). CCG is an affordable housing complex in Camperdown that follows a housing-first model, a social mix of formerly homeless and low-income people managed by Mission Australia, funded by the Department of Communities and Justice that works in partnership with the SLHD. Thus, this initiative is designed to assist vulnerable people and those experiencing long-term homelessness. The model also aims to improve their quality of life, health, social and economic outcomes, increase access to mainstream services, reduce utilisation of acute and emergency services and deliver broad community development ([Mission Australia Housing, 2016](#)).

These two initiatives are assessed on how they are integrated beyond the point of pilots or time-limited programs and to what extent the initiatives are fostering joint governance and decision-making, integrated workforce and staffing, integrated financing systems and data

Table 3. Framework by *Damschroder et al. (2009)*

Domain ^a	Description
Domain 1: characteristics of the intervention being implemented	These involve outlining the qualities of the initiatives being implemented into a particular setting. Initiatives may comprise essential components (the key and indispensable elements of the initiative) and adaptable surroundings (adaptable elements, structures and systems related to the initiative and organisation into which it is being implemented)
Domain 2: the outer setting	This involves the economic, political and social context within which an organisation is established
Domain 3: the inner setting	This is comprised of tightly or loosely coupled entities (e.g. a loosely affiliated medical centre and outlying contracted clinics or tightly integrated service lines within a health system); structural characteristics, networks and communications, culture, climate and readiness which may be associated and influence implementation
Domain 4: individuals involved in the initiative/service	This domain pertains to the individuals who are involved in the implementation of an initiative. Individuals have agency; they make choices and may have influence on others with predictable or unpredictable consequences for implementation. Individuals are responsible for cultural, organisational, professional and individual sets of beliefs, norms, values, interests and affiliations
Domain 5: implementation process	Successful implementation of an initiative requires a dynamic change process aimed at achieving individual and organisational level use of the initiative as planned. Individuals may actively encourage the implementation process and may come from the inner or outer setting

Source(s): *Damschroder et al. (2009)*

Table 4. Framework by *Shiffman et al. (2016)*

Components ^a	Description
Network and actor features	This is comprised of all the internal factors in the network that involves strategy and structure, and characteristics of the actors that form the network or are involved in generating it. This includes how networks, individuals and systems who are part act; the presumption is that actors contribute and that they vary in their ability to transform systems using leadership, governance, composition and its framing strategies
Policy environment	This refers to all the components external to the network that can shape the initiative, its nature and the effects the network aims to generate. It is understood that networks do not operate in a vacuum; rather, they are highly influenced by changes in the system and are shaped by forces outside them. These factors include allies and opponents, funding and global norms
Issue characteristics	This includes all the features of the issue the network seeks to address. The idea is that issues vary on several dimensions, including complexity, that make them difficult to respond to. This includes the severity of the issue, how tractability it is and who are the targeted groups

Note(s): ^aAll components sourced based on *Shiffman et al. (2016)* and *Herrenkohl et al. (2008)*

Source(s): *Olayiwola and Rastetter (2020)*

sharing and use. HHAN is funded by state government health agencies (Ministry of Health) only, while CCG is funded by the social system (Social Services departments) (Category 3, Table 2). HHAN incorporates integrated health and social care staff (Category 2, Table 2). Both initiatives have established integrated health and social care governance and partnerships (Category 1, Table 2). None of the initiatives have established standardised and formal integrated health and social care report pathways using shared data (Category 4, Table 2).

Comprehensive taxonomy of context of multiple stakeholder integrated care. Using the framework developed by Damschroder *et al.* (2009), two research studies (Supplementary File 2) were assessed for their components' salience against the CFIR constructs and measured to the extent to which these constructs are used practically, explored or researched. This body of work aims to advance knowledge of integrated health and social care within a broader system-level approach.

The first study aims to examine the interface between place-based health services and virtual service delivery in health and social services and how these two trends interact and potentially complement each other, focusing on service provision over the life course in disadvantaged communities. The second study seeks to understand how integrated health and social care agendas are implemented in health and social care settings and how, if any, these are further tailored to minority groups, to culturally and linguistically diverse (CALD) groups and considering their specific social and health needs.

Both studies are exploring domains related to the characteristics of the intervention and/or service (Domain 1, Table 3) (Damschroder *et al.*, 2009). Specifically, adaptability of core components (the essential and indispensable elements) within the services (especially during COVID-19 pandemic) and how services were delivered to mainstream populations (face-to-face vs virtual) and what efforts were in place to support priority populations (CALD groups) are to be explored.

Exploring components of the outer setting (Domain 2, Table 3) is also undertaken for both studies (Damschroder *et al.*, 2009). For example, priority is given to describe how integrated care at a system level meets patient needs and to what extent the integrated care approach is supported by external policies and incentives.

The inner setting (Domain 3, Table 3) component of networks and communications is sought in detail (Damschroder *et al.*, 2009). Vertical and horizontal integration communications (including data sharing procedures) occurring between providers at the same level of care, as well as the various levels of care, are to be mapped. The establishment of formal and informal integrated care networks and governance, as well as the barriers and facilitators of these, are to be reported. Both initiatives will be reflecting on the implementation process (Domain 5, Table 3) and drawing lessons on "what worked", for whom and under what circumstances at a system level (Damschroder *et al.*, 2009).

Global integrated health and social care: network development and effectiveness. A country-level network has been invigorated with the aim of advancing international policy to address fragmentation of both care and health and social care systems, with the view of accelerating knowledge translation (Supplementary File 3).

The vision is achieved through the support of IFIC Australia. IFIC Australia was founded in 2015 as a country hub to promote and support integrated care in the Asia Pacific Region. Currently, knowledge translation is achieved by engaging with key stakeholders to shape policy, service models and integrated care while supporting educationally targeted initiatives including conferences, workshops and training.

Meaningful knowledge transfer is associated with the effectiveness of networks and their characteristics (Shiffman *et al.*, 2016). IFIC Australia is characterised by effective leadership (Category 1, Table 4) (Shiffman *et al.*, 2016), a clear governance (Category 1, Table 4) and a formal Partnership Committee composed by a sustainable and heterogeneous group of health and social care stakeholders (Category 1, Table 4) (Shiffman *et al.*, 2016). Efforts in this space are significant because it is a pathway for local and global system learning, which is necessary for reducing system fragmentation.

Discussion

In this paper, we tested the usefulness and contributed to the further development of three analytical frameworks that can guide research into integrated health and social care initiatives (Wodchis *et al.*, 2020; Damschroder *et al.*, 2009; Shiffman *et al.*, 2016). We examined the level of integration of local space-based health and social care interventions based on Wodchis *et al.*'s work (Wodchis *et al.*, 2020), developed a taxonomy of LHD and/or primary care network integrated care initiatives to locate the "local" within a broader policy context using Damschroder *et al.*'s study (Damschroder *et al.*, 2009) and evaluated the quality of international policies and/or strategies and integrated health and social care networks based on Shiffman *et al.*'s work (Shiffman *et al.*, 2016).

Several research studies are currently being undertaken, comprising the evaluation of initiatives targeting health and social disadvantage including child and family disadvantage, homelessness and youth and family mental health.

Understanding the facilitators and barriers to integrated care at a local and system level and focussing on the enhancement of integrated care globally, including establishing higher-level system capacity, is crucial for system change and program sustainability. This study facilitates and advances integrated health and social care knowledge, moving from the study of local initiatives to a higher-level taxonomy of integrated care initiatives and exploring the emergence and effectiveness of global integrated care knowledge exchange networks.

This paper does not propose a step-by-step guide on how to evaluate integrated health and social care initiatives in different settings; instead, it proposes the usability of three different suitable frameworks to assess the enhancement of the integrated health and social care using an array of multi-level innovation efforts as local case studies.

While this was an attempt to analyse these multi-level initiatives using the most appropriate framework for each level, this paper highlights the need for further research and additional supports for formulating a single unified integrated health and social care framework that can assess innovations at multiple levels beyond local settings (Collins *et al.*, 2023).

It is important to note that the authors strongly encourage local researchers in the health and social care space to conduct a theory-led approach combined with an in-depth empirical investigation at the local level to determine whether there are potential hidden instances of integrated health and social care approach emerging from the ground up, middle out or/and policy-led. Context knowledge and a sound understanding of local-based initiatives prior defining research and suitability of frameworks are crucial (including the alignment with specific goals of inquiry).

Previous evidence has demonstrated the value of investment into research that enables the generation of a more suitable framework that can be used for initiatives covering broader settings (Cunningham *et al.*, 2019; Committee on Educating Health Professionals to Address the Social Determinants of Health *et al.*, 2016). The generation of an expert advisory group or committee conducting brainstorming and mind-mapping sessions to assess existing or novel frameworks and to consider how they might be applied to study health and social care initiatives and identify any gaps can be a way forward.

Consultation can be garnered from clinician and consumer experiences, service managers, policymakers and network knowledge partners to determine a unified framework that better reflects the large multi-level agenda for integrated health and social care system change.

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(The Appendix follows overleaf)

Supplementary file 1

Table A1. Theme A: appraisal of comprehensive evaluation of integrated care initiatives with a social care approach using [Wodchis et al. \(2020\)](#) framework^a

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Initiative/service	Integrated care components				Integrated health and social care governance and partnerships	Integrated health and social care data sharing and use
	Funded by health system	Integrated health and social care specific funded	Other funding source	Integrated health and social care staff		
Healthy homes and neighbourhoods	✓	–	–	–	✓	–
Finding common ground	–	–	✓	–	✓	–

Note(s): ^aTable created by authors with categories from [Wodchis et al. \(2020\)](#)

Supplementary file 2

Table A2. Assessing the taxonomy of context of integrated care using [Damschroder et al. \(2009\)](#) framework^a

Topic/study	Intervention/service	Outer setting	Inner setting	Characteristics of individuals	Process
Interface between place-based health services and virtual service delivery in health and social services	Adaptability ^b Complexity ^c Design quality and packaging ^d Cost ^e	Patient needs and resources ^f External policies and incentives ^g	Structural characteristics ^h Networks and communications ⁱ	Not explored	Reflecting and evaluating ^j
Integrated health and social care for culturally and linguistically diverse (CALD) populations in the Sydney Metropolitan area: a services mapping	Adaptability Cost Complexity	Patient needs and resources External policies and incentives	Structural characteristics Networks and communications	Not explored	Reflecting and evaluating

Note(s): ^aTable created by authors with definitions from [Damschroder et al. \(2009\)](#) framework

^bThe extent to which an initiative can be adapted or reinvented to meet local needs

^cPerceived difficulty of implementation

^dPerceived excellence in how the initiative is developed

^eCosts of the initiative and costs associated with implementing it

^fThe extent to which patient needs are widely known and addressed by the organisation

^gAll external strategies to spread initiatives, including policy and regulations and guidelines

^hThe social architecture, age, maturity, and size of an organisation

ⁱThe characteristics and quality of social networks including all communications within an organisation

^jEvaluation of the progress and quality of implementation accompanied with regular personal and staff debriefing

Table A3. Analysis using the local integrated health and social care network framework by [Shiffman et al. \(2016\)](#)^a

Global integrated health and social care	Actor features				Policy environment			Issue characteristics		
	Leadership ^b	Governance ^c	Composition ^d	Framing ^e strategies	Allies and opponents ^f	Funding ^g	Norms ^h	Severity ⁱ	Tractability ^j	Affected groups ^k
The international foundation for integrated care Australia	Persistent well connected; excellent coalition-building skills	Congruent	Heterogeneous	Emergent awareness	Allies promoting the approach	Term funding	Appropriate and aligned with the IC approach	High severity; High Burden to system	Complex solution; Threat to status quo	Priority and vulnerable groups with insufficient political power

Note(s): ^aTable created by authors with categories described in [Shiffman et al. \(2016\)](#)

^bThe ability of an individual to define the issue in a way that resonates with key organisations, bringing these together and once linked, guiding them to effective collective action

^cThis is how a network steers itself to achieve goals its members agree to (in a coordinated way)

^dThis refers to the diversity of the members of the network, e.g. the inclusion of linking scientists, advocates, funders, policymakers and programme implement with a global approach

^eThis refers to how the network actors publicly position an issue to attract attention and resources

^fThis encompasses those groups whose interests align with a network's goals (allies) and those who have opposed interests (opponents)

^gThis refers to the network's type of funding model

^hThis includes all standards of appropriate behaviour for actors with a given identity

ⁱThe degree as to how the problems lead to high mortality and morbidity, economic damage or social disruption

^jThe degree as to how problems are perceived to be soluble (clear link between a condition and its structural causes)

^kClear identification of the target group

Author Affiliations

Gabriela Uribe, The Menzies Centre for Health Policy and Economics, The University of Sydney, Sydney, Australia and The Leeder Centre for Health Policy, Economics and Data, The University of Sydney, Sydney, Australia

Carmen Huckel Schneider, The Leeder Centre for Health Policy, Economics and Data, The University of Sydney, Sydney, Australia

Ferdinand Mukumbang, Department of Global Health, University of Washington, Seattle, Washington, USA

Hueiming Liu, The George Institute, University of New South Wales, Sydney, Australia

Susan Woolfenden, Population Child Health Research Group, University of New South Wales, Sydney, Australia

Tabitha Jones, The Leeder Centre for Health Policy, Economics and Data, The University of Sydney, Sydney, Australia

James Gillespie, The Menzies Centre for Health Policy and Economics, The University of Sydney, Sydney, Australia and The Leeder Centre for Health Policy, Economics and Data, The University of Sydney, Sydney, Australia

Harriet Hiscock, Murdoch Children's Research Institute, Parkville, Australia

Fiona Haigh, Centre for Health Equity Training, Research and Evaluation, University of New South Wales, Sydney, Australia

Sharon Goldfeld, Murdoch Children's Research Institute, The University of Melbourne, Parkville, Australia

Ilan Katz, Social Policy Research Centre, University of New South Wales – Kensington Campus, Sydney, Australia

Andrew Page, Translational Health Research Institute, Western Sydney University, Campbelltown, Australia

Vicki Giannopoulos, Edith Collins Centre, Drug Health Services, Sydney Local Health District, Camperdown, Australia

Paul Haber, Drug Health Service, Royal Prince Alfred Hospital, Sydney Local Health District, Camperdown, Australia

Nick Goodwin, Central Coast Local Health District, Gosford, Australia

Teresa Anderson, Sydney Local Health District, Camperdown, Australia

John Eastwood, Clinical Services Integration and Population Health, Sydney Local Health District, Camperdown, Australia

Michelle Cunich, The University of Sydney, Sydney, Australia

Corresponding author

Gabriela Uribe can be contacted at: gabriela.uribe@sydney.edu.au