HEALTH SYSTEMS AND POLICY ANALYSIS

POLICY BRIEF 33

It's the governance, stupid!

TAPIC: a governance framework to strengthen decision making and implementation

Scott L. Greer
Nikolai Vasev
Holly Jarman
Matthias Wismar
Josep Figueras

European Observatory on Health Systems and Policies
a partnership hosted by WHO

Keywords:

Delivery of health care

Health management and planning

Health policy

Health systems plans – organization and administration

Intersectoral cooperation

© World Health Organization 2019 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies)

Address requests about publications of the WHO Regional Office for Europe to:

Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office web site (http://www.euro.who.int/pubrequest).

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

This policy brief is one of a new series to meet the needs of policy-makers and health system managers. The aim is to develop key messages to support evidence-informed policy-making and the editors will continue to strengthen the series by working with authors to improve the consideration given to policy options and implementation.

What is a Policy Brief?

A policy brief is a short publication specifically designed to provide policy makers with evidence on a policy question or priority. Policy briefs

- Bring together existing evidence and present it in an accessible format
- Use systematic methods and make these transparent so that users can have confidence in the material
- Tailor the way evidence is identified and synthesised to reflect the nature of the policy question and the evidence available
- Are underpinned by a formal and rigorous open peer review process to ensure the independence of the evidence presented.

Each brief has a one page key messages section; a two page executive summary giving a succinct overview of the findings; and a 20 page review setting out the evidence. The idea is to provide instant access to key information and additional detail for those involved in drafting, informing or advising on the policy issue.

Policy briefs provide evidence for policy-makers not policy advice. They do not seek to explain or advocate a policy position but to set out clearly what is known about it. They may outline the evidence on different prospective policy options and on implementation issues, but they do not promote a particular option or act as a manual for implementation.

It's the governance, stupid!
TAPIC: a governance framework to strengthen decision making and implementation

Contents

	page
Key messages	5
Executive summary	6
Policy Brief	7
Introduction	7
Five key domains of governance: the TAPIC framework	9
Using the TAPIC framework to strengthen governance	10
Conclusions: changing how societies make and implement policies can improve health and health care	16
Appendix	17
References	19

Authors

Scott L. Greer – University of Michigan School of Public Health

Nikolai Vasev – University of Copenhagen

Holly Jarman – University of Michigan School of Public Health

Matthias Wismar – European Observatory on Health Systems and Policies

Josep Figueras – European Observatory on Health Systems and Policies

Editors
Anna Sagan

Series Editor
Anna Sagan

Associate Editors
Josep Figueras
Hans Kluge
Suszy Lessof
David McDaid
Elias Mossialos
Govin Permanand
Erica Richardson

Managing Editors
Jonathan North
Caroline White

Print ISSN 1997-8065

Web ISSN 1997-8073

List of tables, figures and boxes

Tables

Table 1: Common dimensions of governance across literature 8

Table 2: Examples of mechanisms to strengthen transparency, accountability, participation, integrity and policy capacity 11

Figures

Figure 1: Contribution of governance to desired health policy outcomes 7

Boxes

Box 1: TAPIC: the five domains of governance 9

Box 2: What isn't governance? 10

Box 3: TAPIC in practice: setting prices and transparency in the pharmaceutical sector 13

Box 4: TAPIC in practice: decentralizing health care and fighting communicable diseases – the accountability perspective 13

Box 5: TAPIC in practice: cutting costs and participation – austerity in health care systems 14

Box 6: TAPIC in practice: integrity in housing policy – impact on public health 15

Box 7: TAPIC in practice: capacity for health technology assessment and its role in the work of NICE 16

Box A1: TAPIC in practice: international trade and transparency 17

Box A2: TAPIC in practice: the challenge of researching synthetic biology whilst maintaining accountability 17

Box A3: TAPIC in practice: participating in primary care reform in Bosnia and Herzegovina (BiH) and Estonia 17

Box A4: TAPIC in practice: coal's impact on health and integrity in Poland 18

Box A5: TAPIC in practice: improving childcare in the UK and the role of policy capacity 18

How do Policy Briefs bring the evidence together?

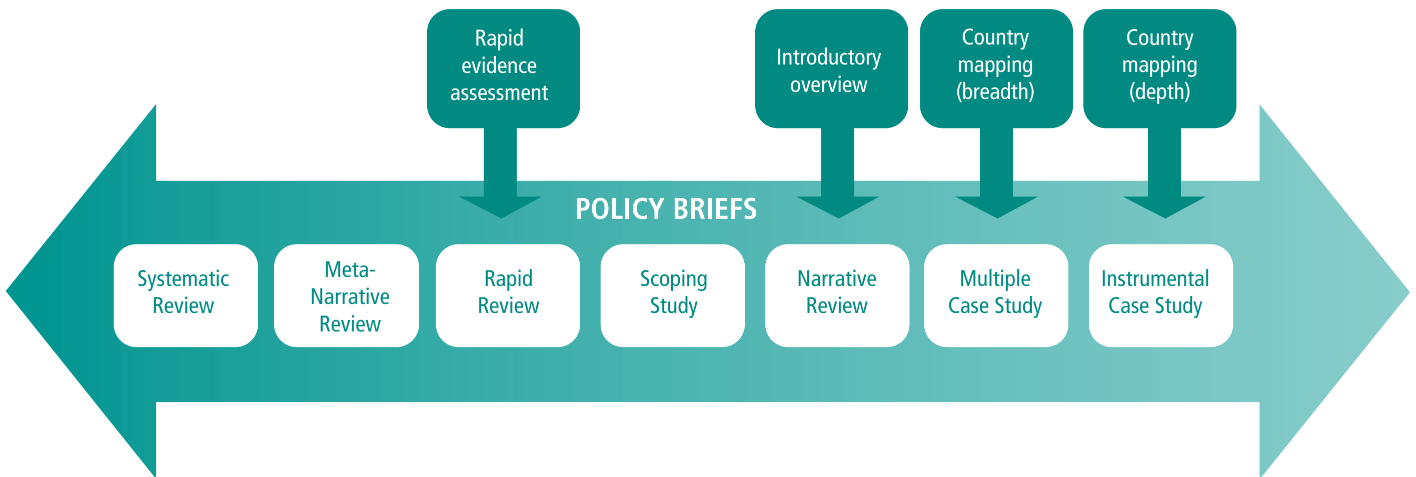
There is no one single way of collecting evidence to inform policy-making. Different approaches are appropriate for different policy issues, so the Observatory briefs draw on a mix of methodologies (see Figure A) and explain transparently the different methods used and how these have been combined. This allows users to understand the nature and limits of the evidence.

There are two main 'categories' of briefs that can be distinguished by method and further 'sub-sets' of briefs that can be mapped along a spectrum:

- A rapid evidence assessment: This is a targeted review of the available literature and requires authors to define key terms, set out explicit search strategies and be clear about what is excluded.
- Comparative country mapping: These use a case study approach and combine document reviews and consultation with appropriate technical and country experts. These fall into two groups depending on whether they prioritize depth or breadth.
- Introductory overview: These briefs have a different objective to the rapid evidence assessments but use a similar methodological approach. Literature is targeted and reviewed with the aim of explaining a subject to 'beginners'.

Most briefs, however, will draw upon a mix of methods and it is for this reason that a 'methods' box is included in the introduction to each brief, signalling transparently that methods are explicit, robust and replicable and showing how they are appropriate to the policy question.

Figure A: The policy brief spectrum



Source: Erica Richardson

Key messages

- Governance is a broad and complex topic with many overlapping definitions, frameworks and recommendations, but governance concepts and ideas found in the literature can broadly be grouped into five key domains: Transparency, Accountability, Participation, Integrity and Capacity (TAPIC).

- Governance is crucial to successful policy-making and implementation. It affects the likelihood that workable policies are adopted, that they are implemented, and that they produce intended results. At the same time, governance may be the cause of policy problems. But it is only one potential cause of problems, alongside other causes of failure such as inadequate finance.

- Each of the five domains of the TAPIC framework contains many different techniques for policy and procedural change. Rigorous and context-sensitive analysis is required to work out which domains contain governance problems and what those problems might be.

Executive summary

Governance is how societies make and implement decisions

Governance is vitally important to health policy and implementation, but harder to pin down than almost any other core concept of health policy analysis. It refers to how decisions are made and implemented – everything from the ability of policy-makers to take evidence-based and relevant decisions to their ability to implement policies and create alignment between different actors. While conflicts, contradictions and burdens – as well as flat-out mistakes – will always be common in human affairs, focused and practical thinking about governance can reduce them.

Governance can be broken into five key domains: Transparency, Accountability, Participation, Integrity and policy Capacity

Frameworks for governance analysis are everywhere, confusing, diverse and often of uncertain applicability. Many of them fall into a checklist, or cookbook, literature which lists policies that look like "good governance", regardless of whether the policies are relevant to a given country or the particular policy area.

However, a review of the large literature on governance reveals that almost every aspect of governance, good or bad, and almost every recommendation for the improvement of governance fall into one of five domains. We call these five domains the TAPIC framework and use it to highlight the places to look for potential or real governance problems and the policies that can redress them:

- **T is for Transparency** – making clear decisions, their grounds and the decision-makers.
- **A is for Accountability** – ensuring that anybody who acts must account for their actions to appropriate other actors who can reward or punish them.
- **P is for Participation** – ensuring that people who are affected by a decision can express their views about it in a way that ensures they are at least heard.
- **I is for Integrity** – a system in which organizations and jobs have clear definitions, and procedures such as hiring and contracting are regularized and clear.
- **C is for policy Capacity** – employing the necessary expertise to assist policy-makers in avoiding, diagnosing and remedying policy failures and unintended consequences.

A governance problem may mean too little or too much of something

While each of these domains has a positive connotation, they are parts of governance, not a cookbook for some mythical "good governance". Thus, the problem of accountability might not be insufficient accountability, but too much accountability (wasting time on excess bureaucracy), or overly diffuse and contradictory accountability (with organizations trying to serve too many governments or others at once). The problem of participation might be lack of participation, or it might be so many or such complex forms of participation that only well resourced lobbies can master the system.

'A vision without a context is a hallucination': the importance of adapting governance concepts to specific contexts

Each of these domains can be strengthened using a number of mechanisms in certain contexts, and governance analysis and improvement is about identifying whether the problem is one of governance and then which policies, in which domains, will help. In practice it has been difficult to get beyond the simple statement that "context is important". TAPIC is a tool for conducting the rigorous and context-sensitive analysis of particular systems and policies that is necessary to identify and remedy governance failings and make future policy problems less likely.

Is it a governance problem, what kind of governance problem is it, and what might address it?

The way to use TAPIC, therefore, is as a tool to go beyond the simple assertion that governance matters but is complex and context-dependent. Instead, break down governance problems: is it primarily a governance problem? If so, in which domains of governance does it primarily lie: transparency, accountability, participation, integrity or capacity? Once we know that, we can ask what kind of problem it is within those domains, and try to identify the policy tool that best addresses the problem at the lowest cost in energy, time and money. Rather than aspiring to good governance without regard to context, or taking actions that might not work, TAPIC focuses us on particular domains of governance within which problems arise and the tools that might work to address the problems.

Policy brief

Introduction

Why does governance matter?

Health systems may be diverse, but the agenda for health policy-makers often looks the same (Quaglio, 2018). Ministers, managers and other leaders seek to reduce the waste in health care without cutting beneficial treatments, to make public health policies more effective, and to achieve sustainability. Policy and management ideas can be good or bad and can be implemented well or poorly. Figure 1 shows, schematically, that it is all too easy to get it wrong. We may adopt the wrong decisions or implement our decisions badly. In other words, reforms can end in disappointment, frustration or even damage. The desired outcome will depend on both good decisions and good implementation.

In each case, there is a governance dimension: it can be that governance impeded or enabled implementation, or that governance impeded or enabled the adoption of a good or bad idea. Governance matters with regard to whether an idea is properly vetted and analysed before adoption, whether it is worked out legally, financially and practically, and whether it is implemented. Governance matters to the quality of decisions made, and to their implementation.

What is governance?

Governance is not a new issue in health policy and management debates. From the challenges of constituting a hospital board, to the challenges of designing governance structures for collaborations with social care, disability, education or other policy areas, to the broad development of systems that balance payers, patients, providers and the public, governance is a thread that runs through all the debates. But this widely shared agreement on the importance of governance has led to an impressive level of confusion as different organizations, academics, consultants and governments produce their own frameworks, scorecards and proposals for good health governance (Barbazza & Tello, 2014; Siddiqi et al., 2009; Kirigia & Kirigia, 2011; Kickbusch & Gleicher, 2011; Brown & Harrison, 2013)as well as the separate area of global health governance (Buse, Hein & Drager, 2009; Liverani, Hanvoravongchai & Coker, 2012; Youde, 2012; Frenk & Moon, 2013). The most common approach to governance is to provide a list of desirable attributes of governance, from transparency to quality to absence of civil conflict. Table 1 lists common dimensions of governance identified in the literature.

Figure 1: Contribution of governance to desired health policy outcomes

		DECISION/IDEA	
		GOOD	BAD
IMPLEMENTATION	GOOD	✔ ✔	✘ ✔
	BAD	✘ ✔	✘ ✘

Source: Authors’ compilation.

Table 1: Common dimensions of governance across literature

	Authors chronologically															
Dimensions of governance	UNDP (1997)	World Bank (1999)	WHO (2000)*	Travis et al. (2002)*	Islam (2007)	WHO (2007)	WHO/EURO (2008)*	Siddiqi et al. (2009)	Lewis & Petterson (2009)	Mikkelsen-Lopez et al. (2011)	Baez-Camargo & Jacobs (2011)	Kickbush & Gleicher (2012)	Council of Europe (2012)	Smith et al. (2012)	Wendt (2012)	Kaplan et al. (2013)
Control of corruption		■								■	■					
Democracy													■			
Human rights												■	■			
Ethics and integrity								■					■			
Conflict prevention		■														
Public good												■				
Rule of law	■	■						■					■			
Accountability	■	■		■	■	■	■	■	■	■	■		■	■	■	■
Partnerships				■		■	■					■			■	
Formulating policy/strategic direction	■		■	■	■	■	■	■	■	■	■			■	■	■
Generating information/intelligence			■	■	■	■	■	■	■					■		■
Organisational adequacy/system design				■		■	■					■	■		■	
Participation and consensus	■				■			■		■	■	■	■		■	■
Regulation		■	■	■	■	■	■		■			■				
Transparency	■						■	■		■	■		■			■
Effectiveness	■	■						■					■			
Efficiency	■						■	■			■		■			■
Equity	■						■	■			■		■		■	■
Quality													■			
Responsiveness	■				■		■	■			■		■			■
Sustainability													■			
Financial and social risk protection							■									
Improved health							■									

Note: A shaded box is used to indentify the explicit reference to the given element in the work of the corresponding author(s). The three groupings applied (fundamental values, sub-functions, outcomes) are the authors' own and therefore may not be explicitly used to characterize dimensions in the respective works.

* Refers to health stewardship.

Source: Table 2.1 in Greer, Wismar & Figueras, 2016.

There are two problems with such a list. First, comparing them, as in Table 1, makes them all look arbitrary and somewhat utopian. Arbitrary: just because the World Health Organization omits the absence of civil strife does not mean that it thinks civil strife is good. Utopian: because only a few countries imaginably come close to performing well on all the different attributes listed in the Table, and as current events show even high-performing countries are capable of backsliding as well as progressing.

Merilee Grindle, examining this literature, came up with the concept of "good enough governance" as an alternative (Grindle, 2004, 2007). Her deservedly influential approach amounts to a strong dose of realism: instead of setting up a standard that is at best met by only a few countries, it asks us to think about the best attainable governance for a country in its given situation. Not all governments have basic control over their own territory (Thomas, 2015). That is a first stage of governance and one that might be prioritized over anticorruption or local participation measures. Stronger governance allows leaders to move on to new problems – for example, stamping out crude corruption involving brown envelopes and unqualified hires merely clears the way to focus on higher level corruption in awarding capital expenditures or manipulating regulation. If we do not think this way, policies risk joining the many discussed in the large literature about misguided good governance policies and how they fall foul of local resources and politics (Ferguson, 1990; Best, 2005). This need to adapt governance concepts to context is important: as the saying goes, a vision without a context is a hallucination.

Why this policy brief?

Given the importance of governance and the multitude of definitions, all of which cause much confusion, we have identified a need for a simple, unified approach geared to policy concerns. Our goal is to sum up key elements of governance that have been identified andvalidated in the enormous literature, and by so doing help policy-makers identify a road map that can allow for the practical analysis of governance issues. The goal is to improve policy-making, policy and services.

Five key domains of governance: the TAPIC framework

In an Observatory book focused on challenges of health care policy, including primary care, hospital governance and pharmaceuticals, and in a special issue of the journal Health Policy we showed the relevance of governance to the broader challenges of public health policy in areas from trade to homelessness to child health to synthetic biology (Greer, Vasev & Wismar, 2017). In our review of the topic, we settled on a version based on the World Bank's definition: *governance is how societies make and implement decisions* (Greer et al., 2016). It is the ensemble of rules, formal and informal, that decision-makers and implementers follow when acting.

Our approach to governance was shaped by the need to avoid three pitfalls:

- the need to avoid treating governance as a shopping list of desirable things that might not be coherent, immediately relevant or within the time and powers of the relevant decision-makers;
- the need to have a framework that is sensitive to context; and
- the need to avoid developing or endorsing a theory of governance that incorporates too many assumptions about how organizations and systems work.

What are the five domains of governance?

We conducted an extensive review of literature on governance, incorporating academic, grey, and government or international organization publications, capturing the list of attributes they attribute to governance. The different frameworks had much in common, and in many cases used multiple words for what were effectively the same concepts, so we clustered the different concepts in order to identify the common preoccupations of governance analysis. The review identified *five domains of governance*, which we abbreviate to TAPIC: transparency, accountability, participation, integrity and capacity, which we present in Box 1.

Box 1: TAPIC: the five domains of governance

Transparency means that institutions inform the public and other actors of both upcoming decisions and decisions that have been made, and of the process by and grounds on which decisions are being made.

Accountability means that an actor must give an account of its actions, with consequences if the action and explanation are inadequate.

Participation means that affected parties have an opportunity to provide input to relevant deliberations without fear of retribution.

Integrity means that the processes of representation, decision-making, employment and enforcement should be clearly specified. Individuals and organizations should have a clear allocation of roles and responsibilities.

Policy **capacity** refers to the ability to develop policy that is aligned with resources in pursuit of goals.

Source: Greer, Wismar & Figueras, 2016.

Why are these domains important?

Transparency matters for a number of reasons. It can ease coordination and performance in the system by making it possible for everybody involved to know what is happening and why. It can reduce the scope for corruption and incompetence by making it clear who made decisions. Below that level, it can help discourage managerial styles based on hoarding or distorting information.

Finally, it enhances other aspects of governance. It enables accountability by making it clear what is being done and why. It enables participation for the same reason: citizens and interested groups can identify what is being considered and being done. It also encourages good implementation simply because it is clear what was decided and by whom. Leaving implementers guessing what they should do is a formula for non-implementation and inefficiency.

The reason to care about **accountability** is that without it almost any relationship starts to fall apart. Allocating resources without a mandate is problematic. A mandate and resources are no good unless there are effective ways to know if the resources were used well and ways to correct the behaviour (or punish it) should they not have been used well. Policy experts and advocates who are frustrated by the failure to implement their favourite ideas will often wish that the right people could be held accountable for delivery. Accountability is also liked by those who are outraged by bad administration or expenses claims. It is, finally, invoked by those who just want a political weapon to use against people or policies they dislike.

Improved accountability relationships can help to solve problems to do with performance including underperformance, misplaced priorities and excessive paperwork. If an accountability relationship is working well, organizations can say what they must do and who will hold them accountable, and how, if they fail. This means that accountability cannot be taken to excess: too much conflicting accountability, a common situation in health, undermines its effectiveness, as does accountability focused on procedures rather than outcomes. At its best, it can enable mutual learning: if organizations are accountable for the best possible performance and can account for their successes and failures, it is possible for both them and policy-makers to learn more about good policy (Sabel & Simon, 2006).

At the same time, there are always compelling reasons to subvert accountability: who does not want to have resources without duties or oversight?

Participation is a value in itself, allowing communities and people a greater role in decisions affecting them (Stewart, 2013). It also improves three elements of health policy (Fung, 2006). First, participation can be a route to legitimacy and ownership; while it will not always reconcile differences, the participation of key implementers is usually necessary to avoid sabotage or just poor implementation. Second, participation can produce information that means policies are more just; lobbyists can bring industry concerns, but if participation is structured well it can also bring in other citizen and NGO perspectives (overly complex, expensive or time-consuming procedures, by contrast, can disempower them) (Ehrlich, 2011). Third, participation also improves the effectiveness of policy, notably by providing information: consulting affected parties can produce very useful information (about, for example, the functioning of little-understood public services that a government is thinking about reforming, or about practical difficulties that might arise from a proposed policy). Even if participation only tells policy-makers about intense opposition, that is useful.

Integrity means that the processes of representation, decision-making and enforcement should be clearly specified. Individuals and organizations should have a clear allocation of roles and responsibilities and be involved in clear procedures that can be specified. These are the basics of well functioning, long-lasting, trustworthy organizations, as social scientists have argued: clear allocation of roles/responsibilities, and clear process relating them. In the short term, there might be apparent advantages to improvisation, informality and corruption, but in the longer term integrity benefits a whole society. Even societies with clear corruption problems, as they develop, face more and more pressure for integrity measures, while corruption is associated with inequality and vulnerability (Uslaner, 2008; Rothstein, 2011).

Minimal integrity means that employees show up and do their jobs without taking bribes or selling the equipment, but integrity means much more than that and often depends on cues from the top. Integrity matters to create and sustain any high-functioning organization, but it most directly matters to corruption (Radin, 2015). Health is one of the most corrupt economic sectors in Europe (European Commission, 2013, 2014) and one in which corruption relates directly to bad outcomes such as overuse of antibiotics (Rönnerstrand & Lapuente, 2017). Corruption in rich countries is most prevalent and difficult to eradicate in areas with large and nonlinear rewards (Warner, 2007), e.g. adjudication of large contracts or regulatory approvals and pricing for lucrative products. In less organized systems it can take other forms, even to the extent that capital expenditure goes unused because there are too many inept or nonexistent employees to utilize it. It can often be a result of lack of options in resource-poor environments where nobody wants to engage in corruption but there are no alternatives (McMann, 2018). If people at the top are complicit and bend rules to permit their own corruption, over time the erosion of enforcement mechanisms can spread corruption downwards. The implication is clear: if the leadership of any organization opposes or undermines integrity mechanisms, the corruption can cascade down quickly.

Integrity is not just about corruption control, though. It is also about clarity, organizational mission and giving employees a sense of what they are doing and how they relate to the wider world. It is no accident that in many different countries the organizations with a strong sense of self, mission and esprit de corps are also the least corrupt and most effective.

Capacity means the "policy bureaucracy" – the organizations at the top of the modern political system whose role is to serve power by monitoring, evaluating and formulating the details of policy, as well as managing policy and legislative change (which is not easy in complex political systems) (Page, 2010, 2012). It is the eyes and ears of politicians, but it is also the capacity to understand policies and systems in detail to prevent policy failures, contradictions, illegality and misbehaviour by contractors and consultants.

Policy capacity is to be evaluated for its "power-serving" role: the ability to do the staff work and analysis to turn a political idea into a thought-out proposal, or explain why it is risky (Page & Jenkins, 2005). It is the part of government that transforms ideas into workable, well designed policies, and blocks unworkable ideas. Its contribution to governance should be clear, for it is what allows governments to steer the system, to set up and operate processes that produce accountability, participation, transparency and integrity, and to carry out work that the centre must always carry out, such as supporting ministers and managing legislation. Along with participation, it is crucial to separating good and bad policy ideas: participation asks stakeholders what will happen, while capacity seeks research and uses acquired knowledge of the system.

Using the TAPIC framework to strengthen governance

Governance means many complex things in many different contexts. To resolve a governance problem, it is important to first ascertain if it is indeed a governance problem. Subsequently, one has to know what kind of a governance problem it is, i.e. in which of the five domains it falls, as each domain presents distinctive problems and requires different kinds of measures (Greer et al., 2016).

Step 1: Is it a governance problem?

There are well known alternative kinds of problems that bedevil health policy and programmes, but are not primarily governance (Box 2). If a policy is impractical, or illegal, or under-resourced, then the sources of the failure should be sought there. Reorganizing governance will not solve the problem; instead it will drain scarce attention, resources and political will from other tasks, and will have unintended consequences.

Box 2: What isn't governance?

Financial limitations refer to the lack of adequate funds to enact the policy or operate the programme. Without adequate funds, most policies and programmes risk failure.

Resource limitations refer to the presence of adequate staff, including health professionals, technology, facilities and other investments. They are the resources that money cannot buy (or cannot buy quickly enough at a reasonable price) but that are generally the result of spending decisions made previously. Resource limitations can lead to even a generously funded policy failing if, for example, the skilled staff cannot be found at a reasonable price.

Avoiding resource problems in rich countries is substantially a result of planning and commitment, e.g. to educating the health workforce.

Legal limitations refer to the constraints that law and the rule of law impose on decision-makers. In most EU Member States, for example, decision-makers must comply with internal administrative law (e.g. on consultations and document retention), statute, their own constitutional law and then EU law. Noncompliance can lead to legal challenges, bureaucratic refusal to carry out illegal orders, and to a court invalidating the policy.

Impracticality, finally, is a reality. Some policies, evidence shows, do not work: for example user fees do not improve health care quality or the financial viability of health systems (Evans, Barer & Stoddart, 1995; Canadian Foundation for Healthcare Improvement, 2003, 2014). Others have a poor cost-benefit ratio, however understood, and some are unsuited to the context in which they will have to be implemented. Good policy analysis will muster the evidence and experience necessary to identify impractical policies, but they nonetheless are regularly adopted around the world.

Step 2: Which governance domain does it fall into?

If there is a question about governance, as a real problem or a potential obstacle, the next step is to identify what domain of governance it falls into. If the problem is about opacity, poor communication, information hoarding, ignorance of procedures or distrust of decision-makers, then it is a problem of *transparency*. If it is a problem of organizations not being responsive to key stakeholders, such as the government or legislators, whether because of too many accountability relationships or too few, then it is a problem of *accountability*. If the problem is of a lack of input from interested parties and consequent poor information or lack of legitimacy in the eyes of key populations such as professionals or patients, then the problem is of *participation*. If the problem is of underspecified mandates and rules, whether on hiring or on the roles and missions of different organizations in the system, then it is a problem of *integrity*. And finally, if the problem is of understanding the system and how to change it, whether in terms of budgeting, legislating, managing or developing policy, then it is a problem of policy *capacity*.

Step 3: What concrete measures can be taken to strengthen governance?

The domains of TAPIC are ultimately all about concrete activities, from registers of lobbyists to ombuds procedures to contracting procedures to hiring statisticians. Agreeing on the desirability of more transparency, accountability, participation, integrity or capacity is often much easier than working out what that actually should mean in context (Lillvis & Greer, 2016). Identifying specific policy options is where contextual analysis (which partly stems from policy capacity) is important, since legal traditions, pre-existing organization and cultural repertoires will all matter in determining what might work. Table 2 presents a selection of mechanisms that can be taken to strengthen the five domains of governance.

Table 2: Examples of mechanisms to strengthen transparency, accountability, participation, integrity and policy capacity

Mechanisms	Examples
Transparency	
Transparency mechanisms ensure that decisions and the grounds on which they are being made are clear and public. They also ensure that forthcoming decisions, decision- makers and relevant data are known to the public.	• watchdog committees; • inspectorates; • regular reporting; • Freedom of Information legislation (FoI); • performance managing/ reporting/ assessment; • clear and useful public information: such as open meetings, clarity about key personnel, and information presented in clear and usable formats.
Accountability	
The most effective accountability mechanisms are interactive, iterative and focused. Focused, meaning that it is clear what is wanted, at a fairly high level (e.g. quality improvement); iterative, meaning that goals are revisited with learning; and interactive, meaning that man-dates are closer to agreements about what is possible and desirable. For example, it is better to hold an agency accountable for the output associated with a budget rather than the process of management of that budget.	• contracts; • other financial mechanisms, such as pay for performance; • laws that specify objectives, reporting and mechanisms; • competitive bidding; • organizational separation; • conflict of interest policies; • regulation; • delegated regulation, e.g. to professional bodies; • standards; • codes of conduct; • "horizontal accountability" or choice mechanisms that let users 'vote with their feet'

Continued on next page >

> Continued from previous page

Mechanisms	Examples
Participation	
Participation at its best means that affected legitimate interests are consulted in a way that reaps information, fosters legitimacy and improves implementation (Fung, 2006). It therefore must be appropriate to the different kinds of relevant interests. It must also not be too energy-intensive, expensive or complex because that will empower the best-resourced actors. Nor does it mean that every affected interest should have a veto. The participation mechanisms suitable for negotiating with doctors, consulting communities and managing intergovernmental relations should differ.	• stakeholder forums; • consultations; • elections; • appointed representatives of specific groups; • accessible legal remedies; • choice mechanisms; • advisory committees, ad hoc or otherwise; • partnerships; • surveys; • joint budgets, joint workforce, etc. (when the problem is the participation of different parts of government in a particular policy area); • more radically democratic innovations, such as participatory budgeting and citizens' juries.
Integrity	
Integrity measures work at the organizational level. They focus on rules about the use of resources that preserve the integrity of organizations: trying to increase the odds that that hiring and promotion are meritocratic, contracts are awarded without favouritism, and trying to increase the sense of mission and coherence of each organization in a system.	• solid and well rewarded internal career trajectories that allow high-level officials to be rewarded for service rather than seeking profit or positions outside government; • internal audit (to ensure that money moves appropriately); • personnel policies (hiring, job descriptions, procedures to weed out flawed people); • clear and clearly written legislative mandates; • a clear budget; • procedures (e.g. document management, board behaviour, minuting meetings); • external audit; • clear organizational roles and purposes.
Capacity	
Policy capacity is the capacity of policy-makers at the centre. It means resources that allow them to understand health systems and policies and present or future challenges (e.g. resource and financial issues). This means expertise and capacity to monitor, understand and evaluate, including commissioning, evaluating and terminating the work of government partners such as contractors and consultants. It also means expertise in the work of government itself: legislative timetabling, drafting and passage of secondary legislation, anticipation and defence against legal challenge, and interactions between politics and policy.	Mechanisms to improve policy capacity include: • intelligence on performance, so that the central policy-makers can identify problems and gauge the effects of what they are doing; • intelligence on process (e.g. understanding of legal and budgetary issues and the system that is being changed); • research/analysis capacity (e.g. trained staff with skills such as research and the ability to identify and work with useful outsiders); • staff training, to improve their technical policy capacity (e.g. if a doctor is hired in a health ministry, provide opportunities to complement medical education with policy education); • hiring procedures, to improve the quality of the policy bureaucracy; • procedures to incorporate specialist advice into policy formulation and recommendations; • good buy/make decisions (i.e. develop sufficient in-house capacity to manage contractors such as consultancy firms and know when it is more efficient to do the work and when it is more efficient to contract in the work); • delegation of non-policy work such as routine management and budgeting away from the central policy-makers, e.g. to executive agencies.

Source: Authors, based on Lillvis & Greer, 2016.

The remainder of this section outlines common problems associated with implementing governance policies and uses real-life examples to demonstrate the application of the TAPIC framework in practice. Further examples can be found in the Appendix.

Transparency

There are three major kinds of problems associated with transparency policies. One is simply their costs, both formal and informal. Producing and making information public is costly. Transparency also carries political risks, though these will often be riskiest to the worst policies. The second is the risk of distorting politics by, essentially, giving better and better information to privileged interests (this is easy to overstate, since privileged interests will almost by definition also have informal ways of getting information when transparency mechanisms are not operating). The third is that an action made in the name of transparency misses the point, whether intentionally or not. A relatively benign example is replacing government releases of data with infographics in the name of accessibility, which might seem like transparency but actually reduces the ability of experts outside government to understand and critique developments. Transparency means ensuring that experts as well as the public can understand what is going on.

Box 3 demonstrates the importance of having clear and useful public information on prices as an example of transparency mechanism in the pharmaceutical sector. Due to the large number of actors involved in the pharmaceutical sector, it is important that decision-makers play a strong stewardship role to ensure that patients have access to high-quality medicines (Cylus, Wouters & Kanavos, 2016).

Box 3: TAPIC in practice: setting prices and transparency in the pharmaceutical sector

What is the governance problem? Lacking transparency can lead to inappropriate pricing of medications, which puts them out of reach for patients.

What are the tools to tackle this problem? Price-setting in Europe is mostly done through external price referencing (EPR). EPR sets a domestic price based on the prices in a basket of countries (e.g. the average or minimum price in the basket) (Cylus, Wouters & Kanavos, 2016). Without *clear and useful public information* on prices in other countries, manufacturers can manipulate the system by offering secret agreements to payers in some countries and keeping the price out of the public's eye. This would skew the average price of the drug in the basket of countries and lead to higher prices for some patients. Manufacturers can also introduce a drug in richer countries first, where its cost would be higher, and then bring it to market in poorer countries. In that case, the EPR mechanism would put a higher price on the drug than if it were introduced in the poorer countries first. Here again clear information on when the drug is available is crucial.

Lesson: Drug price-setting needs to be complemented by clear and transparent information about the drug's availability and cost, in order to protect patients from excessively high prices. Income disparities between richer and poorer patients can lead to disproportionate prices for poorer patients without transparent information.

Source: Cylus, Wouters & Kanavos, 2016.

Accountability

Accountability is a complex and nuanced field of activity that is actually not easy to adopt and implement, as a look at reviews of the unusually large academic literature on the topic will make clear (Bevir, 2010; Greer et al., 2016). So how can accountability go wrong? First, a common pitfall is to focus too much on process rather than outcome. Some measure of accountability for process is good, so that somebody is held responsible when there is financial or other incompetence. But it is much easier to measure process than outcome, and it is harder to argue about process than outcome (we can all agree that the health care system does not primarily exist to supply managers with lavish entertainment accounts, but we do not agree on what the priorities of the health care system should actually be). As a result, accountability has a tendency to focus on processes, often irrelevant and costly, rather than outcomes, with the result that we employ auditors when we really might need policy evaluators or a better designed system for harnessing the expertise and motivation of staff.

Second, the multiplication of lines of accountability in itself is a problem. Counting the number of organizations to which a hospital or clinic or doctor is accountable will often produce alarmingly large numbers once we total up professional regulators, financial regulators, environmental, occupational and safety inspectors, data protection and privacy regulators, building and fire inspectors, quality inspectors, child protection and social welfare inspectors, and different levels of government. In some cases this means that the organization is largely built to satisfy outside regulators rather than its ostensible mission; in some cases it means a large and expensive infrastructure of compliance attached to an otherwise functioning organization, and in some cases it means massive noncompliance and incentives to discredit or protest regulators. In more political settings, multiple accountabilities can be played off against each other in pursuit of a policy agenda. Webs of accountability and contradictory accountabilities are a feature of modern health policy, and often make it hard to reap the benefits of a healthy accountability relationship.

If the problem is elsewhere, merely adding accountability mechanisms will be demoralizing, time consuming, confusing and probably over time contradictory and unsuccessful. Accountability properly understood has a more limited place in the toolkit.

Box 4 shows how regulations, rules and framework laws can be used as a mechanism to strengthen accountability using an example of decentralization and its impact on fighting communicable diseases. Decentralizing health care brings the fight against communicable diseases closer to the patient, but increases the number of political actors (Greer, 2016).

Box 4: TAPIC in practice: decentralizing health care and fighting communicable diseases – the accountability perspective

What is the governance problem? Decentralized health care systems create multiple levels of accountability, wherein who is accountable to whom is unclear.

What are the tools to tackle this problem? *Regulations, rules and framework laws* are a mechanism that can be used to improve accountability. Regulations can specify roles and responsibilities and this can clarify who is accountable to whom. However, regulations get adopted by decision-makers, and they have a distinct interest not to define their own accountability. Therefore this mechanism can be less than successful. In reality, regulations can be written in vague language, or leave decision-makers enough discretion to make the former effectively meaningless.

Recentralization can bring control over spending, decision-making and execution back into the hands of central government. It must be stressed here that recentralization does not have to entail complete return of control over these issues, but can be a shared or partial recentralization of competencies. This can increase central government's responsibility and put decisions on communicable diseases under national democratic control. It would also impede political competition between various levels of government and could inhibit political or inter-regional tribalism.

Lesson: Whilst decentralization brings decision-making closer to the patient, it also distorts accountability by complicating resource pooling, as well as hindering national and cross-national cooperation. In communicable diseases the coordination of efforts to contain and confine the spread of diseases necessitates better communication between partners, which is harder when there are more of them. Intergovernmental councils enable participation, clear and transparency statements of policy enable coordination as well as increase legitimacy of decisions, and concentration of policy capacity in a few agencies allows them to *de facto* improve coordination among less expert actors.

Source: Greer, 2016.

Participation

The basic logic of participation is that, outside extreme cases, good policy ideas are not developed top-down and good implementation does not happen by coercion. In terms of ideas, there are serious problems of lack of information, and subsequent assumptions made by policy-makers, about what is happening and how things work. These are most easily remedied by consulting the people who actually do the work. Almost everybody in health care will have more respect for the outcome of a process in which they are represented. Thus, for example, health care professionals' and patients' participation enhances the quality of health care quality initiatives since practitioners and patients know what is happening and what the problems are. Beyond information, there is the problem of expectations and legitimacy. Doctors, if we are realistic in our expectations, should not be expected to listen willingly to health care advice such as guidelines if they are produced without medical participation. So even if the information is there and best practice is well developed and clearly applicable, a good manager or policy-maker will still try to build consensus.

Participation is often said to make decisions slower and implementation better. This is what is meant by the term "ownership", i.e. participation by affected interests in the decision-making process means that they accept the legitimacy of the decision because they were part of the process, and therefore will comply or even actively assist in carrying out the project. In short, participation can help prevent bad ideas and improve implementation of good ones.

Participation from a policy-maker's perspective is also expensive, resource-intensive (requiring, often, the time of senior managers and policy-makers) and slow. It often feels unrewarding to policy-makers since it will often involve listening to opinions that the policy-makers have already dismissed, language that is not the technical language of policy, and purely political rhetoric that is actually driven by some goal other than a good decision. The same problems are also experienced by the community members and patients who are asked to participate in what are often inconvenient, boring and lengthy exercises which might tire people out, might not actually seem to shape decisions and can destroy trust as much as build it (Stewart, 2016). The level of trust required to make participation work in complex and contested decisions will often come only from a long period of engagement, so even if managers and policy-makers are willing to invest in participation in the run-up to a decision, they might find that the most effective investments in building trust would have been five years earlier. Communities can be rightly suspicious of sudden efforts to encourage participation right before policy decisions. Additionally, finding participants and participatory mechanisms can be tricky. Clinical guidelines, for example, are not improved by patient representatives if the patient representatives are not representative in their demographics or their actions. The history of breast cancer is rich with cases of unrepresentative patient representatives who do not speak effectively for the bulk of people with breast cancer, who are over 65 and often most interested in minimizing their treatment and recurrence chances (Strach, 2016; Greer et al., 2002). Even professional lobbyists are not necessarily able to speak for the people they represent.

Choosing participation mechanisms is therefore crucial, and more than one mechanism is probably useful (Rohrer & Rajan, 2016). Context and target populations matter a great deal- the mechanisms suitable for local governments' participation in communicable disease control are clearly not going to be the ones suitable for understanding how best to organize local mental health services, since elected governments and mental health service users are quite different populations. Goals, in particular, should be clear. Policy-makers might pair efforts to solicit information and views from broader communities through consultation mechanisms and surveys, while engaging in more intense conversations with established interests such as health workers. There are many ways to do both, and they should be thought through to avoid waste and frustration. For example, having meetings in the early evening after work might dissuade anybody with a full-time job and caring responsibilities. In general, there is a risk that community participation mechanisms attract people with time on their hands, a group that might not be representative at all (e.g. retired health care professionals).

Box 5 presents the importance of participation in a time of austerity. Health care systems need to save public money, but they must do so without damaging the functioning and quality of the services provided (Repullo, 2016). The use of consultations and advisory committees can help identify which services are more indispensable than others and should not be subjected to cost-cutting.

Box 5: TAPIC in practice: cutting costs and participation – austerity in health care systems

What is the governance problem? Conducting cost-cutting measures without input from practitioners and patient groups risks cutting effective programmes and maintaining unsuccessful ones.

What are the tools to tackle this problem? *Consultations* and *advisory committees* which include practitioners and patients can deliver practical insight into the functioning of the health care

system, and which are the most indispensable services within it. A participatory and consensual approach will create an alliance of policy-makers with health managers and professionals. Only by delegating authority, confidence, competencies and discretionary margins to front-line services will this allow them to act selectively to convert rationing into rationalization (Repullo, 2016). Patient groups should also have their voices heard or the austerity measures will be perceived as illegitimate and imposed without any regard for patients' needs and preferences. Decreasing participation will streamline implementing austerity measures, but it will also induce confusion, disenfranchisement and very possibly opposition. When implementing reforms, ownership of said reforms is crucial to their success. Therefore, even though less participation would mean speedier implementation, it would also endanger the ultimate success of the austerity measures.

Lesson: In order to deliver the goal of cutting costs while also maintaining quality and safety of treatment, policy-makers need to consult doctors, managers and patients. If their participation is excluded austerity measures will do more harm than they need to, due to the lack of legitimacy and information that come from insufficient participation, and the health care system's functioning can be critically impeded.

Source: Repullo, 2016.

Integrity

Integrity mechanisms can make an organization rigid, as we see with many civil service systems, and politicians and managers consequently try to circumvent them with temporary hires, advisers, consulting firms, etc. Potentially, they can undermine the trust and intrinsic motivations that are among the best motivations for public service. There is inevitably a trade-off, which varies with the kind of job (a clerical assistant, a doctor, a senior epidemiologist and a political adviser will all have quite different job profiles, and integrity in hiring them will mean different things). Given the inevitable rigidity, many policy-makers and managers opt for case by case efforts to bend the rules in order to hire a given person or make a particular decision, but there is often a case for addressing the problem of rigid rules in general. Endless documentation of travel expenses, for example, can often be replaced by very clear accountability for outputs and budgetary control. It is hard to have clear delivery of outputs on budget, while also failing on integrity, which is why accountability can support integrity as well as vice versa.

Box 6 demonstrates the impact of integrity in housing policy on public health. Housing quality, affordability and housing insecurity all contribute significantly to health issues by affecting stress, respiratory diseases and sometimes damaging intelligence, behaviour and development in children (Willison, 2017). Clear and clearly written legislative mandates and procedures are examples of integrity mechanisms that can minimize health detriments that can be linked to housing.

Box 6: TAPIC in practice: integrity in housing policy: impact on public health

What is the governance problem? A collapse in organizational integrity in Flint, Michigan,'s government led to the unnecessary consumption of contaminated water by Flint's residents (Willison, 2017).

What are the potential tools to tackle this problem? The residents of Flint could have benefited from *clear and clearly written legislative mandates* and *procedures*. These could have forced the Michigan State Government, the City of Flint and the federal Environmental Protection Agency to provide information to the residents about the condition of Flint's housing and water infrastructure, the effects of the deteriorated infrastructure on water quality and the effects of consuming the affected water on the health of residents (Willison, 2017). The damage to public health is disproportionately carried by lower-income residents who can only afford lower-quality housing where the infrastructure is comparatively worse. The lack of explicit procedures to provide information allowed policy-makers to shift responsibilities and essentially not to do their jobs. In a policy area such as housing, which has such a direct impact on public health, this can and has led to considerable public health detriments.

Lesson: Integrity in managing housing is crucial to minimizing the health detriments that can be linked to housing. In order to achieve integrity existing government structures' mandates need to be clearly stated, and backed up with specific procedures in order to ensure that public health protection is enhanced.

Source: Willison, 2017.

Capacity

Policy capacity does not mean the capacity to deliver health services. Rather, it means the capacity to deliver health policies: to identify issues, formulate policies, operate large-scale stakeholder and public consultations (formal and informal), shepherd policies through the decision-making and implementation processes, and then monitor and evaluate them. It is all too easy for a government to focus on health care system issues, such as hiring more doctors and nurses, at the expense of the capacity of their own health ministry. Notably, weak capacity can lead to bad bargains when a negotiating ministry is simply outperformed by private sector or professional counterparts (as frequently happens with public-private partnerships even in rich and sophisticated countries) (Lieberherr, Maarse & Jeurissen, 2016). It is not hard to imagine a scenario in which the losses from a badly negotiated private finance initiative (PFI) hospital could easily have paid for the policy capacity needed to avoid the bad contract in the first place.

Investment in capacity is rarely a bad idea, though it can look (or be made to look) bad for politicians. The worst that happens if there is too much capacity is that governments produce more research and publications, more risk analyses and gap analyses, more international lesson-drawing and more reviews of management. Given that information can be shrugged off by politicians, this is not much of a problem. There is a cost, but the cost of a few policy analysts in the health ministry or federation of payers or providers is a rounding error in the scale of health budgets, even if they are not very competent. There is really little or no downside in investing in policy capacity. Insofar as there is a reason not to have capacity, it is in political decisions.

Politicians seeking to make a point about "waste" will often decide not to invest in capacity, and well intentioned politicians might view hiring a nurse as a better decision than hiring an analyst. Interest groups will often cheer their decisions, since uninformed politicians are easier to convince with cheap talk of the sort professional staffers could see through.

Box 7 shows the benefits of enhanced capacity for health technology assessment (HTA) by using research and analysis. HTA bodies such as the National Institute for Health and Care Excellence (NICE) have a wide-reaching impact on health care systems through their recommendations on new treatments. Their recommendations cannot be delayed and should not be too complex to implement.

Box 7: TAPIC in practice: capacity for health technology assessment and its role in the work of NICE

What is the governance problem? NICE needs very high in-house capacity to approve only scientifically robust and cost-effective treatments, but also needs to reach decisions quickly.

What are the tools to tackle this problem? NICE places great emphasis on *research and analysis capacity*. This ensures that NICE's decisions are sufficiently researched, tested and modelled. NICE's in-house expertise in evidence-analysis process, such as, for example, decision modelling, health economics and public health, is probably unsurpassed among technology assessment bodies across the world (Williams, 2016). However, it should be noted that the considerable concentration of expert staff and capacity at NICE is known to have led to lengthy appraisals, which has delayed access to new treatments. This has been criticized by a 2007 House of Commons Select Committee (Williams, 2016). This stresses one of the trade-offs of high capacity for policy-making. When the concentration of expertise is too high, delayed decision-making grows increasingly likely. Another issue in NICE's work has been the slow rate of implementation of its recommendation. Here we can question whether NICE's expert recommendations have grown too intricate to be complied with, because they reflect the great concentration of experts at NICE.

Lesson: HTA bodies, such as NICE, need sufficient levels of research and analysis capacities. Their work depends fundamentally on their ability to evaluate and assess new treatments and their cost. Without sufficient research and analysis capacity, HTA bodies' recommendations could be under-researched and potentially dangerous. However, HTA bodies also need to deliver recommendations within reasonable time limits, and their policies need to be executable, and not overly complicated.

Source: Williams, 2016.

Conclusions: changing how societies make and implement policies can improve health and health care

The core finding of our literature review and commissioned research is that governance matters and can be improved for policy success. While governance literature is often beset by abstraction, linguistic confusion and unclear normative agendas, it allowed us to identify five domains in which problems arise and different instruments work. These domains – transparency, accountability, participation, integrity, and capacity – are the core of the TAPIC model. The objective of the TAPIC model is to improve policy effectiveness by identifying governance obstacles, as well as reducing the likelihood that impractical, illegal, under-resourced or otherwise unworkable policies are adopted.

The usefulness of TAPIC lies in identifying problems in existing systems in order to remedy them, and in identifying potential problems in policies under consideration in order to address them before they can undermine the policy. If a policy is not working, or a potential policy is being considered, policy-makers can ask themselves: is there a governance issue, and, if so, in which of the domains of TAPIC may it lie? Once one or more domains are identified, it is possible to start to look for tools to address the specific problems. Looking at all the governance goals in Table 1 might counsel despair, since implementing a framework for "good governance" overall is a big and thankless mission. But viewing governance as discrete problems in one or more domains is a way to link it tightly to policy problems and specific contexts in the pursuit of the kinds of solutions in Table 2.

Policy-makers and policy advocates, finally, should think about governance as part of any policy process. Policies are not self-implementing and policy designers can never legislate every particularity. Instead, the hope for good and well implemented policy is to create governance that identifies and avoids problems by design.

Annex

Boxes A1–A5 provide further examples of practical application of the TAPIC framework.

Box A1: TAPIC in practice: international trade and transparency

What is the problem? Trade policies affect determinants of health as well as the options and resources available to health policy-makers (Jarman, 2017).

What is the governance problem? International trade negotiations in the US and the EU are crafted outside the public's view, which impedes transparency.

What are the tools to tackle this problem? Trade negotiations' transparency can be improved if negotiators provide *clear and useful public information.* However, negotiations are a careful balance between demands, imposition, bluffing, acquiescence and compromising. Publically sharing documents which reflect who yielded and who won would jeopardize negotiators' positions and can only harden their position, making compromise more elusive. This makes sharing clear and useful public information particularly difficult (Jarman, 2017).

Transparency can be an issue even for senior officials such as elected representatives and heavily vetted stakeholders. They have been known to be forced to access draft texts by viewing them in a secure room, under supervision, without support from staffers or the ability to copy the text in any way (Jarman, 2017). Even though these hurdles to transparency are present in both the US and the EU, the European Union does provide more transparency on negotiation documents, compared to global standards.

Lesson: Since the nature of international trade negotiations precludes sharing negotiation details with the broader public, the health implications of trade deals can be overlooked during negotiations. Trade experts need to be advised on potential red flags to consider when negotiating trade deals. This will increase awareness among trade negotiators and enhance public health considerations. European Union trade policy has been among the most progressive in participation and could be imitated (Jarman 2017).

Box A2: TAPIC in practice: the challenge of researching synthetic biology whilst maintaining accountability

What is the problem? Advancements in synthetic biology research can bring new drugs and vaccines, but they also pose the threat of altering the environment by introducing genetically changed organisms.

What is the governance problem? Accountability in synthetic biology research is difficult to build due to the lack of explicit regulatory instruments or risk management protocols (Trump, 2017).

What are the tools to tackle this problem? *Regulations and codes of conduct* are by far the most direct tools to ensuring accountability in innovative research. The United States, the European Union and Singapore rely on regulatory bodies bound by legislation and codes. However, in all three of these cases, there are additional mechanisms that guarantee accountability. In the United States independent watchdogs can request information through Freedom of Information Act (FOIA) requests to obtain transcripts and other knowledge relevant to regulator decisions and actions (Trump, 2017). In the European Union Member States ensure that rules are being followed, and can be sanctioned by the Court of Justice of the European Union. In Singapore the state's soft authoritarian characteristics are reflected in very low transparency but highly efficient internal government watchdogs which maintain accountability through adherence to constitutional and legislative standards established within hard law (Trump, 2017).

Lesson: Accountability needs to be vigorously enforced in synthetic biology research to ensure that researchers carry out their work responsibly and do not blindly pursue their profit motives. Regulations and codes of conduct are the most basic tools to achieve this, although they can be complemented by additional, country-specific enforcement mechanisms. Legislation is trickier since it can be too rigid to adapt to quickly changing technologies and risk assessments.

Box A3: TAPIC in practice: participating in primary care reform in Bosnia and Herzegovina (BiH) and Estonia

What is the problem? The reform of primary care in BiH and Estonia was carried out with a varying degree of international assistance and with differing success.

What is the governance problem? Public authorities in BiH had limited in-house skills to make critical decisions and tended to over-rely on international advisers, whereas in Estonia the reforms were locally initiated (Kyratsis, 2016). As a result, in BiH participation of local actors was very poor, whereas in Estonia domestic stakeholders drove the reforms.

What are the tools to tackle this problem? Estonian decision-makers benefited from *partnerships* with other organizations. The policies behind the reform were developed in the context of collaboration between Estonian clinicians and academics and the international primary care academic community. The contact with international stakeholders, who have had experience with primary care structures, their functioning and potential issues in setting them up, complemented the input from Estonian practitioners. Crucially, the Estonian stakeholders kept control over the reforms which maintained national ownership and precluded the reforms from being perceived as externally imposed.

Although policy-makers in Bosnia and Herzegovina were also influenced by foreign experts, the reforms unfolded in a different way. The reforms comprised a top-down approach to change with local views often not being taken into account, which contributed to the slow implementation with a lack of perceived ownership of the reforms by local institutions, and limited local participation by municipalities who owned the Primary Health Care Centres (Kyratsis, 2016).

Lesson: When carrying out reform, partnerships with other (especially foreign) organizations is important, but not imperative. Domestic peculiarities, experience and practice need to be fed in through stakeholders' participation or ownership of the reforms will be compromised and success will suffer. If organizations in a health care system are held accountable for reform outcomes, their partnerships (participation) can greatly improve decision-making and implementation.

Box A4: TAPIC in practice: coal's impact on health and integrity in Poland

What is the problem? The Polish government is overly reliant on coal for the production of electricity, which has devastating effects on public health in the country (Vasev, 2017).

What is the governance problem? The government is making politically motivated staff changes in the energy sector, which has compromised integrity.

What are the potential tools to tackle this problem? The situation in Poland can benefit from the application of *clarity on organizational roles and purposes*. After assuming control at the end of 2015, the newly elected Law and Justice Party (PiS) replaced almost all managers of state-run energy companies (Vasev, 2017). Dawid Jackiewicz, Minister of the Treasury, has defended the sackings saying "Managers of state companies 'can't be calm' about keeping their jobs if they don't put the interests of the country before those of the corporations they lead." (Vasev, 2017). This attitude shows that the dismissals were politically motivated and the performance of the managers was irrelevant to their positions. The PiS government's strong emphasis on coal power in Poland and its resistance to renewable energy are compromising public health. If energy companies' managers were to shift investments away from coal, towards renewables (as is increasingly happening around the world), they would lose their jobs. In this situation the Polish government is violating integrity and preventing improvement of air quality.

Lesson: Energy companies' managers need to have clarity and security for their roles even when they do not follow the government's political agenda. Additionally, public health authorities cannot continue to be decoupled from the government's political programme.

Box A5: TAPIC in practice: improving childcare in the UK and the role of policy capacity

What is the problem? Since the 1990s infant mortality prevention in the United Kingdom has been slipping behind the country's counterparts (Wolfe et al., 2017).

What is the governance problem? The responsibility for infant mortality is shared between government departments and as a result not enough policy capacity is attributed to it.

What are the potential tools to tackle this problem? In the United Kingdom the responsibility for infant mortality is split between the Department for Education (DoE) and the Department of Health and Social Care (DHSC). Within DHSC, children and young people are one of several health priorities, competing against other interests such as those of the elderly, who have greater political capital (Wolfe et. al., 2017). Even though DoE has a more explicit mandate to take care specifically of children, it has been shown that their capacity for policy directed specifically towards children's health can be lost (Wolfe et. al., 2017). As a result, to tackle the issue of infant mortality, the civil service needs to enhance its *research/analysis capacity* dedicated specifically to the issue. There can be no meaningful improvement of mortality rates as long as neither one of the departments holds enough capacity to deal with the issue in a meaningful and effective way. Recent austerity-related cuts in the departmental staff underline the need to enhance research and analysis capacity.

Lesson: Whilst growing the bureaucracy is never a popular move, the alternative would see the United Kingdom continuously falling in international rankings. Political leadership is needed to grow the in-house policy capacity in order to tackle this issue.

References

Barbazza E, Tello JE (2014). A review of health governance: definitions, dimensions and tools to govern. *Health Policy*, 116:1–11.

Best J (2005). *The limits of transparency: ambiguity and the history of international finance.* Ithaca: Cornell University Press.

Bevir M (2010). *The SAGE handbook of governance.* London: Sage Publications.

Brown C, Harrison D (2013). *Governance for health equity in the European region.* Copenhagen: WHO Regional Office for Europe.

Buse K, Hein W, Drager N (eds) (2009). *Making Sense of Global Health Governance: A Policy Perspective.* Basingstoke: Palgrave Macmillan.

Canadian Foundation for Healthcare Improvement (2003). User fees would stop waste and ensure better use of the health care system. *Journal of Health Services Research & Policy*, 8:125–6.

Canadian Foundation for Healthcare Improvement (2014). Myth: User fees ensure better use of health services. *Journal of Health Services Research & Policy*, 19:121–3.

Cylus J, Wouters O, Kanavos P (2016). Understanding the role of governance in the pharmaceutical sector: from laboratory to patient. In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better Policies, Stronger Performance.* Maidenhead: Open University Press, pp. 173–85.

Ehrlich SD (2011). *Access points: an institutional theory of policy bias and policy complexity.* New York: Oxford University Press.

European Commission (2013). Study on Corruption in the Healthcare Sector (HOME/2011/ISEC/PR/047-A2). Brussels: European Commission.

European Commission (2014). EU Anti-Corruption Report (COM(2014)38). Brussels: European Commission.

Evans RG, Barer ML, Stoddart GL (1995). User Fees for Health Care: Why a Bad Idea Keeps Coming Back (Or, What's Health Got to Do With It?). *Canadian Journal on Aging/La Revue canadienne du vieillissement*, 14:360–90.

Ferguson J (1990). *The anti-politics machine: development, depoliticization, and bureaucratic power in Lesotho.* Cambridge: Cambridge University Press.

Frenk J, Moon S (2013). Governance challenges in global health. *New England Journal of Medicine*, 368:936–42.

Fung A (2006). Varieties of participation in complex governance. *Public Administration Review*, 66:66–75.

Greer AL et al. (2002). Bringing the patient back in. *International Journal of Technology Assessment in Health Care*, 18:747–61.

Greer SL (2016). Intergovernmental governance for health: federalism, decentralization and communicable diseases. In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better Policies, Stronger Performance.* Maidenhead: Open University Press, pp. 187–205.

Greer SL, Singer PM (2016). The United States confronts Ebola: Suasion, executive action, and fragmentation. *Health Economics, Policy and Law*, 12(1):81–104.

Greer SL, Vasev N, Wismar M (2017). Fences and ambulances: Intersectoral governance for health. *Health Policy*, 121:1101–4.

Greer SL, Wismar M, Figueras J (eds) (2016). *Strengthening Health System Governance: Better Policies, Stronger Performance.* Maidenhead: Open University Press.

Greer SL et al. (2016). Governance: a framework. In: Greer SL, Wismar M, Figueras J (eds). Strengthening Health System Governance: Better Policies, Stronger Performance. Maidenhead: Open University Press, 27–56.

Grindle MS (2004). Good enough governance: poverty reduction and reform in developing countries. *Governance*, 17:525–48.

Grindle MS (2007). Good enough governance revisited. *Development Policy Review*, 25:533–74.

Jarman H (2017). Trade policy governance: What health policymakers and advocates need to know. *Health Policy*, 121(11):1105–12.

Kickbusch I, Gleicher D (2011). Governance for health in the 21st century. A study conducted for the WHO Regional Office for Europe.

Kirigia JM, Kirigia DG (2011). The essence of governance in health development. *International Archives of Medicine*, 4:11.

Kyratsis Y (2016). Issues of governance in implementing complex policy innovations: lessons from primary health care reforms in Estonia and Bosnia and Herzegovina. In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better policies, stronger performance.* Maidenhead: Open University Press, pp. 223–44.

Lieberherr E, Maarse H, Jeurissen P (2016). The governance of public-private partnerships: lessons from the United Kingdom and Germany. In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better policies, stronger performance.* Maidenhead: Open University Press, pp. 143–58.

Lillvis DF, Greer SL (2016). Strategies for policy success: Achieving 'good' governance. In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better Policies, Stronger Performance.* Maidenhead: Open University Press, pp. 57–84.

Liverani M, Hanvoravongchai P, Coker RJ (2012). Communicable diseases and governance: a tale of two regions. *Global Public Health*, 7:574–87.

McMann KM (2018). *Corruption as a last resort: Adapting to the market in Central Asia.* Ithaca: Cornell University Press.

Page EC (2010). Accountability as a bureaucratic minefield: lessons from a comparative study. *West European Politics*, 33:1010–29.

Page EC (2012). The European Commission Bureaucracy: Handling Sovereignty through the Back and Front Doors. In: Hayward J, Wurzel R (eds). *European Disunion: Between Sovereignty and Solidarity.* Basingstoke: Palgrave Macmillan, pp. 82–98.

Page EC, Jenkins B (2005). *Policy Bureaucracy: Government with a cast of thousands.* Oxford: Oxford University Press.

Quaglio G et al. (2018). An overview of future EU health systems. An insight into governance, primary care, data collection and citizens' participation. *Journal of Public Health*,40(4):891–8.

Radin D (2015). Why health care corruption needs a new approach. *Journal of Health Services Research & Policy*, 21:212–14.

Repullo JR (2016). Austerity: reforming systems under financial pressure. In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better Policies, Stronger Performance.* Maidenhead: Open University Press, pp. 207–22.

Rohrer K, Rajan D (2016). Population consultation on needs and expectations. *Strategizing National Health in the 21st Century: A Handbook*. Geneva: World Health Organization.

Rönnerstrand B, Lapuente V (2017). Corruption and use of antibiotics in regions of Europe. *Health Policy*, 121:250–6.

Rothstein B (2011). *The Quality of Government: Corruption, Social Trust and Inequality in International Perspective.* Chicago: University of Chicago Press.

Sabel CF, Simon WH (2006). Destabilization Rights: How Public Law Litigation Proceeds. *Harvard Law Review*, 117:1016.

Siddiqi S et al. (2009). Framework for assessing governance of the health system in developing countries: gateway to good governance. *Health Policy*, 90:13–25.

Stewart E (2013). What is the point of citizen participation in health care? *Journal of Health Services Research & Policy*, 18:124–6.

Stewart EA (2016). *Publics and Their Health Systems: Rethinking Participation.* Basingstoke: Palgrave Macmillan.

Strach P (2016). *Hiding Politics in Plain Sight: Cause Marketing, Corporate Influence, and Breast Cancer Policymaking.* New York: Oxford University Press.

Thomas MA (2015). *Govern Like Us: U.S. Expectations of Poor Countries.* New York: Columbia University Press.

Trump BD (2017). Synthetic biology regulation and governance: Lessons from TAPIC for the United States, European Union, and Singapore. *Health Policy*, 121(11):1139–46.

Uslaner EM (2008). *Corruption, inequality, and the rule of law.* Cambridge: Cambridge University Press.

Vasev N (2017). Governing energy while neglecting health: the case of Poland. *Health Policy*, 121(11):1147–53.

Warner CM (2007). *The Best System Money Can Buy: Corruption in the European Union.* Ithaca: Cornell University Press.

Williams I (2016). The governance of coverage in health systems: England's National Institute for Health and Care Excellence (NICE). In: Greer SL, Wismar M, Figueras J (eds). *Strengthening Health System Governance: Better Policies, Stronger Performance.* Maidenhead: Open University Press, pp. 159–71.

Willison C (2017). Shelter from the Storm: Roles, responsibilities and challenges in United States housing policy governance. *Health Policy*, 121(11):1113–23.

Wolfe I et al. (2017). Child survival in England: Strengthening governance for health. *Health Policy*, 121(11):1131–8.

Youde J (2012). *Global health governance.* Cambridge: Polity Press.

Joint Policy Briefs

1. How can European health systems support investment in and the implementation of population health strategies?
   David McDaid, Michael Drummond, Marc Suhrcke
2. How can the impact of health technology assessments be enhanced?
   Corinna Sorenson, Michael Drummond, Finn Børlum Kristensen, Reinhard Busse
3. Where are the patients in decision-making about their own care?
   Angela Coulter, Suzanne Parsons, Janet Askham
4. How can the settings used to provide care to older people be balanced?
   Peter C. Coyte, Nick Goodwin, Audrey Laporte
5. When do vertical (stand-alone) programmes have a place in health systems?
   Rifat A. Atun, Sara Bennett, Antonio Duran
6. How can chronic disease management programmes operate across care settings and providers?
   Debbie Singh
7. How can the migration of health service professionals be managed so as to reduce any negative effects on supply?
   James Buchan
8. How can optimal skill mix be effectively implemented and why?
   Ivy Lynn Bourgeault, Ellen Kuhlmann, Elena Neiterman, Sirpa Wrede
9. Do lifelong learning and revalidation ensure that physicians are fit to practise?
   Sherry Merkur, Philipa Mladovsky, Elias Mossialos, Martin McKee
10. How can health systems respond to population ageing?
    Bernd Rechel, Yvonne Doyle, Emily Grundy, Martin McKee
11. How can European states design efficient, equitable and sustainable funding systems for long-term care for older people?
    José-Luis Fernández, Julien Forder, Birgit Trukeschitz, Martina Rokosová, David McDaid
12. How can gender equity be addressed through health systems?
    Sarah Payne
13. How can telehealth help in the provision of integrated care?
    Karl A. Stroetmann, Lutz Kubitschke, Simon Robinson, Veli Stroetmann, Kevin Cullen, David McDaid
14. How to create conditions for adapting physicians' skills to new needs and lifelong learning
    Tanya Horsley, Jeremy Grimshaw, Craig Campbell
15. How to create an attractive and supportive working environment for health professionals
    Christiane Wiskow, Tit Albreht, Carlo de Pietro
16. How can knowledge brokering be better supported across European health systems?
    John N. Lavis, Govin Permanand, Cristina Catallo, BRIDGE Study Team
17. How can knowledge brokering be advanced in a country's health system?
    John. N Lavis, Govin Permanand, Cristina Catallo, BRIDGE Study Team
18. How can countries address the efficiency and equity implications of health professional mobility in Europe? Adapting policies in the context of the WHO Code and EU freedom of movement
    Irene A. Glinos, Matthias Wismar, James Buchan, Ivo Rakovac
19. Investing in health literacy: What do we know about the co-benefits to the education sector of actions targeted at children and young people?
    David McDaid
20. How can structured cooperation between countries address health workforce challenges related to highly specialized health care? Improving access to services through voluntary cooperation in the EU.
    Marieke Kroezen, James Buchan, Gilles Dussault, Irene Glinos, Matthias Wismar
21. How can voluntary cross-border collaboration in public procurement improve access to health technologies in Europe?
    Jaime Espín, Joan Rovira, Antoinette Calleja, Natasha Azzopardi-Muscat , Erica Richardson,Willy Palm, Dimitra Panteli
22. How to strengthen patient-centredness in caring for people with multimorbidity in Europe?
    Iris van der Heide, Sanne P Snoeijs, Wienke GW Boerma, François GW Schellevis, Mieke P Rijken. On behalf of the ICARE4EU consortium
23. How to improve care for people with multimorbidity in Europe?
    Mieke Rijken, Verena Struckmann, Iris van der Heide, Anneli Hujala, Francesco Barbabella, Ewout van Ginneken, François Schellevis. On behalf of the ICARE4EU consortium
24. How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe?
    Verena Struckmann, Wilm Quentin, Reinhard Busse, Ewout van Ginneken. On behalf of the ICARE4EU consortium
25. How can eHealth improve care for people with multimorbidity in Europe?
    Francesco Barbabella, Maria Gabriella Melchiorre, Sabrina Quattrini, Roberta Papa, Giovanni Lamura. On behalf of the ICARE4EU consortium
26. How to support integration to promote care for people with multimorbidity in Europe?
    Anneli Hujala, Helena Taskinen, Sari Rissanen. On behalf of the ICARE4EU consortium
27. How to make sense of health system efficiency comparisons?
    Jonathan Cylus, Irene Papanicolas, Peter C Smith
28. What is the experience of decentralized hospital governance in Europe?
    Bernd Rechel, Antonio Duran, Richard Saltman
29. Ensuring access to medicines: How to stimulate innovation to meet patients' needs?
    Dimitra Panteli, Suzanne Edwards
30. Ensuring access to medicines: How to redesign pricing, reimbursement and procurement?
    Sabine Vogler, Valérie Paris, Dimitra Panteli
31. Connecting food systems for co-benefits: How can food systems combine diet-related health with environmental and economic policy goals?
    Kelly Parsons, Corinna Hawkes
32. Averting the AMR crisis: What are the avenues for policy action for countries in Europe?
    Michael Anderson, Charles Clift, Kai Schulze, Anna Sagan, Saskia Nahrgang, Driss Ait Ouakrim, Elias Mossialos
33. It's the governance, stupid! TAPIC: a governance framework to strengthen decision making and implementation
    Scott L. Greer, Nikolai Vasev, Holly Jarman, Matthias Wismar, Josep Figueras

The European Observatory has an independent programme of policy briefs and summaries which are available here: http://www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries

World Health Organization
Regional Office for Europe
UN City, Marmorvej 51,
DK-2100 Copenhagen Ø,
Denmark
Tel.: +45 39 17 17 17
Fax: +45 39 17 18 18
E-mail: postmaster@euro.who.int
web site: www.euro.who.int

The **European Observatory on Health Systems and Policies** is a partnership that supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in the European Region. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues. The Observatory's products are available on its web site (http://www.healthobservatory.eu).

Print ISSN
1997-8065

Web ISSN
1997-8073