

Regional Committee for Europe

EUR/RC61/Inf.Doc./6

Sixty-first session

Baku, Azerbaijan, 12-15 September 2011

Provisional agenda item 6(a)

ORIGINAL: ENGLISH

18 August 2011

Governance for health in the 21st century: a study conducted for the WHO Regional Office for Europe

Contents

ра	ige
Governance for health in the 21st century: a study conducted for the WHO Regional Office for Europe	
Foreword	iv
Acknowledgements	v
Executive summary	vi
1. 21st century governance for health and well-being	1
1.1 Focus of the study	
1.2 Contextual drivers	
1.2.1 Global interdependence: the context for governing health has changed	
1.2.2 Complexity: Our understanding of health has changed and expanded	
1.2.3 Co-production: The new role of citizens and civil society	
2. Governance	14
2.1 Three key governance dynamics	
2.1.1 Diffusion of governance	
2.1.2 Expansion of monitory democracy	
2.1.3 'Shared value'	
2.2 The changing nature of policy-making	
3. Governance for health and well-being	31
4. Good governance for health and well-being	
4.1 What is good governance?	36
4.2 Role of guiding value systems	37
4.3 The relationship between values and evidence	41
5. Smart governance for health and well-being.	43
5.1 Introduction to smart governance	
5.2 Five types of smart governance for health and well-being	45
5.2.1 Governing through collaboration	
5.2.2 Governing through citizen engagement	
5.2.3 Governing by a mix of regulation and persuasion	
5.2.4 Governing through independent agencies and expert bodies	
5.2.5 Governing by adaptive policies, resilient structures and foresight	64
6. New governance for health	
6.1 New role for the health sector	70
6.2 Political engagement and leadership	72
6.3 Conclusions and recommendations to the new European policy for health, Health 2020	73

Glossary	77
Bibliography	80

© World Health Organization 2011

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. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

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.

Foreword

Adaptation of governance is driven by the changing nature of the societies in which we live and the challenges they face. My goal as Regional Director is to ensure that health is repositioned as an overarching goal shared by everyone. That is why the WHO Regional Office for Europe commissioned a study on governance for health in the 21st century.

Mind-sets on how we view and address health and its determinants have shifted. Two challenges go hand in hand: (1) the governance of the health system and health systems strengthening, which are what we refer to as 'health governance'; and (2) the joint action of health and non-health sectors, of the public and private sectors and of citizens for a common interest in what we call 'governance for health'. The latter is the subject of this study.

Living in a 'knowledge society' means that power and authority are no longer concentrated in government. Informed citizens, conscientious businesses, independent agencies and expert bodies increasingly have a role to play. Nevertheless, governments and health ministries continue to be important in managing governance for health, setting norms, providing evidence and 'making the healthier choice the easier choice'.

We define governance for health and well-being as 'the attempts of governments and other actors to steer communities, whole countries or even groups of countries in the pursuit of health as integral to well-being through both whole-of-government and whole-of-society approaches'. The entire society must be understood as being responsible for its health.

I see this as essential. Pathways to good and poor health can be non-linear and hard to predict, and health is increasingly understood as a product of complex, dynamic relations among distinct types of determinants. The health system alone does not have the tools to solve all our health challenges.

The highest levels of government and society must recognize that health is a common objective and that achieving it requires coherence. This study on governance for health will form the basis for the Health 2020 Regional policy in terms of how governments are moving in this direction. It is informed by a set of background papers prepared by eminent experts, which provide further detail on the issues raised. This study will be expanded in a second phase to provide further guidance, tools and case studies.

Zsuzsanna Jakab WHO Regional Director for Europe

Acknowledgements

This study was led by Ilona Kickbusch, Director, Global Health Programme, Graduate Institute of International and Development Studies, Geneva, Switzerland, and was written by Ilona Kickbusch and David Gleicher, Project Officer, Global Health Europe.

The study was informed by seven expert background papers, which will be published subsequently. Preliminary drafts can be obtained by contacting the Health 2020 secretariat at the WHO Regional Office for Europe. The authors and titles of the papers are:

- Mr Edward Andersson, Deputy Director, Involve, London, England: *Engagement in health: What role for the public and patients?*
- Professor Maged N. Kamel Boulos, Senior Member, Institute of Electrical and Electronics Engineers, Associate Professor, Health Informatics, Faculty of Health, University of Plymouth, England: *Social media and Web 2.0*: How will they impact governance for health?
- Dr Armin Fidler, Lead Adviser, Health Policy and Strategy, Human Development Network, World Bank, Washington DC, USA; and Ms Tünde Szabó, Healthcare Consultant, UNAIDS, Geneva, Switzerland: *Bridging the gap: Governance challenges for the health sector in the countries of CEE and the former Soviet Union.*
- Dr David McQueen, Senior Biomedical Research Scientist and Associate Director for Global Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America: Value base, ethics and key challenges of health governance for health protection, prevention and promotion.
- Professor Vural Ozdemir, Associate Professor, Centre of Genomics and Policy, Department of Human Genetics, Faculty of Medicine, McGill University, Montréal, Québec, Canada; B.M. Knoppers, Director, Centre of Genomics and Policy, Centre de Recherche en Droit Publique, Law Faculty, University of Montreal, Montréal, Québec, Canada: From government to anticipatory governance: Responding to the challenges of innovation and emerging technologies.
- Dr Olivier Raynaud, Senior Director, Head, Global Health and Healthcare Industries, World Economic Forum, Geneva, Switzerland: *Health governance in the 21st century: Transforming the way we manage health.*
- Professor Göran Tomson, Professor of International Health Systems Research, Division of Global Health (IHCAR), Karolinska Institutet and Director of the Doctoral Programme of the Medical Management Centre, Department of Learning, Informatics, Management and Ethics (LIME), Karolinska Institutet, Stockholm, Sweden; Ms Jessica Påfs, Division of Global Health (IHCAR), Karolinska Institutet, Stockholm, Sweden; and Anders Diseberg Medical Management Centre, Department of Learning, Informatics, Management and Ethics (LIME), Karolinska Institutet, Stockholm, Sweden: The challenges of multi-level governance: the impact of global and regional processes on health and health systems in Europe.

The authors would like to thank all those who gave valuable feedback to the study, in particular: Agis Tsouros, Erio Ziglio, Matthias Wismar, Richard Alderslade, Srdan Matic, Ann-Lise Guisset, Amiran Gamkrelidze, Mihaly Kökény, Thomas Zeltner, Harry Burns, Gaudenz Silberschmidt, Piroska Ostlin and Rüdiger Krech. The study would not have been possible without the support of the project team, and special thanks are due to Michaela Told, Kristina Petrova and Monika Rimmele. The definition of 'governance for health' owes much to the work of S. Bell and A. Hindmoor.

The study was funded by the Federal Office of Public Health within the Federal Department of Home Affairs of the Swiss Government.

Executive summary

In this study, 'governance for health' is defined as the attempts of governments or other actors to steer communities, countries or groups of countries in the pursuit of health as integral to well-being through both a 'whole-of-government' and a 'whole-of-society' approach. It positions health and well-being as key features of what constitutes a successful society and a vibrant economy in the 21st century and grounds policies and approaches in values such as human rights and equity. Governance for health promotes joint action of health and non-health sectors, of public and private actors and of citizens for a common interest. It requires a synergistic set of policies, many of which reside in sectors other than health as well as sectors outside of government, which must be supported by structures and mechanisms that enable collaboration. It gives strong legitimacy to health ministers and ministries and to public health agencies, to help them reach out and perform new roles in shaping policies to promote health and well-being.

Governance

In the 21st century, health is mainly about people and how they live and create health in the context of their everyday lives. This requires a new perspective on the governance of health and well-being. To date, much of the discussion on 'health in all policies' and intersectoral action for health starts from the health perspective and builds on the evidence that the most important determinants of health are found in sectors other than health. In this study, we chose first to review the main changes that have occurred in governance, in order to position the challenges for health in a broader societal frame. Many of these challenges reflect the seminal shift from industrial to knowledge-based societies. The conclusion of the review is that all policy fields—not only health—are confronted with the necessity of reforming their way of working and of experimenting with new approaches to policy-making and implementation at global, regional, national and local levels. This overall shift in modern policy-making must be understood if 'whole-of-government' and 'whole-of-society' approaches for health are to be implemented. Health is not the only policy field that requires action in other sectors, thus opening the opportunity for synergistic policies in all directions.

New approaches to governance are driven by the changing nature of the challenges faced by 21st century societies, of which health is only one and which is not always given priority. Most of these challenges, however, have significant health impacts, which have so far not been considered sufficiently. The challenges include systemic shocks, such as natural disasters and disease outbreaks, as well as longer-term processes, such as urbanization, epidemiological and demographic transitions, food insecurity, climate change and widening economic disparities. Unique to our times are the synergistic global interconnections among these large-scale challenges (and opportunities) and the interdependence of most of the solutions. The complexity of these so-called 'wicked problems' calls for systems approaches and networked responses at all levels and will force policy-makers to move out of their silos compartments.

The result has been the diffusion of governance, from a state-centred model to a collaborative one, in which governance is co-produced by a wide range of actors at the level of the state (e.g. ministries, parliaments, agencies, authorities, commissions), society (e.g. businesses, citizens, community groups, global media including networked social media, foundations) and supranationally (e.g. the European Union, the United Nations). This shift in governance is reflected in the varied approaches to health, with environment and health frequently at the forefront of multistakeholder developments. Governance is also increasingly conducted across levels, from local to global; regional and local actors therefore have increasing relevance, making effective multilevel governance as important as cross-sectoral and participatory governance. Research indicates that the diffusion of governance is not a 'zero-sum game' between the state and society but can make the state more effective. As power becomes more

widely distributed in society, the role of the state changes but remains critical and even expands into new areas.

Key messages: governance and its context

- The governance challenges faced by the health sector are not unique: all sectors are experiencing major shifts.
- The contextual drivers of change are interdependence, complexity, co-production and Europe's transition from industrial to knowledge-driven societies.
- Wicked problems' require systems approaches that involve a wide range of society and multiple levels of governance, from local to global, with increasing relevance of regional and local levels.
- The new context leads to the new governance dynamics of diffusion, democratization and shared value.
- Health is a major macroeconomic factor and, increasingly, a critical component of business models and strategies. Businesses must reorient themselves towards strategies built on shared value, which can enhance their competitiveness while also advancing social agendas.
- The role of government in governance remains critical and is expanding in many areas of modern life.

Governance for health and well-being

Views are shifting, not only on how the state and society co-produce governance but also on how they view and address health and its determinants. Two challenges go hand in hand: (1) governance of the health system and health systems strengthening, which we refer to as 'health governance'; and (2) the joint actions of health and non-health sectors, of public and private sectors and of citizens for a common interest, which is what we call 'governance for health'. Health has become a critical macroeconomic and political factor throughout society; the result is that governments, businesses, communities and citizens increasingly engage in governance for health. It touches on their interests in many different ways. Health is considered a human right, an essential component of well-being, a global public good and an issue of social justice and equity. Health is also increasingly recognized as a property of other systems, such as the economy, the environment, education, transport and the food system. The recognition of health as a key factor for the economic prosperity of knowledge societies is gaining ground.

Health and well-being are critical components of good governance and, as such, constitute a social value in themselves. This is reflected prominently in the value of universal access to health care. Social values such as human rights, social justice, well-being and global public goods also guide governance for health and provide a 'value frame' within which to act. These are reflected in many proposed policies at national, European and global level. It is increasingly recognized that the major factors of ill health and the major assets for health are best addressed by engaging non-health sectors and actors through policies and initiatives at all levels of governance, with or without the involvement of the health sector. Some national governments have gained much experience in doing so. Supranational bodies are also engaging with actors beyond nation-states. At the local level, cities are using a wide range of innovative policy instruments to improve health and well-being. In the corporate sector, investment in employee health and community programmes and in healthy products and services is being recognized as a new business model. Initial experiences suggest that businesses can build 'shared value' by enacting policies to increase their competitive advantage while assuming social responsibility and supporting social growth. This will be a key challenge in the next decade, particularly in view of the worldwide epidemic of noncommunicable diseases.

Governance for health requires a synergistic set of policies, many of which reside in sectors other than health and outside of government and which must be supported by structures and mechanisms that facilitate collaboration. The engagement of people is a defining factor. The concept of 'governance for health' can best be illustrated as the culmination of three waves in the expansion of health policy, from intersectoral action, to healthy public policy, to the 'health in all policies' approach, all of which are now integrated in whole-of-government and whole-of-society approaches to health and well-being. These approaches not only emphasize better coordination and integration of government activities for health, but, by reaching beyond government, they contribute with others to overarching societal goals such as prosperity, well-being, equity and sustainability. They include accountability for health and equity through a diverse range of monitoring mechanisms.

Key messages: governance for health and well-being

- Governance for health and well-being is a central building block of good governance; it is guided by a value frame that includes health as a human right, a global public good, a component of well-being and a matter of social justice.
- The expanded understanding of health includes consideration of health as an emerging property of many societal systems; it therefore requires action in many systems, sometimes with and sometimes without the involvement of the health sector.
- Whole-of-government and whole-of-society approaches reflect this reality and are grounded in strategies that enhance 'joined-up' government, improved coordination and integration and diffusion of responsibility for health throughout government and society.
- Governance for health builds on experiences gained in the health arena with intersectoral action, healthy public policy and health in all policies.

Research indicates that a combination of governance approaches—hierarchical, dispersed and participatory—is needed for health and well-being. This combination might be up to twice as effective as the single most effective intervention, as reflected in many policy papers. While some countries have strengthened and expanded their public health activities to address 21st century health challenges more effectively, others must still move in this direction. This study, which is based on a review of case studies of new approaches to governance for health, contains five proposals for 'smart' governance for health, which should be combined in whole-of-government and whole-of-society approaches.

Governing through collaboration: collaboration is the new imperative. The study shows that lessons can be learnt from the rich literature on collaborative governance, including giving due consideration to the process and design of collaboration; the virtuous circle of communication, trust, commitment and understanding; the choice of tools and mechanisms; and transparency and accountability.

Governing through citizen engagement: public policy can no longer just be delivered. The study shows that successful governance for health requires co-production as well as the involvement and cooperation of citizens, consumers and patients. As governance becomes more widely diffused throughout society, working directly with the public can strengthen transparency and accountability. Partnering with and empowering the public are also crucial for ensuring that values are upheld. Technology, such as 'smart phones' and networked social media, empower citizens and change the ways that governments and health systems act, for example through digital and mobile health. Within the new, complex relations between state and society, participation, transparency and accountability become engines for innovation.

Governing through a mix of regulation and persuasion: governing is becoming more fluid, multilevel, multistakeholder and adaptive. The study shows that traditional hierarchical means of governance are increasingly being complemented by other mechanisms, such as 'soft power' and 'soft law', with expanding influence in an interdependent world. The mechanisms include self-regulation, governance by persuasion, alliances, networks and open methods of coordination as well the new role of citizens in monitory democracy. Health promotion approaches such as 'making the healthier choice the easier choice' are being reviewed because of the growing interest in nudge policies. At the same time, hierarchical multilevel regulations that extend from the global to the local level, such as the WHO Framework Convention on Tobacco Control (WHO, 2003) and many European Union regulations, are becoming more common, as are regulations that affect many dimensions of people's lifestyles and behaviour.

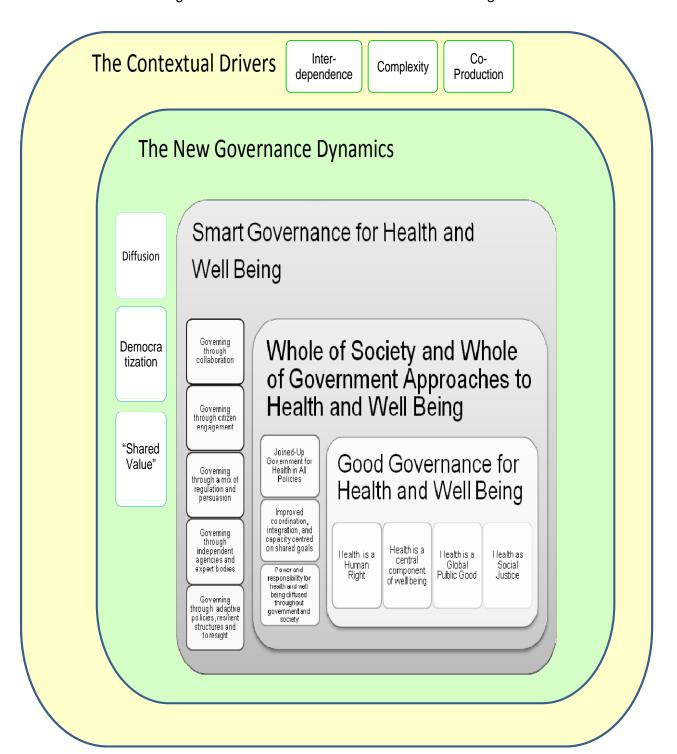
Governing through new independent agencies and expert bodies: evidence is critical in a knowledge society. The study shows that, as in other fields of governance, independent expert bodies, such as federal agencies, commissions, regulators and auditors, are playing increasingly vital roles in providing evidence, watching ethical boundaries, extending accountability and strengthening democratic governance in health, as related to privacy, risk assessment, quality control and health technology and health impact assessments. Their importance increases as we move to a knowledge society with more rapid innovation. The literature also indicates, however, that we must improve our metrics, for example, by including both objective and subjective measures, in order to capture what is happening to most people and to the most disadvantaged.

Governing through adaptive policies, resilient structures and foresight: 'Wicked problems' have no simple causes or solutions. The study shows that whole-of-government and whole-of-society approaches to health must be adaptive and must mirror the characteristics of complexity; decentralized decision-making and self-organizing social networking should make it possible for stakeholders to respond quickly to unanticipated events in innovative ways. Interventions should be iterative and integrate continual learning, multistakeholder knowledge-gathering and -sharing and mechanisms for automatic policy adjustment or for triggering deliberations, especially as policy interventions in one area can have unintended consequences in another. Given the long-term nature of many health problems, anticipatory governance also requires new forecasting methods. Studies indicate the value of promoting a wide variety of smaller-scale interventions at local and community levels for the same problem, as practised in many networks. Anticipatory governance with participatory foresight mechanisms can also increase social resilience by shifting policy focus from 'risks' to addressing more fundamental systemic challenges and deliberating the social aspects (e.g. values) of public policy and science (e.g. evidence) jointly.

Key messages: smart governance for health and well-being (Fig. 1)

- Smart governance for health and well-being is already being practised in Europe and in many other parts of the world. Governments are already approaching such governance in new and innovative ways.
- Smart governance for health and well-being reflects how governments address health challenges strategically, the choices they make about the mixture of 'hard' and 'soft' instruments to use, the angle from which they approach a challenge and the partners, which partners, at which levels of government and society they choose to engage and when.
- On the basis of a review of case studies of new approaches to governance for health, five types of smart governance for health are proposed for consideration, which should be combined in whole-of-government and whole-of-society approaches:
 - Governing by collaboration
 - Governing through citizen engagement
 - Governing by a mix of regulation and persuasion
 - Governing through independent agencies and expert bodies
 - Governing by adaptive policies, resilient structures and foresight

Fig. 1. Smart Governance for health and well-being



Source: authors.

Conclusions and recommendations for the Health 2020 process:

1. Positioning health

First and foremost people's health and well-being must be a goal for the whole of government and whole of society. The new European policy for health - Health 2020, must therefore involve partners from beyond the health sector in order to reach out to heads of government, parliamentarians, business leaders, mayors and European citizens. The creation of a new innovation platform for Health 2020 could strengthen such an outreach strategy.

2. Basing policy on new metrics

The whole-of-government and whole-of-society approaches require familiarity with the complex dynamics of health and its determinants in order to govern better. Health 2020 can contribute actively to supporting Member States in defining new measures for health and well-being based on both objective and subjective data and ensuring equity and sustainability, as a basis for policy. These measures include new forecasting tools for anticipatory governance and new types of public health reports with new measures; a systematic effort, such as a clearing-house, might be initiated, for continual collection of robust evidence on the impact of a wide range of policies on health and of health on other policies.

3. Institutionalized processes for whole-of-government approaches

To harness health and well-being, institutionalized whole-of-government structures and processes are required within government to facilitate cross-sector problem-solving and to address power imbalances. Health 2020 could propose innovative approaches, such as those reviewed in this study, to crossing sectoral and agency boundaries and to budgeting, financing and monitoring progress in Member States. It could support health ministries and public health agencies in advocating for governments to tackle 'wicked problems' through a mixture of 'hard' and 'soft' governance mechanisms, ranging from law to persuasion and incentives as well as motivating other sectors to engage for health. These initiatives include capacity-building by intersectoral training in smart governance for health, in cooperation with schools of public health, business schools and schools for public policy, to create a new skills mix based on systems thinking and 'complexity science'.

4. Innovative partnerships for whole-of-society approaches

Many of the current health challenges could be better resolved through whole-of-society approaches, which include civil society and the private sector as well as the media. Health 2020 can support health ministries and public health agencies in reaching out to people within and outside government to find joint solutions. It can propose new programmes, networks and initiatives to engage many different stakeholders and, above all, citizens throughout Europe and explore new incentive mechanisms. Stakeholders could jointly identify and implement new means for assessing accountability and health impact, such as the contribution to a 'European health footprint'. The WHO Healthy Cities Network would be an excellent laboratory for such an innovation.

5. A commitment to "the informed citizen" and to citizen participation

The health sector must commit itself to the highly participatory nature of smart governance for health. Health 2020 can initiate a process of dialogue with European citizens on health and well-being using new information and communication technologies. It could engage health ministries to develop a civil society strategy, open-data initiatives and tracking systems that ensure better public accountability for health in all sectors. This includes e-gov, i-gov and m-gov approaches as well as a comprehensive strategy to strengthen health literacy.

6. A global perspective

The new governance for health should integrate all levels of governance, from the local to the global. Health 2020 could initiate a process whereby policy-makers at various levels are brought together to find responses to interdependent challenges, making use of cooperation among the various levels of WHO. This will require support for new processes of health diplomacy to promote coherence among sectors such as foreign policy, trade, agriculture, development and health.

7. An outreach-oriented, innovative, supportive Regional Office

The health sector can support other arms of government by assisting them in setting policies and attaining goals. Health 2020 could initiate the pooling of both the best and failed experiences in innovative practices for shared goals in the European Region and beyond. Regular meetings with ministers of health, heads of public health agencies and representatives of other sectors could drive such innovations forwards. The Regional Office could build on models for long-term cooperation with other sectors, as developed for example in the European Environment and Health Process, its work on food and health and network approaches, such as the South-eastern Europe Health Network, and health promoting schools.

8. A joint commitment to governance innovation

Finally, it is proposed that in the context of Health 2020 Member States and the Regional Office:

- initiate a process for assessing and monitoring progress in governance for health in the European Region. A measure of innovation in governance for health based on whole-of-society and whole-of-government approaches should be identified as a follow-up to this study. A bi-annual report on innovation in governance for health would be submitted to the Regional Committee. The measure would be based on phase II of this study, which will be a review of experiences in innovative governance for health according to the approaches to smart governance outlined in this study.
- consider establishing a multidisciplinary European institute of governance for health, which, like the Instituto Sudamericano de Gobierno en Salud (South American Institute for Health Governance) recently established by the Union of South American Nations, would be a resource for Member States of the WHO European Region to reorient towards smart governance for health by leadership development, political debate, training and research, in cooperation with national institutes in many disciplines.

1. 21st century governance for health and well-being

Background

The results of this study will be used directly in preparation of the new European policy for health, Health 2020, and will form the basis for the governance aspects of the European review of social determinants and the health divide. The focus of this study is on how governance for health and well-being is evolving to meet new challenges and circumstances in the 21st century, what is driving the change in how states and society govern for health, and how governments can take steps to enact smarter governance for health through collaboration. It is based on a review conducted between January and June 2011. In addition, seven studies were commissioned from eminent experts. The conclusions of the papers are incorporated into this study and will be made available as accompanying background documents. Health equity and how to achieve it through better governance will be discussed in depth and at length in an accompanying study on social determinants and the health divide, which is being led by Michael Marmot.

1.1 Focus of the study

How will European countries wish to define success as the century progresses? What role will health play? Narrow economic indicators such as the growth of gross domestic product are increasingly considered insufficient. For example, the recommendations of the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz et al., 2010) state that we have mis-measured our lives and that the success of societies must also be measured in terms of the increased health and well-being of citizens and their quality of life and in terms of sustainable use of resources, particularly with regard to the environment and the economy. In such a perspective, health not only becomes relevant to many areas of society and policy but it also becomes a defining factor of good governance. We must assign value to the right things. People, their potential and their capabilities are the key resources of a knowledge society, and investment in their health and their education is critical—nations are shaped by the health of their population.

Governance concerns how governments and other social organizations interact, how they relate to citizens and how decisions are taken in a complex world (Graham et al., 2003). The argument addressed in this study is that the main changes taking place in governance in the 21st century are also manifesting in relation to health and its governance and are critical for achieving health gains in the decades to come. The changes include three contextual drivers—interdependence, complexity and co-production—and three new governance dynamics, which we have summarized as diffusion, democratization and 'shared value'. Already in 2001, the Organisation for Economic Co-operation and Development (OECD) in its report on governance in the 21st century (OECD, 2001) stated that:

- Old forms of governance in both the public and the private sector are becoming increasingly ineffective.
- New forms of governance will involve a much broader range of active players; in particular, they depend to an increasing degree on the involvement of the governed.
- New forms of leadership are emerging, which continually shift the allocations of power and which weaken centralized top-down decision-making structures.

The larger role of health in society is not new: it tends to manifest at critical points of societal change, such as the rise of the industrial society in the 19th century and the development of the European welfare state after the Second World War. In Europe over the past 150 years, health has not only shaped the modern nation-state and its social institutions, it has also powered social movements, defined the rights of citizens and contributed to construction of the modern self and its aspirations. Health is central to the era of individualization (Kickbusch, 2007). Access to health and to medical care has for many become a synonym for social progress and social justice. Health is now integral to how Europe defines itself and compares itself to other parts of the world. As Europe responds to globalization and the transition from industrial societies to knowledge societies (European Commission, 2010), to develop further and adapt its social model to fit this new context in the face of the financial crisis and to address the major challenges of the 21st century, health will again have an important, exemplary role to play.

Health governance: Undeniably, European health systems face complex challenges, no matter what their organizing principle, be it tax-based or insurance-based. These challenges include:

- securing financing for both public health and health-care services;
- ensuring equitable access, including financial protection;
- emphasizing the importance of empowerment of citizens and patients;
- using resources efficiently by e.g. health technology assessments, competitive purchasing agreements, innovative service delivery methods, cost–effectiveness studies;
- monitoring and evaluation;
- knowledge-brokering (aligning research objectives and policy needs);
- interconnecting primary and specialized care; and
- training human resources, including strengthening the role of universities.

More recent analyses show that there is no 'best' health system. In the decade to come, the financial stability of some health systems will be threatened to the point of insolvency, while others will struggle to address changing population needs, to acquire adequate numbers of health professionals and to provide access to the best, newest, life-saving treatments and technologies. Many European countries must significantly reduce their national debt. The OECD has projected that, if new approaches are not implemented, public health-care spending could increase by 3.5–6% of gross domestic product by 2050 in all OECD countries. It is therefore of concern to the whole of government, other sectors and citizens that health systems be better managed and more efficient and effective. A 10% increase in health-care spending would increase life expectancy by only 3–4 months (OECD, 2010). What would be the health impact of a 10% increase in education investment? We do not usually measure progress in health in that way.

Health sector reform continues to be a key responsibility of health ministries, within the boundaries of their portfolios. Many Member States of the WHO European Region, especially low-income countries, still lack an effective health system. Many others still struggle with basic health governance mechanisms, such as guaranteeing financial protection for service users, and they need operational tools to help them develop and expand their health-care systems to provide core services such as screening, vaccination and maternal and child health. Wealthier countries must remain vigilant in protecting the health systems that took decades to develop and which are repeatedly under threat. This is of the utmost importance, and a key dimension of the work of WHO has been to support Member States in addressing these challenges. This function of health ministries, which we term 'health governance', and its relevance for government budgets and gross domestic product development are not the subject of this study. Rather, the study was stimulated by a recent review that shows that all OECD countries could get better

value from their health-care spending and add an average of 2 years of life expectancy if they were all to become as efficient as the best performers. Improvements and savings are to a large extent, however, related to the prevention of chronic disease, which can be dealt with only very partially within and by the health sector. It is therefore necessary to "broaden the definition of health reform to include a consideration of the intentional or unintentional impact of all policies—health, social, economic and others—on individual or population health" (Georgia Health Policy Center, 2008). No country does this yet in a systematic manner.

Governance for health and well-being: The aim of this study is therefore to identify new, innovative forms of governance that are emerging (Wilke, 2007) to address the key health challenges of the 21st century, by collaboration between health and non-health sectors. The focus is on a whole-of-government and whole-of-society approach and on consideration not only of the impact of other sectors on health but also of the impact of health on other sectors, and, most importantly, the relevance of health to overall social advancement, which we refer to as 'governance for health and well-being'. Most health challenges originate beyond health care in the social determinants of health and in the factors that influence unhealthy behaviour, but they also depend on the global processes that drive disease outbreaks, food insecurity and antimicrobial resistance. Health ministers are now well aware of this challenge and have expressed this awareness on many occasions, most recently at the OECD Meeting of the Health Committee at Ministerial Level in October 2010 (OECD, 2010):

"Chronic diseases are the biggest health challenge we face and in addressing them we must take into account environmental and social determinants and take a balanced approach that covers individual and social responsibilities in an inter-sectoral policy framework....However, we need new thinking on how we can rise to the challenges of increased chronic disease in general, and obesity in particular. We must work across government departments and together with industry, schools, planners and our citizens to make the environment more conducive to healthy lifestyles for all and to change unhealthy behaviors of people at risk. Particular care has to be taken to enable and promote healthy lifestyles among children."

Definition: In this study, 'governance for health' is defined as the attempts of governments or other actors to steer communities, countries or groups of countries in the pursuit of health as integral to well-being through both a 'whole-of-government' and a 'whole-of-society' approach. It positions health and well-being as key features of what constitutes a successful society and a vibrant economy in the 21st century and grounds policies and approaches in values such as human rights and equity. Governance for health promotes joint action of health and non-health sectors, of public and private actors and of citizens for a common interest. It requires a synergistic set of policies, many of which reside in sectors other than health as well as sectors outside of government, which must be supported by structures and mechanisms that enable collaboration. It gives strong legitimacy to health ministers and ministries and to public health and well-being.

Outcomes: From the view point of public health, the first question to be asked of new governance arrangements is whether they have the capacity to deliver: Will they produce better, more equitable health outcomes? Experience to date shows that tackling complex problems requires the engagement of many actors. Population health cannot be achieved without collaborative approaches; it requires an active state, but, above all, it requires the involvement, motivation and commitment of citizens and a wide range of social organizations. While whole-of-government action is critical for policy-making on social determinants, many health challenges also require approaches that include the whole of society, because health is foremost about how people can be healthy in their everyday lives. This is related to questions about how society should be organized to ensure health and therefore includes very basic issues of social

justice and fairness. "Thinking about justice seems inescapably to engage us in thinking about the best way to live." (Sandel, 2010). We therefore conclude that, as governments seek to address 'wicked problems' and 'govern better for results', they must include a commitment to the values, principles and processes inherent to good governance.

Wicked problems: The term 'wicked' in this context is used, not in the sense of evil, but rather as an issue highly resistant to resolution. Successfully solving or at least managing wicked policy problems requires reassessment of some traditional ways of working and solving problems, challenging governance structures, skills bases and organizational capacity. As a first step, wicked problems should be recognized as such. Successfully tackling wicked problems requires broad recognition and understanding by governments and their ministers that there are no 'quick fixes' or simple solutions.

1.2 Contextual drivers

Three key contextual drivers of change that are highly relevant to the development of governance for health are: interdependence, complexity and co-production. They are linked to several larger, long-term trends that affect overall social development (Nye & Kamarck, 2002) and, of course, health: globalization, marketization and the increasing power and impact of the business sector and the role of information technology. The most important trend, however, which is often overlooked, may be the rise of the role of citizens as active participants in governance at all levels: "across vast geographic distances and despite barriers of time, they deliberately organize themselves and conduct their cross-border social activities, business and politics outside the boundaries of governmental structures" (Keane, 2003).

These trends and drivers are ingredients of the transition from an industrial society to what is referred to as the 'knowledge society'. The knowledge society, within which health plays an expanding role, is characterized by three interrelated processes:

- the changing contexts and conditions of 'knowledge work', based on specialized knowledge acquired through years of organized professional training and experience;
- the rise of the 'intelligent organization', in which the structures, processes and rule systems have been built in such a way that they can be called 'intelligent', i.e. structures designed intelligently, processes with built-in learning capacity and rule systems that allow existing rules to be changed if necessary; and
- the knowledge economy that comes into being when knowledge work and intelligent organizations are the rule and not the exception (Willke, 2007).

Health gains a new political and economic relevance in a knowledge society based on innovation. Governments are rediscovering the extent to which health and well-being drive economic growth, prosperity and well-being, a view that was well appreciated in the 19th century. In the 21st century, health is not only a pivotal variable for public finance but constitutes an essential sector of the global economy and of national economies in its own right, just as it contributes to labour productivity and economic performance in all other sectors. In many OECD countries, the more narrowly defined health sector represents an average 10% of gross national product and 10% of the labour force. Health spending helped stabilize OECD economies during the recent recession (OECD, 2010).

Health gains a new political and economic relevance in a knowledge society based on innovation. Governments are rediscovering the extent to which health and well-being drive economic growth, prosperity and well-being, a view that was well appreciated in the 19th century. In the 21st century, health is not only a pivotal variable for public finance but

constitutes an essential sector of the global economy and of national economies in its own right, just as it contributes to labour productivity and economic performance in all other sectors. In many OECD countries, the more narrowly defined health sector represents an average 10% of gross national product and 10% of the labour force. Health spending helped stabilize OECD economies during the recent recession (OECD, 2010).

For example, in Germany, health is the second largest industry, larger than the automobile industry. Its macroeconomic importance in terms of innovation and productivity led the German Government to establish a division of health within the Ministry of Economic Development. Its task is to better understand the economic dimension of health activities within the overall economy by, for example, drawing up 'satellite health accounts' that are conceptually and methodologically consistent with the country's macroeconomic statistics (Aizcorbe et al., 2008; Schneider et. al., 2010), in order to reach beyond market activities, as proposed by the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz et al., 2010).

Satellite health accounts: In this concept, 'health' is considered a type of human capital, which, like other capital goods, depreciates over time and requires investment. Measures are therefore needed of the capital stock of health and of the rate of depreciation, financial investment into health and the flow of returns to that investment. A value is then placed on improvements in health, which is derived by combining indicators such as quality-adjusted life-years with estimates of the value of a human life. This concept expands the scope of existing accounts beyond market activity to include the value of the time that members of households invest in their health and in the health of others (Aizcorbe et al., 2008).

The optimism—and sometimes 'hype'—generated by these developments was tempered during the past decade as the global community endured a series of challenges and shocks with farreaching consequences. These require fundamental changes in perspective, governance structures, organizational capacity and skills, as indicated in the following section on the three contextual drivers: interdependence, complexity and co-production.

1.2.1 Global interdependence: the context for governing health has changed.

'Interdependence' refers to situations characterized by reciprocal effects among countries or among actors in different countries. Interdependence exists where there are reciprocal—not necessarily symmetrical— costly effects of transactions. When interactions do not have significant, costly effects, there is simply interconnectedness. Interdependence does not mean mutual benefit; interdependent relationships always involve costs, as interdependence restricts autonomy. It is, however, impossible to specify a priori whether the benefits of a relationship will exceed the costs. This will depend on the values of the actors and on the nature of the relationship (Keohane & Nye, 1989).

In the first decade of the 21st century, governments operate in entirely new contexts, which are, above all, dynamic, complex and interdependent, as are the problems they have to address. The current system of global governance has no mechanisms for addressing systemic shocks or for managing globalization fairly. Global challenges affect all people, in all socioeconomic strata and geographical locations. Each appears to be unique, but they are increasingly understood to have underlying patterns and interconnections, requiring global and whole-of-society and whole-of-government responses. The crisis in the international financial and monetary system, outbreaks such as severe acute respiratory syndrome (SARS), other health challenges such as HIV infection and AIDS, hurricanes, tsunamis and earthquakes have hit some nations harder than others, but the after-effects, often unforeseen and unpredictable, have transcended political

borders, government sectors, businesses and civil society. Most recently, the risks associated with damage to the Fukushima nuclear reactor in Japan have changed policy perspectives throughout the world, the threat to human health being the main factor in the debate about controlling atomic energy production.

These problems can no longer be resolved by any single government; yet, it remains difficult to obtain a joint commitment to resolve complex, multilayered issues such as control of the global financial system, fair trade, access to medicines or equitable management of energy resources, even though a range of global governance mechanisms have been established. For example, health inequities have increased within and between countries despite a significant increase in foreign aid for health; this is one of many unintended consequences of policies. Critical interdependence has increased concerns about security, preparedness, resilience and response in many policy and social sectors and has led to the realization that the whole of society must be prepared, beyond the health sector (WHO, 2009).

Many sectors have realized how critical an issue health is for them – see for example below the 'readiness framework' (WHO, 2009) developed to prepare the whole of society for a disease outbreak. It emphasizes the interdependence of all sectors of society. The framework suggests five key principles: a whole-of-society approach, preparedness at all levels, attention to critical interdependence, a scenario-based response and respect for ethical norms. The diagram in Fig. 2 illustrates this approach, represented by the three circles in the middle: government, civil society and business. The pyramids inside each circle represent the levels within each sector (subnational, local government and community), and the nine circles around the disaster management continuum of readiness, response and recovery represent the nine key essential services, which are defence, law and order, finance, transport, telecommmunications, energy, food, water and health. The 'readiness framework' approach thus illustrates the interdependence of all sectors of society.

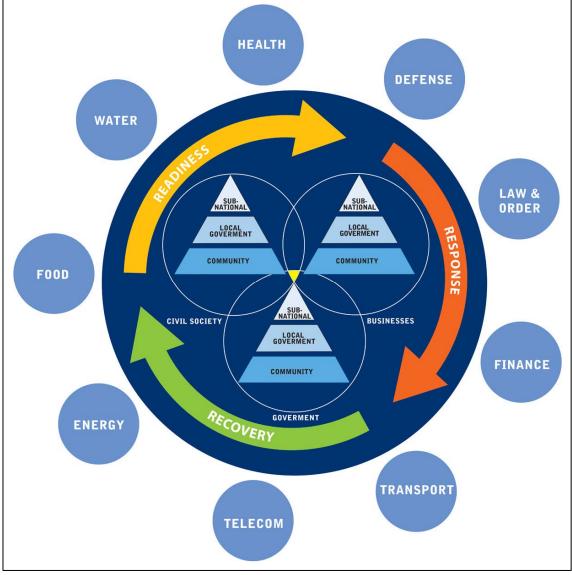


Fig. 2. Readiness Framework

Source: World Health Organization (2009).

Many analysts consider that the global system is dysfunctional, both in defining the problems and in committing to collective responses, and they consider that the significant imbalances of power and resources should be addressed on a global scale (Labonte et al., 2004). At the same time, the dynamics of the new constellations of power must be better understood, such as the uncertainty about the role of emerging economies: as they gain power, their responses to many of the global challenges will define whether fair globalization and a more equitable global system become a reality.

Many of the health problems that governments confront today transcend national borders and are part of a complex web of interdependence. The separation between domestic and foreign policy agendas has become blurred, and the new geopolitical constellations have a significant impact on the role and position of many countries in the European Region—indeed of Europe as a whole—in the global arena. Parts of Europe are becoming considerably poorer and have to make hard choices about health and health systems. In order to resolve these problems, health ministries find themselves working at several levels, with overlapping networks of actors with competing agendas, both at home and abroad, as in the present economic crisis. In this critical

situation, it has become obvious that in many countries health ministries do not have much bargaining power. This problem was analysed in detail for the system changes after the breakdown of the Soviet Union (see the background paper by A. Fidler and T. Szabó)

The United Nations, with its universal membership, has been moving to new models for facilitating and coordinating international engagement as traditional forms of cooperation between states are challenged, supplemented and sometimes replaced by new, more flexible types of organizations, alliances and networks (Orr, 2011). Three examples are the Committee on World Food Security, the high-level Energy and Climate Change Advisory Group and the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The **Committee on World Food Security**, an intergovernmental body established by the Food and Agriculture Organization of the United Nations in 1974, was reorganized in 2009 to include a wider group of stakeholders and to increase its ability to promote polices that reduce food insecurity. The aim was to make the Committee the most inclusive intergovernmental platform for collaboration to ensure food security.

The United Nations Secretary-General established the **high-level Energy and Climate Change Advisory Group**. Its Chair, Kandeh K. Yumkella, Director-General of the United Nations Industrial Development Organization, said, "Governments alone will not be able to deal with the challenges. We need a commitment from all sectors of society, including the private sector, academia and civil society, as well as from international organizations and nongovernmental organizations."

Many international organizations and many countries are, however, ill prepared for the complex processes of multistakeholder diplomacy that are required. Health ministries find themselves involved increasingly with ministries of foreign affairs and of economic cooperation and development and with international financial bodies that now consider health part of their 'tool box', because of its new relevance (Kickbusch, 2011). For many European countries, an additional level of power and complexity has been added through the European Union, as all countries are bound by a growing number of international agreements that are related to health but are not primarily health agreements. Coherence among these many portfolios is lacking in most countries, and the health sector frequently lacks power to obtain commitment for a health agenda. This is where heads of government play a central role.

In an interdependent world, the economic impact of health and health security on other sectors and the whole of society is becoming increasingly evident and is changing the societal approach to health. As other stakeholders are affected negatively by health issues, they will increasingly call for governance and institutions that can respond and deliver, be it a more efficient health system or better health security. First, there is concern about the effect of the growth of the health sector on other sectors of government and on overall growth and productivity, particularly in those countries where expenditure for the health sector is growing more rapidly than the overall economy. The impact and capacity of the health sector are also becoming relevant in relation to outbreaks such as SARS, avian influenza, pandemic (H1N1) 2009 and, most recently, the outbreak in Europe of infection with a deadly strain of Escherichia coli in 2011. The economic cost of the SARS outbreak was estimated to be €7–21 billion, while the locally contained outbreak of plague in Surat, India, in 1994 was estimated to have cost of €1.4 billion, and the 1997 avian influenza epidemic in China Hong Kong Special Administrative Region was estimated to have cost hundreds of millions of euros in lost poultry production, commerce and tourism (Robertson, 2003).

The recent outbreak of *E. coli* infection has had a severe impact on European farming and food retail, as some countries banned the import of certain vegetables and consumers refrained from

buying certain fresh products, leading to a dramatic decline in sales. The latest amount proposed by the European Union in aid to European farmers for their losses was € 210 million. The severity of the economic impact has led to political strain between countries, action by the European Union and consideration of legal consequences in relation to cross-border compensation for farmers and other businesses affected. Governments, business and citizens are not yet well prepared to respond to such outbreaks at a whole-of-government and a whole-of-society level, and new forms of organization and coordination that allow for more rapid, efficient action are being discussed at country, European and global level. Uncertainty remains a defining factor in relation to such outbreaks; other sectors expect the health sector to minimize the impact on their areas of responsibility. At the same time, society expects a high level of security with regard to population health. This is one of the reasons for the establishment of the European Centre for Disease Prevention and Control in 2005 as a European Union agency for strengthening Europe's defences against infectious diseases, in partnership with national health protection bodies.

Society's resilience is tested not only by systemic shocks and outbreaks but also by problems that have been gathering momentum for over a century, but which have been tackled with traditional approaches to policy and governance. Rapid urbanization, epidemiological shifts, demographic transitions, climate change, competition for scarce natural resources, widening economic disparities and the introduction of new technologies—from social media to synthetic biology—are profoundly affecting the health and well-being of societies. These are also interdependent 'wicked problems', in ways that are not yet fully understood, and there are no measures to gauge fully their impact on the economy and society. Countries struggle to address these problems, as well as the vulnerability brought on by change, but are hampered by two major factors. First, cross-sector and cross-border collaborative efforts are constrained by path dependency, policy silos, competing interests, unbalanced resource distribution and different systems of values and beliefs. Secondly, change is often difficult to achieve in the face of strong private sector interests, which are well organized and coordinated at the global level. In Europe, coordination efforts have an additional level of complexity owing to the power of the European Union and the power and resource imbalances among countries.

1.2.2 Complexity: Our understanding of health has changed and expanded

"Complexity theory offers a much more realistic description of the flow and interplay of events. It brings to the study of human affairs, the sense that everything is indeed related to everything else, however inconvenient that may be for established disciplines, or for organizations based on bureaucratic insularity. It warns us to disregard the claims of ideologists and propagandists that there are unique, permanent solutions to major issues. It trains us instead to view issues, policies and the consequences of policies as parts of an unceasing interaction. It alerts us to the constant potential for abrupt, discontinuous forms of change. It helps us to understand why only the Law of Unintended Consequences stands intact over the ruins of policies based on single concepts and rigid plans." (Fuerth, 2009).

Another approach to governance implies a change in the perspective on the issue to be dealt with. WHO's definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946) goes beyond disease categories. Today, this definition is reinforced by a perception of health both as an outcome of a wide range of political, social and economic developments and as an asset linked to the capabilities and resources of individuals, communities and society as a whole. The knowledge society, democratic development, the nature of health problems and technological innovation all point towards accepting complexity as a key characteristic of a 21st century perspective of health and health risks. In the world of health, this view is recognized in a number of ways, for example by referring to widespread use of tobacco or obesity as 'social epidemics',

'communicated diseases' or 'commodity-driven pandemics' because of the many factors that contribute to their spread. In terms of complexity, strategies to control such epidemics must work at many levels, and their impact will reach far beyond the health outcomes: they will also have economic, social and political impacts as well as unintended consequences, a fact frequently neglected in many health-centred analyses (Slama, 2005).

Complex adaptive systems are "...made up of many individual, self-organizing elements capable of responding to others and to their environment. The entire system can be seen as a network of relationships and interactions, in which the whole is very much more than the sum of the parts. A change in any part of the system, even in a single element, produces reactions and changes in associated elements and the environment. Therefore, the effects of any one intervention in the system cannot be predicted with complete accuracy, because the system is always responding and adapting to changes and to the actions of individuals." (Glouberman et al., 2003).

A number of authors have suggested that health should be understood as a complex adaptive system that results from the multiple interactions and dynamic processes that are embedded in other complex systems. Many modern-day health problems and the complex nature of chronic diseases therefore require 'a systems perspective', which includes understanding the overall interdependence of all stakeholders and the social nature of risk, its equity dimensions and individual motivations. Changes will be required at both policy and organizational levels and at the level of the community and individual, as expressed in many health policy documents. Yet, despite this knowledge and evidence, many governments have not responded with a whole-of-government or whole-of-society approach.

From a systems perspective, three approaches are relevant: (1) Health is produced and maintained through a complex adaptive system of interactions between individuals and their environment as well as between physiological, psychological and behavioural factors, sociodemographic factors and socioeconomic status (Glouberman et al., 2003). (2) Health development in turn creates further processes, which affect other complex systems. The most obvious case is increased health and life expectancy and the demographic and epidemiological transitions that are redefining every area of personal and social life and policy. (3) Health can also be understood as an emerging property of other complex adaptive systems, such as the global food system.

Systemic risks require a whole-of-government and whole-of-society approach, because they affect the systems on which society depends, including health, transport, environment, agriculture and telecommunications. Investigating systemic risks therefore takes us beyond an agent–consequence analysis to focus on interdependence and spillover between risk clusters (Klinke & Renn, 2006). Two examples are particularly pertinent.

The report of the Commission on Social Determinants of Health (2008) shows that health is itself a property of other complex systems, from employment and work to transport and housing, that it relates to the social stages of industrialization, urbanization and globalization and, most importantly, that it relates to differential exposure to risks and differential coping capabilities, which are determined by the distribution of power, money and resources in society. These 'causes of the causes' require a new approach to measurement and a new perspective of policy on equity. Unlike more traditional approaches to epidemiology, which address the identification of individual risk factors, an approach based on complexity highlights the wider environment within which systemic risks to health arise, the social gradient being one of the most obvious. This also means that positive health effects are achieved through other sectors, with no involvement of the health sector; this is particularly true of certain fiscal measures and

redistributive policies. For example, countries with less social inequality also tend to have less health inequality and enjoy higher overall health status.

The links between food, food security, sustainable development and the systemic health risks obesity and diabetes clearly exemplify the need for a broader perspective (WHO Regional Office for Europe, 2004a; Kickbusch, 2010). For example, the most important risk factors for type-2 diabetes are obesity, physical inactivity, a diet with low fibre and a high calorie count and smoking, which interact with other factors such as age, genetic factors and early-life nutrition (Fig. 3):

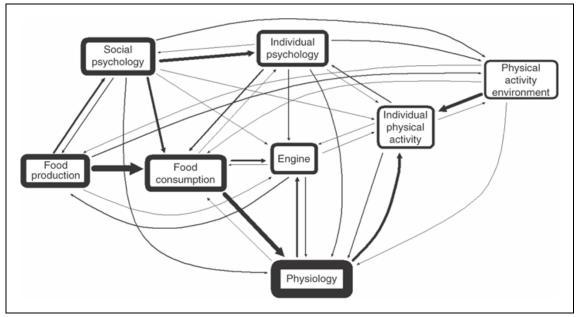


Fig. 3. Simplified map of foresight for obesity

Source: Finegood, Merth & Rutter (2010).

These risks themselves are determined by structural factors, such as the extent of social stratification, industrialization, urbanization and globalization, which affect an individual's access to health care and exposure to environments that promote smoking or to 'obesogenic' environments, which in turn depend on social norms, local food culture and urban infrastructure. Therefore, very few of the necessary interventions for addressing systemic risks and social determinants of health can be implemented by the health sector alone, or even at all.

Although production is frequently asserted to follow the patterns of food demand on the market, there are good reasons to think that food production has become dissociated from market demand and that many other factors distort the market. Forms of food production determine not only the safety of food products but also their nutritional and dietary value. Food production methods and the factors that influence them are thus an integral part of the patterns of food-related ill-health. Environmental issues, especially the need for farming methods that are sustainable in the long term, have a bearing on food production. Broad concurrence can be foreseen between the production of food for human health and the production of food for environmental protection. Nutrition and environmental policies can thus be set in parallel, as outlined in the WHO action plan for food and health in Europe (WHO Regional Office for Europe, 2004a). Food production affects human health not only through food consumption but also through the nature and sustainable development of the rural economy, which have implications for rural employment, social cohesion and leisure facilities. These in turn foster better mental and physical health.

Most interventions are broad, structural and related to policy rather than specific clinical interventions (Whiting et al., 2010), particularly in relation to the distribution of income, consumption and wealth. An analysis by the OECD suggested that multipronged approaches are up to twice as effective as the single most effective intervention, for comparable cost–effectiveness; this is most clearly demonstrated in tobacco control (Slama, 2005). Of particular importance are 'leverage interventions', which create positive systems dynamics for effecting social change. Such systemic approaches also tend to be more sustainable, as the 30 years of experience in tobacco control show. Frequently, they are implemented in the face of organizational inertia and strong opposition from sectors with competing values and interests and with extensive financial resources. Whole-of-government and whole-of-society approaches therefore require a 'window of opportunity' (Kingdon, 1995), i.e. a unique constellation that brings together cultural shifts, political will and political feasibility.

1.2.3 Co-production: The new role of citizens and civil society

Co-production of health: During the 20th century, citizens changed the ways in which they approached both health and governance, as individuals and as civil society communities and organizations. Many present-day health challenges require a unique mixture of structural and behavioural change and of agency and political action. Individual choices contribute to both health successes and health failures, but they are embedded in socioeconomic and cultural environments. Use of the term 'obesogenic' for environments that encourage unhealthy eating or discourage physical activity expresses this clearly and points to the interventions people must make in their lives, particularly at the local level. This understanding of 'obesity governance' is itself a result of experience gained in 30 years of tobacco control.

Health activism has been pivotal in bringing about changes in how societies govern health and disease: from local action to address environmental health risks to global action on HIV infection and AIDS, access to medicines and tobacco control. The governance of health cannot be understood without the action of civil society at all levels: "a vast, interconnected and multilayered non-governmental space" (Keane, 2003). This form of democratization of health is linked to new participatory features of modern democracy, which includes both "strong traces of pluralism and strong conflict potential" (Keane, 2003).

The rise of civil society took place in the last decades of the 20th century; in the 21st century, there is again something inherently new about the way individuals most recently empowered by new technologies and forms of communication are taking charge of their health and demanding more from governments, health professionals and industry. Citizens today are activists in two dimensions. They are engaged in the co-production of health through their engagement in two simultaneous and often interacting approaches: shared governance for health, which incorporates awareness that to be successful there must be a commitment to a whole-ofgovernment and whole-of-society approach; and shared health and care, which relate to the collaborative, communicative relationships between individuals within the more narrowly defined health sector, in their capacity as citizens, patients, carers, consumers or health-care professionals. This co-production of health is made possible by the proliferation of new technologies and access to information, which are shifting the nature of European societies from industrial to knowledge-based and which are redefining the structures and working modes of health organizations and agencies. Health is increasingly part of a larger knowledge economy based on 'knowledge work' and which requires intelligent users and learning organizations to produce successful outcomes. Health literacy is therefore a critical factor in both health governance and governance for health.

Co-production of knowledge: Co-production of health implies co-production of knowledge. If governance for health is to be effective, it must be participatory and include but go beyond

expert opinion. People's experience and people's perceptions are beginning to count in new ways. A knowledge society requires anticipatory governance, "which underscores shared governance, the co-production of knowledge by science and society and the inseparable nature of 'facts' and 'values' where both of these elements need to be made explicit and deliberated to achieve innovation in governance. Beyond the traditional expert knowledge, anticipatory governance responds to uncertainty by mobilizing through an extended peer community of 'epistemic cultures', local and tacit knowledge and ways of knowing to enable a more robust and enriched framing of science and technology." As many viewpoints as possible, from experts and laypeople, should be included to minimize the risk that problems are incorrectly defined or framed by unknown biases. "This broader approach to 'knowledge' (including but beyond expert opinions) allows an examination of the value and power systems that shape visions of the socio-technical future(s)." (Kloprogge & van der Sluijs, 2006; see also the background paper by V. Ozdemir and B.M. Knoppers.)

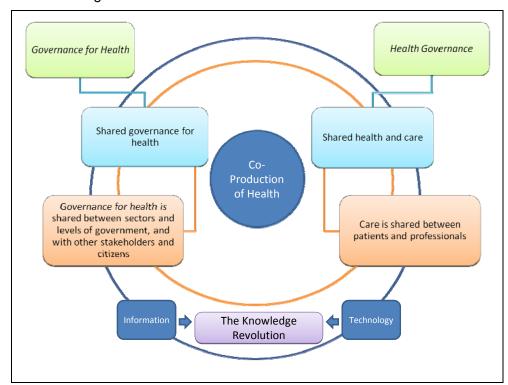


Fig. 4. Governance for Health and Health Governance

Source: authors.

Change based on co-production of health and knowledge is occurring in all sectors and areas of life (Fig. 4), in the demand for healthier food, greener technologies and cleaner streets, faster development of new medicines and treatments, more participatory forms of health care and the recent popular uprisings against unaccountable government regimes. People can be empowered to act. Shared governance for health, the focus of this study, is both a driver of change and a response to the changing political contexts of the 21st century: it "envisions individuals, providers and institutions to work together to create a social system and environment enabling all to be healthy" (Ruger, 2010). The challenge for governments is to build the capacity for efficient co-production of public value in complex, interdependent networks of organizations and systems across the public, private and non-profit sectors (World Economic Forum, 2011) and to measure the value produced in new ways that allow evaluation of whether societies are moving towards greater well-being.

"Shared health governance encompasses consensus-building around substantive principles and distribution procedures, accurate measures of effectiveness, changes in attitudes and norms and open deliberations to resolve problems. ...The process embodies roles and responsibilities for all parties—individuals, providers and institutions." (Ruger, 2010).

2. Governance

2.1 Three key governance dynamics

Governance is "the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interest." (Commission on Global Governance, 1995).

As outlined above, governments must act differently in today's world. They are the means by which state power is used, and, as power diffuses throughout the layers of modern societies, the role of the state and the functions of government must adapt. In most countries of the European Region, there is a clear distinction between the incumbent government and the state, and there is a constitutional distribution of power between a parliament, the government and various levels of government. Adherence to the principles of good governance and the willingness and ability to introduce new governance approaches will depend largely on the strength of the democratic institutions. The role of the state is interpreted differently by different political parties as they hold office; this is a political factor of great relevance to the governance of health, for example in relation to public policy and state interventions, in particular in relation to equity and health. With respect to health, some governments opt for individual 'lifestyle' interventions, often based on arguments of individual freedom of choice, while others address structural social or environmental factors, which often include measures to restrict markets or address redistribution. Sandel (2010) summarized these differences as revolving around three key ideas: maximizing welfare, respecting freedom and promoting virtue. These ideas are the core of the political debate on health at all levels of governance.

The role of the state is viewed differently in different parts of Europe, reflecting each country's historical development and political culture, yet, throughout Europe, there are long-term trends in the role and functions of the state and a shift in the separation of powers (Riklin, 2006), including in the area of health. In general, there is a trend in European democracies (but not in all European countries) to move from authoritative to collaborative, participatory strategies of problem-solving and policy-making. While the effects of the economic crisis cannot yet be fully gauged in some countries, all indications are that a return to monopolistic strategies will not resolve the issues.

A recent report by the World Economic Forum (2011) notes that, to be efficient and effective in today's complex, interlinked, fast-changing environment, the structures and processes of governments must be redesigned in order to encompass a new set of actors and tools. They must remain relevant by being responsive to rapidly changing conditions and citizens' expectations and must build capacity to operate effectively in complex, interdependent networks of organizations and systems in the public, private and non-profit sectors to coproduce public value.

Because of this shift, the word 'governance' is increasingly used to describe new processes. The term is the subject of a wide range of academic literature, and many attempts have been made to categorize this body of work, distinguish different schools of thought and develop explicative theoretical frameworks (Rhodes, 2000; Peters, 2001; Frederickson, 2005; Hill & Lynn, 2005; Willke, 2007; Bell & Hindmoor, 2009; Klijn, 2010; Osborne, 2010). In its broadest sense, governance determines how societies are steered and how power and resources are distributed. It also requires new forms of leadership. Governance undergoes major historical shifts and changes, some revolutionary and others more drawn out and incremental but not necessarily less transformational. de la Chapelle (2008) drew attention to the fact that, just as there are changes in scientific paradigms, as expressed in the notion of 'scientific revolutions' (Kuhn, 1969), there are also changes in political paradigms of the basis of governance systems and structures, which change once they can no longer maintain their legitimacy or lose their problem-solving capacity.

In the current period of change, governance illustrates moments in the continuous process that has been driven and shaped by trends in the distribution of power and authority. Diffusion of governance, monitory democracy and shared value are the three dynamics that shape understanding of the mechanisms and institutions of governance, as it shifts from authoritarian to collaborative. They constitute a distinct group of political determinants of approaches to governance for health.

"...the advantages of hierarchical coordination are lost in a world that is characterised by increasingly dense, extended, and rapidly changing patterns of reciprocal interdependence, and by increasingly frequent, but ephemeral, interactions across all types of pre-established boundaries, intra- and inter-organisational, intra- and inter-sectoral, intra- and international" (Scharpf, 1994).

2.1.1 Diffusion of governance

Innovation in governance extends beyond government to various actors in society. Nye & Kamarck (2002) proposed that the functions of the state would diffuse simultaneously in several directions in response to incongruence between state capacity and increasingly complex challenges (Fig. 5).

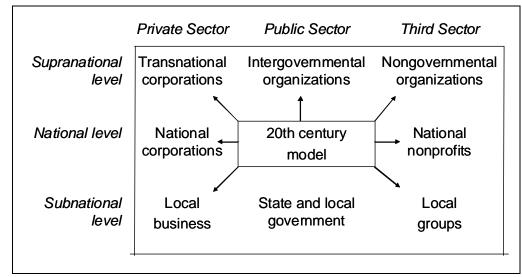


Fig. 5. Diffusion of Governance in the 21st Century

Source: Nye & Kamarck (2002).

Diffusion is seen in how governance is approached today at the level of both government and organizations. It is the basis of whole-of government and whole-of-society approaches. Moore & Hartley (2010) argued that the new class of governance innovation crosses the boundaries of organizations, creating network-based public service production systems, which tap into new pools of resources, exploit government's capacity to convene, exhort and redefine private rights and responsibilities, and redistribute the right to define and judge the value of what is being produced.

Examples include contracting child protection services to community groups, partnerships for park renovation in the United States, the creation of a 'congestion charge' for vehicle use in London, and the law in Singapore that holds children to their customary duty to care for their ageing parents. In each of these examples, the challenges are so great that no single organization could bring about change; public coffers and rosters cannot be the only sources of financing and manpower, defining public purpose and deciding to use public assets; and the mobilization and deployment of resources are not the responsibility solely of government. The public services that result are evaluated not only for efficiency and effectiveness but also in terms of justice, fairness and community-building (Moore & Hartley, 2010).

The literature on governance addresses the patterns of power-sharing and analyses the relations between organizations and their contexts, between sectors and policy fields, between states, between states and non-state entities, and, most importantly, between and within the networks that function within these groupings. New terms have emerged to describe governance, including 'network governance', 'meta-governance', 'governance without government' and 'the hollowed-out state'. All refer to the consequences of the diffusion of governance and power. An example of the collaborations involved in governance is the partnership to control malaria (Fig. 6):

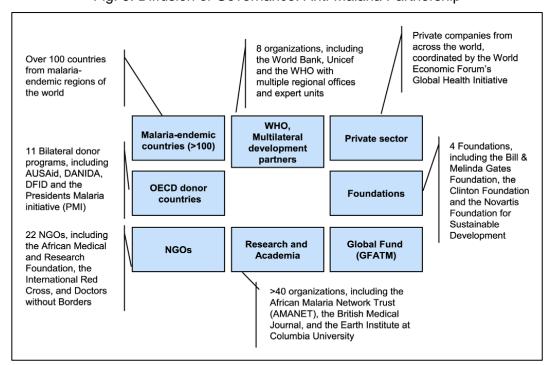


Fig. 6. Diffusion of Governance: Anti-Malaria Partnership

Source: Roll Back Malaria Partnership (2010)

The main issues discussed in the literature on governance are the role and authority of the state in the 21st century and the interfaces of local, national, regional and global policy. In the debate on health, three schools of thought on governance are found:

- Some authors argue that states have been significantly weakened, both nationally and internationally, particularly by the increasing power of private corporations (Strange, 1996; Cashore, 2002; Vogel, 2008). In consequence, they juxtapose government and governance in a situation in which governments always appear to lose out.
- Others draw attention to the fact that the scope, scale and nature of government action in the context of new policy problems and following the systemic shocks of the past decade are actually expanding (Jessop, 2002; Crawford, 2006; Moss et al, 2006; Sorenson, 2006; Bell & Hindmoor 2009). This expansion is seen in both traditional and new types of hierarchical regulatory action, new relations between states and new, more complex multistakeholder relations

Within the remit of health, governments expand their reach into many sectors of society. For example, moves to reduce tobacco consumption over the past decade resulted in new regulatory measures that reached into areas of life in which the state had previously not tread. Negotiating major international treaties like the WHO Framework Convention on Tobacco Control (WHO, 2003) and continuing negotiations on its implementation require a vast, multistakeholder approach. Tobacco regulation affects not only the tobacco industry and tobacco farmers, producers and merchants but also, for example, the catering and advertising industries, customs authorities and agencies that control the trafficking of illicit goods. Similar processes are under way in relation to obesity control.

A third school of thought (Michalski et al., 2001; Keanes, 2009) highlights the dynamism
that has emerged in governance due to direct involvement of people in matters regarding
their quality of life, such as urban development, environmental issues and food systems
and health. Citizen-controlled local food councils and neighbourhood councils are
examples.

A characteristic of the diffusion of governance is that it leads to horizontal, multilevel, multistakeholder approaches. Three types of horizontal or shared governance are relevant in diffusion: whole-of-government, multistakeholder and multilevel governance. Frequently, all three approaches are used together, in order to merge into a fourth, the whole-of-society approach. It should be emphasized that more traditional, hierarchical forms of governance do not (as some of the literature on governance implies) become irrelevant and are not totally replaced by new mechanisms, but rather the approaches to governance indicated above complement each other and are combined and adapted in many different ways during periods of change to increase problem-solving capacity. This is certainly true in the area of health, for which multistakeholder approaches are accompanied by increased interest in public health law at all levels of governance (Institute of Medicine, 2011).

2.1.2 Expansion of monitory democracy

Democracy as we know it today is fundamentally different from what it was 100 or even 50 years ago. Political scientists such as John Keane (2003, 2009) and Frank Vibert (2007) debated the extent to which political paradigms have changed and how the latter part of the 20th century transformed our understanding and concepts of democracy. They drew attention to new power-scrutinizing institutions that have arisen in a wide range of policy fields and interests, where they "raise the level and quality of public monitoring of power, often for the first time in many areas of life, including power relationships 'beneath' and 'beyond' the institutions of territorial states" (Keane, 2009). In view of the strong relevance of co-production (as outlined above), this

group of political determinants of health significantly affects the problem-solving capacity of societies in relation to health.

Keane (2009) argued that a new mode of democracy is emerging, which he calls 'monitory democracy'. Legitimacy and accountability are also shifting from authoritarian to collaborative processes as citizens demand not only to be better informed but also to become involved in new ways.

Legitimacy has been defined as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchmann, 1995). Legitimacy depends on the level of acceptance by various direct and external audiences. Issues of representation, inclusiveness and transparency are critical in building the necessary trust for legitimacy. Additionally, legitimacy depends on the ability of the process to engage stakeholders in a meaningful dialogue, in which they feel ownership and the possibility of deriving benefits. This requires full transparency, openness and respect. Nascent multistakeholder processes can be seriously jeopardized if the partners do not regularly verify the transparency of the perceptions and expectations of participation (Burger & Mayer, 2003; Vallejo & Hauselmann, 2004).

Monitory democracy is 'post-representative' democracy, in which the devices of power-monitoring and power-controlling extend "sideways and downwards through the whole political order". It represents the age of surveys, focus groups, deliberative polling, online petitions and audience and customer voting, as well as audit commissions, citizens' assemblies, Internet-based think-tanks, local assemblies, regional parliaments, summits and global 'watch-dog' organizations. It represents the transition from a political geography of 'one person, one vote, one representative' to 'one person, many interests, many voices, multiple votes and multiple representatives'. As outlined in the report of the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz et al., 2010), what is measured is of increasing importance if people do not find that their everyday experience is reflected in the data provided by government and other social institutions. This clearly undermines trust. "One of the reasons that most people may perceive themselves to be worse off even though average gross domestic product is increasing is because they are worse off." In the health arena, where evidence plays a significant role, this is of particular importance, as discussed below.

Accountability "describes the process of being called 'to account' to some authority for one's actions....It is external, in that the account is given to some other person or body outside the person or body being held accountable; it involves social interaction and exchange, in that one side, that calling for the account, seeks answers and rectification while the other side, that being held accountable, responds and accepts sanctions; it implies rights of authority, in that those calling for an account are asserting rights of superior authority over those who are accountable, including the rights to demand answers and to impose sanctions....

"But more recently, 'accountability' has been extended beyond the concerns of representative democracy and into areas where the various features of core 'accountability' described above no longer apply. "For instance, 'accountability' now commonly refers to the sense of individual responsibility and concern for the public interest expected from public servants ('professional' and 'personal' accountability), an 'internal' sense which goes beyond the core external focus of the term. Secondly, 'accountability' is also said to be a feature of the various institutional checks and balances by which democracies seek to control the actions of the governments (accountability as 'control') even when there is no interaction or exchange between governments and the institutions that control them. Thirdly, 'accountability' is linked with the extent to which governments pursue the wishes or needs of their citizens (accountability as 'responsiveness') regardless of whether they are induced to do so through

processes of authoritative exchange and control. Fourthly, 'accountability' is applied to the public discussion between citizens on which democracies depend (accountability as 'dialogue'), even when there is no suggestion of any authority or subordination between the parties involved in the accountability relationship." (Mulgan, 2000).

As power diffuses throughout government and society, a range of new actors, from 'donor' agencies to central banks and economic rating agencies, such as Standard and Poor's, are playing roles with implications that stretch beyond national borders, At national level, such agencies range from public service providers like the British Broadcasting Company's independent news services and the French Agency of Food Sanitary Safety to risk assessment and monitoring agencies such as Sweden's Children's Ombudsman. This new type of unelected authority accompanies the transition to a knowledge society. While many of these entities are self-organized, others were established by elected governments but are often run by unelected officials who work at a distance fairly removed from the reach and rhythm of periodic elections. Vibert (2007) called this phenomenon "the rise of the unelected" and considered these actors to be a new, fourth branch of democratic government, in addition to the executive, legislative and judicial separations of power. A mechanism that is increasingly used (also in health) is the commission, although new types of health agencies are also being created, such as the Australian National Preventive Health Agency and the Commission for a Socially Sustainable Malmö.

The Australian National Preventive Health Agency will support the Council of Australian Governments and the Australian Health Ministers' Conference in addressing the increasingly complex challenges associated with preventing chronic disease. The Agency will promote prevention by providing evidence-based advice to health ministers, supporting the acquisition of evidence and data on the state of preventive health in Australia and the effectiveness of preventive health interventions, and setting national guidelines and standards for preventive health activities. The advisory council will consist of one representative of the Commonwealth, not more than two members representing the governments of the States and Territories and at least five but not more than eight other members with expertise in preventive health.

The Commission for a Socially Sustainable Malmö (Sweden) was appointed to draft a plan, objectives and strategies for reducing health inequality in the City of Malmö. The plan will guide the City's efforts to reduce differences in health between population groups. The starting-point is a comprehensive national public health objective of "creating social conditions for good health on equal terms", with a focus on influencing the structural requirements for health. The Commission's aim is to provide the City of Malmö with a foundation and some tools for controlling, setting priorities and realizing activities that affect the requirements of all Malmö citizens for health and that decrease health inequality. It is an independent commission, the work of which should be transparent. It should invite organizations and Malmö citizens to share their experiences and take part in analysis and in shaping strategies. It is important that the Commission's work be made available and is communicated both internally and externally, for instance at meetings, hearings and lectures for and with entities such as citizens, tradespeople, businesses, interest groups and educational institutes.

e-Governance

Over the last decade e-governance or digital governance, has become a widely discussed subject as well as a new reality for how the state and society communicate and interact. More and more local governments are using the Internet to communicate with their citizens. While there is a digital divide between OECD and non-OECD nations, cities show an interesting mixture of use of digital governance, with cities like Bratislava, Ljubljana and Zagreb on a par with larger

cities such as London, Paris and Tokyo. A growing number of municipalities publish the results of performance measurements on their websites; the number of websites providing data from such measurement systems had doubled globally by 2007, indicating a move towards more open co-production of governance by the state and society, which depends on the diffusion of empowering technology throughout society on a scale unknown since the invention and proliferation of the printing press. Digital governance will also help countries that are presently reviewing their government structures because of large political shifts. For example, the 2011 Moldova ICT Summit built on the summit on information and communication technology held in 2010 and brought together stakeholders from the Government, the Moldovan business community, multinational companies and academia to discuss international and national trends and challenges facing the industry. In particular, the Summit elaborated a plan for digital transformation (including health) in Moldova, by effective integration of technology into public and private life, and it formulated a proactive agenda for strengthening the competitiveness of the national information and communication technology sector.

Prague shows best practice for digital governance

Prague has been a rising star in the rankings for municipal digital governance, going from 15th to 2nd place between 2007 and 2009 and outranking even the world's 'most-connected' city, Seoul, Republic of Korea, in terms of website usability and citizen participation. Prague's fast climb shows what can be accomplished with political will and dedicated information technology officials and public managers (Holzer et al., 2010).

"Governments of the future must be fully tech-enabled with a tech-savvy workforce. Policy, legal and regulatory frameworks and processes must be redesigned to align with the dynamics of the networked world. Information infrastructures must support new modes of collaboration, information and intensive governance. Even in the poorest regions, brilliant examples of service innovation have been driven through the use of cheap mobile and wireless technologies. FASTer (Flatter, Agile, Streamlined and Tech-enabled) governments are more likely to attract and retain a new breed of civil servant who thrives on problem-solving, results and innovation." (World Economic Forum, 2011).

2.1.3 'Shared value'

The most widely disputed issue around the new governance is the role of business. This role has been challenged in many ways in relation to the governance of health, the most prominent examples being 'the tobacco wars' (Brandt, 2007) and, more recently, debates about the undue influence of the food industry (Nestle, 2007). The social responsibility of industries and business sectors is discussed regularly, as societies and policy-makers deal with the 'wicked problem' of epidemics driven by commodities and communication, such as childhood obesity. The safety of products and consumer health and the occupational safety and health of employees continue to be a focus of concern from a health perspective. Advances in these areas have often been regulated at a national and, more recently, European level. International legislation on access to medicines, harmful products and consumer health is often difficult to enact, given the power of the private sector. Nevertheless, there have been successes, such as the WHO Framework Convention on Tobacco Control (WHO, 2003) and the Doha Declaration on the TRIPS Agreement and Public Health (World Trade Organization, 2001).

In 2001, member states of the World Trade Organization adopted a ministerial declaration to clarify ambiguities between application of the principles of public health by governments and the terms of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). While acknowledging the role of intellectual property protection "for the

development of new medicines", the Declaration also recognizes concern about its effects on prices. The Doha Declaration affirms that "the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health". In this regard, the Doha Declaration enshrines the principles that WHO has publicly advocated and advanced over the years, namely reaffirmation of the right of member states to of the World Trade Organization to make full use of the safeguard provisions of the TRIPS Agreement in order to protect public health and enhance access to medicines by poor countries.

As the noncommunicable disease pandemic spreads, business has been seen as contributing significantly to its causes, particularly in countries with weak legislative structures. Governments and international organizations experience pressure from a highly globalized industry that can often harm health. For example, in 2003, the United States Sugar Association, Inc., comprising more than 300 companies, threatened to exert pressure on the United States Congress to stop funding WHO if the Organization did not rescind its recommendations on sugar consumption in its report on diet and nutrition.

Over the past few decades, therefore, the gap between the interests of business and society has grown; the pharmaceutical industry and tobacco, alcohol and food and beverage companies have become the focus of critical health campaigns by consumers and nongovernmental organizations. Many of these industries could make significant contributions to health and its determinants if they were to reorient their premises. One business leader said, "Companies have a responsibility towards all stakeholders, including shareholders and the societies that make their very existence possible." (Murthy, 2011). Over the past few decades, a number of companies have begun to reconsider their responsibility in relation to noncommunicable diseases and are providing support to the global NCD Alliance and other initiatives, such the Clinton Foundation/Beverage Industry Agreement On Eliminating Soft Drinks Sales In Schools.

The leading beverage companies in the United States have made a 3-year commitment with the Alliance for a Healthier Generation, a joint initiative of the American Heart Association and the William J. Clinton Foundation, to remove full-calorie soft drinks from schools across the country and replace them with lower-calorie, smaller-portion products. As a result of the agreement, there has been an 88% reduction in calories in beverages shipped to schools since 2004 (American Beverage Association, 2010).

The challenge of 'giving back' was addressed by a movement for increased corporate social responsibility, a form of corporate self-regulation, whereby businesses monitor and ensure active compliance with the spirit of the law, ethical standards and international norms. The movement was begun in relation to sustainable development—for people, the planet and profit; today, health features more prominently. The United Nations Global Compact, launched in 2000 in order to involve the business sector in achieving the Millennium Development Goals, is part of the drive for more private sector involvement, in particular by charitable contributions. Activities for corporate social responsibility are now ubiquitous, with proactive outreach to communities and others, including governments and civil society organizations. In global health, business has come to play a significant role in many partnerships, in the governance of organizations such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and in promoting social business solutions in relation to nutrition and information technology. Today, the business community's involvement in health has extended beyond the usual partners, such as pharmaceutical companies, to include for example mining, information technology providers, food and beverage companies and a growing number of private sector foundations. Murthy (2011) stated, "We are moving beyond traditional philanthropy, where companies only provide funds and direction, to deeper carefully managed relationships that share personnel, expertise and ideas."

In 1999, WHO launched the **Roll Back Malaria Project in Azerbaijan**, entirely financed by Eni, an international oil and gas company, as part of its programme for community relations. It helped the Ministry of Health to strengthen its malaria prevention and control activities. Eni works with many international organizations, governments and nongovernmental organizations in about 80 countries.

The **Global Alliance for Clean Cookstoves** was launched in 2010 as a public–private partnership to save lives, improve livelihoods, empower women and combat climate change by creating a thriving global market for clean, efficient household cooking solutions. The Alliance's '100 by '20' goal calls for 100 million homes to adopt clean, efficient stoves and fuels by 2020. The Alliance works with public, private and non-profit partners to help overcome the market barriers to the production, deployment and use of clean cookstoves in the developing world.

The pros and cons of corporate social responsibility continue to be widely debated and are viewed critically not only by civil society but also by economists, who see the approach as a mind-set "in which societal issues are at the periphery not at the core" (Porter & Kramer, 2011). As health becomes a major economic driver, linked to business innovation and growth, such as the role of the information technology industry in 'mobile health', new approaches can be conceived to the interface of social and business interests. This is illustrated "when a firm invests in a wellness programme. Society benefits because employees and their families become healthier, and the firm minimizes employee absences and lost productivity." (Porter & Kramer, 2011). Fig. 7 below shows areas in which the connections are strongest.

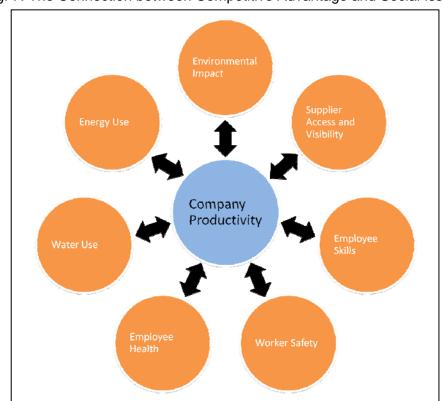


Fig. 7. The Connection between Competitive Advantage and Social Issues

Source: Porter & Kramer (2011).

Shared value: This concept can be defined as policies and operating practices that enhance the competitiveness of a company while simultaneously advancing economic and social conditions in the communities in which it operates. Creation of shared value involves identifying and expanding the connections between social and economic progress (Porter & Kramer, 2011).

These authors suggest that corporate social responsibility, social business and social entrepreneurship are first steps towards changing the role of business in a whole-of-society approach to health, in which business moves beyond philanthropy and charity. Porter & Kramer (2011) note that it is "societal needs not just conventional economic needs that define markets" and argue for a shared-value approach by business, government and society, in which social concerns result in both productivity and well-being. One method for measuring and providing incentive for a shared-value approach would be use of the concept of a 'health footprint', which has proven to be useful for motivating businesses and consumers to adopt better practices in relation to carbon consumption. (For more information on health as a 'common affair', see the background paper by O. Raynaud.) As in the movement for 'greener' businesses and consumer preferences, health is moving from corporate social responsibility to become embedded directly in strategies and business models.

There is still a long way to go, and there are heated debates about which policies will best convince industry to become more engaged and more responsible and about the extent to which multistakeholder initiatives can be made accountable. There also continue to be wide differences among industries in their behaviour in countries with strong and weak regulatory structures. One challenge of global health is the exportation of unhealthy products and lifestyles to developing countries, accompanied by extensive marketing and use of the international system, such as World Trade Organization agreements, to keep restrictions to a minimum on the basis of arguments of unnecessary negative impacts on trade.

2.2 The changing nature of policy-making

A key problem in policy-making in the 21st century is dealing with uncertainty. In view of the developments described above, the nature of policy-making has changed; it has become more complex as it attempts to address 'wicked problems' and systemic risks, confront multiple possible futures, include many players and stakeholders and reach agreement on courses of action based on the understanding that the amount of evidence is always increasing and it is rarely final. A case in point is the interface of the global food system with the increasing prevalence of obesity and its long-term impact on health and life expectancy and also on agriculture and animal health. This complexity makes it difficult to predict a clear trajectory for development, to have full confidence in calculations of risk or to define any combination of behaviour and technology as 'sustainable'. New forecasting methods indicate that "future death rates and health care expenditures could be far worse than currently anticipated" (Reither et al., 2011). Once these new calculations are accepted, they will clearly affect the amount of investment in a given problem, in this case obesity.

These uncertainties constitute a major problem for traditional bureaucracies: first, they are averse to risk and unlikely to act when they cannot be sure of the result; secondly, they have no incentive to take initiatives beyond their own sector. It is, however, no longer sufficient to address the major social challenges by a sectoral division of labour and with a short-term perspective when the challenges themselves interact, are interconnected and have long-term impacts. It is also no longer adequate to apply a linear approach to policy-making, because "part of the wickedness of an issue lies in the interactions between causal factors, conflicting policy objectives and disagreement over the appropriate solution. Linear thinking is inadequate to encompass such interactivity and uncertainty." (Government of Australia, 2007). The question

also arises of who should be involved in policy formulation and decision-making and, in the context of numerous regional and global agreements, at what level of governance the final authority lies. Doing only one thing is no longer safe and efficient; within the new environment, governments must use a wide range of approaches.

The move to policy-making through highly networked, multilevel, multistakeholder governance is not recent; it is a transition that has gathered momentum since the advent of modern public administration and is reaching its culmination in our time. All agencies and branches of government, in health as in other areas, are undergoing this change, as are businesses, associations, communities and individuals. The transition requires a new way of making policy.

Nine features required of policy-making in the 21st century

Forward looking: a long-term view based on statistical trends and informed predictions of the probable impact of the policy

Outward looking: taking account of the national, European and international situation and communicating policy effectively

Innovative and creative: questioning established methods and encouraging new ideas; open to the comments and suggestions of others

Using evidence: using the best available evidence from a range of sources and involving stakeholders at an early stage

Inclusive: taking account of the impact of the policy on the needs of everyone directly or indirectly affected

Joined-up: looking beyond institutional boundaries to the government's strategic objectives; establishing the ethical and legal basis for policy

Evaluative: including systematic evaluation of early outcomes into policy-making

Reviewing: keeping established policy under review to ensure that it continues to address the problems for which it was designed, taking into account associated effects

Learning lessons: learning from experience of what works and what doesn't

Adapted from Government of Northern Ireland (1999)

To fully understand the extent of the shift, it is helpful to recapitulate the change from public administration to new public management and then to 'new' governance that includes whole-of-society and whole-of-government approaches. Much of the transformation has occurred in the health sector, which has undergone constant management reforms in some countries.

Public administration

The late 19th century saw the development and growth of public administration as the dominant form of governance. In public administration, authority is distributed hierarchically within specialized subunits, or bureaux, the functions and jurisdiction of which are dictated by stable, exhaustive rules and in which functionaries of the state are technical professionals whose appointments to public service were based increasingly on merit and not on birthright or favour with leadership (Weber, 1922; Osborne, 2010).

New public management

Between the late 1970s and the early 21st century, the old national and international bureaucracies came under criticism. They were portrayed as bloated, inefficient and too slow to react to new, complex, interconnected challenges such as 'stagflation', the oil monopolies of

the Organization of the Petroleum Exporting Countries, chronic poverty and instability in less-developed countries and global financial crises, such as the stock market crash of 1987. This portrayal also applied at international level, where the increasing numbers of public–private-partnerships and product-development partnerships saw closer cooperation between international organizations and the private sector in what some observers have called 'market multilateralism' (Bull & McNeill, 2007). The increasing influence of neoliberal economic theory, coupled with new types of social challenges tested the capabilities of public administration as the dominant mode of governance and brought about a move, particularly in the Anglo-Saxon countries, towards a competing regime referred to as 'new public management'.

New public management reforms were modelled on the private sector and made the management styles in public organizations less hierarchical, more focused and more entrepreneurial, emphasizing control of inputs and outputs, evaluation, performance management and audit, the use of market principles like competition and contracts for resource allocation, and outsourcing government functions to more efficient actors in civil society and the private sector (Hood, 1991). New public management reforms tended to ignore the problems of horizontal coordination and the ensuing fragmentation of effort, thereby actually hampering efficiency and effectiveness to some extent (Christensen & Laegreid, 2007).

New governance, whole of government and whole of society

Whereas the focus of new public management is on reforms in public sector organizations and on improving their efficiency and effectiveness by application of market mechanisms, 'new governance' is based on the changing context of the practice of public administration and the resulting changes in inter-jurisdictional, cross-sectoral and third-party relationships (Frederickson, 2005; Klijn, 2005). The two approaches described below, the whole-of-government and the whole-of-society approaches, both include multistakeholder, multilevel governance. They require that governments take on diverse roles (Fig. 8): as 'commander-in-chief', imposing mandatory regulations that define boundaries and rules for consumers and all stakeholders; as a provider of public goods and services; as the steward of public resources; and as a partner in collaborative undertakings with other jurisdictions, businesses and civil society organizations (Dubé et al., 2009).

Public Policy in Its Many Roles Steward of Enabler of Enabler of Provider of Public Partner in Social and Whole-of-Public Goods Regulator Resources Multi Sector Business and Services and Collaboration Society Action Innovation Investments

Fig. 8. Public policy in its main roles.

Source: Dubé, Thomassin & Beauvais (2009); MWP (2011).

The whole-of-government approach

A number of countries have shifted to a whole-of-government approach, sometimes called 'joined-up government', which represents the diffusion of governance vertically across levels of government and areas of governance, as well as horizontally throughout sectors.

The **Federal Sustainable Development Strategy for Canada** makes environmental decision-making more transparent and accountable to Parliament. It does so by establishing a framework for sustainable development planning and reporting with the following elements: an integrated, whole-of-government picture of actions and results to achieve environmental sustainability; a link between sustainable development planning and reporting and the Government of Canada's core expenditure planning and reporting system; and effective measurement, monitoring and reporting in order to track and report on progress to Canadians. The Strategy was conceived and implemented collaboratively at all levels of the Government, in order to improve transparency and accountability. The Minister of the Environment has overall responsibility for the Strategy.

The whole-of-government approach is often considered to be the appropriate way of addressing 'wicked problems' within government. The activities are multilevel, spanning local and global activities and actors and increasingly involving groups outside government. This approach has become highly relevant in setting public policy for health. It requires that all actors consider improved health and well-being as a social goal that requires joint action.

In **South Australia**, the Department of the Premier and Cabinet is the principal Government agency that gives specialist advice on policy to the Premier and ministers, supports the Cabinet and provides direction and leadership to the public service. The Department oversees implementation of South Australia's strategic plan, has overall responsibility for Federal–State relations and leads Government initiatives in a range of services that benefit other Government agencies and the community. The integration of a health-in-all-policies approach, known as 'health lens analysis', directly into the South Australia strategic plan was crucial for a whole-of-government approach to health and well-being.

ActNow BC: ActNow BC is a cross-government health promotion initiative that seeks to improve the health of British Columbians by taking steps to address common risk factors and reduce chronic disease. The British Columbia Ministry of Health, which initiated the programme, knew that it could not achieve its targets alone, as too many factors that influence people's ability to make healthy choices, such as access to affordable, healthy food, are beyond its scope. To overcome this hurdle, the Premier appointed a minister of state for ActNow BC, to lead a Government-wide approach and coordinate the participation of all provincial ministries. The Ministry of Transportation provides community funding to install or widen cycling lanes, and the Community Food Systems for Healthy Living programme, supported by the Ministry of Agriculture and Lands, is introducing community gardens and kitchens in 12 First Nations communities. All ministries are required to use a 'health promotion lens'.

The whole-of-government approach is often used to address a perceived lack of command and control from the centre in order to achieve a priority or for overall goals, with a new organizational design and reorganization. This approach requires building trust, a common ethic, a cohesive culture and new skills. Whole-of-government approaches are time- and resource-consuming but can be particularly suited for addressing complex policy issues. They require the full support of the overall system and top-level decision-makers. Conklin (2006) defined the approach as creating a shared understanding of a problem and a shared commitment to its possible solution. Typical of whole-of-government approaches are central strategic units, for example in the prime minister's office, sometimes devoted to specific priorities. They also

include cabinet committees, interministerial or interagency units, intergovernmental councils, task forces, lead agency assignments, cross-sectoral programmes and projects and (as in the United States) so-called 'tsars', who are responsible for overseeing policies and convincing agencies to work together. They can be found in nearly all fields of public policy; in health, a global AIDS tsar or a drug tsar plays an important role. One aspect is finding ways to work together more pragmatically and intelligently, rather then creating new, formalized structures. This approach is also referred to as 'network governance' (Christensen & Laegard, 2007).

A whole-of-government approach includes the complexity of multilevel governance—working at national, regional and local levels of government. Many countries have devolved responsibility for public health, health care and a range of the determinants of health to regional and local levels. Multilevel governance meets the idea that governance emerges from interactions among a range of state and non-state actors operating at different jurisdictional, geographical and organizational levels, with different forms and degrees of authority (Hooghe & Marks, 2003). Multilevel governance, which is often related to global and regional governance, involves both horizontal and vertical interaction among local, national, regional and global policy arenas. It highlights the important role of local governments in leading new approaches to governance for health.

The **European Union** has created a number of specialized agencies in the Region, such as the European Centre for Disease Prevention and Control, the European Agency for Safety and Health at Work and the European Food Safety Authority, which bridge the interests of the European Union, its Member States and, ultimately, citizens.

Innovative governance for global health: New forms of collaboration in global governance have attracted attention. There has been a significant increase in the number of organizations associated with global health. The movement for legitimate (involving people living with HIV) and effective global governance to stop the spread of HIV infection and AIDS has been a major catalyst for the diffusion of governance. UNAIDS was created to coordinate responses to the global challenge, also involving civil society. New multistakeholder governance arrangements have been instituted by agencies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and the GAVI Alliance.

In 2001, **local strategic partnerships** were set up in local authority areas across England. These statuary bodies bring together all public sector service providers, businesses and civil society groups to provide unified public services in each area and to overcome the previous fragmented approach to public service delivery.

The whole-of-government approach emphasizes not only better coordination and integration of government activities but also focuses coordination and integration on the social goals that the government represents. Health-in-all-policies is one whole-of-government approach to giving priority to governance for health and well-being, which involves sectors other than the health sector in both directions: the impact of other sectors on health and the impact of health on other sectors. The analysis Crossing sectors by the Public Health Agency of Canada et al. (2007) confirmed that the balance appears to be shifting from intersectoral action for health to intersectoral action for shared societal goals.

On the basis of successful government modernization policies in Canada, New Zealand and Singapore, the Federal Government of the United Arab Emirates designed a holistic approach to achieving more flexible, forward-looking 'joined-up' government. The success of this approach is due to an agency at the centre of government that champions the modernization process and derives its power from the leadership of the country. It has four roles: championing overall policy-making through national strategies, ensuring accountability and proper implementation by performance management and coordination of cross-cutting programmes, enabling flexibility and continuously reinventing Government through institutional efficiency and service excellence and supporting cabinet decision-making and related stakeholder communications. Fig. 9 shows these roles and related activities (World Economic Forum, 2011).

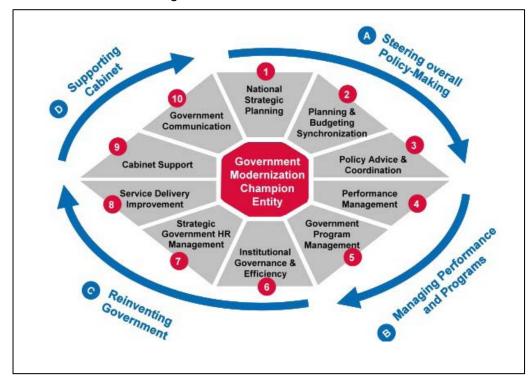


Fig. 9. Government modernization

Source: World Economic Forum (2011).

The whole-of-society approach

The whole-of-society approach adds yet another layer of complexity to the diffusion of governance. Usually, 'wicked problems' require more than a whole-of-government approach: solutions require the involvement of many social stakeholders, particularly citizens. Increasingly more platforms and alliances are therefore being created for action on shared social goals. The aim of a whole-of-society approach is to expand the whole of government by emphasizing the roles of the private sector and civil society as well as a wide range of political decision-makers, such as parliamentarians. The policy networks that have emerged within government increasingly extend beyond government to include other social actors, particularly for the consideration of wicked problems such as obesity (Dubé et al., 2009) and pandemic preparedness (WHO, 2009).

Government actions for whole-of-society approaches. On the basis of WHO's recommendations on how to establish a whole-of-society approach to pandemic preparedness, the following actions are recommended for governments:

- Establish a cross-government committee or task force to coordinate activities.
- Establish a forum involving civil society and the private sector.
- Assign one agency, department or ministry to coordinate the multisectoral agencies or organizations involved.
- Integrate issue-specific plans with national management processes, plans and committees.
- Set up explicit legal and ethical frameworks for policy implementation.
- Formulate clear, issue-specific plans, including the chain of command, the human, material and financial resources required and where they will come from.
- Establish locations, structures and standard operating procedures.
- Align issue-specific plans with those of neighbouring countries.
- Promote participation of the private sector.
- Share plans in order to facilitate public understanding and cross-border consistency.
- Consult neighbouring countries (in meetings or workshops) about aspects of their plans that have regional or cross-border implications.
- Identify the social groups that are likely to be most vulnerable and most severely affected and establish measures to protect them.
- Determine which agencies and organizations will deliver services most appropriate to each vulnerable population at all targeted locations.
- Stipulate the level of government (national, regional, local, community) responsible for each action.
- Provide advice to local authorities on planning, and conduct training for effective dissemination at all levels.
- Involve national and international organizations, and designate a coordination body.
- Conduct drills, simulations or exercises at least annually to test the robustness of the established plan; identify gaps, and revise the plan accordingly
- Involve the private sector, civil society and international organizations in simulation exercises.
- Evaluate the lessons learnt.

The whole-of-society approach implies new, greater capacity for communication and collaboration in complex, networked settings and highlights the role of the media and new forms of communication. Each party must invest resources and competence into the strategy. By engaging the private sector, civil society, communities and individuals, the whole-of-society approach increases the resilience of communities to withstand threats to their health, security and well-being. As stated by Paquet (2001), "Collaboration is the new categorical imperative." The whole-of-society approach goes beyond institutions: it influences and mobilizes local and global culture and media, rural and urban communities and all relevant policy sectors, such as education, transport, the environment and even urban design, as demonstrated with respect to obesity and the global food system.

Preventing road traffic injury. In 1987, a group of intensive-care specialists in New Zealand decided to become involved in preventing road traffic injury. The core of this activity was changing people's discourse on road traffic injuries by rejecting the concept of 'accidents'. A communication campaign became a successful lobbying action based on clever use of the mass media, which included raising awareness by ruthlessly and immediately exploiting every crash and every death, personalizing the victims and communicating in well-informed, innovative ways. The term 'crash' was publicized in all the mass media, adopted by the Coroner in reporting road deaths and was received favourably by the Minister for Health. The installation of median barriers became an issue for the electronic and print media, politicians and the public. A petition from Auckland with 16 000 signatures was presented to Parliament in July 1988. Because of the increasing pressure on the Ministry of Transport, the Prime Minister announced a new policy in which "all new motorways will have median barriers as part of design and all old motorways will be retrofitted". These installations were completed in Auckland by 1992 (WHO Regional Office for Europe, 2004).

Whole-of-society approaches are a form of collaborative governance that emphasizes coordination, through normative values and trust-building among various actors in society. The approaches usually imply 'steering instruments' that are less prescriptive, less committed to a uniform approach and less centralized and hierarchical. Joint goals and targets, such as in the United States 'Healthy People 2020' (Davis, 1998; Federal Interagency Workgroup, 2010; US Department of Health & Human Services, 2010), are a good basis. Many European Union policies have a similar basis, given the wide consultation that precedes them, usually involving all relevant stakeholders, public as well as private, although not with the same level of influence.

Healthy People 2020 in the United States reflects input from a diverse group of people and organizations. The vision, mission and overall goals provide structure and guidance for achieving the objectives. While they are general, they indicate specific, important areas in which action must be taken if the United States is to achieve better health by the year 2020. Developed under the leadership of the Federal Interagency Workgroup, the framework of the project is based on exhaustive collaboration between the Department of Health and Human Services and other federal agencies, public stakeholders and an advisory committee.

In the **European Union**, policy is increasingly such that "deliberative consensus is often regarded as provisional; multilevel—connecting different levels of government, crucially this means that it is not strongly hierarchical or hierarchical at all; a departure from representative democracy in which accountability is defined in terms of transparency and scrutiny by peers; a combination of framework goals set from above combined with considerable autonomy for lower-level units and agents to redefine the objectives in light of learning; and built on reporting on performance and participation in peer review in which results are compared with those pursuing other means to the same general ends" (Greer & Vanhercke, 2010).

The term 'multistakeholder governance', also known as 'devolved governance', is frequently used in the context of whole-of-society approaches. The stakeholders usually include the state, the private sector, nongovernmental organizations and other members of civil society, such as civil foundations (Burger & Mayer, 2003). This concept has entered the public health debate, particularly the argument of increased problem-solving efficiency, also described as 'results-based governance', and legitimacy. While the involvement of civil society is now an accepted feature of many governance processes, the involvement of the private sector is still contested, particularly on grounds of legitimacy.

ActNow BC: To extend its reach, ActNow BC has more than 70 partners, including nongovernmental organizations, communities, schools and the private sector, which are delivering ActNow BC programmes and services throughout the Province. One programme, in partnership with the British Columbia Dairy Foundation, purchased 900 refrigerators for schools to store fresh food, such as milk, fruit and vegetables (Health Council of Canada, 2007).

3. Governance for health and well-being

For decades, the health sector has argued that health depends on policies and processes that originate beyond its jurisdiction, and the history of most major health advances reflects this view. The required approach to health has been described in many ways: 'intersectoral action for health', 'healthy public policy' and, more recently, 'health in all policies', 'shared governance for health' and 'governance for health determinants'. On the basis of the arguments outlined in the first two chapters of this study, on the dynamics of new governance and the changing nature of policy-making, we have worked from a process- and relation-based understanding of governance.

The recent report of the Commission on the Social Determinants of Health (2008) describes once more the many social determinants that constitute the 'causes' of good or bad health and the many fields of social and political action that are required to effect a change to fairer distribution. It linked the intersectoral debate with a commitment to equity more strongly than before. Nevertheless, the failure in many countries to achieve real, sustained involvement of other actors in health and equity suggests that a clearer understanding of health and governance is needed in order to move forward. In our view, this will require joint recognition of systemic risks and 'wicked problems' and working together through both whole-of-government and whole-of-society approaches, accepting the need to build convergence in order to reach better outcomes.

The most important change to be made by the whole of government and the whole of society is to consider that improved health and well-being represent an overarching social goal that requires common action. Consideration of health in the policies of other sectors becomes part of their social commitment both to improve well-being and to govern better.

The history of horizontal governance for health in three waves¹

First wave: intersectoral action and primary health care

Intersectoral action: efforts by the health sector to work collaboratively with other sectors of society to improve health outcomes

In the Declaration of Alma Ata (WHO, 1978), WHO stated that the role of governments in health, in all countries, both developing and developed, in the late 20th century should be redefined and strengthened and that intersectoral action was a key to better health. The Declaration called for "a comprehensive health strategy that not only provided health services but also addressed the underlying social economic and political causes of poor health" and

¹ Adapted from Kickbusch (2010)

stated that: "[Primary health care] involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors."

This call to engage in coordination for health can be considered the first of the systematic attempts to highlight the relevance of other sectors in modern health policy for improving population health. The governance innovation was based on a model of rational policy-making initiated by and under the leadership of the health sector. The health sector follows an endsmeans rationale and shows other sectors (e.g. education) how to contribute to health and how this in turn will contribute to economic and social development. Today, the term 'intersectoral action for health' is used very broadly to denote a wide variety of forms of action and decision-making across sectors. A recent publication deleted the collaboration imperative and defined 'intersectoral action for health' as "actions undertaken by sectors outside the health sector, possibly, but not necessarily, in collaboration with the health sector, on health or health equity outcomes or on the determinants of health or health equity" (Peake et al., 2008).

Second wave: health promotion and healthy public policy

"Healthy public policy is characterized by an explicit concern for health and equity in all areas of policy and by an accountability for health impact." (WHO, 1998)

The call to engage other sectors for health was reinforced in the 1980s by the health promotion movement. The Ottawa Charter for Health Promotion (WHO Regional Office for Europe, 1986) introduced 'build healthy public policy' as one of the five action areas for health promotion, the others being 'create supportive environments', 'strengthen community action', 'develop personal skills' and 'reorient health services'. Healthy public policy was to be implemented in concert with the other four strategies of the Charter in order to be fully effective.

The Ottawa Charter stated unequivocally that health is created in the context of everyday life, where people live, love, work and play. It expanded the concept of health determinants to include environmental challenges and people's empowerment. While its governance concept was still centred on state and public sector policy, it opened strategic thinking towards new types of partnerships and approaches. The focus on new lifestyle and environmental challenges to health called for regulation in sectors other than health (both nationally and internationally), while the focus on supportive environments introduced achievement of a common health purpose through 'settings' approaches, such as the WHO European Healthy Cities project, health-promoting schools and healthy workplaces. The health promotion approach addressed the interfaces between different levels of governance, stakeholders and organizations in other sectors. Health promotion professionals were considered to be 'brokers' for health rather than implementers.

The second international conference on health promotion in Adelaide, Australia, in 1988 addressed selected policy issues that required concerted action across government sectors, such as women's health, food and nutrition, tobacco, alcohol and creating supportive environments for health. The recommendations (WHO, 1998) urged governments to act on the underlying elements of a healthy society: what are now referred to as 'the causes of the causes'. They stressed the relevance of equity as a determinant of health and introduced the concept of accountability for health effects (WHO, 1997a). This thinking led to the use of 'health impact statements' in policy.

Health promotion and healthy public policy gave rise to many innovations for governance. In the 'settings' approach, health promotion reintroduced 'place' as a key category in public policy for health. Initiatives such as the WHO European Healthy Cities project re-established the importance of local action and the links between urban planning, zoning, green spaces, housing, transport, neighbourhood cohesion and health. In the setting and networking approaches, health promotion and healthy public policy are more of an incrementalist rather than a rational policy model; in this innovative social model, the health sector plays the role of an advocate and broker. To a greater extent than in the first wave of intersectoral action, it recognized that complex policy-making must take into account the interests, values and established positions of institutions and personal ambitions. After two decades of focusing on individual behavioural change, health promotion showed (as did other areas of policy, such as the environment) that the problems had to be addressed at the causal level and that joined-up policy approaches are necessary (Fig. 10). It highlighted the accountability of other sectors for health and promoted health impact assessments.

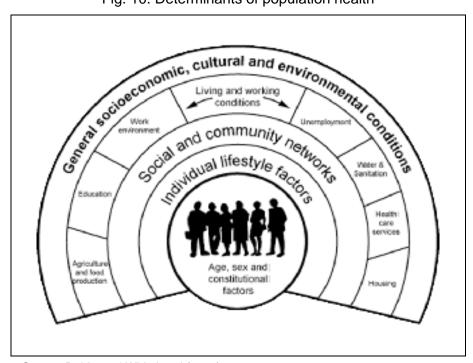


Fig. 10. Determinants of population health

Source: Dahlgren &Whitehead (2006)

Today, the terms 'intersectoral action' and 'healthy public policy' are often used indiscriminantly; however, intersectoral action does not necessarily include a policy component, and healthy public policy does not necessarily require intersectoral action. A single sector, finance or education, can well implement policies that have a considerable effect on heath, even if that was not the intent and without the involvement of the health sector. An increase in taxation on alcohol, tobacco or soft drinks can have an effect on health even if the measure was introduced for fiscal reasons.

Third wave: health in all policies

"The **Health in All Policies** approach considers the impacts of other policies on health through health determinants when policies of all sectors are being planned, decisions between various policy options are being made, and when implementation strategies are being designed. It also examines the impacts of existing policies. The ultimate aim is to enhance evidence-informed policy-making by clarifying for decision-makers the links between policies and interventions, health determinants and the consequent health outcomes" (Stahl et al., 2006).

Intersectoral action for health usually took the shape of projects (e.g. Public Health Agency of Canada et al., 2007), which provided an opportunity to test elements of horizontal health governance. In Europe, widescale health promotion projects, such as Heartbeat Wales (Capewell et al, 1999) and the North Karelia Project (Puska et al., 1995), gave further impetus and more experience. There are, however, fewer examples of initiatives with a systems approach at the level of government followed by a move towards a whole-of-society approach. Finland comes closest, as it has been implementing a political paradigm shift for several decades. The Finnish approach to horizontal health governance has focused more on redefining health within government overall, eventually leading to the third wave of health in all policies (Puska & Ståhl, 2010).

In 1972, the Finnish Government's Economic Council included health in its deliberations, and optimal population health and its fair distribution were made priorities of Finnish public policy. Finland had continued to use various approaches to horizontal health policy since the 1970s, particularly in its response to high levels of cardiovascular disease. It adopted a national health programme based on intersectoral action in 1986, which was used as a model for healthy public policy in the Ottawa Charter. The national policy was acted upon, particularly in areas such as agriculture and commerce; a key factor was to reduce agricultural subsidies for products with a high fat content, such as milk, and subsidies were used instead to promote domestic berry and vegetable products. On the basis of its experience, Finland introduced a resolution on health protection in all policies during the Finnish Presidency of the European Union in 1999. This led to a number of actions in the European Community, one of the most important being the launch of sector-specific health impact assessments in all European Union policies in 2000.

Finland built on its experience in horizontal governance for health and made health in all policies a major theme of the Finnish Presidency of the European Union in 2006. At the end of its Presidency, the Council adopted a conclusion (Council of the European Union, 2006) that invited the European Union to:

- apply parliamentary mechanisms to ensure effective cross-sectoral cooperation for a high level of health protection in all policy sectors;
- take into account and carry out health impact assessments of legislative and nonlegislative proposals; and
- consider the health impact, with particular emphasis on equity in health, of decisions made in all policy sectors.

Health in all policies is clearly built on the first two waves—the collaborative approaches of primary health care and health promotion—drawing on their strengths and learning from their shortcomings. Health in all policies is an innovation in governance in response to the critical role that health plays in the economies and social life of 21st century societies, to take governance beyond intersectoral action and healthy public policy, even though the terms continue to be used interchangeably. Health in all policies is a network approach to policy-making throughout government—a whole-of-government approach with a focus on health—

based on acceptance of different interests in the policy arena and the importance of building relationships among policy-makers in order to ensure policy outcomes.

"Whole of government denotes public services agencies working across portfolio boundaries to achieve a shared goal and an integrated government response to particular issues. Approaches can be formal or informal. They can focus on policy development, program management, and service delivery." (Australian Management Advisory Committee, 2004).

The Adelaide Statement (WHO and Government of South Australia, 2010) included this approach in its statement on health in all policies, stating that a new social contract between sectors is required to advance human development, sustainability and equity, as well as to improve health outcomes. This requires a new form of governance, with 'joined-up' leadership within governments, across sectors and among levels of government. Governance for health and well-being requires both whole-of-government and whole-of-society approaches to address the 'causes of the causes' and 'wicked problems' in health, such as obesity and mental health. Health should be negotiated with others, with health not always in the lead. The health sector should be considered "one of a number of intersectoral players in a 'web' that makes use of new kinds of leadership, skills, information and intelligence" (WHO, 1997a).

As we make the transition to a knowledge society, in which power and intelligence are diffused throughout society, it is increasingly important to involve the private sector and civil society in policy design and implementation in meaningful ways. Nevertheless, the role of government must remain strong and clear, in particular in relation to unfair distribution. With a better coordinated, integrated, capable whole-of-government approach, the state is better equipped to steer and collaborate with society and promote good governance for health, well-being and equity.

Health ministries: a modern concept that is still taking shape

The health sector has experienced a transformation similar to that of governance, and health and well-being merit their place among the policy fields enumerated in the OECD definition referred to above. Functionally separate health ministries are a relatively new phenomenon. In the mid-19th century, many cities had public health departments with broad authority. The New York Board of Health, for example, had the statutory power in 1849 "to do or cause to be done any thing which in their opinion may be proper to preserve the health of the city" (Rosenberg, 1962).

National health ministries came later. In Germany, for example, the Ministry of Health was created as a separate ministry in 1961; it then underwent a variety of changes to include responsibilities such as youth, family and women, only to become a separate ministry again in 1991. In 2002, it was given the responsibility for social affairs, before its portfolio was again reduced to health in 2005. In France, ministerial departments are even more fluid and depend on allocations from the Prime Minister. After its establishment in 1921, the French Ministry of Health was expanded to include other portfolios, such as labour, pensions, the family, the elderly and the handicapped. Currently, the French Ministry of Health is also responsible for sports and women. In Sweden, the portfolio of the current Ministry of Health and Social Affairs includes social services and security, health and medical care, public health and the rights of children, the elderly and people with disabilities. The Ministry has four ministers: one for health and social affairs, one for public administration and housing, one for social security and one for children and the elderly.

In western European countries, portfolios are often changed during reorganization because of increasing attention to health and health issues, such as moving the responsibility for health

insurance from the health to the social portfolio, as in France. Such decisions are driven by political considerations: in countries governed by coalition governments, ministry portfolios are adapted according to the availability of possible ministers and their importance and personalities.

The portfolios of health ministries in eastern European countries undergo less change. For example, in Croatia, the Ministry of Health and the Ministry of Labour and Social Welfare were merged in 2003 into the current Ministry of Health and Social Welfare. An exception is Hungary, where, after the elections in April 2010, portfolios underwent far-reaching changes, with the creation of a 'super ministry', the Ministry of National Resources, which combines the portfolios of social affairs, health, education, youth, sport and culture. Health ministries in Central Asian countries have remained more static. For instance, the portfolios of the Kazakh and Turkmen health ministries have not changed substantially since their creation after the countries' independence in 1991.

In the 20th century, the main role of health ministries was to organize health care, which became an increasing financial and organizational challenge. Public health has frequently not received the necessary priority, and only a few health ministries have systematically used health-in-all-policies approaches. Despite the epidemiological transition to noncommunicable diseases, the focus remained on 'care and cure' rather than on health promotion and prevention. Furthermore, most countries paid little attention to the policies of other sectors, even though intersectoral communication was highlighted in many health policy documents and in the Health for All targets adopted by the WHO Regional Office for Europe in 1984.

In the 21st century, the role of health ministries must change yet again, into the whole of government and the whole of society. The health sector is part of an intersectoral 'web', with new kinds of leadership, skills, information and intelligence used to achieve societal goals through a range of collaborative mechanisms.

4. Good governance for health and well-being

4.1 What is good governance?

Principles of good governance for governments have been drawn up by a number of international organizations, including the European Union, OECD and the World Bank. To some extent, these principles have emerged in parallel to guidelines for good corporate governance as standards for the behaviour of companies. More recently, such standards are also being applied in nongovernmental organizations. Understanding of good governance in relation to governments is well captured in the World Bank's definition of governance (World Bank, 2011):

We define governance as the traditions and institutions by which authority in a country is exercised for the common good. This includes (i) the process by which those in authority are selected, monitored and replaced, (ii) the capacity of the government to effectively manage its resources and implement sound policies, and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them.

Major donors and international financial institutions have increasingly made reforms to ensure 'good governance' a condition for receiving aid and loans, and similar standards apply to accession to the European Union. According to the UNDP, good governance is accountable, transparent, responsive, equitable and inclusive, effective and efficient, participatory, consensus-oriented and follows the rule of law (Fig. 11). More information on measures of good

health governance and an analysis of governance for health and health governance in central and eastern Europe is given in the background paper by A. Fidler and T. Szabó.



Fig. 11. Good governance

Source: UNDP (1997)

The OECD takes a similar but broader approach and defines good, effective public governance as follows: "It helps to strengthen democracy and human rights, promote economic prosperity and social cohesion, reduce poverty, enhance environmental protection and the sustainable use of natural resources, and deepen confidence in government and public administration." Good governance is therefore an amalgam of guiding principles that transcend specific policies, sectors and actors. In this regard, good governance is better understood as a process than as a destination, as a dynamic rather than a static state of affairs. Good governance is an ideal; the application of good governance principles without proper understanding of the context in development is often considered unreasonable. While in the larger United Nations context the concept of good governance is frequently reduced to fighting corruption, we consider it a necessary, intellectually helpful concept. It can assist each health system in analysing progress towards good governance through the eight dimensions of the UNDP definition. Various tools and mechanisms for doing so are cited throughout this document and in the background papers; for example, using 'e-governance' to increase both transparency and participation. Sometimes, the term 'good governance' is used interchangeably with the concept of ethical governance; however, good governance for health and well-being has two larger features: the relation between values and evidence and the role of guiding value systems for ethical governance. We propose four value orientations.

4.2 Role of guiding value systems

Values have become central to the health debate, reflecting a quest for orientation in a pluralist, global, multistakeholder world: democratic societies must continually debate what makes a good society. WHO Member States commit themselves to the values stated in the WHO Constitution (WHO, 1946) and in many other documents at both global and regional levels. The call for Health for All highlighted the value of equity; the WHO HIV/AIDS strategy under the

² This definition is given on the OECD web page on public governance: http://www.oecd.org/countrieslist/0,3351,en_2649_37405_1_1_1_1_37405,00.html (last accessed 9 May 2011).

leadership of Jonathan Mann reinvigorated human rights. Such initiatives are not always easy to translate into national policies in the face of many outside pressures. In 1984, the member states of the European Union agreed on a set of values in the context of European Health-for-All targets (WHO Regional Office for Europe, 1985). In June 2006, the ministers of health of European Union member states agreed that health services must be underpinned by the "overarching values of universality, access to good quality care, equity and solidarity" (Council of the European Union, 2006).

- **Universality** means ensuring access to health care for every person.
- **Equity** means equal access to health care according to need, regardless of ethnicity, gender, age, social status or ability to pay.
- **Solidarity** is closely linked to the financial schemes of health systems. It requires countries to ensure universal access to the necessary health-care services by fair allocation of the costs of health and health services among all citizens. This is achieved mainly through social health insurance based on solidarity, in which the rich subsidize the poor and the healthy subsidize the sick.
- **Access to good-quality care** refers to the pledge of governments to provide the highest possible quality of care, which is patient-centred and responsive to individual needs.

These values must remain central to the health systems of member states of the WHO European Region. As noted above, our understanding of health today goes beyond the health system. Health and well-being are considered essential to good governance in general and the responsibility of the whole of government and the whole of society. Therefore, health must be based on values and principles that transcend the increasingly fluid boundaries of health systems and care. This was well stated by Bjarne Hanssen in 2009, when he was Minister of Health and Care Services in Norway (Strand et al., 2009):

Reducing health inequity is a whole-of-government challenge. It requires intersectoral action, which is demanding. Nevertheless, it is the only way forward if we are to achieve our aim of reducing health inequity that is socially produced and unfair. The Norwegian Government is committed to action for a society in which there is equal opportunity for a healthy life for every individual.

On the basis of our analysis of the literature, we propose that four interlinking concepts constitute the value framework of good governance for health: health as a human right, health as a component of well-being, health as a global public good and health as social justice.

Health as a human right

The new European policy for health, Health 2020, is based on broad agreement that health policies, programmes and practices can directly influence the enjoyment of human rights, and lack of respect for human rights can have serious health consequences. Protecting human rights is recognized as key to protecting public health. A human rights-based approach to health is therefore a governance approach for realizing and giving operational expression to the right to health and related rights.

Health is a human right that is indispensable for fulfilling the fundamental principle of the inviolability of human dignity. This right has been recognized in many international treaties and conventions, as has the impact on other human rights on health, for example, in the WHO Constitution (WHO, 1946), in the Universal Declaration of Human Rights (United Nations General Assembly, 1948) and in the International Covenant on Economic, Social and Cultural

Rights (United Nations General Assembly, 1966), a legally binding instrument of international law.

Every state has ratified at least one international human rights treaty that recognizes the right to health. The right to health or health care is also referred to in 115 state constitutions. It is frequently associated only with individual access to health care and medical facilities, whereas the right to health also includes other factors that can lead to a healthy life, including the protection of health:

- safe drinking-water and adequate sanitation,
- safe food,
- adequate nutrition and housing
- healthy working and environmental conditions,
- health-related education and information and
- gender equity.

As defined by the Office of the United Nations High Commissioner for Human Rights and WHO, the right to health embodies a set of unalienable freedoms and entitlements, such as:

- the right to a system of health protection that provides equality of opportunity for everyone to enjoy the highest attainable level of health;
- the right to prevention, treatment and control of diseases;
- access to essential medicines; and
- maternal, child and reproductive health.

Health as a human right is therefore both a legal obligation and a set of values applied in a human rights approach to global health.

While public policy is always formulated within preset political ideas of what is ethical or acceptable in the 21st century, no sector or actor is exempt from respecting human rights, which are a central value of governance for health, as they touch on a myriad of issues, as set out in the box above. By defining rights and duties, national citizenship defines entitlements of a particular group of people, which must be guaranteed by the state, as opposed to needs, which an individual satisfies by looking to the market or kinship (Jenson, 2009). Human rights, however, transcend 19th and early 20th century notions of citizenship: they are universal and unalienable, based on human dignity and not on the regimes of civil and political rights that have defined the boundaries of the responsibilities and roles of the state, markets, communities and the individual.

Health as a component of well-being

The value of generating 'social wealth' and 'social growth' rather than economic growth that can be measured only in terms of gross domestic product has been discussed internationally for some time. Since 1990, the United Nations has regularly measured the well-being of nations with the 'human development index', with the intention of shifting "the focus of development economics from national income accounting to people centred policies" (UNDP, 2011). Since 2010, the index has combined three dimensions: a long and healthy life: life expectancy at birth; access to knowledge: mean years of schooling and expected years of schooling; and a decent standard of living: gross national income per capita. In the human development index, the Member States of the WHO European Region range from 1 (very high) to 114 (medium). Policies for well-being are considered one possible reorientation of 21st century public policy

goals, from which emerges a range of possibilities for partnerships and joint action for health and well-being.

Many European organizations and countries have begun to redefine their goals. For example, the European Commission (2009) issued a policy paper, GDP and beyond, based on extensive work by partners including the European Commission, the European Parliament, the Club of Rome, OECD and WWF. During the past decade, a number of countries, including Australia, Canada and The Netherlands, elaborated measures of well-being at national level. In the United Kingdom, the Office of National Statistics has begun a national consultation on new measures of well-being, seeking the views of citizens and organizations. In Germany, a Parliamentary commission on 'growth, well-being and quality of life' began work in January 2011 to determine how to complement measures of gross national product with ecological, social and cultural criteria. In France in 2009, a commission on 'measuring economic performance and social progress', set up by the French President and led by two Nobel Prize winners, Joseph E. Stiglitz and Amartya Sen, as well as by Jean-Paul Fitoussi, made suggestions about measuring societal well-being (Stiglitz et al., 2010). The Council of Europe introduced 'well-being for all', emphasizing that well-being cannot be attained unless it is shared. The Club de Madrid, made up of former heads of state, has been holding high-level forums within its Shared Societies Project, which gives current leaders a better understanding of the benefits of policies that strengthen social cohesion, the contribution of social cohesion to well-being and economic performance and the incentives and means to advance social cohesion (Birkays & McCartney, 2011).

Within this shift in values, in which the success of our societies is measured in terms of well-being rather than economic growth, health is understood as an essential component of well-being and becomes a core element of the measure of success. The change shifts the emphasis in economy from the production of goods to a broader measure of overall well-being, which includes the benefits of health, education and security, the effects of income inequality and new ways to measure the economic impact of sustainability on future generations. As Robert Kennedy said during a speech at the University of Kansa (USA) in 1968, "The gross national product does not allow for the health of our children, the quality of their education or the joy of their play." The pursuit of well-being therefore promotes health from a sectoral goal to an overall social goal, requiring commitment not only at the highest level of government but also the whole of society. By including subjective measures of well-being, it validates people's experiences and perspectives.

Health as a global public good

Global challenges like climate change and infectious disease outbreaks (e.g. SARS in 2003, E. coli in 2011) recall the values inherent in the concept of public goods, like peace and security, law and order, street signs and traffic rules: 'things' that are in the public domain. If they are adequately provided, everyone can benefit from these goods; if they are underprovided, if, for example, law and order suffer and crime and violence prevail, we may all suffer. As challenges and their determinants cross boundaries and the nation-state becomes less effective in addressing these problems on its own, there is globalization of public goods. Thus, services and conditions once guaranteed by national and local authorities now require international cooperation between states at regional and even global levels. Many global health challenges and their solutions have the properties of global public goods.

Nationally, there are special challenges for the provision or governance of public goods, known as 'collective action problems'. Each good may be provided differently, involving different people with different incentives. The provision of global public goods is a highly complex governance process, involving many actors, levels and sectors. In the case of pandemic influenza (H1N1) 2009, many states had to act, many agencies in each country had to become

involved, many parts of WHO played important roles, the pharmaceutical industry had to initiate vaccine production, and, last but not least, many people worldwide took precautionary measures or sought treatment in response to information campaigns by the media and other actors (e.g. schools and employers). The successful provision of most global public goods follows a summation process, in which several or all countries take national-level measures to correct underprovision of a global public good, such as enhancing tuberculosis control. Health as a global public good, with the slightly nuanced concept of 'global public goods for health', provides a value system that highlights the need for effective governance of interdependence. United Nations activities in relation to HIV infection and AIDS, climate change and women's and children's health reflect such a commitment to global public goods (Orr, 2011).

Health as social justice

Effective action against the health divide in Europe requires the inclusion of health equity in the values that define good governance. A review of the social determinants of health and the health divide in the WHO European Region (Mackenbach et al., 2008) revealed wide health inequality across the Region and within countries. Unless urgent action is taken, these gaps will increase. Evidence shows that the lower a person's social position, the worse his or her health; in most cases, however, the evidence has not been strong enough to mobilize public outcry or to persuade governments that closing the gap in health equity is a top priority for the whole of government. Many of the factors that shape the patterns and extent of health inequities in a country, including the nature and type of employment, housing, environmental conditions, income level, security, education and community resources, lie outside the direct control of health ministries. At the same time, many determinants of health equity and inequity are also priorities in other sectors, including educational performance, social inclusion, social cohesion, poverty reduction and community resilience and well-being. These determinants represent a meeting-point for common action among sectors, which, if due attention is given to their distribution, will result in benefits for health and health equity.

Many countries with long experience in tackling health inequity are moving to an approach based on sharing the determinants of equity goals with other sectors and stakeholders. In these approaches, health equity is increasingly one of several indicators of progress. Health equity can be considered a guiding value system to promote benefits that accrue to multiple sectors and all of society in terms of social cohesion and quality of life. A key area for action in whole-of-government and whole-of-society approaches to health equity is new or strengthened instruments and mechanisms to promote equity of voice and perspectives in decision-making.

4.3 The relationship between values and evidence

Good governance in the knowledge society has three components: knowledge, legally prescribed procedures and social values (Klinke & Renn, 2006). The co-production of knowledge by the state and society and the pursuit of better evidence drive contemporary policy, as manifest in new modes of democracy and governance through independent agencies and expert bodies. The more complex a governance process and the more stakeholders involved, the more important it is to have common values. It would be misguided to assume that any policy can be based solely on evidence; the production of knowledge and what we call 'evidence' is always embedded within existing values and beliefs.

"Social factors such as human values and ways of knowing—what we choose to know and how we know it—expressly impact what gets to be produced as scientific knowledge. The choice and framing of scientific hypotheses, experimental methodology and interpretation of data can all be influenced by experts' and their institutions' value systems that often remain implicit in scientific decision-making." (See background paper by V. Ozdemir and B.M. Knoppers.)

Evidence and expert advice are only one element of the co-production equation. Evidence for policy-making is constantly evolving; in some cases, the conclusions and recommendations of different sources are incomplete or contradictory. Governance in the knowledge society therefore requires decision-makers who are fully aware of the values that coexist with and are often inseparable from the evidence and allow their debate through participatory processes.

Values can be defined as broad preferences for appropriate courses of action or outcomes. They therefore reflect a person's sense of right and wrong and what ought to be. Values influence attitudes and behaviour and thereby shape policy-making and entire societies by setting the rules and standards (the principles) that determine acceptable (i.e. ethical) actions, in the area of family and community or in terms of governance of society and interactions between communities and societies with different values and principles. Values can be global and regional. 'Equal rights for all' and 'people should be treated with respect and dignity' are important values, which are endorsed virtually universally in principles such as civil and human rights. The epistemology of values such as equity, social justice and human rights is based in moral philosophy. The epistemology of evidence, however, is based in the philosophy of logic and science. "These may be seen as very distinct traditions and ones that have often been at odds in European history." (See the background paper by D. McQueen.); however, in the knowledge society, values and evidence are two sides of the same coin, which influence each other. Whether intentionally or not, evidence and values are applied together; the dichotomy between 'scientific fact' and 'social beliefs' is not nearly as substantial as it is commonly held to be, nor are the two easy to separate.

In responding to uncertainty in policy-making, the tendency has been to rely solely on evidence, overlooking the ways in which social values shape evidence. For example, the 'precautionary principle' represents a value system that overrides evidence (or the lack thereof) as the deciding factor in risk management policy. It states that, in the face of uncertainty, one should choose to halt an innovation or action if there is a 'perceived risk' for irreversible damage, whether or not there is scientific evidence for such risk. A belief in science is strongly held in European thought. Science seeks clear explanations of what works and why. Insofar as medicine is seen as a science and public health as a science-driven field of work, these disciplines are held accountable to the rigour of scientific proof. The rise of accountability, framed in terms such as 'evidence-based medicine' and 'evidence-based policy', runs almost parallel to the rise of such value concerns as equity and social justice in the world of health. (The role of values in governance for health is further explored in the background paper by D. McQueen.)

The **precautionary principle** was a response to environmental concerns and the convergence of public fear of perceived risks alleged to be due to developments in the 1990s, such as genetically modified organisms, nuclear energy, ozone depletion and climate change, which collectively led to the concept of a 'risk society' (Beck, 1992). This concept catalysed the emergence of governance mechanisms perceived to ensure certainty by preventing or stalling the irreversible environmental changes and social risks associated with emerging technologies. The precautionary principle changes the previously neutral position of science to one of a value system, such that, in the face of scientific uncertainty, "it is more responsible to accept the priority of fear over the predictions of hope in order to prevent potential irreversible damages." (Jonas, 1985; Tallacchini, 2005; see also the background paper by V. Ozdemir and B.M. Knoppers).

A recent study by the Institute of Medicine (2011) suggests that health in all policies can be "seen as a manifestation of the precautionary principle: first do no harm to health through policies or laws enacted in other sectors of government." It cites California's Clean Air Act as an embodiment of this principle.

For example, the precautionary principle implies that the values by which we govern should be scrutinized with a rigour equal to that with which we seek and evaluate evidence. Although the strong relation between social determinants and good public health have been known for decades, it was the report of the WHO Commission on the Social Determinants of Health (2008) that brought together this knowledge in a new way, supported by strong evidence. But knowledge is not enough for effective action against the value-related causes of poor health. "The science of how effectively to change these causes is highly problematic and in reality significant changes in the attributable causes may imply political philosophies that are themselves tied to values that may not be in concert with those of the underlying values that relate to good health." (See the background paper by D. McQueen.) For example, in actions to fight risk factors for noncommunicable diseases, behaviour changes are critical. Basic values such as freedom of choice are, however, inimical to some actions for addressing determinants of health and influence the type of evidence and arguments that policy-makers of one or another political orientation are willing to accept.

A new discussion of values in governance for health is therefore essential. Ultimately, the ageold, false separation between 'science' (e.g. evidence) and 'social' (e.g. values) must be closed so that these two inseparable strands of knowledge can be interpreted and deliberated jointly. Good governance for health must be based on an expanded understanding of health, in which health is recognized as a core component of human rights, well-being, the global commons and social justice. With this understanding of good governance for health and recognition that the whole of government and society should take responsibility for good governance for health, a multistakeholder deliberation should be held to define universal values and guiding principles for health that go beyond the existing ones. Sandel (2010) argued that societies will be strengthened by debating differing positions on how equity and justice should be understood and addressed. His call for 'politics of moral engagement' fits well with the requirement for addressing the complex, diverse factors that shape decisions about the distribution of health and health determinants.

5. Smart governance for health and well-being

Smart governance: In a knowledge society, policy decisions based purely on normative considerations lose ground to decisions based on 'evidence'. At the same time, decision-making requires new methods for coping with and accounting for the uncertainties that abound when knowledge—always questionable, always revisable—supersedes 'majority values' as the basis for authority. 'Smart governance' is one way of describing the major institutional adaptations being undertaken in public and international organizations in the face of increasing interdependence. 'Smart governance', coined by Willke (2007), is "an abbreviation for the ensemble of principles, factors and capacities that constitute a form of governance able to cope with the conditions and exigencies of the knowledge society."

5.1 Introduction to smart governance

This section suggests how 21st-century governance arrangements, multidimensional and complex health challenges and their status as 'wicked problem' can be addressed. This requires an integrated, dynamic response across portfolios, making health a shared goal for all parts of government and linking it more explicitly to well-being. In the previous sections, we highlighted two features:

 Power and responsibility have diffused up, down and throughout the levels of government and into society. With shifts in approaches to democracy and 'shared value', these trends

- are coming together in new whole-of-government and whole-of-society approaches, which provide a new framework for designing and implementing public policy for health.
- The concept of good governance has been extended to include aspirations such as health and well-being. Values such as human rights, well-being, global public goods, social justice and equity are the principles that can guide ethical policy-making for health (Fig. 12).

Health and Well Being Social Determinants of Health 21st Century Determinants of Health – TRANSNATIONAL WHOLE OF SOCIETY SMART GOVERNANCE Community and Whole of Shared Value – Corporate Social Responsibility Government Consumer Health in All Policies Engagement Government Action **Business Action** Citizen Action HEALTH is created in the context of everyday life – where people live, love, work, play, shop, google, travel...

Fig. 12. Governance for health in the 21st century

Source: Kickbusch (2011)

These challenges are also being faced in sectors other than health: in general, sector-based approaches to governance do not fit the interdependent world of the 21st century, as outlined above. Just as health seeks the support of other sectors, the health sector must begin to consider how health contributes to or counters the agendas of other sectors and how it contributes to overall social well-being. It is not sufficient to exert 'leadership for health', as so frequently stated in documents on health. If all sectors are responsible for the whole, so is the health sector.

As governments come under increasing pressure to maintain legitimacy and improve performance, they gradually add new forms of governance, mainly by forging new strategic relationships, both within government and with non-state actors. We have chosen to use the term 'smart governance' for an innovative set of approaches to address the most challenging health problems. Smart governance for health is already under way in Europe and many other parts of the world, where governments are approaching governance for health in new ways based on wider understanding of health and changes in how the state and society work together, discussed in previous sections of this study. The boundaries of the health sector are being redefined, with the involvement and cooperation of health professionals and their organizations as well as academia and the health technology industry. So far, these stakeholders have not sufficiently addressed the new governance challenge, even though they are major actors in public health and in the delivery and provision of health-care services. Their opinions and perspectives are vital for forging workable, realistic policies. For example, because of the lack of engagement with health professionals during the pandemic influenza (H1N1) 2009 outbreak,

many nurses and doctors refused to be vaccinated because they were uncertain of the safety of the vaccine. If health professionals do not support a shift in perspective and policy, good governance cannot be fully realized.

In Europe, health impact assessments are helping policy-makers to make more informed, forward-thinking decisions to avoid unintentional consequences for health, regardless of the sector in which the policy was set. Similarly, in South Australia, the health sector is lending its expertise to other sectors, providing a 'health lens' for various challenges, from water security to sustainable transport systems. If this approach to health in all policies is institutionalized in a whole-of-government strategic plan, it will help other sectors to achieve their goals while promoting health, rather than saddling them with an additional burden.

Health impact assessments are decision-support measures for policy-making, which are applicable at local, federal or provincial, national and supranational levels. They are also applicable across sectors and are sensitive to the determinants of health inequities. The effectiveness of these assessments and their institutionalization in Europe were discussed by Wismar et al. (2007) on the basis of research and case studies, from air quality in Northern Ireland and Ticino, Switzerland, to food production and nutrition in Slovenia after adaptation of the European Union's agricultural policy. All 17 case studies demonstrate the effectiveness of health impact assessments.

5.2 Five types of smart governance for health and well-being

Smart governance for health defines how governments approach governance for health challenges strategically in five dimensions, through:

- collaboration;
- engagement;
- a mixture of regulation and persuasion;
- independent agencies and expert bodies; and
- adaptive policies, resilient structures and foresight.

Smart governance can also be understood as the application of 'smart power', defined by Nye (2011) as "the combination of the hard power of coercion and payment with the soft power of persuasion and attraction". Whereas 'hard power' (e.g. use or threat of military intervention, economic sanctions) and 'soft power' (e.g. diplomacy, economic assistance, communication) are wholly descriptive terms, smart power also involves evaluation. Smart governance for health and well-being means that the state is engaged in more complex relations with other governmental and societal actors, using both hard and soft power. This does not inevitably reduce its role or power; indeed, with regard to health governance and governance for health, states have expanded their power to meet new challenges through new collaborative arrangements. For example, health ministries and the health sector are now responsible for one of the largest, most important sectors in society, with significant economic and social impact, it is also usually one the most highly regulated sectors. At the same time, the state in many countries has been expanding its regulatory power into everyday life and into markets in order to address health challenges such as obesity, smoking, alcohol use, illicit drug use, environmental protection and food safety. In Europe, the role of the state is more complex, as governance dynamics have changed in the context of the European Union. A challenge for governance for health in the 21st century in an age of globalization and marketization is how the interests of health and of the market can be reconciled to improve the public good rather than to serve individual interests. In the European Union, this requires a continuous balancing between market efficiency and social (and health) protection (Scharpf, 2002).

5.2.1 Governing through collaboration

Terms such as 'cross-sector collaboration', 'interagency collaboration', 'interjurisdictional cooperation', 'strategic partnerships' and 'multistakeholder multilevel deliberative and networked governance' are often poorly differentiated, but they all refer to the same issue: how the state and society co-govern in the 21st century.

Multistakeholder deliberations feed into nearly every aspect of smart governance for health and are critical for effective anticipatory governance. WHO considers that a health system consists of all organizations, people and actions with the primary intent to promote, restore or maintain health. This primary intent should be given higher priority and be better coordinated within the wider health system and the health sector. The boundaries of what we call 'the health-care system' have, however, become increasingly fluid: health is not only a sector, it is an emerging property of other complex adaptive systems and of dynamic networks and relations, with many spill-over effects. This view goes beyond the concept of a primary intent for health to other sectors and systems that contribute or endanger health (for example, the food system) or that consider health to be a significant part of their own primary intent but with goals that differ from those of the health system (for example, economic development, foreign policy).

Health is a widely used instrument of foreign policy. Supporting health programmes can serve national interests through bilateral initiatives. In the geopolitical marketplace of the 21st century, supporting health can support political positioning, improve relations between states and between states and other actors and help build alliances.. Examples are the United States President's Emergency Plan for AIDS Relief, which was instigated by the former President G.W. Bush and a bipartisan Congress in 2003. Today, health is also part of foreign policy in rising states such as Brazil, China and India in their challenge to established approaches to development.

Health is increasingly shaped by forces such as the speed of modern society, globalization of markets, increasing individual mobility and insecurity, energy expenditure, climate change, food security, concern about risks and safety and the reach of the media. We call these the 21st-century health determinants, which cut across many of the acknowledged social, environmental and economic determinants of health. The health sector will have to work with an equally diverse range of actors to jointly explore policy innovation, novel mechanisms and instruments and better regulatory frameworks. For example, the health sector must work with the environmental sector in relation to climate change and food security and with the urban sector to create more liveable cities. Co-production and co-governance mean achieving outcomes by working together; in principle, it is irrelevant who is in the lead, as the goals pursued cannot be realized by unilateral action.

London works for better health. Given the importance of urban policy in improving human health outcomes and the variety of policy domains with direct links to health, the Lord Mayor of London agreed to the principle of equality of opportunity for all people and agreed that reducing health inequality and promoting Londoners' health are cross-cutting issues. Health is included in the 'integrated impact assessment', which comprises a 'sustainability appraisal' (including a 'strategic environmental assessment') and a 'habitats regulation assessment' and addresses health, health inequalities and community safety.

A wealth of observations and analyses have appeared in the past three decades on cooperation in society for health, through partnerships, cooperation or collaboration (e.g. Stahl et al., 2006; Public Health Agency of Canada et al. 2007, 2008; Kickbusch & Buckett, 2010; Institute of Medicine, 2011). The literature shows that working together consists increasingly of working in complex networks rather than between two clear hierarchical systems, sectors or portfolios. It implies bridging diverse policy areas, professional fields, academic disciplines, levels of government (from street level to political appointees), levels of governance (localities, states, regions, global) and sectors of society (public, private, civil). In some cases, health institutions might be better served by not taking the lead and instead giving ownership and playing a supporting role to other sectors and non-state actors. This was the case in new approaches to food policies or to reducing child poverty.

Recipe for success sets out the steps in Scotland's National Food and Drink Policy. The food and drink industry is a priority in Scotland. Recipe for success promotes sustainable economic growth while recognizing the challenges of public health, environmental sustainability and affordability. The success of the policy will require partnerships. Many individuals and organizations in the public, private and third sectors, including food outlets, retailers, the National Health System, Scotland Food and Drink, the National Federation of Enterprise Agencies, local authorities and communities, will be responsible for activities, which will be both challenging and exciting, some being achieved more easily than others. The strategy will support the growth of the food and drink industry, build on Scotland's reputation as a land of food and drink, ensure healthy and sustainable choices, make Scotland's public sector an example for sustainable food procurement, ensure that food supplies are secure and resilient to change, make food both available and affordable to all and ensure that Scots understand more about the food they eat (Scottish Government, 2009).

In his first annual report on the physical and mental well-being of the Canadian population in 2008, Dr David Butler-Jones, the Chief Public Health Officer, wrote that reducing child poverty would benefit the health of all Canadians. "Every dollar spent in ensuring a healthy start in the early years will reduce the long-term costs associated with health care, addictions, crime, unemployment and welfare." (Butler-Jones, 2008).

Many further examples illustrate how a focus on health can help citizens and sectors to approach long-term challenges from new angles and with new tools. Use of cross-sectoral goals is sometimes less controversial than addressing an issue directly, as in the following example of gun violence.

CeaseFire is a non-profit organization with a public health approach, methods and techniques to stop the spread of HIV infection and AIDS and to prevent gun violence in some neighbourhoods of Chicago, Illinois, where homicide has reached 'epidemic levels'. The initiative came from academia, was funded by private foundations and relies heavily on collaboration with law enforcement agents, the criminal justice system, the Mayor's office and especially neighbourhood associations and citizens. CeaseFire attempts to interrupt the cycle of violence and to change behavioural norms. The initiative involves information campaigns, strategic peer education and interventions with high-risk populations, which have proved to be effective in combating communicable diseases and changing behaviour. An independent evaluation of the project showed that it reduced the broadest measure of shootings (including attempts) by an additional 17–24%. In four overlapping sites, the number of people actually shot or killed decreased by 16–34% (Skogan et al., 2008). A decrease in neighbourhood violence is of interest to law enforcement agents and the criminal justice system and also has health repercussions, which extend from decreasing the burden on emergency health-care services to decreasing stress and anxiety in the populations living in violent surroundings.

Working together: successful collaborative governance

Experience with initiatives such as 'health in all policies' demonstrates the difficulty in making progress, particularly when there are imbalances of power and resources. It is even more difficult if a commitment to health and well-being has not been established in the whole of government, leaving advocacy to health ministries. Meta-analyses have been conducted of case studies in various policy areas, from public health, education and social welfare to international relations and natural resource management, in order to distil common propositions or contingencies that accurately capture elements that can make or break collaborative governance. In terms of process and design, smart governance through collaboration depends on:

- the starting conditions for collaboration, as perceptions of the relative power and resources of stakeholders, perceptions of interdependence between stakeholders, and the history of previous cooperation or antagonism combine to determine successful cross-sectoral, multi-actor collaboration, raising the question of when it is better to target one sector in particular; (For more discussion of meta-analyses, 'crowd-sourced intelligence' and open government databases, see the background paper by M.N.K. Boulos.)
- the role of leadership, to align the initial conditions, processes and structures, set ground rules, build trust and facilitate dialogue;
- institutional design, which is the structure and governance of collaborative systems, determining who has access to and can participate in the collaboration, the ground rules for the process, transparency, consensus rules and establishing deadlines; and
- the process of the collaboration, which is the iterative process of forging agreements, building leadership, building legitimacy, building trust, managing conflict, planning, working towards immediate 'small-win' outcomes, commitment to the process and shared understanding of challenges and values.³

Smart governance for collaboration depends on "achieving a virtuous cycle between communication, trust, commitment, understanding, and outcomes" (Huxham, 2003; Imperial, 2005; Ansell & Gash, 2008). Growing emphasis is being placed on the role of attitudes and culture, building trust, the existence of real goal interdependence, time and knowledge in successful cross-sectoral collaboration.

- Shared concerns: the importance of building a consensus that health and well-being are an overall social goal. "Governance networks essentially present a struggle between differing values, how problems are defined, and how solutions are derived" (Klijn, 2010). Health depends largely on societies' ability to work together towards common goals despite different vested interests.
- Continual dialogue: Lessons learnt from Sweden's experience in implementing cross-sector policies for health further illustrate the importance of continual dialogue. Speaking from personal experience, Pettersson (2010) recalled that identifying common concerns with other sectors is a long-term process that requires continual dialogue and a realistic time frame. Defining problems and designing indicators for monitoring progress had to be done jointly, with consideration of the partner's language, concepts and ways of operating. Other sectors probably already promote health, but with different names and organizational jargon.

³ Ansell & Gash (2008) reported a meta-analysis of 137 case studies of collaborative governance, in which Bryson et al. (2006) reviewed the literature on the theory of partnerships, networks and cross-sectoral collaboration.

For example, measures to improve passenger safety, tidiness, time-keeping and instant information in the Swedish public transport system can also prevent injuries, improve hygiene and may reduce stress (Pettersson, 2010).

- Understanding the other: The health sector must learn to understand and promote the contributions of partner sectors to better health and well-being. This includes understanding the partner's regular policy cycles, policy remit and existing strategic programmes and documents, all of which require preparation and investment of time. As more partners appear, smart governance must clarify the responsibilities for action in a world in which responsibility for health is universal.
- Trust: When and under which circumstances is a whole-of-government approach required? The ability of society in turn depends on the ability of different sectors to trust one another enough to take a risk in initiating a strategy as complex and prone to failure as cross-sectoral collaboration (Bryson et al., 2006; Vangen & Huxham, 2003). Trust is in turn built on the expectation that the individual actors in a network will refrain from opportunistic behaviour (Klijn, 2010). Trust is built continually by sharing information and knowledge and demonstrating competence, good intentions and follow-through (Bryson et al., 2006).

Smart governance for collaboration can be based on a variety of tools and instruments that have proven useful at various stages of collaborative governance (WHO and Government of South Australia, 2010). They include:

Inter-ministerial and inter-departmental committees

Finland's Advisory Board of Public Health is a forum consisting of 17 participants from all sectors of government, nongovernmental organizations, research institutes and municipalities. The Board provides a forum where problems and interdependence can be jointly defined, and trust and leadership can be built over time. The Board is complemented by intersectoral policy programmes with a direct link to the Prime Minister's office, providing additional high-level leadership for this approach to governance for health (Wismar & Ernst, 2010).

Cross-sectoral action teams

In the United States, Public Health–Seattle & King County formed a 'vulnerable populations action team' to coordinate county-wide preparedness with a wide variety of community partners. The team consists of a diverse cross-section of staff with expertise in public health for vulnerable populations, preparedness and infectious diseases.

Partnership platforms

With over a decade of experience in supporting community voices, the nongovernmental organization Health & Development Networks set up 'national partnership platforms' for more unified, grounded responses to HIV infection, tuberculosis and related health and development issues. They are platforms for information, dialogue and advocacy, which help civil society partners to exchange information and experience with these diseases. Partnership platforms are operating in Cambodia, Ireland, Malaysia, Thailand, Uganda, Zambia and Zimbabwe, and one is being set up in Viet Nam.

Integrated budgets and accounting

The goal of including the health effects of cycling and walking in cost-benefit analyses of transport investments is a 20% increase in walking and cycling and replacing 15% of short car or public transport journeys by cycling and walking. The expected health benefits are on cancer (five types), high blood pressure, type 2 diabetes and musculoskeletal diseases; the other benefits are reducing traffic accidents, travel time, insecurity, school bus transport, air,

noise, congestion, road wear and parking costs. The benefits were estimated at 420 billion euro or €880 per year per moderately active person. Calculated by the Norwegian Institute of Transport Economics and Transportation Research (Institute of Transport Economics, 2002).

Cross-cutting information and evaluation systems

The purpose of a 'gender mainstreaming checklist for the health sector' (World Bank Institute/PRMGE 2009, African Development Bank Group 2009) is to help World Bank staff and consultants in analysing and identifying gender issues in the health sector, designing appropriate gender-sensitive strategies and components, allocating resources and defining monitoring indicators for all stages of the project or programme cycle. For effective gender analysis and mainstreaming in projects, the checklists should be used with the Bank's operations manual and 'environmental and social procedures'. In these procedures, gender-sensitive terms of reference for environmental and social assessments should be prepared in order to demonstrate good practice in mainstreaming gender in any Bank-funded sector intervention, including health sector projects

'Joined-up' workforce development

The Children and Young People's Workforce Development Network was established by the Care Council for Wales on behalf of Welsh ministers in 2006. Its role includes contributing to improving the lives of children and young people by ensuring that the people working with them have the best possible training, qualifications, support and advice; building a workforce that is properly equipped to deliver the cross-cutting approach to children and young people's services in Wales envisaged in the Children Act 2004; and engaging the full range of employers' interests in all sectors working with children and young people in Wales.

Legislative frameworks

Switzerland's drug policy is based on a fourfold approach: prevention, law enforcement, treatment and harm reduction. The perception of the issues, the implementation of policy decisions and the impact of this drug policy have changed, as determined from quantitative data on each of four pillars. A new perception of people with drug dependency gave rise to a new approach, which is based on social assistance and public health, rather than on enforcement and punishment. The enforcement approach was, however, strengthened to deal with people who profit from drug trafficking. The four-pillar policy is intended to be a balanced, pragmatic approach based on recognition of the fact that drug problems cannot be eliminated and that steps must be taken to mitigate the effects of drug abuse and the illegal drug trade.

Smart governance for health should bring about better, deeper engagement with various social actors, facilitated by greater transparency, and should be held accountable by social values. The media have an important role to play in this regard. Information-sharing in general should be recognized as one of the most effective tools for ensuring coordination, legitimacy and accountability (Hernández-Aguado & Parker, 2009). The same is true for businesses, which are often perceived as contributing to creating 'wicked problems' but minimally to their solutions. While hard regulations might ultimately be needed, businesses are taking the initiative to realign their operational philosophy in accordance with social values and to self-report progress made. The move to a 'shared value' approach gives businesses a 'smart governance' option to contribute to the solution more actively, thereby obviating implementation of harder regulation while catering to consumer preferences for healthier, safer products.

The International Food and Beverage Alliance was formed in a letter to the Director-General of WHO, Dr Margaret Chan, in May 2008 by the chief executive officers of eight large food and beverage manufacturers, who committed their companies to support the WHO Global strategy on diet, physical activity and exercise (WHO, 2004). They acknowledged the private

sector's role by pledging to extend the efforts already under way at individual companies to realize "five commitments in five years":

- 1. continue to reformulate products and develop new products that support the goals of improving diets;
- 2. provide easily understandable nutrition information to all consumers;
- 3. extend responsible advertising and marketing to children initiatives globally;
- 4. raise awareness about balanced diets and increased levels of physical activity; and
- 5. participate actively in public–private partnerships that support WHO's Global Strategy.

The International Food and Beverage Alliance (2009, 2011) has delivered two reports to Dr Chan, outlining progress made in meeting the five commitments.

Why can collaborative governance fail?

The literature on inter-organizational partnerships corroborates the findings of studies on collaborative governance. McQuaid (2010), reviewing case studies of urban regeneration and labour market-exclusion policies, found that partnerships fail for a limited number of reasons:

- conflict about goals and objectives;
- considerable but underestimated direct and opportunity costs in terms of the time it takes to build trust and consensus;
- weak accountability of partners for success or failure;
- territorial and organizational difficulties when partnerships are seen as detracting from existing mainstream initiatives or when features of the structures or institutions within the partnering agencies make it particularly difficult to break out of 'policy silos';
- asymmetrical technical skills and expertise for contributing to the partnership;
- differences in philosophy among partners, such as the role of markets, or different value or ethical systems, which fragment the partnership's cooperative culture; and
- differing power relations and levels of community participation.

5.2.2 Governing through citizen engagement

Expansions in governance for health and in understanding of health also imply that the views of a wider range of actors are important. The health sector must work with other policy sectors, as described above; it must work with the private sector as well as with nongovernmental organizations; and, increasingly, it must engage with individuals in their roles as patients, consumers and citizens and in their everyday lives. Successful prevention, diagnosis and treatment of diseases are possible only with the active participation of citizens, and European governments and citizens tend to agree on this issue. (See the background paper by S. Andersson.) Policy can no longer just be delivered: success requires co-production and the involvement and cooperation of citizens.

Diversity of engagement: Patient engagement has become not only an integral aspect of health care in Europe but also a model for citizen engagement. There are, however, "important differences between activities which aspire to empower individual patients in their own care, and structures put in place to allow the public (either as interested individuals or as elected representatives) to hold health structures to account". (See the background paper by S. Andersson, in particular his elaboration on why patient and public involvement should be encouraged as illustrated in Table 1 from his contribution)

Table 1. Why encourage patient and public involvement?

Patients	Citizens
To ensure appropriate treatment and care	To improve service design
To improve health outcomes	To determine priorities for public expenditure
To reduce risk factors and prevent ill-health	To manage demand
To improve safety	To meet expectations
To reduce complaints and litigation	To strengthen accountability

Source: Coulter (2005) in the background paper by S. Andersson..

Individuals are engaged not only as outlined in the above table but also as consumers, which is a nuanced distinction from their roles as patients and citizens. Engagement can be a continuum, from information provision to empowerment and from consultation to co-production, delegated power and ultimate control of decisions. The Canadian Government drew up a set of guidelines for altering public behaviour with regard to 'wicked problems' in environment and health called 'tools of change', consisting of proven methods for promoting health, safety and environmental citizenship (Cullbridge Marketing and Communications, 2011).

A number of analytical models help understanding of the level of power that is delegated to participants in each instance. (See the background paper by E. Andersson and his reference to increasing level of public impact (Table 2) The one introduced here was formulated by the International Association for Public Participation (Involve, 2005):

Table 2. Increasing level of public impact

Inform	Consult	Involve	Collaborate	Empower
Provide Information	Obtain public feedback	Work directly with the public	Partner with the public	Place final decision-making power in hands of the public

Source: Modified from the background paper by Andersson (2011)

Policy processes tend to focus on the first two levels of participation: informing and consulting citizens, service users and stakeholders. Working directly with, partnering and empowering the public are more complex and less frequently practised methods; however, they are crucial to ensuring that democratic values are upheld as governance becomes more widely diffused throughout society.

For example, the Government of Finland adopted a **Programme for Child and Youth Policy** in December 2007 (Ministry of Education, Finland, 2008), which incorporates comprehensive intersectoral approaches, with citizen engagement and empowerment at the centre. The programme is divided into three areas: a child-oriented society, well-being of families and prevention of social exclusion. Gender equality and multicultural aspects are cross-cutting themes, reflected in each area and action of the programme. The Finnish Government is particularly committed to giving children and young people more voice and opportunities for participation: children and adolescents are encouraged to influence their environment by voicing their opinions daily, at school, at municipal level and in the planning stage of services. This could become a model for other states of the WHO European Region: regional and state administrations should design ways of hearing the opinions of children and young people. A

further example of child and youth empowerment is the children and youth parliaments that have been established in Belgium and Ireland.

The creation of the **Parliament of Children and Young People in Ústí nad Labem, Czech Republic**, dates back to 1999, so that its existence has been sufficiently long for it to affect various areas of public life. The Parliament is made up of children aged 12–18 years, who are pupils in elementary and secondary schools who want to use their free time, are communicative and can materialize their ideas. Because of the age limitation, the Parliament's members change continually, and new members have an opportunity to distinguish themselves and make suggestions.

Diversity of engagement

There are many examples of good public engagement for health in Europe. The following provide some of the reasons for engaging.

Exploring public perceptions of emerging policy areas: 'Testing Our Genes' Consensus Conference, Denmark, 2002. Denmark has been a pioneer in devising and using deliberative methods to engage randomly selected members of the public to judge emerging policy areas. In this example, a small group of citizens were asked to consider how the Government should address ethical issues of genetic testing.

Facilitating the implementation of existing polices: Workshop on Tobacco Control, Armenia, 2007. This meeting brought together Governmental and international agencies, nongovernmental organizations, practitioners and researchers under the auspices of the Coalition for Tobacco-free Armenia to discuss how civil society could support formulation and implementation of a national tobacco control strategy.

Gathering public feedback on service quality: Social Support Act boards, The Netherlands, 2008. The 2007 Social Support Act requires that municipalities involve citizens in the delivery of social care. Many municipalities have established a 'Social Support Act board' to give municipalities solicited and unsolicited advice on policy in relation to the Social Support Act.

Empowering citizens to assess health services: 'People's Voice Project', Ukraine, 1999. The World Bank funded a project to empower citizens to hold health services to account by use of 'citizen report cards', conferences, public hearings, surveys and training of nongovernmental organizations and civil servants. The 'civic audit' method has since been used in numerous European countries to evaluate the quality of health services from the perspective of citizens, led by the Italian nongovernmental organization Cittadinanzattiva.

Allocation of funding and setting spending priorities: 'Participatory budgeting', Seville, Spain, 2004. Participatory budgeting allows citizens to make or influence decisions on spending directly, at city or neighbourhood level. Initiated in Latin America, it has since been used in France, Germany, Italy, Spain and the United Kingdom and other European countries. In Seville, the process involves thousands of residents each year in making decisions about spending on health, transport, culture and other services.

How technology can increase engagement

Recent advances in consumer technology and innovations from the private sector (including foundations) facilitate citizen engagement in new ways. For example, organizations like America Speaks have pilot-tested what they call the '21st Century Town Hall Meeting', which brings together thousands of randomly selected citizens in one or several location to contribute to public debates. Participants sit at tables of eight to ten people with a trained facilitator. They

discuss a series of questions and build a set of collective priorities. Participatory technology is used to ensure that every voice is heard: this includes a computer at each table, which serves as an 'electronic flipchart' so that agreements can be transmitted instantly, and 'voting keypads' that allow participants to vote on what they consider to be the most important priorities. Similar 'consensus conferences' have been organized in Europe, locally and regionally. This model has been applied to health in a variety of ways:

In the United Kingdom, the global arm of America Speaks, Global Voices, joined with the National Health Service and the firm Opinion Leader Research to hold a national dialogue on health policy in 2005, called 'Your health, your care, your say', which resulted in a plan and commitments from the Prime Minister, Tony Blair. The high-profile meeting was broadcast live on the web, received day-long coverage on several BBC channels and was reported in the national press.

A year later, a more focused conference, the 'European Citizens Deliberation on Brain Science', was held in partnership with a German communications firm, IFOK, and the King Baudouin Foundation. Conducted in nine languages, it was the first example of a transnational consensus conference. It resulted in 37 consensus recommendations for the European Parliament, which identified priorities for research and regulation on brain science (Meeting of Minds European Citizens' Panel, 2006). The recommendations set the framework for national and international meetings on this issue and guided research and policy. A growing body of research has shown a positive effect of the deliberation on both citizens and government institutions (Barabas, 2004).

Technology is not only helping citizens to engage in collecting intelligence and knowledge-sharing or shared care but also to act as independent agents to co-produce governance for health. Over the past decade, 'smart phones', mobile telephones with advanced computing and communications ability beyond standard voice and texting features to include uninterrupted Internet connectivity, and geospatial positioning have "penetrated significantly into society, capturing an entire age spectrum of subscribers in western industrialised nations, from school children to senior citizens". (See the background paper by M.N.K. Boulos.) These devices are gaining credibility because of their potential to facilitate shared care with mobile health monitoring and to promote healthier behaviour, with 7000 health-related applications on the market in 2010 (Kailas et al., 2010). Applications for shared governance are less well understood.

For example, **LoveCleanStreets** is a British application in which the built-in global positioning system (GPS) and camera of smart phones are used by citizens to report environmental or neighbourhood problems directly to local authorities. Citizens only have to take a photograph of the problem, for example, broken pavements or street lamps, dead animals, damage to park facilities, dog fouling, illegal waste disposal, graffiti and blocked drains and gullies. The application sends the photograph with a report giving the exact location, which is identified by the GPS. Users can then visit www.lovecleanstreets.org to review the progress of their reports. M.N.K. Boulos (see background paper) found that city councils were "responding very well and promptly to citizens' reports filed via the lovecleanstreets.org mobile app."

Consumer technology like this can empower people to take ownership and promote healthier, safer environments. Direct reporting by toll-free telephone has been in place for decades; however, the ease with which such reports can be made and, crucially, followed up makes 'the right choice the easy choice' for citizens who otherwise might not take the time or effort to make a report. www.police.uk used social web features to inform citizens about criminal activity in their area and to solicit information on crimes.

The 'social web' is also facilitating unprecedented multi-way communications and engagement between and among government agencies and the communities they serve, thus "empowering citizens by helping create an informed citizenry, increasing public trust, and encouraging citizens' participation in shaping their own services by seeking feedback and generating new ideas from the public ('wisdom of the crowds' and demands of the public)." High-speed transfer of information and data and the possibility of 'mining' social forums for 'crowd-sourced' public mood and opinions helps build more resilient public polices. (For more information on networked social media, virtual and mirror worlds and their implications for governance for health, see the background paper by M.N.K. Boulos.)

'Smart phones' allow unprecedented leveraging of the 'power of the crowds', with a growing number of 'crowd-sourcing' mobile 'apps' in use for real-time participatory health and health care. For example, the MedWatcher app (http://www.healthmap.org/medwatcher/) is being used in relation to use of drugs, while the HealthMap app Outbreaks Near Me (http://www.healthmap.org/outbreaksnearme/), from the Children's Hospital Informatics Program group that developed MedWatcher, allows 'participatory epidemiology' (in which users submit a local outbreak report). Another example is the real-time lifesaving iPhone app of the San Ramon Valley Fire Department (California) (http://firedepartment.mobi/), which alerts community members trained in cardiopulmonary resuscitation as soon as a cardiac arrest has been reported to the national emergency number. The iPhone's GPS gives responders the location of the emergency and the nearest defibrillators.

How transparency feeds innovation

Engagement goes hand-in-hand with transparency, which is a necessary element for building trust in collaborative governance systems. When trust is successfully fostered, it opens new opportunities for win-win innovations through society-science knowledge co-production, in addition to coordination mechanisms such as hierarchical authority and the market forces of price and competition.

For example, health industries use data on patients for research and development, and governments require these data to decide where to make public investments. The health sector, however, guards the privacy of patients and their data because of the background history of discrimination on the basis of health conditions and in order to protect the sanctity of the doctor–patient relationship. Nevertheless, patients usually want medical progress to be as fast as possible, with more investment in the areas that matter most to them. Some patients have shown their willingness to relinquish their privacy in order to have more efficient research, development and public investments, as long as there is transparency in how the data will be used.

Patientslikeme.com is an example of this principle in action. Within a familiar social networking format, patients can openly share their data online. This helps to empower patients, who can compare their experiences and make better-informed decisions about the management of their own health, also creating an alternative research platform. Some of the communities that have formed on Patientslikeme represent combined collections of data that are large enough for clinical trials, such as the multiple sclerosis community, which has nearly 23 000 members. This is especially useful in the case of rare diseases, where patients may be geographically widely separated. At the time of writing, Abbot Laboratories and Novartis Pharmaceuticals Corporation were conducting clinical trials through the Patientslikeme website. The 'openness' philosophy of Patientslikeme provides a value system based on transparency on all sides, which allows the creation of mutually beneficial initiatives that would not exist in a setting of asymmetrical information.

Governments too are learning the benefits of data transparency. The United Kingdom, for example, has opened an online portal for data sharing (see box below). Access to the government data on which much evidence for policy depends, is a large step towards making policy-making more transparent. It also invites citizens to engage themselves in the process by presenting their conclusions and recommendations on issues that they care about through initiatives like the 'show us a better way' competition in the United Kingdom.

Going open-source

The Government of the United Kingdom has a dedicated Director of Digital Engagement, who manages and integrates new social media digital technology into the infrastructure of daily Government communication and practice. The aim is to support and encourage Government departments in the use of digital engagement techniques, such as communicating through Facebook and Twitter, as well as using traditional engagement methods.

The Government of the United Kingdom's data.gov.uk portal, launched in September 2009, is an ambitious project for opening up (for free re-use by members of the general public) almost all non-personal data acquired for official purposes. This 'Opening up government' portal gives free access to thousands of Government datasets and over 100 apps for accessing public data.

The WHO Regional Office for Europe has played a critical role in the establishment of interdisciplinary networks for health. Examples of long-standing interdisciplinary, politically oriented networks for health include the South-eastern European Health Network and the WHO European Healthy Cities Network. The South-eastern European Health Network is the health component of the 1999 Stability Pact for the region and is a political and institutional forum set up by the governments of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, the Republic of Moldova, Romania, Serbia and the former Yugoslav Republic of Macedonia to promote peace, reconciliation and health in the Region. The WHO European Healthy Cities Network engages local governments in health development through political commitment, institutional change, capacity-building, partnership-based planning and innovative projects.

5.2.3 Governing by a mix of regulation and persuasion

Smart governance for health does not mean choosing between governing through networks or through hierarchies but rather the smart use of both approaches. "For many wicked policy problems the effectiveness of traditional policy approaches to influencing behaviour (legislation, sanctions, regulations, taxes and subsidies) may be limited without some additional tools and understanding of how to engage citizens in cooperative behavioural change" (Government of Australia, 2007). Smart governance is evaluative, with regard not only to the tool being used but also to the choice and use of the tool in the context of a plurality of tools and modes of application. In other words, smart governance for health concerns how governments respond strategically to health challenges: the choices they make about which mixture of instruments to use, which partners, at which levels of government and society to engage and when.

Hierarchical governance still matters

The mirror image of health in all policies implies that risk is present at many points in people's everyday lives. This has significant consequences for how we frame health policies and where we assign responsibilities for health in society. If health is everywhere, every place or setting in society can support or endanger health. As demonstrated in the previous section on governing through engagement, stakeholders in the health debate are not only the producers of unhealthy products and substances but also those who populate the arenas of everyday life where those

products and substances are consumed. This implies a shift from material entities and organizations that are clearly defined as 'health organizations' to increasing dependence on a strategic mixture of the institutional mechanisms that structure society and lifestyles and those that regulate behaviour and access to or consumption of products.

Typical examples are **smoking regulations**, which involve a governance shift from individual to social responsibility. While in the mid-20th century "it was still possible to argue that to smoke or not to smoke was simply an issue of personal agency", by the 1980s and 1990s "the growing evidence that smoke harmed non-smokers...began to erode traditional arguments." (Brandt, 2007). This shift reshaped the policy of regulation and led to a cultural transformation. Today, governments not only regulate who can buy tobacco products, where and at what price, but they also regulate where people are permitted to smoke. In doing so, they change the cultural approach to smoking and set new norms. Over time, smoking restrictions extend to all settings: first, usually schools and hospitals, then major public places, then all forms of transport, then restaurants and bars, until finally—as in New York City—there is virtually no space outside the home where smoking is permitted. Smoking laws also regulate access to images and messages by restricting advertising for tobacco products. The first international health treaty, the WHO Framework Convention on Tobacco Control, also regulates tobacco.

Health, it turns out, really is everybody's business in both a symbolic and a real sense: owners of bars and restaurants, retailers, the management of airports and railway lines must all be concerned about health. Everyday settings become 'healthy' settings through a commitment to norms, standards and patterns of appropriate behaviour, with laws and regulations sometimes promoting, in other cases following, cultural shifts (Kickbusch, 2003).

Hill & Lynn (2005), in the most comprehensive review of the literature on governance to date, concluded that, while market- and network-related government activities have increased in importance, hierarchical government is by no means in decline, and the role of government is just as pivotal as it ever was. Bell & Hindmoor (2009) noted that governments have recently extended hierarchical controls at national and regional levels, for example, in areas such as mobile phones, genetic cloning, the Internet, genetically modified organisms, performance-enhancing drugs for athletes, in-vitro fertilization, traffic congestion, population imbalances, antisocial behaviour and the threat of terrorism. Dubé et al. (2009) provide an interesting illustration of the different policy tool options. (Fig. 13)

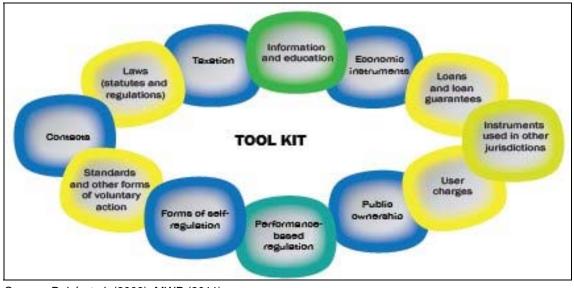


Fig. 13. Policy tool options

Source: Dubé et al. (2009); MWP (2011).

Note: a broad framework used by the Government of Canada to assess, select and use the best portfolio of instruments for policy objectives is available at: http://www.regulation.gc.ca/documents/gl-ld/asses-eval/asses-eval/00-eng.asp

The traditional tools of hierarchical governance—command-and-control, rules and standards of behaviour backed by sanctions and rewards dealt out by the state—are also undergoing transformation (Salamon, 2002). New layers of regulatory authority are emerging at regional and global levels, and states are revising their institutions in order to increase hierarchical authority and centralized control. In recent decades, political leaders increasingly centralized executive power and authority to ensure strong leadership in the face of real or perceived crises (Hocking, 2005; Poguntke & Webb, 2005; Walter & Strangio, 2007; Bell & Hindmoor, 2009). At the same time, the number of regulatory agencies expanded, as governments are now expected to police society and markets and to mitigate the risks presented by new technologies.

In Spain, the world's first ban on overly thin catwalk models at a top-level fashion show in Madrid caused outrage among modelling agencies and raised the prospect of restrictions at other venues. Madrid's fashion week turned away underweight models after protests that girls and young women were trying to copy their rail-thin looks and developing eating disorders (Cable News Network [CNN], 2006).

European Union policy is a clear example of a new regulatory approach to governance that is increasingly "(a) deliberative (consensus is often regarded as provisional); (b) multilevel (connecting different levels of government—crucially, this means that it is not strongly hierarchical, or hierarchical at all); (c) a departure from norms of representative democracy (accountability is defined in terms of transparency and scrutiny by peers); (d) a combination of framework goals set from above combined with considerable autonomy for lower-level units and agents to redefine the objectives in light of learning; and (e) built on reporting (on their performance) and participation in peer review (in which results are compared with those pursuing other means to the same general ends)" (Greer & Vanhercke, 2010; Sabel & Zeitlin, 2008;).

Multilevel governance and steering instruments are evolving

An extension of top-down authority is also evident in governments' reliance on multilevel governance to address an increasing number of challenges, the solutions for which require

effective coordination of collective action beyond the nation-state, with implementation within the nation-state at national and local levels. Whereas governing through networks captures the horizontal cross-sectoral and interjurisdictional aspects of smart governance for health, and governing through engagement illustrates the diffusion of governance for health roles to many new actors, the aim of multilevel governance is vertical relations among governance actors and arenas.

In Europe in particular, there has been a rise in multilevel regulatory agreements since the 1990s, due almost entirely to the new authority at the regional level of governance. In the 1970s, when the European Economic Community was formulating policies on trade and agriculture, fewer than 20 agreements were signed every 3 years, whereas 260 such agreements were signed between 2002 and 2005 (Bell & Hindmoor, 2009). In some cases, the European Union has been able to enact health-promoting regulations as measures for consumer protection, such as the regulation on nutrition and health claims made on food packaging in 2006, which calls for measures "to ensure that any claim made on foods' labelling, presentation or marketing in the European Union is clear, accurate and based on evidence accepted by the whole scientific community". The increasing attention that industry lobbyists pay to the European Parliament is testament to its growing influence and authority. This can have implications for governance for health, as exemplified in 2010, when the food industry successfully lobbied the European Parliament to vote down proposals to force food manufacturers to add 'traffic light' labels on the front of packaging to help consumers to calculate their daily intake of salt, sugar and fat.

The European Union's best-known approaches to smart governance for health have been through its steering instruments: declarations and conclusions, efforts to create closer cooperation and harmonization through recommendations, resolutions and codes of conduct, which are used as alternatives to legislation (Senden, 2005; Greer & Vanhercke, 2010). Examples include the Platform on Diet, Nutrition and Physical Activity, the High Level Group on Health Services and Medical Care and the Open Method of Coordination (Greer & Vanhercke, 2010). The last in particular reflects the incorporation of traditional forms of hierarchical governance into 'new governance' methods to ensure that the 'soft law' practices of the European Union do not degrade into sharing ideas without follow-through. Greer & Vanhercke (2010) considered that the possibility that the European Court of Justice could intervene with hard law through Article 49 jurisprudence (provision of services), state aid and competition cases (assimilating health into the internal market) is integral to the success of regulatory approaches that rely less and less on command-and-control. It is this potential use of hard law that provides incentives for member states to make the most of softer, consensus-based mechanisms. Bell & Hindmoor (2009) refer to this approach as "self-regulation in the shadow of hierarchy".

The move to more mixed, multilevel forms of governance is driven by the decreasingly territorial nature of problems and solutions and increasing differentiation within the international system (Zürn, 2010). Differentiation is reflected in the presence of new, legitimate actors and arenas beyond the nation-state, which also undertake decision-making, regulatory action, policy implementation, resource allocation and acceptance and recognition of actors and functions—the traditional business of governments. As Zürn (2010) states, "nation-states have increasing difficulties in designing unilateral policies or regulations that are of use in attaining governance goals such as security, legal certainty, legitimacy or social welfare", for which they must turn to multilateral collaboration and to international and regional institutions.

_

⁴ http://ec.europa.eu/food/food/labellingnutrition/claims/index en.htm

For example, **European policies to address antimicrobial resistance**: Antimicrobial resistance is a growing threat to public health worldwide. In 2009, a joint working group of the European Centre for Disease Prevention and Control and the European Medicines Agency estimated that the number of extra deaths due to resistant bacteria in Europe had already exceeded 25 000 a year (ECDC/EMEA Joint Working Group, 2009). After reviewing policy over the past 15 years, G. Tomson, J. Pafs and A. Diseberg (see background paper) found that countries such as Chile, Denmark, France, Israel, The Netherlands and Sweden had all developed and implemented practical policies for managing resistance or components thereof at various levels of society. Similarly, many local antibiotic stewardship programmes have been set up in hospitals and health centres. Successful control of resistance to antibiotics will, however, require a multipronged approach in which all relevant sectors of society are engaged, from the World Health Assembly to the high-street chemist and consumers.

A common policy on antimicrobial resistance has been in place at regional level in the European Union since the late 1990s, which is a concrete example of multilevel top-down governance. The European Union issued recommendations to restrict systemic antibacterial agents to prescription-only use in 2002. Eighteen countries adopted and have implemented measures to comply, such that no antibiotics are sold without a prescription or such products represent less than 1% of sales. In eight countries, however, 1–10% of antibiotics are sold without a prescription, and in Greece the percentage exceeds 15% (Wernli et al., 2011). The chain of effective multilevel governance is often only as strong as its weakest link. States increasingly rely on multilateral organizations to help coordinate policy responses; however, without effective hierarchical controls to implement policy within states, multilevel governance breaks down. In the case of antimicrobial resistance in Europe, if there is failure to implement policies or surveillance mechanisms in one country or locality, the success of the policy in the entire region is jeopardized.

One of the best example of expanding smart forms of multilevel hierarchical regulation is the WHO Framework Convention on Tobacco Control (WHO, 2003), especially when taken in conjunction with European Union tobacco regulations. Tobacco control policy in the European Union "highlights the vertical interactions and shared authority and responsibilities between regions, states, and intergovernmental organisation, as well as the importance of non-state actors on all levels. It also emphasises the importance of integrating different sectors, such as health care, agriculture, and international trade for appropriate and effective policy making." (See the background paper by G. Tomson, J. Pafs and A. Diseberg.) Tobacco regulation is an example of governance through networks and engagement, which is wholly dependent on a strong hierarchical top-down core of regulatory agreements and hard law. It highlights the necessity for and complementarity of the diffusion of power with a strong steering role of the state.

The softer side of the state: how states govern through persuasion

A 'softer' side of top-down authority has appeared in new forms of 'welfare contractualism', in which the state uses its centralized power and resources to provide incentives through reward rather than sanction. For example, "states have used tax incentives, subsidised nursery places and job-sharing schemes to encourage mothers to return to work. In Mexico, Brazil and other South American countries, conditional cash transfers provide financial incentives for mothers to take nutritional supplements, keep their children in school, and ensure they attend regular health check-ups. Parents are paid only if they effectively police their own activities." (Bell & Hindmoor, 2009). One step further along the continuum from rewards for good behaviour is governance through persuasion, which goes beyond changing people's behaviour through rewards and sanctions to changing people's ideas of how they ought to behave (Bell & Hindmoor, 2009). The health sector has extensive experience in governing through persuasion

and in collaborating with non-state actors to do so. Peer education on HIV and HIV prevention programmes are a case in point.

Traditional hierarchical means of governing are becoming more fluid and adaptive. Regulation is no longer only top-down, as soft power and soft law extend their influence. This includes both self-regulation and growing interest in 'nudge' policies, which build on health promotion approaches such as 'making the healthier choice the easier choice'. The term 'nudge' describes "any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008). Examples are making salad rather than chips the default side-dish or making stairs rather than lifts more architecturally prominent in public buildings. Another applied technique for nudge policy is 'social norm feedback', in which information about what others are doing is shared. The following Table 3 provides more examples and highlights the distinction between nudging and regulating.

Table 3. Examples of nudging and regulating actions

	Nudging	Regulating
Smoking	Make non-smoking more visible through mass media campaigns with the message that the majority do not smoke and most smokers want to stop	Ban smoking in public places
	Reduce cues for smoking by keeping cigarettes, lighters and ashtrays out of sight	Increase price of cigarettes
Alcohol	Serve drinks in smaller glasses	Regulate pricing through duty or minimum pricing per unit
	Make lower alcohol consumption more visible by mass media campaigns with the message that the majority do not drink to excess	Raise the minimum age for purchase of alcohol
Diet	Designate sections of supermarket trolleys for fruit and vegetables	Restrict food advertising in media directed at children
	Make salad rather than chips the default side-order	Ban industrially produced trans-fatty acids
Physical activity	Make stairs, not lifts, more prominent and attractive in public buildings	Increase duty on petrol year on year (fuel price escalator)
	Make cycling more visible as a means of transport, e.g. through city bicycle hire schemes	Enforce car drop-off exclusion zones around schools

Source: Adapted from Marteau et al. (2011)

All public health professionals may not be convinced of the value of 'nudging' (Bonell et al., 2011), and admittedly more research is needed into its effectiveness; however, it represents an important shift in governance, in which individuals are not treated only as perfect specimens of Homo economicus, always rational and calculating. Rather than using incentives directed at people's pocketbooks, nudge policies interface with people "within the settings of their everyday life; where they learn, work, play and love" (WHO Regional Office for Europe, 1986), subtly influencing the norms they live by and the psychosocial cues that can provoke healthier behaviour or discourage unhealthy habits.

5.2.4 Governing through independent agencies and expert bodies

As described earlier in the study, many new mechanisms have emerged since 1945 as approaches to democracy. A characteristic of Keane's (2009) monitory democracy that distinguishes it from previous forms of representative or assembly democracy is the "way all fields of social and political life come to be scrutinized, not just by the standard machinery of representative democracy, but by a whole host of non-party, extra-parliamentary and often unelected bodies operating within and underneath and beyond the boundaries of territorial states". These many new power-scrutinizing institutions differ so widely that is difficult to group them as a common phenomenon.

"Monitory mechanisms are not just information-providing mechanisms. They operate in different ways, on different fronts. Some scrutinise power primarily at the level of citizen input to government or civil society bodies; other monitory mechanisms are preoccupied with monitoring and contesting what are called policy throughputs; still others concentrate on scrutinising policy outputs produced by governmental or nongovernmental organisations. Quite a few of the inventions concentrate simultaneously on all three dimensions. Monitory mechanisms also come in different sizes and operate on various spatial scales (Table 4) ranging from 'just round the corner' bodies with merely local footprints to global networks aimed at keeping tabs on those who exercise power over great distances." (Keane, 2009).

Citizens assemblies: When the governments of British Columbia and Ontario announced that they would convene citizens' assemblies to explore the issues of electoral reform and democratic renewal, they introduced a new mechanism for decision-making into the political process, a mechanism that could bring more women into Canada's decision-making and transform politics in the process. Tens of thousands of citizens in both provinces were told that they had been randomly selected from the electoral lists and could put their names forward for a draw to become members of the citizens' assemblies. At selection meetings in both provinces, 250 eligible members were randomly picked to serve on the assemblies. Those selected spent months (18 in British Columbia and nine in Ontario) learning, deliberating and finally making collective recommendations about electoral reform, which were proposed in referendums. While the public rejected the recommendations of the citizens' assemblies to reform the political system, remarkable things took place in the meeting rooms of the assemblies. For a range of public issues, from health care to climate change, poverty and child-care, an opportunity was given to ensure that all Canadians had a hand in shaping those decisions (Nguyen, 2009).

Table 4. Monitory mechanisms

citizen juries	advisory boards	bioregional assemblies	focus groups
participatory	'talkaoke' (local and	think-tanks	consensus conferences
budgeting	global talk shows broadcast live on the Internet)	local community consultation schemes	information, advisory
teach-ins			and advocacy services
archive and research	public memorials	citizens' assemblies	brain-storming
facilities	opportunities for professional networking public meeting trigger clauses	Global Association of Parliamentarians against Corruption public interest litigation online petitions	conferences constitutional safaris (famously used by the drafters of the new
conflict of interest boards			
railway courts			
consumer testing			South African
agencies	'lok adalats' (people's	public vigils	Constitution to identify
democracy clubs	courts in India) consumer councils democracy cafés summits boards of accountancy public 'score-cards' (yellow cards and white lists) tendency for increasing numbers of	global watchdog organizations expert councils (such as the 'Five Wise Men' of the Council of Economic Advisers in Germany) global social forums unofficial ballots (e.g. text-messaged straw	best practice) Satyagraha methods of civil resistance
'protestivals' (a			
speciality of the			chat rooms
Republic of Korea)			peaceful sieges
deliberative polls			independent religious
public consultations			courts
social forums			public planning exercises
weblogs			
electronic civil disobedience			websites dedicated to monitoring the abuse of
	nongovernmental organizations to adopt	polls)	power (such as Bully
	written constitutions, with		OnLine, a British
	an elected component international criminal courts		initiative against workplace bullying and related issues)
	Courts		self-selected opinion polls

Source: Adapted from Keane (2009).

Rise of the unelected: In this wide variety of new democratic mechanisms, one subcategory is of particular importance, referred to by Vibert (2007) as 'the unelected'. The focus on evidencebased policy led to the creation of agencies such as the National Institute for Health and Clinical Excellence in the United Kingdom, an independent body for setting national guidelines, for example on treatment, use of medicines and quality of care, and to a similar organization in Germany, the Institute for Quality and Efficiency in Health Care. Further, the European Union has created a number of specialized agencies at regional level, which bridge the interests of the Union, its member states and, ultimately, its citizens. Permanand & Vos (2010) noted that, in practical terms, the European Union agencies have proliferated on numerous grounds but mainly "in response to an increased demand for information, expert advice and coordination at the Community level, as well as the need to lessen the Commission's workload and its search for more efficient and effective decision making." The member states support these multilevel expert agencies, first because they facilitate collective action and improved governance without further strengthening the European Commission, and secondly because "European Union agencies are generally networks functioning to a 'hub and spoke' model, which directly involves national level counterparts." (Permanand & Vos, 2010). It is also important to note that some of these unelected expert bodies have elaborate approaches for listening to public and patient opinions (e.g., the Citizens' Panel of the National Institute for Health and Clinical Excellence) (Dolan et al., 2003).

When these new, highly capable, unelected actors meet the increasing involvement and growing demands of informed citizens, the more traditional elected forms of government must react, "propelled to change both the way they discharge their problem-solving role and the way in which they provide an arena for the expression of values in society" (Vibert, 2007). In this regard, governments must facilitate and adapt to the new distribution of power. In Germany, public debates on the future of nuclear energy after the events at the Fukushima reactors in Japan led to the establishment of an ethical commission on safe energy provision (Ethikkommission für eine sichere Energieversorgung), chaired by the former head of UNEP (Grefe & Schnabel, 2011), and the Government based its decision to opt out of nuclear energy on the results of this commission's deliberations. Similarly, in 2007, the High Court of England and Wales found that the Government's consultation into the future energy mixture for the United Kingdom was 'misleading', and it required the Government to revise its recommendations. Increasingly, established ways of taking controversial decisions are being called into question.

In the European Union, regulatory agencies like the European Medicines Agency and the European Food Saftey Authority fill important gaps between regulation at regional level and implementation of regulations by member states (Mossialos et al., 2010).

"Many of the [European Union] agencies represent the formalization into a single structure of what had previously been a series of loosely connected committees. This single committee structure can then work independently of both the Commission and the Member States—though this is not to say that the main committees are not subject to pressures from both, nor that their decisions or recommendations have never reflected these pressures—a fact that, in turn, generates its own credibility." The agency approach therefore represents a new mode of European Union governance, which shifts from "the long standing, essentially top-down, rule-based 'community method'" and aims to foster the credibility of European Union scientific decision-making and make processes such as risk assessment for health protection less political (Mossialos et al., 2010).

'The unelected' are also reaching into governance for health in lower-income areas of the European Region. For example, the Global Fund to Fight AIDS, Tuberculosis and Malaria, a multilateral, multistakeholder donor agency, has established multistakeholder forums in Bulgaria, Romania and Tajikistan, through their 'country coordinating mechanism'. These forums are responsible for governing Global Fund investments in the countries in a manner analogous to the Fund's own board of directors, which includes representatives from donor and recipient governments, nongovernmental organizations, the private sector (including businesses and foundations) and affected communities.

The Global Fund on AIDS, Tuberculosis and Malaria created the **country coordinating mechanism** with responsibility for establishing an 'oversight plan' to ensure that activities are implemented and resources are used as specified in the grant agreement. Oversight is a critical element in ensuring accountability in grant implementation. This is, however, a major undertaking, and, while several such mechanisms have set up processes and systems that can be considered examples of best practice for oversight, many are still struggling to overcome challenges in exercising their oversight function.

5.2.5 Governing by adaptive policies, resilient structures and foresight

"Most human misery arises from our own ignorance, rather than from the inherent organization of the natural world. Science and technology are ladders allowing us either to climb higher out of this condition, or to descend further. At the societal level, we express our

choice through governance. But the default condition of governance is for the most part that it is myopic and fragmented." (Fuerth, 2009).

How 'complexity science' can lead to better governance for health and well-being

Addressing 'wicked problems' requires a high level of systems thinking. If there is a single lesson to be drawn from the first decade of the 21st century, it is that surprise, instability and extraordinary change will continue to be regular features of our lives (Swanson et al., 2009). As a result, the findings and theories of 'complexity science' are increasingly seen as relevant to public policy in sectors beyond the environment, in which it has been used most frequently (OECD, 2009). Interdisciplinary systems approaches are essential for analysis, for attempts to improve health and well-being and to prevent future crises.

Systems approaches require understanding of the system as a whole, the interactions between its elements and possibilities for intervention. In complex systems, 'understanding the system as a whole' may include acknowledging the extent of one's ignorance and one's limited grasp of the implications of nonlinear relations within the system. For example, the systems approach is of particular value in child road safety, "because it moves away from placing the onus on children to adapt their behaviour to cope with traffic, to recognizing that children's need for safe mobility must instead be addressed in the design and management of the whole transport system" (WHO & UNICEF, 2008). More than 260 000 children die as a result of road traffic crashes each year, and it is estimated that up to 10 million more are non-fatally injured (WHO & UNICEF, 2008). Preventing child injury requires understanding the system and the interactions between its elements. Effective interventions require a mixture of policies. from engineering and urban planning, such as reducing and enforcing speed limits and building separate infrastructure (the establishment of exclusive motorcycle lanes in Malaysia reduced crashes by 27%), to vehicle design and safety equipment, daylight headlamps on vehicles, access to bicycle helmets, legislative action and implementation of standards, as well as better education and skill development for children, parents and the general population. Such systems responses can be strengthened by the addition of anticipatory governance with foresight, as discussed below, helping policy-makers to determine whether proposed policy interventions would be adequate in future scenarios, such as those associated with demographic change and further urbanization.

G. Tomson, J. Pafs and A. Diseberg (see background paper) showed how 'complexity science' is used in analysing emerging, non-linear (unpredictable), multilevel characteristics of health systems, and suggested that health also be viewed through the lens of complex adaptive systems. This complexity is captured in Fig. 14 below.

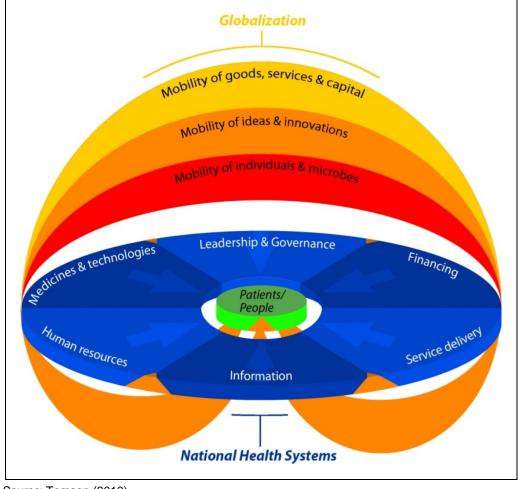


Fig. 14. Complex ecology of national health systems

Source: Tomson (2010).

Complex adaptive systems are characterized by nonlinear, self-organizing relations among agents, which gives rise to uncertainty and unanticipated consequences or 'emergent properties' or behaviour: in other words, the whole is greater than the sum of its parts. For example, urban planners understand that "the characteristics of a neighbourhood are different from, and not just the sum of, the individual elements of houses, streets, parks and shops. What makes a neighbourhood work, or not, is not the result of its particular parts, but rather, of the complex interactions of the individual elements" (Glouberman et al., 2003). The same can be said of human health, which is not just a function of an individual's biological characteristics. Studies of interconnections (weak links) and interdependence (strong links) in the system and how small-scale interventions can affect the system as a whole are therefore essential.

'Complexity science' demonstrates that there is no simple cause or simple solution to the 'wicked problems', and interventions in one area could have unintended deleterious effects in another. Strategies for public policies based on complexity have been developed (e.g. Glouberman et al., 2003; Swanson et al., 2009), which indicate that complex adaptive systems should be approached by policies that mirror the characteristics of complexity; decision-making should be decentralized, and self-organizing or social networking should be available to allow stakeholders to respond quickly to unanticipated events in innovative ways. Interventions should be iterative and should integrate continual learning, multistakeholder knowledge-gathering and sharing and mechanisms for automatic policy adjustment or for automatically triggering deliberations. Interventions should promote wide variation in policies, as many smaller interventions for the same problem can increase the likelihood of finding an appropriate.

effective solution (or solutions) over that with a single, top-down, 'rationally planned' approach. This is particularly important to bear in mind as governance for health shifts to more collaborative, whole-of-society and whole-of-government approaches. These approaches should not be misinterpreted as a return to top-down large-scale initiatives. Preserving and promoting system resilience should also be a fundamental characteristic of smart governance for health. Resilience is often misunderstood as merely the ability to 'bounce back' from systemic shocks to the old system as quickly as possible. In many instances, however, this is neither possible nor desirable. Resilience does not imply sustaining an existing system but refers to the adaptive capacity of a system to evolve with the challenges—to 'roll with the punches'—in the least disruptive way.

Swanson et al. (2009) proposed a comprehensive framework for creating such adaptive policies, consisting of seven tools to help policy-makers create more resilient policies in an uncertain world (Fig. 15).

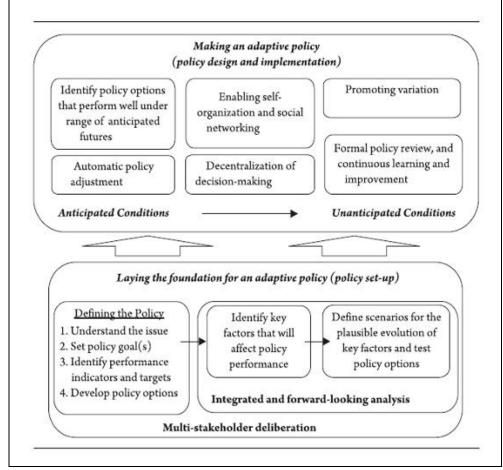


Fig. 15. Making an adaptive policy

Source: Swanson et al. (2009).

In summary, mirroring complexity means promoting policies that are holistic, allow selforganization and social networking in the communities that design, implement and receive the end-services of public policy, decentralize decision-making to the lowest effective, accountable unit of governance, whether existing or newly created, promote variety and diversity in responses to common problems, institutionalize continual learning and formal policy review and integrate automatic policy adjustment by defining 'signposts' and 'triggers' for changes in policy or for new discussions on policy renewal or adaptation. Each of these methods has been shown to help communities and stakeholders to respond better to unanticipated events, to increase the capacity of policies to be successful in unforeseen situations and to manage risk more efficiently in the face of unanticipated conditions (Swanson et al., 2009). The use of integrated, forward-looking analysis and multistakeholder deliberations are essential.

How to govern anticipatorily: integrated, forward-looking analysis

"By identifying key factors that affect policy performance and identifying scenarios for how these factors might evolve in the future, policies can be made robust to a range of anticipated conditions, and indicators developed to help trigger important policy adjustments when needed." (Swanson et al., 2009).

Swanson et al. (2009) described the importance of foresight and what is called 'anticipatory governance'. Foresight is "the capacity to anticipate alternative futures, based on sensitivity to weak signals, and an ability to visualize their consequences, in the form of multiple possible outcomes", while anticipatory governance requires foresight in policy design and implementation processes (Fuerth, 2009). Integrated, forward-looking analysis should lead to policies and to policy-makers who are better able to "sense and execute changes ahead of the cusp of major events; the better to blunt threats and harvest opportunities" (Fuerth, 2009). Rather than a forecast with a highly deterministic outlook on one high-probability outcome or singular trajectory, anticipatory governance builds broad capacity among the stakeholders to imagine multiple possible future scenarios, including ignorance—'unknown, unknowns' or 'black swans'—and to address uncertainty head-on. Anticipatory governance signals a shift from 'risks' to addressing more fundamental challenges, such as ignorance in the conception and response to the future(s) of innovations and how we live, work, love and relate to each other as a society.

Fuerth (2009) conceptualized anticipatory governance as a 'system of systems', comprising a foresight system, a networked system for integrating foresight into the policy process, a feedback system to gauge performance and to manage 'institutional' knowledge and an openminded institutional culture. Integrated foresight analysis can be seen as complementary to initiatives to institutionalize health impact assessments and health lens analysis. (For more information on anticipatory governance with participatory foresight, see the background paper by V. Ozdemir and B.M. Knoppers.)

Scenarios are powerful tools for illustrating possible future complex, multistakeholder issues. They can be prepared by inviting not only experts but major actors to identify major trends, factors or motivations for change and to find possible solutions in a collaborative approach. New governance for health could benefit from a 'scenario for global health'. This could not only promote agreement about the description of the issue and the design of possible solutions but could also illustrate the choices and decisions available for putting the world 'on track' in a 'best case scenario'. It could show that the status quo is an impossible option, place the choices and decisions before the relevant decision-makers and make them accountable, in a positive way, for the results that will be seen when they are no longer in office. (See the background paper by O. Raynaud.)

Anticipatory governance for health can be based on new methods of health forecasting. As Reither et al. (2011) stated, we should move from a two-dimensional to a three dimensional model of health forecasts. Most long-term health projections are based on linear extrapolation from age-specific data; three-dimensional models include the accumulated health experience of people who are now alive, which more accurately reflect the health challenges to be addressed and thus provide a better basis for decision-making.

6. New governance for health

In previous sections, we examined how governance for health in the 21st century is evolving with our notions of health, democracy and the roles of the state and society. We also argued for a new, expanded approach to good governance, guided by values for health and well-being. We further described the main characteristics of smart governance for health, which is co-produced collaboratively, in government and throughout society, incorporating new actors and methods for scrutinizing power and authority, to increase resilience and adaptability.

Governance for health reflects how we shape our societies in the 21st century. Governments must change their approaches. It is well understood that health requires action at the whole-of-government level and by health ministers and ministries. It is also recognized that partnerships and participation are important mechanisms for new governance as expressed in whole-of-society approaches. The Moscow Declaration, adopted at the First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Disease Control (WHO, 2011), reflects this type of thinking clearly in sections 11 and 12:

- 11. Effective noncommunicable disease prevention and control require leadership and concerted 'whole-of-government' action at all levels (national, subnational and local) and across a number of sectors, such as health, education, energy, agriculture, sports, transport and urban planning, environment, labour, industry and trade, finance and economic development.
- 12. Effective noncommunicable disease prevention and control require the active and informed participation and leadership of individuals, families and communities, civil society organizations, private sector where appropriate, employers, health care providers and the international community.

We have discussed the many reasons why another approach to governance is required in order to promote and protect health and well-being in the 21st century. In order to propose new roles for health ministers and ministries, we have explored the roles that government and society play in the co-production of governance for health in the 21st century.

We have compared developments in health with an analysis of general trends in 'new governance', and we have aligned ourselves with the conclusion of the most comprehensive review of governance literature to date (Hill & Lynn, 2005) that, while market- and network-related government activities have increased in importance, the role of government is as pivotal as ever. The role of governments in health remains fundamental; the changing nature of health has seen a clear, if sometimes contested, expansion of regulatory controls into new areas of policy in different sectors.

We concur with the position that governments today are exploring new approaches in 'meta-governance', which covers the range of government functions "in relation to the support of governance arrangements, which include overseeing, steering and coordinating governance arrangements; selecting and supporting the key participants in governance arrangements; mobilising resources; ensuring that wider systems of governance are operating fairly and efficiently; and taking prime carriage of democracy and accountability issues" (Bell & Hindmoor, 2009). The number of new mechanisms and approaches to governance for health has grown exponentially at all levels, involving many different actors. In health, we see a clear trend towards a new form of collaboration and towards monitory democracy, with more levels of accountability for health impact.

We agree with others that health can no longer be considered a sectoral goal to be produced by a single ministry. Health emerges from complex adaptive systems that depend primarily on social and political determinants of health. This concept requires a shift throughout society and

government, in three main directions: (1) health is recognized by heads of government as a priority for joined-up government; (2) health is recognized by all sectors and levels of government and within society as both a means to reach their own goals but also as a responsibility towards the whole of society; and (3) health is recognized by the health sector as requiring greater leadership and outreach. Governance for health requires whole-of-government and whole-of-society approaches and new positioning and roles for health ministers and ministries. New forms of transitional leadership are beginning to emerge.

6.1 New role for the health sector

We agree that the role of governments and government agencies in health is far from over, and the dichotomy between state-centred and society-centred relational governance is somewhat false; they remain distinct approaches, but they coexist in most cases. Capable, informed ministries are still crucial, whether activities are hierarchal or designed for more fluid systems of communication and collaboration. But they need to change. In view of the transformations that society has undergone over the past 35 years, many governments and health ministries appear slow to adapt. Too many national governments and agencies within governments continue to conduct 'business as usual' and "assume the role of coal shufflers on electric trains" (Willke, 2007). Rather, write authors such as Pacqet (OECD, 2001), the state must play new roles and become involved in problem-solving as a broker, catalyst, animator, educator and partner in much more participatory, 'flat' processes. This is true also for health ministries and the agencies aligned with them. In particular, the interaction with citizens has become critical, lending new vigour to concepts of subsidiarity and health action at the local level and the importance of meso-institutions that allow participation in debates on issues.

Health ministers, permanent secretaries, secretaries of state and the like have important roles in good governance for health, by engaging in transformational leadership within government:

- creating the environment within their sphere of influence to send the message that they wish to see cross-cutting approaches and to move away from territorial identity;
- taking positions on health in the cabinet and initiating cross-departmental cooperation with support at ministerial level;
- using their authority to reach out to other actors for joint initiatives, set the framework for micro-decisions through 'nudge' policies directed at society as well as government; and
- seeking exchanges with citizens and community-based action groups to understand people's concerns and contributions through a civil society strategy.

Senior civil servants in health ministries and heads of health agencies should develop the capacity of their organizations for smart governance for health and

- adopt an extended understanding of health that: looks outwards from the health sector as
 well as inwards; abandons linear thinking and accepts the unpredictability and uncertainty
 of complexity; and calls on health policies and institutions to reflect better use of
 foresight, multistakeholder deliberation, promotion of variation, self-organizing networks,
 decentralized decision-making and continual learning and review to manage risks and
 create more enduring policies;
- assign the resources and, above all, the time to build intersectoral trust and understanding; identify interdependent goals jointly with partners in other ministries, the private sector and communities; and take on the role of network manager, with skill and respect for network partners; and
- support national, regional and global dialogue on societal values and goals, of which health and wellbeing should be essential components, by facilitating universal ownership of the health agenda, recognizing that, in some cases, the health ministry will not always lead.

It is important to note the distinction between the powers of politics, which sit with ministers, and the powers of policy, which sit with the ministries, agencies and experts they call on. We have argued that health politics is paramount, and it is often politics that has the most influence over good governance for health and its four dimensions: human rights, well-being, global public goods and social justice. Ministers must recognize their responsibility for acting on the political determinants of health, beyond the scope of public policy. Parliamentarians must engage in new, proactive ways in governance for health. For example, the recommendations in the Moscow Declaration from the First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Disease Control (WHO, 2011) identify and distinguish the responsibilities at whole-of-government level and at the level of a health ministry.

The new responsibilities of health departments in support of a health-in-all-policies approach were summarized in the Adelaide Statement (WHO and Government of South Australia, 2010) as follows:

- understanding the political agendas and administrative imperatives of other sectors, building capacity to practise intersectoral approaches and working with other arms of government to achieve their goals and in so doing advance health and well-being: This is essential for successful collaborative governance, which requires building trust among sectors and appropriate framing of interdependent policy goals, challenges and solutions.
- building the knowledge and evidence base of policy options and strategies: More information and evidence should be collected and shared. The health sector should set an example of greater transparency by providing information on how resources are allocated and used, identifying successful institutions and those with problems and sharing the results of epidemiological research on health trends, among other data. This offers a point of departure for intersectoral analysis of health problems.
- comparing the health consequences of options in policy development: This should be done through integrated, forward-looking analysis, such as foresight and anticipatory governance, health impact assessments and health lens analysis.
- creating regular platforms for dialogue and problem-solving with other sectors: It is important to engage a wide variety of viewpoints in multistakeholder deliberations for all aspects of smart governance for health.
- evaluating the effectiveness of intersectoral work and integrated policy-making: Through integrated review and continuous learning, policies can become more adaptive and can address problems before they become crises.
- building capacity through better mechanisms, resources, agency support and skilled and dedicated staff.

The power to initiate smart governance for health lies mainly with ministries. Health ministries and agencies must assume new roles as 'meta-governors of relations', responsible for building trust and managing networks by better communication for collaboration. To advance governance for health, the health sector must learn to work in partnership with other sectors, jointly exploring policy innovation, novel mechanisms and instruments and better regulatory frameworks. This requires a health sector that is outward-oriented, open to others and equipped with the necessary knowledge, skills and mandate to take a systems approach to health and the priorities of partner ministries. This also means improving coordination and supporting champions within the health sector.

6.2 Political engagement and leadership

Change must be led, within governments and organizations and at the level of civil society. Leadership can be shown at the top of an organization, and it can emerge from the bottom up as agendas are set in civil society and through the media. In the health arena, the term 'political will' is frequently used to describe the ability to effect change. This term is a composite of many dimensions; it requires a sufficient set of political actors with a common understanding of a particular problem on the public policy agenda, who genuinely intend to support a policy solution commonly perceived to be potentially effective (Post et al., 2010). Ensuring political will is complex and is usually achieved over time, influenced by contextual factors such as media and social acceptance of an issue. Kingdon (1995) identified three streams in agenda-setting that must come together to effect policy change: the problem, the politics and the policies.

Leaders can also be seen as policy entrepreneurs: they help understanding of an issue, they frame it and act as facilitators. Leaders today are not always individuals; they may also be organizations or movements that exert pressure on politicians and policy-makers. In the health arena, there are many examples of such leadership, through social movements such as those for women's health and for HIV and AIDS. New dimensions are developing through technology. As new forms of participation appear, leadership becomes increasingly consultative and democratized. Monitory democracy also depends on good ethical judgement and transparency about conflicts of interest from leaders.

Nye (2008) in his analysis of leadership stressed that, in a 21st century context, leadership is changing. He applied his concept of 'soft' and 'hard' power to leadership and saw effective leadership as a successful mixture of the two, which he called 'smart power'. Leaders today are enablers: they help a group create and achieve shared goals. This is an important attribute in multistakeholder governance, as one of the most highly regarded leadership skills is the ability to enlarge the sense of 'we' to create a common purpose. This principle of leadership is fully reflected in the health promotion notion of empowerment: enabling people to improve their health and address its determinants. This kind of leadership is called 'transformational leadership', in which power for change is based on goals that serve a higher purpose—in our case, better health and well-being as a societal goal. This type of leadership can be contrasted with transactional leadership, which is based on self-interest, although the two are not totally separate. Porter & Kramer (2011) proposed a shared value concept of transformational leadership in health and the environment and also in the business world, without neglecting the self-interest necessary to run a business.

Such new leadership requires a range of skills. One of the most important is known as 'contextual intelligence' (Mayo & Nohria, 2005), which is the ability to discern trends in the face of complexity and adaptability and to capitalize on those trends. It is a skill that allows a leader to align tactics with objectives and then create smart strategies in an evolving environment. Transformational leaders make good use of 'windows of opportunity', and they apply a mixture of hard and soft power strategies to achieve change. In the health arena, these skills must be strengthened; many technical experts in health and health care and public health managers are not prepared for the political nature of health and the highly politicized context in which health decisions are taken. Lack of knowledge about the political process and the political culture is one of the weaknesses of health ministries and of many health organizations, which is why politically astute ministers and permanent secretaries are so important for moving governance for health forward.

6.3 Conclusions and recommendations to the new European policy for health, Health 2020

Smart governance for health is under way across Europe, although WHO investigations suggest that its adoption is uneven across the Region. Health 2020 can contribute significantly to creating the new mind-set required to move governance for health forward, by adopting the following eight recommendations:

(1) Positioning health

First and foremost, people's health and well-being must be a goal for the whole of government and the whole of society.

As noted in other discussions on social progress beyond the gross domestic product (Stiglitz et al., 2010), good health is an overall societal goal that is integral to human well-being, economic and social development and environmental protection. It is an essential component of sustainable development and good governance. Although a number of modern constitutions include a commitment to health, this commitment must be made actionable in new ways, so that governance for health is based on human rights: health is an unalienable responsibility of all. Governance for health is a responsibility at the highest level of government, and clear investment goals should be set in relation to different sectors of policy and society. This is critical if the determinants of health are to be addressed.

Health 2020 must therefore engage partners far outside the health sector to 'apply a health lens' and reach out to heads of government, parliamentarians, business leaders, mayors and European citizens. Creation of a Health 2020 innovation platform could strengthen such a strategy.

(2) Basing policy on new metrics

The whole of government and the whole of society must become more familiar with the complex dynamics of health and its determinants in order to govern better.

All actors must appreciate the extent to which good health enhances the quality of life, improves workforce productivity, increases learning capacity, strengthens families and communities, supports sustainable habitats and environments and contributes to security, poverty reduction and social inclusion. They must also recognize the extent to which good health depends on multiple social determinants, inequalities and social gradients. Governance for health is closely related to management of the risks associated with globalization and modernization. It requires equipping the actors with skills and the capacity to recognize and address cross-cutting problems such as health. Sectors must work together to define indicators for monitoring change and progress. Through regular review, even when a policy is working, states improve their resilience to unexpected change by early identification of emerging issues that affect the policy. It is therefore essential that the data and information collected and shared are relevant for all parties and accessible to the public. It is also important that the range of materials considered to constitute acceptable evidence is broadened to include citizens' perspectives, so that they can affect decision-making. Improving general health literacy in society should go hand in hand with improving health literacy in government sectors.

Health 2020 can help Member States to identify new measures of health and well-being on the basis of both objective and subjective data and equity and sustainability. New types of public health reports with new measures can be considered, including new forecasting tools for anticipatory governance. Health 2020 could also initiate a systematic effort, such as a clearing house, to collect robust evidence on the impact of a wide range of policies on health and of health on other policies.

(3) Institutionalized processes for whole-of-government approaches

In order to harness health and well-being, institutionalized whole-of-government structures and processes are required to encourage cross-sector problem-solving and address power imbalances.

These processes will require a significant change in culture and an appropriate timetable. The functional organization of government departments limits their ability to address cross-cutting 'wicked' problems. Government agencies need the leadership, mandate, incentives, audits, budgetary instruments, pooling of resources, sustainable mechanisms and realistic time frames to work collaboratively on integrated solutions. Governments can coordinate policy-making through strategic plans that set out common goals, integrated responses and increased vertical and horizontal accountability across departments. These will include new reporting formats, such as the measurement of externalities between sectors and between national and transnational health effects that are subject to external and broad public scrutiny. One such proposal is to establish a team of civil servants at the centre of government (a 'department of consequences'), which deals systematically with such cross-cutting issues.

Health 2020 could propose innovative approaches (such as those reviewed in this study) to working across sector and agency boundaries and to budgeting, financing and monitoring progress in Member States. It could support health ministries and public health agencies to be champions within governments for tackling 'wicked problems' through a mixture of hard and soft governance mechanisms, ranging from law to persuasion and incentives, as well as motivating other sectors to engage for health. These tactics include capacity-building through intersectoral training in smart governance for health in cooperation with schools of public health, business schools and schools for public policy, to create a new skills mix based on systems thinking and complexity science.

(4) Innovative partnerships for whole-of-society approaches

Many current health challenges could be better resolved by whole-of-society approaches that include civil society and the private sector as well as the media.

By working with third parties in civil society and the private sector, governments have been portrayed as 'hollowed-out', that is, they are in charge of regulating sectors in which they no longer have control or expertise. By working with third parties, however, governments have enhanced their legitimacy, generated additional social capital, made sure that their policies reflect local needs and gained access to valuable resources, such as the expertise, legitimacy and contacts of third parties⁵ (Bell & Hindmoor, 2009).

Health 2020 could support health ministries and public health agencies in reaching out to others within and outside government to arrive at joint solutions. It could also propose new programmes, networks and initiatives in order to engage many different stakeholders and, above all, citizens throughout Europe, and explore new incentive mechanisms. Stakeholders could jointly undertake and implement new assessments and accountability frameworks for health impacts, such as their contributions to a 'European health footprint'. The WHO European Healthy Cities Network would be an excellent laboratory for such innovation.

(5) A commitment to 'the informed citizen' and to citizen participation

The health sector must commit itself to the highly participatory nature of smart governance for health.

⁵ Where 'first party' refers to elected policy-makers and legislators, and 'second party' refers to public sector organizations and administrators

In monitory democracy, politicians and certain government bodies cede their representative authority to new actors, who have better, more transparent information on what people want and need. Through new consumer technologies, people inform themselves directly, search out information, exchange it with others and demand access to information. This is all the more important as many challenging lifestyle-related health issues can no longer be categorized clearly as public or private behaviour. An increasingly well-educated citizenry expects greater engagement, and governments should give them a clear agenda for participation, outlining the roles of citizens and patients and the impact they will have. Participation should be seen as a core health service activity, to be encouraged systematically throughout policy-making and health service commissioning cycles. Citizens have a right to health information.

Health 2020 can initiate dialogue with European citizens on health and well-being through new information and communication technologies. It can commit health ministries to design a civil society strategy, open-data initiatives and tracking systems that allow better public accountability, including digital and mobile government approaches, and a comprehensive strategy to strengthen health literacy.

(6) A global perspective

The new governance for health must integrate all levels of governance, from the local to the global.

Health challenges often require states to work together to provide public goods. The globalization of public goods through the integration of economies and the abolition of political borders has led to the notion of regional and global public goods based on national building blocks. For example, pandemic disease surveillance is based on effective monitoring and reporting by many different actors at local and national levels, who answer to regional bodies like the European Centre for Disease Prevention and Control and to global actors such as WHO. Coherence is essential for effective collective action, and this requires seamless coordination and policy implementation, from local to global level, with continual feedback and review.

Health 2020 can initiate a process whereby policy-makers at various levels are brought together to respond to interdependent challenges by making use of the cooperation among the various levels of WHO. This will require support to new types of health diplomacy that promote coherence between sectors, such as foreign policy, trade, agriculture, development and health.

(7) An outreach-oriented, innovative, supportive Regional Office

The health sector can support other arms of government by assisting in policy development and goal attainment.

Health 2020 could pool reports of best and failed innovative practices in working with others for shared goals within the European Region and beyond. Regular meetings with health ministers, heads of public health agencies and representatives of other sectors could drive these innovations forwards. The Regional Office could use models of long-term cooperation with other sectors, such as the European Environment and Health Process in its work on food and health, as well as network approaches such as the South-eastern Europe Health Network and health-promotion schools.

(8) A joint commitment to governance innovation

In the context of Health 2020, Member States and the Regional Office should:

- assess and monitor progress in governance for health in the European Region: a measure
 of governance innovation for health focused on whole-of-society and whole-ofgovernment approaches should be designed as a follow-up to this study. A bi-annual
 report on governance innovation for health would be submitted to the Regional
 Committee.
- consider establishing a multidisciplinary European Institute of Governance for Health, which, like the recent initiative taken by the Union of South American Nations in establishing the Instituto Suramericano de Gobierno en Salud (South American Institute for Health Governance), would operate as a resource for Member States of the WHO European Region to reorient their governments towards smart governance for health by leadership development, political debate, training and research, in cooperation with national institutes in many disciplines.

Glossary

Accountability: being called 'to account' to some authority for one's actions. It is external, in that the account is given to another person or body outside the person or body being held accountable; it involves social interaction and exchange, in that one side, that calling for the account, seeks answers and rectification, while the other side, that being held accountable, responds and accepts sanctions; it implies rights of authority, in that the person or body calling for an account is asserting the right of superior authority over the person or body that is accountable, including the right to demand answers and to impose sanctions.

Complex adaptive system: made up of many individual, self-organizing elements capable of responding to others and to their environment. The entire system can be seen as a network of relations and interactions, in which the whole is much more than the sum of the parts. A change in any part of the system, even in a single element, results in reactions and changes in associated elements and the environment. Therefore, the effects of any one intervention in the system cannot be predicted with complete accuracy, because the system is always responding and adapting to changes and to the actions of individuals.

Foresight: the capacity to anticipate alternatives, on the basis of sensitivity to weak signals, and the ability to visualize multiple possible outcomes (Fuerth, 2009).

Governance: how governments and other social organizations interact, how they relate to citizens and how they take decisions (Graham et al., 2003).

Governance for health: attempts of governments and others to steer communities, whole countries or groups of countries in the pursuit of health and well-being as a collective goal (adapted from Bell & Hindmoor, 2009).

Health governance: actions and means adopted by a society to organize itself for the promotion and protection of the health of its population (Dodgson, Lee, Drager, 2002).

Health in all policies: a strategy to strengthen the link between health and other policies; addresses the effects on health of all policies, such as those for agriculture, education, the environment, finance, housing and transport. It seeks to improve health and at the same time contribute to the well-being and the wealth of countries through structures, mechanisms and actions planned and managed mainly by sectors other than health (Wismar et al., 2006).

Healthy public policy: an explicit concern for health and equity in all areas of policy and accountability for health impact. The main aim is to create a supportive environment to enable people to lead healthy lives, making healthy choices possible or easier for citizens (WHO, 1998).

Health promotion: Health promotion is the process of enabling people to increase control over, and to improve, their health. (Ottawa Charter for Health Promotion, WHO 1986).

Health system: all activities with the primary purpose of promoting, restoring and maintaining health (WHO, 2000).

Health equity: the absence of systematic disparities in health (or in the major social determinants of health) between groups with different underlying social advantage or disadvantage, such as wealth, power or prestige. Inequities in health systematically put groups of people who are already socially disadvantaged (for example, by virtue of being poor, female or members of a disenfranchised racial, ethnic or religious group) at further disadvantage with respect to their health (Braveman & Gruskin, 2003).

Interdependence: situations characterized by reciprocal effects among countries or actors in different countries. Interdependence exists when there are reciprocal—not necessarily symmetrical, costly effects of transactions; when interactions do not have significant costly effects, there is simply interconnectedness. Interdependence does not mean mutual benefit. Interdependent relations always involve costs, as interdependence restricts autonomy; it is impossible to specify a priori whether the benefits of a relation will exceed the costs. This will depend on the values of the actors and the nature of the relationship (Keohane & Nye, 1989).

Intersectoral action: working with more than one sector of society to take action on an area of shared interest. Sectors may include government departments such as health, education, environment and justice; ordinary citizens; non-profit societies or organizations; and business (Health Canada, 2000).

Legitimacy: "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchmann, 1995). Legitimacy depends on the level of acceptance by different direct and external stakeholders. Representation, inclusiveness and transparency are critical to building the necessary trust for legitimacy. Additionally, legitimacy depends on the ability to engage stakeholders in a meaningful dialogue in which they feel ownership and the possibility of deriving benefits, which requires full transparency, openness and respect. Nascent multistakeholder processes can be seriously jeopardized if the partners do not regularly monitor the transparency of perceptions and expectations with regard to participation (Burger & Mayer, 2003; Vallejo & Hauselmann, 2004).

Multistakeholder deliberation: "a collective and collaborative public effort to examine an issue from different points of view prior to taking a decision, deliberative processes strengthen policy design by building recognition of common values, shared commitment and emerging issues, and by providing a comprehensive understanding of causal relationships" (Swanson et al., 2009).

Meta-governance: covers the range of functions that governments take on "in relation to the support of governance arrangements, which include overseeing, steering and coordinating governance arrangements; selecting and supporting the key participants in governance arrangements; mobilising resources; ensuring that wider systems of governance are operating fairly and efficiently; and taking prime carriage of democracy and accountability issues" (Bell & Hindmoor, 2009).

Nudge policy: "any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008).

Public health: "the science and art of preventing disease, prolonging life and promoting health through organized efforts of society" (Acheson, 1988).

Shared value: policies and operating practices that enhance the competitiveness of a company while simultaneously advancing economic and social conditions in the communities in which it operates. Shared value is created by identifying and extending the connections between social and economic progress (Porter & Kramer, 2011).

Social determinants: the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health are responsible for most health inequity, the

unfair but avoidable differences in health status seen within and between countries (Commission on Social Determinants of Health, 2008).

Smart governance: one way to describe the major institutional adaptations observed in public and international organizations in the face of increasing interdependence. In a knowledge society, policy decisions based on purely normative considerations lose ground to decisions based on 'evidence'. At the same time, decision-making requires new methods for coping with and accounting for the associated uncertainties that abound when knowledge—always questionable, always revisable—supersedes 'majority values' as the basis for authority. Smart governance, coined by Willke (2007), is "an abbreviation for the ensemble of principles, factors and capacities that constitute a form of governance able to cope with the conditions and exigencies of the knowledge society."

Well-being: people's experience of positive and negative emotions, satisfaction, vitality, resilience, self-esteem and sense of purpose and meaning. Social well-being has two main components: supportive relationships and a feeling of trust and belonging; together they form a picture of what we all really want: a fulfilling and happy life (New Economics Foundation, 2011).

Whole-of-government approach: the diffusion of governance vertically across levels of government and arenas of governance and horizontally throughout sectors. Whole-of-government activities are multilevel, from local to global government activities and actors, and increasingly also involving groups outside government. A whole-of-government approach often seeks to address a perceived lack of command and control at the centre with respect to an issue or overall goals by use of a new organizational design and reorganization. This approach requires building trust, common ethics, a cohesive culture and new skills. It stresses a need for better coordination and integration centred on the overall societal goals for which the government stands. Health in all policies is one whole-of-government approach to making governance for health and well-being a priority for more than the health sector and working in both directions: the impact of other sectors on health and the impact of health on other sectors.

Whole-of-society approach: an approach with the aim of extending the whole-of-government approach by additional emphasis on the roles of the private sector and civil society, as well as political decision-makers such as parliamentarians. Increasingly, the policy networks that have emerged within government extend beyond government to include other societal actors, particularly in considering wicked problems such as obesity (Dubé et al., 2009) and pandemic preparedness (WHO, 2009). By engaging the private sector, civil society, communities and individuals, the whole-of-society approach can strengthen the resilience of communities to withstand threats to their health, security and well-being. A whole-of-society approach goes beyond institutions: it influences and mobilizes local and global culture and media, rural and urban communities and all relevant policy sectors, such as the education system, the transport sector, the environment and even urban design, as demonstrated in the case of obesity and the global food system. Whole-of-society approaches are a form of collaborative governance, which places emphasis on coordination through normative values and trust-building among a wide variety of actors.

Wicked problems: the term 'wicked' in this context is used not in the sense of evil but rather as an issue that is highly resistant to resolution. Successfully solving or at least managing wicked policy problems requires reassessment of some of the traditional ways of working and solving problems. These problems challenge our governance structures, our skills base and our organizational capacity. A first step is to recognize wicked problems as such. In order to address wicked problems successfully, there must be broad recognition and understanding, including from governments and ministers, that there are no 'quick fixes' or simple solutions.

Bibliography

Acheson D (1988). Report of the Committee of Inquiry into the future development of the public health functions. London, HMSO:289.

African Development Bank Group (2009). *Checklist for gender mainstreaming in governance programmes*. Abidjan, African Development Bank Group (http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Checklist%20for%20Gender%20Mainstreaming%20in%20Governance%20Programmes%20EN.pdf, accessed 18 August 2011).

Aizcorbe A, Retus B, Smith S (2008). Toward a health care satellite account. *Survey of Current Business*, 88:24–30.

Alderslade R (2011). *Health in All Policies. The argument for investment in equitable health. Presentation for "Better Health for All in Latvia"*. *Riga 18 April 2011* (http://phoebe.vm.gov.lv/misc_db/web.nsf/626e6035eadbb4cd85256499006b15a6/0d12aafd0b0 abe72c22575b0003093b9/\$FILE/Richard%20Alderslade 3dala.pdf, accessed 18 August 2011).

American Beverage Association (2010). *Alliance school beverage guidelines: final progress report.* Washington, DC, American Beverage Association.

Ansell C, Gash A (2007). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18:543–571.

(Australian) Management Advisory Committee (MAC) (2004) *Connecting Government: Whole of Government Responses to Australia's Priority Challenges*. Canberra, Commonwealth of Australia (http://www.apsc.gov.au/mac/connectinggovernment.pdf, accessed 18 August 2011).

Barabas J (2004). How deliberation affects policy opinions. *American Political Science Review*, 98:687–701.

Beck U (1992). Risk society: towards a new modernity. London, Sage.

Bell S, Hindmoor A (2009). *Rethinking governance: the centrality of the state in modern society*. Cambridge, Cambridge University Press.

Birkavs V, McCartney C (2011). Policies for shared societies: their contribution to well-being and economic performance. In: *Challenge Europe: growth, well-being and social policy in Europe: trade-off or synergy?* Brussels, European Policy Centre:20–26.

Bonell C et al. (2011). One nudge forward, two steps back. British Medical Journal, 342:d401.

Brandt AM (2007). The cigarette century: the rise, fall, and deadly persistence of the product that defined America. New York, Basic Books.

Braveman P, Gruskin S (2003). Defining equity in health. *Journal of Epidemiology and Community Health*, 57:254–258.

Bryson JM, Crosby BC, Stone MM (2006). The design and implementation of cross-sector collaborations: propositions from the literature. *Public Administration Review*, 66:44–55.

Bull B, McNeill D, eds. (2007). Development issues in global governance. London, Routledge.

Burger D, Mayer C (2003). *Making sustainable development a reality: the role of social and ecological standards*. Eschborn, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

Butler-Jones D (2008). The Chief Public Health Officer's Report on the State of Public Health in Canada, 2008: Addressing Health Inequalities. Ottawa, Minister of Health (http://www.phacaspc.gc.ca/cphorsphc-respcacsp/2008/pdf/cpho-report-eng.pdf, accessed 18 August 2011).

Capewell S et al. (1999). Effects of the Heartbeat Wales programme. *British Medical Journal*, 318:1072.

Cashore B (2002). Legitimacy and the privatisation of environmental governance: how non-state market driven (NSMD) governance systems gain rule making authority. *Governance*, 15:503–529.

Castell-Florit, P (2010). Intersectoral Health Strategies: From Discourse to Action. *MEDICC Review*, 12(1):48–48.

Christensen T, Laegreid P (2007). The whole of government approach to public sector reform. *Public Administration Review*, 67:1059–1066.

CNN World (2006). *Skinny models banned from catwalk*, September 13, 2006, (http://articles.cnn.com/2006-09-13/world/spain.models_1_association-of-fashion-designers-skinny-models-pasarela-cibeles?_s=PM:WORLD, accessed 18 August 2011).

Commission on Global Governance (1995). *Our global neighbourhood*. Oxford, Oxford University Press.

Commission on Social Determinants of Health (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva, World Health Organization (http://www.who.int/social_determinants/resources/gkn_lee_al.pdf, accessed 1 August 2011).

Conklin J (2006). Wicked problems and social complexity. In: *Dialogue mapping: building shared understanding of wicked problems*. New York, Wiley.

Coulter A (2005). What do patients and the public want from primary care? *British Medical Journal*, 331:1199.

Council of the European Union (2006a). *Council conclusions on health in all policies (HiAP)*. *Proceedings of the 2767th Employment, Social Policy, Health and Consumer Affairs Council meeting, Brussels, 30 November and 1 December 2006*. Brussels, Council of the European Union (http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/lsa/91929.pdf, accessed 1 August 2011).

Council of the European Union (2006b). *Council conclusions on common values and principles in European Union health systems*. Brussels, Council of the European Union.

Crawford A (2006). Networked governance and the post-regulatory state? *Theoretical Criminology*, 10:449–479.

Cullbridge Marketing and Communications (2011). Tools of change: proven methods for promoting health, safety and environmental citizenship [web site]. Ottawa, Cullbridge Marketing and Communications.

Dahlgreen G, Whitehead M (2006). European strategies for tackling social inequities in health: Levelling up Part 2. Copenhagen, WHO Regional Office for Europe.

Davis RM (1998). Healthy People 2010": national health objectives for the United States. *British Medical Journal*, 317:1513–1517.

de la Chapelle B (2008). Multi-stakeholder governance: emergence and transformational potential of a new political paradigm. In: Helbing D, ed. *Managing complexity: insights, concepts, applications*. Berlin, Springer.

Dodgson R, Lee K, Drager N (2002). *Global health governance: a conceptual review*. Geneva, World Health Organization.

Dolan P, Tsuchiya A, Wailoo A (2003). NICE's citizen's council: what do we ask them, and how? *Lancet*, 362:918–919.

Dubé L et al. (2009). *Building convergence: toward an integrated health and agri-food strategy for Canada*. Ottawa, Canadian Agri-Food Policy Institute (http://www.capiicpa.ca/pdfs/BuildingConvergence Summary.pdf, accessed 1 August 2011).

Dubé L, Thomassin P, Beauvais J (2009). Whole-of-Society Approach To Policy Development And Implementation: Building Convergence And Driving Change On The Ground. Ottawa, The Canadian Agri-Food Policy Institute (CAPI). (http://www.capi-icpa.ca/converge-full/eight.html, accessed 1 August 2011).

ECDC/EMEA (2009). *The bacterial challenge: Time to react*. Stockholm, ECDC, European Medicines Agency

(http://www.ecdc.europa.eu/en/publications/Publications/0909_TER_The_Bacterial_Challenge_Time to React.pdf, accessed 1 August 2011).

European Commission (2009). Communication from the Commission to the Council and the European Parliament. GDP and beyond: measuring progress in a changing world. Brussels, European Commission.

European Commission (2010). *Communication from the Commission: Europe 2020 – a strategy for smart, sustainable and inclusive growth.* Brussels, European Commission (http://ec.europa.eu/europe2020/index en.htm, accessed 1 August 2011).

European Parliament (2006). Regulation (EC) No. 1924/2006 of the European Parliament and the Council of 20 December 2006 on nutrition and health claims made on foods. *Official Journal of the European Communities*, L 404 (30 December):9.

Federal Interagency Workgroup (2010). *Healthy People 2020 Framework*. Washington, DC, U.S. Department of Health and Human Services (http://www.healthypeople.gov/2020/consortium/HP2020Framework.pdf, accessed 1 August 2011).

Finegood D, Merth T, Rutter H (2010). Implications of the foresight obesity system map for solutions to childhood obesity. *Obesity*, 18:S13–S16.

Frederickson GH (2005). Whatever happened to public administration? Governance, governance everywhere. In: Ferlie E, Lynn LE, Pollitt C, eds. *The Oxford handbook of public management*. Oxford, Oxford University Press.

Fuerth LS (2009). Foresight and anticipatory governance. *Foresight*, 11(4):14–32.

Georgia Health Policy Center (2008). Finding the voice of public health in the national health reform dialogue: an integrative model for health system transformation. Atlanta, GA, Georgia State University.

Glouberman S et al. (2003). A toolbox for improving health in cities: a discussion paper. Ottawa, Caledon Institute of Social Policy.

Government of Australia (2007). *Tackling wicked problems: a public policy perspective*. Canberra, Australian Public Service Commission (http://www.apsc.gov.au/publications07/wickedproblems.pdf, accessed 1 August 2011).

Government of Northern Ireland (1999). *Professional policy making for the twenty first century*. Belfast, Government of Northern Ireland (http://ctpr.org/wp-content/uploads/2011/03/Professional-Policy-Making-for-the-21st-Century-1999.pdf, accessed 1 August 2011).

Graham J, Amos B, Plumptre T (2003). *Principles of good governance in the 21st century*. Ottawa, Institute on Governance.

Greer SL, Vanhercke B (2010). The hard politics of soft law: the case of health. In: Mossialos E et al., eds. *Health systems governance in Europe: the role of European Union law and policy*. Cambridge, Cambridge University Press.

Grefe C, Schnabel U (2011). "Wir müssen zukunftsoffen bleiben". *Zeit Online*, 21 (http://www.zeit.de/2011/21/Energie-Ethikkommission, accessed 1 August 2011).

Health Canada (2000). Intersectoral action toolkit. Ottawa, Health Canada.

Health Council of Canada (2007). *ActNow BC supports healthy lifestyles*. Ottawa, Health Council of Canada

(http://healthcouncilcanada.ca/docs/shiningalight/ActNow%20BC%20supports%20healthy%20lifestyles.pdf, accessed 1 August 2011).

Hernández-Aguado I, Parker LA (2009). Intelligence for health governance: innovation in the monitoring of health and well-being. In: Kickbusch I, ed. *Policy innovation for health*. New York, Springer:23–66.

Hill C, Lynn LE (2005). Is hierarchical governance in decline? Evidence from empirical research. *Journal of Public Administration Research and Theory*, 15:73–96.

Hocking J (2005). Liberty, security and the state. In: Saunders P, Walter S, eds. *Ideas and influence: social science and public policy in Australia*. Sydney, UNSW Press.

Holzer M et al. (2010). *Prague e-Governance: a study of best practices*. Newark, NJ, E-Governance Institute, National Center for Public Performance.

Hood C (1991). A public management for all seasons? *Public Administration*, 63:3–19 (http://www.globalhealtheurope.org/images/stories/researchpaper_02_v3_web.pdf, accessed 1 August 2011).

Huet Machado JM, de Souza Porto MF (2003). Health promotion and intersectoriality: experience of occupational surveillance. *Saúde*, 12(3).

Huxham C (2003). Theorizing collaboration practice. *Public Management Review*, 5:401–423.

Imperial M (2005). Using collaboration as a governance strategy: lessons from six watershed management programs. *Administration and Society*, 37:281–320.

Institute of Medicine (2011). For the public's health: revitalizing law and policy to meet new challenges. Washington, DC, National Academy of Sciences.

Institute of Transport Economics (2002). CBA of cycle track network in Norwegian cities: TØI-report 567/2002. Oslo, Institute of Transport Economics, A 38(8):592–605.

International Food and Beverage Alliance (2009). Progress report to Dr. Margaret Chan, Director-General of the World Health Organization on the International Food and Beverage Alliance's five commitments to action under the 2004 Global Strategy on Diet, Physical Activity and Health. Geneva, International Food and Beverage Alliance.

International Food and Beverage Alliance (2011). The International Food and Beverage Alliance's five commitments to action in support of the World Health Organization's 2004 Global Strategy on Diet, Physical Activity and Health. Geneva, International Food and Beverage Alliance.

Jenson J (2009). Making sense of contagion: citizenship regimes and public health in Victorian England. In: Hall P, Lamont M, eds. *Successful societies: how institutions and culture affect health*. Cambridge, Cambridge University Press.

Jessop B (2002) Governance and metagovernance: on reflexivity, requisite variety, and requisite irony. Lancaster, Department of Sociology, Lancaster University (http://www.lancs.ac.uk/fass/sociology/papers/jessop-governance-and-metagovernance.pdf, accessed 1 August 2011).

John F. Kennedy Presidential Library and Museum (1968). *Remarks of Robert F. Kennedy at the University of Kansas, March 18*, 1968. Boston, John F. Kennedy Presidential Library and Museum.

Jonas H (1985). *The imperative of responsibility: search of an ethics for the technological age*. Chicago, University of Chicago Press.

Keane J (2009). The life and death of democracy. New York, Simon and Schuster.

Keane, J (2003). Global civil society? Cambridge, Cambridge University Press.

Keohane RO, Nye J (1989). *Power and interdependence*. 2nd ed. Cambridge, MA, HarperCollins.

Kickbusch I (2003). Perspectives in health promotion and population health. *American Journal of Public Health*, 93:383–388.

Kickbusch I (2007). Health governance: the health society. In: McQueen D, Kickbusch I, eds. *Health and modernity: the role of theory in health promotion*. New York, Springer.

Kickbusch I (2010). Health in all policies: the evolution of the concept of horizontal governance. In: Kickbusch I, Buckett K, eds. *Implementing health in all policies: Adelaide 2010*. Adelaide, Government of South Australia.

Kickbusch I (2011). Global health diplomacy: how foreign policy can influence health. *British Medical Journal*, 342:d3154.

Kickbusch I, Buckett K, eds. (2010). *Implementing health in all policies: Adelaide 2010*. Adelaide, Government of South Australia.

Kingdon JW (1995). *Agendas, alternatives and public policies*. 2nd ed. New York, Addison Wesley Longman.

Klijn EH (2005). Networks and inter-organizational management: challenging, steering, evaluation, and the role of public actors in public management. In: *The Oxford handbook of public management*. Oxford, Oxford University Press.

Klijn EH (2009). Trust in governance networks: looking for conditions for innovative solutions and outcomes. In: Osborne SP, ed. *The new public governance? Emerging perspectives on the theory and practice of public governance*. London, Routledge.

Klinke A, Renn O (2006). Systemic risks as challenge for policy making in risk governance. *Forum Qualitative Sozialforschung/Forum Qualitative Sozial Research*, 7(1):33.

Kloprogge P, van der Sluijs (2006). The inclusion of stakeholder knowledge and perspectives in integrated assessment of climate change. *Climatic Change*, 75:359–389.

Kuhn T (1962). Structure of scientific revolutions. Chicago, University of Chicago Press.

Mackenbach J et al. (2008). Socioeconomic Inequalities in Health in 22 European Countries for the European Union Working Group on Socioeconomic Inequalities in Health. *New England Journal of Medicine*, 358:2468–2481.

Marteau TM et al. (2011). Judging nudging: can nudging improve population health? *British Medical Journal*, 342:d228.

Mayo AJ, Nohria N (2005). *In their time: the greatest business leaders of the twentieth century.* Boston, Harvard Business School Press.

McQuaid RW (2009). Theory of organizational partnerships: partnership advantages, disadvantages and success factors. In: Osborne SP, ed. *The new public governance? Emerging perspectives on the theory and practice of public governance*. London, Routledge.

Meeting of Minds European Citizens' Panel (2006). European citizens' assessment report: complete results. Brussels, Meeting of Minds Partner Consortium.

Michalski W, Miller R, Stevens B (2001). Governance in the 21st century: power in the global knowledge economy and society. In: OECD, ed. *Governance in the 21st century*. Paris, Organisation for Economic Co-operation and Development:7–26.

Ministry of Education, Finland (2008). *The Finnish Government's Child and Youth Policy Programme* 2007–2011. Helsinki, Ministry of Education.

Moore M, Hartley J (2009). Innovations in governance. In: Osborne SP, ed. *The new public governance? Emerging perspectives on the theory and practice of public governance*. London, Routledge.

Moss C, Schmitz A, Schmitz T (2006). First-generation genetically modified organisms in agriculture. *Journal of Public Affairs*, 6:46–57.

Mossialos E et al., eds. (2010). *Health systems governance in Europe: the role of European Union law and policy*. Cambridge, Cambridge University Press.

Mulgan R (2000). Accountability: an ever-expanding concept? *Public Administration*, 78:555–573.

Murthy NRN (2011). Corporate connections: the value of private sector partnerships. *Harvard International Review*, Spring:69–73.

Nestle M (2007). Food politics: how the food industry influences nutrition and health. Revised and expanded edition. Berkeley, University of California Press.

New Economics Foundation (2011). *Measuring our progress: the power of well-being*. London, New Economics Foundation

(http://www.wikiprogress.org/images//Measuring_our_progress_webReady.pdf, accessed 1 August 2011).

Nguyen C (2009). A woman's place is at the policy table ... and how citizens' assemblies are helping make that happen. Ottawa, Canadian Women's Health Network (http://www.cwhn.ca/en/node/39372, accessed 1 August 2011).

Nye J (2008). The power to lead. Oxford, Oxford University Press.

Nye J (2011). The future of power. New York, PublicAffairs.

Nye J, Kamarck EC (2002). *Governance.com: democracy in the information age*. Washington, DC, Brookings Institute Press.

OECD (2001). *Governance in the 21st century*. Paris, Organisation for Economic Co-operation and Development.

OECD (2010). *Meeting of the Health Committee at Ministerial Level: final communiqué*. Paris, Organisation for Economic Co-operation and Development (http://www.oecd.org/dataoecd/4/55/46163626.pdf, accessed 1 August 2011).

OECD (2011). Public governance [web site]. Paris, Organisation for Economic Co-operation and Development

(http://www.oecd.org/countrieslist/0,3351,en_2649_37405_1_1_1_1_37405,00.html, accessed 1 August 2011).

OECD Global Science Forum (2009). Applications of complexity science for public policy: new tools for finding unanticipated consequences and unrealized opportunities. Paris, Organisation for Economic Co-operation and Development.

Office of the United Nations High Commissioner for Human Rights & World Health Organization (2008). *The Right to Health. Fact Sheet No. 31*. Geneva, United Nations. (http://www.ohchr.org/Documents/Publications/Factsheet31.pdf, accessed 1 August 2011).

Orr R (2011). UN Innovation: a business model for solving global problems. *Harvard International Review*, Spring:64–68.

Osborne SP (2009). The (new) public governance: a suitable case for treatment? In: Osborne SP, ed. *The new public governance? Emerging perspectives on the theory and practice of public governance*. London, Routledge.

Paquet G (2001). The new governance, subsidiarity and the strategic state. In: OECD, ed. *Governance in the 21st century*. Paris, Organisation for Economic Co-operation and Development.

Peake S et al. (2008). *Health equity through intersectoral action: an analysis of 18 country case studies*. Ottawa, Public Health Agency of Canada and Geneva, World Health Organization.

Permanand G, Vos E (2010). EU regulatory agencies and health protection. In: Mossialos E et al., eds. *Health systems governance in Europe: the role of European Union law and policy*. Cambridge, Cambridge University Press.

Peters BG (2001). The future of governing. Lawrence, University Press of Kansas.

Pettersson B (2010). Health in all policies across jurisdictions – a snapshot from Sweden. *Public Health Bulletin South Australia*, 7(2):17–20.

Poguntke T, Webb P (2005). The presidentialization of politics in democratic societies: a framework for analysis. In: Poguntke T, Webb P, eds. *The presidentialization of politics: a comparative study of modern democracies*. Oxford, Oxford University Press:1–25.

Porter M, and Kramer M, (2011). Creating shared value. *Harvard Business Review*, 89(1/2):62–77.

Post LA, Raile ANW, Raile ED (2010). Defining political will. *Politics and Policy*, 38:653–676.

Public Health Agency of Canada et al. (2007). *Crossing sectors – experiences in intersectoral action, public policy and health*. Ottawa, Public Health Agency of Canada (http://www.phac-aspc.gc.ca/publicat/2007/cro-sec/pdf/cro-sec_e.pdf, accessed 1 August 2011).

Puska P et al., eds. (1995). *The North Karelia project: 20 year results and experiences*. Helsinki, National Public Health Institute.

Puska P, Ståhl T (2010). Health in all policies – the Finnish initiative: background, principles, and current issues. *Annual Review of Public Health*, 31:27.1–27.14.

Reither EN, Olshansky SJ, Yang Y (2011). New forecasting methodology indicates more disease and earlier mortality ahead for today's younger Americans. *Health Affairs*, doi:10.1377/hlthaff.2011.0092.

Rhodes RAW (2000). Governance and public administration. In: Pierre J, ed. *Debating governance: authority, steering, and democracy*. Oxford, Oxford University Press.

Riklin A (2006). What Montesquieu could not have known yet: reflections on a revision of the separation of powers theory. *Ancilla Iuris*, 20.

Robertson J (2003). *The economic costs of infectious diseases*. Canberra, Parliament of Australia (Research Note No. 36 2002–03; http://www.aph.gov.au/library/pubs/rn/2002-03/03rn36.htm, accessed 1 August 2011).

Roll Back Malaria Partnership (2010). Roll Back Malaria (RBM) Partnership publications and multimedia resources [web site]. Geneva, World Health Organization (http://www.rollbackmalaria.org/multimedia/index.html, accessed 15 December 2010).

Rosenberg CE (1962). *The cholera years; the United States in 1832, 1849, and 1866.* Chicago, University of Chicago Press.

Ruger JP (2010). Health and social justice. Oxford, Oxford University Press.

Sabel CF, Zeitlin J (2008). Learning from difference: the new architecture of experimentalist governance in the European Union. *European Law Journal*, 14:278–280.

Salamon LM, ed. (2002). The tools of government. Oxford, Oxford University Press.

Sandel MJ (2010). Justice: what's the right thing to do? London, Penguin Books.

Scharpf FW (1994). Games real actors could play: positive and negative co-ordination in embedded negotiations. *Journal of Theoretical Politics*, 6(1):27–53.

Scharpf FW (2002). The European social model. *Journal of Common Market Studies*, 40:645–670.

Schneider M et al. (2010). Foundations, methodology, and selected results of a satellite account for the German health economy. Augsburg, Beratungsgesellschaft für angewandte Systemforschung mbH.

Scottish Government (2009). *Recipe for success – Scotland's National Food and Drink Policy*. Edinburgh, Scottish Government (http://www.scotland.gov.uk/Publications/2009/06/25133322/2, accessed 1 August 2011).

Senden L (2005). Soft law, self-regulation and co-regulation in European law: where do they meet? *Electronic Journal of Comparative Law*, 9.1.

Slama K (2005). From evidence to practice: tobacco control effectiveness. *Promotion and Education*, 12(Suppl. 1):28–32.

Sorenson E (2006). Metagovernance: the changing role of politicians in processes of democratic governance. *American Review of Public Administration*, 36:98–114.

Ståhl T et al., eds. (2006). *Health in all policies: prospects and potentials*. Helsinki, Ministry of Social Affairs and Health.

Stiglitz JE, Sen A, Fitoussi JP (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. Paris, Commission on the Measurement of Economic Performance and Social Progress (http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf, accessed 1 August 2011).

Strand M et al. (2009). Setting the political agenda to tackle health inequity in Norway. Copenhagen, WHO Regional Office for Europe (Studies on Social and Economic Determinants of Population Health, No. 4;

http://www.euro.who.int/__data/assets/pdf_file/0014/110228/E93431.pdf, accessed 1 August 2011).

Strange S (1996). *The retreat of the state: the diffusion of power in the world economy.* Cambridge, Cambridge University Press.

Suchman M (1995). Managing legitimacy: strategic and institutional approaches. *Academy of Management Review*, 20:571.

Swanson D et al. (2009). Seven guidelines for policy-making in an uncertain world. In: Swanson D, Bhadwal S, eds. *Creating adaptive policies: a guide for policy-making in an uncertain world*. London, Sage.

Tallacchini M (2005). Before and beyond the precautionary principle: epistemology of uncertainty in science and law. *Toxicology and Applied Pharmacology*, 207(2 suppl):645–651.

Thaler RH, Sunstein C (2008). *Nudge: improving decisions about health, wealth, and happiness*. New Haven, CT, Yale University Press.

Timo Ståhl et al., eds. (2006). *Health in All Policies. Prospects and potentials*. Helsinki, Ministry of Social Affairs and Health (http://ec.europa.eu/health/archive/ph_information/documents/health_in_all_policies.pdf, accessed 1 August 2011).

Tomson G (2010). *The impact of global processes on health systems in Europe*. Geneva, Global Health Europe (Global Health Europe Research Paper No.2; http://www.globalhealtheurope.org/images/stories/researchpaper_02_v3_web.pdf, accessed 1 August 2011).

Tomson G, Pafs J, Diseberg A (2011). The challenges of multi-level governance: the impact of global and regional processes on health and health systems in Europe.

ul Haq M (1995). Reflections on human development. Oxford, Oxford University Press.

UNDP (1997). *Good Governance – and sustainable human development*. A UNDP policy document. New York, UNDP (http://mirror.undp.org/magnet/policy/chapter1.htm, accessed 1 August 2011).

UNDP (2010). Human development report 2010 – The real wealth of nations: pathways to human development. New York, Palgrave Macmillan.

United Nations General Assembly (1948). *Universal Declaration of Human Rights*. New York, United Nations.

United Nations General Assembly (1966). *International Covenant on Economic, Social and Cultural Rights*. New York, United Nations.

U.S. Department of Health & Human Services (2010). *HHS announces the nation's new health promotion and disease prevention agenda*. Washington, DC, U.S. Department of Health and Human Services (http://www.hhs.gov/news/press/2010pres/12/20101202a.html, accessed 1 August 2011).

Vallejo N, Hauselmann P (2004). *Governance and multi-stakeholder processes*. Winnipeg, International Institute for Sustainable Development.

Vibert F (2007). *The rise of the unelected: democracy and the new separation of powers*. Cambridge, Cambridge University Press.

Vogel D (2008). Private global business regulation. *Annual Review of Political Science*, 11:261–282.

Walter J, Strangio P (2007). No, Prime Minister: reclaiming politics from leaders. Sydney, UNSW Press.

Weber M (1922/1978). Economy and society. Berkeley, University of California Press.

Wernli D et al. (2011). A call for action: the application of the International Health Regulations to the global threat of antimicrobial resistance. *PLoS Medicine*, 8:e1001022.

Whitehead M, Dahlgren G (1991). What can we do about inequalities in health? *Lancet*, 338:1059–1063.

WHO (1946). *Constitution of the World Health Organization*. Geneva, World Health Organization (http://www.who.int/governance/eb/who_constitution_en.pdf, accessed 1 August 2011).

WHO (1978). Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. Geneva, World Health Organization (http://www.who.int/hpr/NPH/docs/declaration almaata.pdf, accessed 1 August 2011).

WHO (1997a). Jakarta Declaration on Leading Health Promotion into the 21st Century. 4th International Conference on Health Promotion: "New Players for a New Era – Leading Health Promotion into the 21st Century", Jakarta, 21–25 July. Geneva, World Health Organization (http://www.who.int/hpr/NPH/docs/jakarta_declaration_en.pdf, accessed 1 August 2011).

WHO (1997b). *The world health report 1997 – Conquering suffering, enriching humanity*. Geneva, World Health Organization (http://www.who.int/whr/1997/en/whr97_en.pdf, accessed 1 August 2011).

WHO (1998). Adelaide Recommendations on Healthy Public Policy. Second International Conference on Health Promotion, Adelaide, South Australia, 5–9 April 1998. Geneva, World Health Organization (http://www.who.int/hpr/NPH/docs/Adelaide_recommendations.pdf, accessed 1 August 2011).

WHO (2000). World health report 2000: health systems: improving performance. Geneva, World Health Organization (www.who.int/whr/2000/en/index.html, accessed 1 August 2011).

WHO (2003). WHO Framework Convention on Tobacco Control. Geneva, World Health Organization (http://www.who.int/fctc/en, accessed 1 August 2011).

WHO (2004). *Global Strategy on Diet, Physical Activity and Exercise*. Geneva, World Health Organization (http://www.who.int/dietphysicalactivity/en, accessed 1 August 2011).

WHO (2009). Whole-of-society pandemic readiness: WHO guidelines for pandemic preparedness and response in the non-health sector. Geneva, World Health Organization (http://www.who.int/csr/disease/influenza/pandemic/en, accessed 1 August 2011).

WHO (2011). *Moscow Declaration: First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Disease Control*. Geneva, World Health Organization (http://www.who.int/nmh/events/Moscow_ncds_2011/conference_documents/moscow_declaration en.pdf, accessed 1 August 2011).

WHO and Government of South Australia (2010). *Adelaide Statement on Health in All Policies*. Geneva, World Health Organization (http://www.who.int/social_determinants/en, accessed 1 August 2011).

WHO Regional Office for Europe (1985). Targets for Health for All: targets in support of the European regional strategy for Health for All. Copenhagen, WHO Regional Office for Europe.

WHO Regional Office for Europe (1986). *Ottawa Charter for Health Promotion*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf, accessed 1 August 2011).

WHO Regional Office for Europe (2004a). *Food and health in Europe: a new basis for action*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0005/74417/E82161.pdf, accessed 1 August 2011).

WHO Regional Office for Europe (2004b). *Preventing road traffic injury: a public health perspective for Europe*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0003/87564/E82659.pdf, accessed 1 August 2011).

WHO, UNICEF (2008). *World report on child injury prevention*. Geneva, World Health Organization (http://www.phs.ki.se/csp/pdf/Publications/summary_world_report_children_engl.pdf, accessed 1 August 2011).

Willke H (2007). *Smart governance: governing the global knowledge society*. Frankfurt, Campus Verlag.

Wismar M et al. (2007). The effectiveness of health impact assessment: scope and limitations of supporting decision-making in Europe. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies (http://www.euro.who.int/__data/assets/pdf_file/0003/98283/E90794.pdf, accessed 1 August 2011).

Wismar M, Ernst K (2010). Health in all policies in Europe. In: Kickbusch I, Buckett K, eds. *Implementing health in all policies: Adelaide 2010*. Adelaide, Government of South Australia.

World Bank (2011). What is our approach to governance? [web site]. Washington, DC, World Bank (http://go.worldbank.org/MKOGR258V0, accessed 1 August 2011).

World Bank Institute/PRMGE (2009). *Gender and development. A trainer's manual. Module 3 Integrating gender into development projects*. Washington, World Bank Institute (http://info.worldbank.org/etools/docs/library/192862/Module3/Module3-index.html, accessed 1 August 2011).

World Economic Forum (2011). *The future of government: lessons learned from around the world*. Cologny, World Economic Forum (http://www3.weforum.org/docs/EU11/WEF EU11 FutureofGovernment Report.pdf, accessed

(http://www3.weforum.org/docs/EU11/wEF_EU11_FutureofGovernment_Report.pdf, accell August 2011).

World Trade Organization (2001). *DOHA Declaration on the TRIPS Agreement and Public Health*. Geneva, World Trade Organization.

Zürn M (2010). Global governance as multi-level governance. In: Enderlein H, Wälti S, Zürn M, eds. *Handbook on multi-level governance*. Cheltenham, Edward Elgar.

Key literature that has informed this study

Bambra C, Smith K, Kennedy L (2008). Politics and health. In: Naidoo J, Wills J, eds. *Health studies*. 2nd ed. London, Palgrave Macmillan

Bauman Z (2007). Liquid times: living in an age of uncertainty. Cambridge, Polity Press.

Bevir M, ed. (2011). The Sage handbook of governance. London, Sage Publications.

Bogdanor V (2005). Joined-up government. Oxford, Oxford University Press.

Brinkerhoff DW, Fort C, Stratton S (2009). *Good governance for health: assessing progress in Rwanda*. Chapel Hill, NC, IntraHealth International (http://www.intrahealth.org/~intrahea/files/media/good-governance-and-healthassessing-progress-in-rwanda/goodgovandhealth.pdf, accessed 1 August 2011).

Dietz T, Ostrom E, Stern PC (2003). The struggle to govern the commons. *Science*, 302:1907–1912.

Edelenbos J, Klijn EH (2007). Trust in complex decision-making networks: a theoretical and empirical exploration. *Administration and Society*, 39:25–50.

Enderlein H, Wälti S, Zürn M, eds. (2010). *Handbook on multi-level governance*. Cheltenham, Edward Elgar.

Fidler DP (2010). *The challenges of global health governance*. New York, Council on Foreign Relations (http://www.pdf-finder.com/The-Challenges-of-Global-Health-Governance.html, accessed 1 August 2011).

Government of Australia (2004). Connecting government: whole of government responses to Australia's priority challenges. Canberra, Australian Public Service Commission (http://www.apsc.gov.au/mac/connectinggovernment1.htm, accessed 1 August 2011).

Hall P, Taylor RCR (2009). Health, social relations, and public policy. In: Hall P, Lamont M, eds. *Successful societies: how institutions and culture affect health*. Cambridge, Cambridge University Press.

Henke K-D, Martin K (2009). Health as a driving economic force. In: Kickbusch I, ed. *Policy innovation for health*. New York, Springer:95–124.

Hooghe L, Marks G (2003). Unravelling the central state, but how? Types of multi-level governance. *American Political Science Review*, 97:233–243.

Jakubowski E, Lister G (2006). *Ninth Futures Forum on health systems governance and public participation*. Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0006/97836/E89766.pdf, accessed 1 August 2011).

Kailas A, Chong CC, Watanabe F (2010). From mobile phones to personal wellness dashboards. *IEEE Pulse*, 7/8:57–63.

Kickbusch I (2009). Policy innovations for health. In: Kickbusch I, ed. *Policy innovation for health*. New York, Springer.

Koenig-Archibugi M, Zürn M, eds. (2006). New modes of governance in the global system: exploring publicness, delegation and inclusiveness. Basingstoke, Palgrave Macmillan.

Labonte R et al. (2004). Fatal indifference: the G8, Africa and global health. Ottawa, Juta Academic.

Lehtonen M (2010). Deliberative decision-making on radioactive waste management in Finland, France and the UK: influence of mixed forms of deliberation in the macro discursive context. *Journal of Integrative Environmental Sciences*, 7:175–196.

Mulgan G (2010). Health is not just the absence of illness: health in all policies and "all in health policies". In: Kickbusch I, Buckett K, eds. *Implementing health in all policies: Adelaide 2010*. Adelaide, Government of South Australia.

MWP (2011). Background [web site]. Montreal, McGill World Platform for Health and Economic Convergence (http://www.mcgill.ca/mwp/, accessed 22 August 2011).

Newman J (2005). Introduction. In: Newman J, ed. *Remaking governance*. Bristol, Policy Press.

Ostrom E (2010). Nested externalities and polycentric institutions: must we wait for global solutions to climate change before taking actions at other scales? *Economic Theory*, doi:10.1007/s00199-010-0558-6.

Peters BG (2009). Meta-governance and public management. In: Osborne SP, ed. *The new public governance? Emerging perspectives on the theory and practice of public governance*. London, Routledge.

Pollitt C (2003). Joint-up government: a survey. *Political Studies Review*, 2:34–49.

Raustiala K, Victor DG (2004). The regime complex for plant genetic resources. *International Organization*, 58:277–309.

Rouse WB (2008). Health care as a complex adaptive system: implications for design and management. *The Bridge*, 38(1):17–25 (http://www.nae.edu/File.aspx?id=7417, accessed 1 August 2011).

Sihto M, Ollila E, Koivusalo M (2006). Principles and challenges of health in all policies. In: Ståhl T et al., eds. *Health in all policies: prospects and potentials*. Helsinki, Ministry of Social Affairs and Health: 3–20.

Skogan WG et al. (2008). Evaluation of CeaseFire-Chicago. Chicago, Northwestern University.

Slaughter AM (2004). A new world order. Princeton, NJ, Princeton University Press.

Slaugther AM, Hale TN (2010). Transgovernmental networks. In; Enderlein H, Wälti S, Zürn M, eds. *Handbook on multi-level governance*. Cheltenham, Edward Elgar.

Vangen S, Huxham C (2003). Nurturing collaborative relations: building trust in interorganizational collaboration. *Journal of Applied Behavioral Science*, 39:5–31.

Whiting D, Unwin N, Roglic G (2010). Diabetes: equity and social determinants. In: Blas E, Kurup AS, eds. *Equity, social determinants and public health programmes*. Geneva, World Health Organization (http://www.who.int/social_determinants/en, accessed 1 August 2011).