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European Health Forum Gastein 2018



➤ Health and sustainable development: Bold political choices for Agenda 2030

- A dose of courage for health policy
- European Cooperation on HTA
- Blockchain in digital health & life sciences
- Increasing vaccine uptake
- How health systems advance economic and fiscal outcomes
- Tackling health inequalities
- Driving sustainable cancer care
- The capital-NCD-nexus
- Using evidence for policy
- Implementing the 2030 Agenda

:: Special Issue ::

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2018 is a big year for health. It marks not only the anniversaries of many international milestones including Alma-Ata and the Tallinn Charter, but 70 years of the World Health Organization and the Universal Declaration of Human Rights, and with it the very right to health itself. While progress made over the last decades has been promising, we are nowhere near the finish line, and renewed international commitments to improving health are set against the backdrop of a turbulent political climate in Europe that poses a threat to maintaining health as a priority item. Decisive political action and strong commitments to a comprehensive vision of improved health for all are needed.

With its main theme of *“Health and Sustainable Development – Bold political choices for Agenda 2030”*, the European Health Forum Gastein (EHFG) 2018 will focus on health in Europe within the Sustainable Development Goals (SDGs) of the United Nations (UN) Agenda 2030. All session organisers were asked to consider their topics and initiatives in relation to targets of the UN Agenda 2030 including and beyond SDG3 (Ensure healthy lives and promote wellbeing for all at all ages). We would like to explore how the EHFG sessions can contribute to European policy implementation while safeguarding health and furthering sustainable development to ensure reaching the SDG targets.

The connection and interaction between health and sustainable development will not only be at the forefront of discussions in Gastein this year, but also features as a central topic of this EHFG special issue of Eurohealth. You will find articles on the four tracks of the EHFG 2018: The track **“Innovation for All”** will feature a comprehensive look at innovation delivery, uptake and implementation – and the obstacles we need to overcome along the way. One article in this section by Martin Seychell and Anna Eva Ampelas on *“The Future of the European Cooperation on Health Technology Assessment”* points to strengthened cooperation improving evidence-based decision-making while ensuring the sustainability of health systems. The article *“Blockchain in Digital Health and Life Sciences”*

by Daniel Burgwinkel and Richard Bergström attempts to lift the fog around the hype of the big unknown.

The **“Sustainable Systems”** track will take a demanding but nevertheless optimistic look at how to make all of our systems future-proof. In her article on *“Inclusive growth as a route to tackling health inequalities”*, Emma Spencelayh sees great opportunities for health policymakers to tap into economic development agendas for furthering health. Kathy Oliver, Stefan Gijssels, Shannon Boldon and Suzanne Wait, *on behalf of All.Can*, call for a change towards genuinely patient-led health policies in order to avoid inefficiencies in their article on *“Patient empowerment driving sustainable cancer care”*. Christian Franz and Ilona Kickbusch’s article *“The capital-NCD-nexus: The commercial determinants of health and global capital flows”* is a wake-up call for the health community to understand the global financial markets and take responsibility for health from the global food and beverage industry in order to urgently prevent and control NCDs.

“Evidence for Action” will also take a critical look at how much evidence we have – but how smartly we are employing it for improved policymaking. Jonathan Cylus, Govin Permanand and Peter C. Smith call for a better understanding of the linkages between health systems and economic and fiscal outcomes in their article on *“How can health systems advance economic and fiscal objectives?”* Isabella Röhring,

Sabine Weißenhofer and Brigitte Piso explore the role of evidence in policymaking and point to the need to pick the right tools to aid evidence-informed decision-making on bold political choices in their article “How do you use evidence in policy the smart way?” Martin McKee, et al. name access barriers and disinformation connected with an increased mistrust in governments as possible reasons for recent outbreaks of vaccine-preventable diseases in “Increasing vaccine uptake: confronting misinformation and disinformation”.

Persisting inequities in health will be the focus of the **“No one left behind”** track. “Vaccination is the solidarity of the many for the few” proclaims Xavier Prats-Monné in his article, showcasing an ambitious proposal for a Council Recommendation aiming to improve vaccination coverage across the EU. Catherine Hernandez-Festersen, Caroline Costongs, Nigel Sherriff, et al. call for mandatory training for health professionals to reduce health inequalities experienced by Lesbian, Gay, Bisexual, Trans and Intersex (LGBTI) people in their article “LGBTI people and health inequalities”.

Concrete action on health as a pivotal policy item and a key concern on the European agenda, necessary for the economic and social wellbeing of its nations and people, is paramount to this year’s EHFG. We encourage our plenary speakers to “think big” for health in Europe, to discuss bold political decision-making and to dare to imagine a healthy paradigm shift to make our systems future-proof. Following last year’s theme of “Health in all Politics”, the debates will once again centre on championing the urgency of action on health across sectors and borders, and how to better articulate the value that health creates by discussing the synergies and co-benefits of health and economic interests, thereby furthering sustainable development. This need for more confidence to rethink health policy in order to secure social cohesion is stressed in our lead article “A dose of courage for health policy”.

Health as an indispensable pillar of sustainable development is a major driver of social and economic development. At the EHFG 2018, sessions will therefore focus heavily on demonstrating the immense economic and social payoff generated by investment in health. The Thursday plenary, co-organised with WHO Euro and the European Observatory on Health Systems and Policies, will involve decision-makers from the finance sector to hear their stance on health and what is needed to convince them of its value.

In connection with this, we will discuss the commercial determinants of health, examine the role of markets in health and how we can work collaboratively with the private sector to ensure that commercial interests do not go against health interests, and how we can redress the balance. How can we help the health community to better understand the global financial and investment landscape?

Enjoy reading about this and much more in the 6th Gastein edition of Eurohealth!



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A DOSE OF COURAGE FOR HEALTH POLICY

By: Clemens Martin Auer

Summary: The current political discourse has been considerably influenced by the biggest disruptions of our times – the highly competitive global market economy, the influence of digitalisation on the job market, and the national management of unpredictable migration flows. In order to ensure social cohesion and wealthy societies, politicians need to consider health as a crucial factor. On the other hand, more confidence in the health sector is needed as its purpose reaches far beyond providing care. All this requires a dose of courage for rethinking health policy and a new narrative in health with the Sustainable Development Goals (SDGs) providing a valuable model.

Keywords: SDGs, Health is wealth, Social Cohesion, Strong Health Dossier, Rethinking Health Policy

Putting health policy front and centre

Keeping it simple seems to be the latest trend in political communication. That also seems to hold true for recent debates on the future of the European Union – or rather, on its future responsibilities. In line with this trend, one of the options presented in Juncker's *White Paper on the Future of Europe*¹ seems appealingly straightforward: do less, but do it more efficiently.

When listening to heads of state and government and other high ranking politicians from EU Member States, the interpretation of this seemingly simplistic approach often boils down to three clearly defined responsibilities: a European Single Market, secure European external borders and a joint refugee policy. An oft cited argument for focusing on these priorities is the perceived necessity to

comply with the general sentiments of the electorate in order to avoid losing voters to propagandistic populist forces. References to a common health and social policy are lacking in this new and trimmed-down handbook of political catchphrases. Rather, solidarity is hailed as an indispensable part of common European values.

Strengthening the European Single Market in the face of global competition or aiming to secure European external borders is not wrong by default. But it would be a paradoxical misinterpretation to believe the Single Market could function without a corresponding health and social policy. Many voters are not only concerned about refugees and secure borders – as a matter of fact, large swathes of the European middle-classes have long worried about social cohesion and the growing income gap. There are noticeably fewer middle-

> #EHFG2018 – Opening Plenary:
Let's think big

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skilled jobs, which, simply put, means that many have given up hope that the next generation will fare better than their own. This is essentially where today's most dangerous explosive force for weakening the political legitimacy of democratic values is to be found.

These considerations take us right to the core of health politics. Despite all the progress in medicine and health care practice, health and health care, health promotion and the fight against epidemics and pandemics are all closely linked with the wealth of a society. This understanding should be an inherent feature of the contemporary political discourse with "Health is wealth" having long been proclaimed by the World Health Organization. Accordingly, politicians who neglect health policy will lose voters just as quickly to the populists as those who lightly dismiss concerns about secure national or European borders. The proven link between health and wealth should be simple enough to qualify for the aforementioned handbook of political catchphrases.

“there
can be no social
cohesion without
functioning
health systems

This is the first conclusion: the biggest disruptions of our time, such as the merciless fight for competitiveness in a global market economy, the pressure that digitalisation exerts on large sections of the job market, the unpredictable migration flows and the difficulties modern constitutional states encounter when trying to manage migration at country borders – let alone being able to prove successful integration – have considerably altered the wider political discourse. Yet, this is no reason for crossing health policy off the list of European Union responsibilities. If politics is to keep in view the wealth of a society in general, factoring out health would

be a fundamental mistake: there can be no social cohesion without functioning health systems.

This means that there can also be no successful European Single Market policy without health. The health of European citizens is not only dependent on high quality health care systems, the excellence of doctors and other health professions and on science. It is at least as strongly dependent on social factors; factors, which in turn are shaped by economic conditions. These mirror the economic and financial interests of the different actors of the European Single Market. A functioning market economy entails competition, stock market rates, investments and profit goals – which have a strong influence on the health of people. This fact has been widely ignored in health policy analyses to date.

This is the second conclusion: the health policy sector needs to realise very quickly that its purpose is more than “merely” providing high-quality, accessible health care, or implementing the latest public health knowledge. It is true that well trained health professionals, progress in medical and care sciences, digital health and modern methods of quality management are indispensable, just as much as access to high quality medication and vaccines. However, once we bring the societal preconditions for health into the picture, economic and financial factors matter at least as much. Health policy must therefore embrace these dimensions in order to communicate at eye-level with other policy areas.

Health policy limitations on the principle of subsidiarity

The crux of the matter is this: the wider debate on health needs a new narrative if it is to assert itself in the face of presumed and real diktats of globalisation, security and consumption. The United Nations Sustainable Development Goals (SDGs) have shaped a powerful discourse that might, for the first time, withstand the dominant narratives of competitiveness, stock markets and the demand for low cost goods. Where nutrition, healthier lifestyles and the prevention of non-communicable diseases are concerned, involving

sectors outside health in the political discourse has, to a modest extent, already commenced. Now we need to recognise that a functioning market economy has a lasting impact on the health of people – be it negative or positive – and continue the discussions from there. For this part of the health policy debate, the health sector is as yet poorly prepared. This aspect centres around the lives of citizens of the European Union and is utterly relevant to the workings of the European Single Market and its ability to compete with other markets globally. It touches each and every one of us and points to the limits of subsidiarity within the European Union. For it is about the relative position of vulnerable groups vis à vis the market power of financial stakeholders, including public stakeholders like ministers of finance, as well as private interests within many of the strong industry branches.

An ill person trying to recover has a weak position to begin with. Nearly any price for health seems politically enforceable, as various morally dubious examples from the medical sector have shown time and again. The often cited principle of subsidiarity does not take effect in such situations: an individual person living with a disease has neither the market power nor the political assertiveness to counter the high profit expectations of industry or powerful, high-income professions. Neither does an individual city, region, or even an individual country – particularly one with a small market share – have the economic or political leverage to face up to major financial interests. Even a finance or economics minister seldom has the power to challenge big business or influential professional groups when trying to safeguard national, regional or local interests.

The principle of subsidiarity is just as ineffective in the central areas of health prevention: the fragmented responsibilities of health policy in communities, regions or individual Member States bear no leverage for imposing rules on the European Single Market, e.g. when it comes to regulating processed foods. The global leaders in the food and beverage industry will only lower the sugar content of beverages once they feel the market power of a unified health policy for the European Single Market.

This exemplifies how the stock market interests of global companies are often the polar opposite of the health interests of the individual citizen and inhibit modern prevention measures. So while it is true that an environment for successful health policy can be secured to a certain extent in the local or urban context, it is equally true that there needs to be an overarching regulatory framework to restrain stark economic interests in health at the European level.

Bearing in mind that the private interests of market participants are often opposed to the interests of patients and public payers, political interests of finance and health ministers should be able to converge easily. This common cause is particularly visible when considering access to innovative medicines: these are often only readily available in about half of the EU's Member States, and at very high costs. In the remaining 50%, they become available much later – if at all. It is common knowledge that the “standard” mechanisms of a free market do not match the interests of ill people and their doctors. Furthermore, the local interests of industry in one Member State may work against the healthcare interests of another. And these contexts and time-specific contrasting interests between individual states can only be balanced on a common, higher ground.

The third conclusion therefore calls for a strong footing for health on all political competence levels. Modern health and prevention policy has to be regional, national, European and, in some regards, even multilateral. In the European Union context this amounts to an imperative need for a strong health dossier, as long as the EU level is also the one coordinating the economic interests of the Single Market.

A short macroeconomic detour will support this line of thought: the OECD estimates that public expenditure on health will, on average, be at about 9% of Member States' GDP in the year 2030, which would be manageable with an average economic growth of 1.5%.² The OECD forecasts growing health expenditure due to numerous unpredictable factors like prices, market behaviour or technological and scientific

innovation, rather than to the ageing population in industrialised countries. Most of these unpredictable factors are market-driven, caused by misguided political decisions or organisational weaknesses. An analysis of the cost drivers highlights how they are unmanageable at a regional or national level, and how much strong unified action at the European level is needed.

The scope for European action on health issues stretches across all areas of investment in health care infrastructure. This holds true for investment in primary care and digital infrastructure for all health care providers in nearly all EU countries. The delivery of primary care by expensive tertiary care institutions or hospitals is a standard example of mismanagement, which can only be counteracted by substantial investment in primary care structures. This entails ensuring that actual treatment – and not only referrals to specialist care – can take place at the primary care level. Another area that is unmanageable by an individual nation state alone is the implementation of consistent technical standards and formats in the area of digitalisation. Data exchange and analysis require a European framework and have to reach and integrate each GP practice and hospital. And there are many more reasons for working together: targeted investment in research and development to address yet unsolved medical problems calls for the pooling of resources and a common strategy. The free movement of people is going to pose a challenge especially to smaller Member States when it comes to resource planning for health professions. As we well know, contagious diseases do not stop at national borders.

A clear case: we need to rethink health policy

The European Health Forum Gastein can make a small contribution to the reorganisation of European health policy. It can help by accentuating a new way of thinking about health and emphasising sidelined topics, by providing fresh insights and by pointing to the overarching economic connections. Health, social and economic conditions complement each other and cannot be viewed individually –

they need to be understood as a whole. Modern health policy needs to show courage and venture into these zones of economic interest by lifting the curtains behind which economic interests are comfortably hidden. Health policy is relatively inexperienced in dealing with this dimension.

The EHFG also intends to contribute increasingly to building analytical capacities for decision-makers in health, to equipping them for these new tasks ahead. Actors in the field of health have to face up to complex challenges, for example when debating investments, as bankers – the analysts of public investment funds – tend to speak another language than the trained doctor or public health expert. When it comes to matters like digital health, health experts and not technicians need to outline the requirements for integrated processes in an often fragmented health care landscape.

This is what Gastein has to offer: an open market space for new ideas and insights, a safe space for controversial debates and thought experiments, which may plant the seeds for creative restructuring. The many professionals in health and health care owe it to patients and public payers to really think outside the box and have a clear and transparent debate that constructively pinpoints the kinds of decisions that need to be taken.

And sometimes, the health sector needs a dose of courage to face up to other political areas – and prevail.

References

- 1 European Commission. *White Paper on the future of Europe. Reflections and scenarios for the EU27 by 2025*. COM(2017) 2025 of 1 March 2017. Available at: https://ec.europa.eu/commission/sites/beta-political/files/white_paper_on_the_future_of_europe_en.pdf
- 2 OECD. *OECD Economic Outlook, 2014(1)*. OECD Publishing, Paris. Available at: https://doi.org/10.1787/eco_outlook-v2014-1-en

THE FUTURE OF EUROPEAN COOPERATION ON HEALTH TECHNOLOGY ASSESSMENT

By: **Martin Seychell** and **Anna Eva Ampelas**

Summary: The European Commission has put forward a legislative proposal establishing a sustainable legal framework for strengthening European Union (EU) cooperation on Health Technology Assessment (HTA). The proposal focuses on joint work on clinical aspects of HTA; the main areas of cooperation are joint clinical assessments, joint scientific consultations, identification of emerging health technologies, and voluntary cooperation. Key principles include a Member States – driven approach; high scientific quality and timely assessments; transparency, independence, stakeholder involvement; and gradual phasing in. Such strengthened cooperation can improve evidence – based decision-making, facilitate access to innovative health technologies with true added value for patients, while ensuring the sustainability of health systems.

Keywords: *Health Technology Assessment, EU Cooperation, Joint Clinical Assessments, Sustainability*

Growing recognition of health technology assessment

HTA has been gaining momentum in the last 20 years. All Member States of the European Union have started to introduce HTA processes at national or regional levels, establishing 51 HTA bodies in 26 countries. There are national legal frameworks for HTA in place in 26 Member States; still, some Member States are only at the initial phase of establishing HTA systems and/or have dedicated only limited resources to HTA.¹

The growing importance of HTA has also been reflected in 20 years of project-based European cooperation in this

area. This included a number of research projects* and scientific and technical work in three consecutive EUnetHTA Joint Actions. A clear definition of HTA (see **Figure 1**) is one outcome from this process. In addition, in 2013, the HTA Network, a network of national authorities responsible for HTA was established under the Cross-border Healthcare Directive (2011/24/EU).² The Network provides strategic and political guidance to this cooperation. The cooperation to date has built trust between HTA bodies across Europe and has piloted joint work on methodologies and assessments.

* HTA-related projects include AdHopHTA, MedTechHTA, Advance-HTA, Integrate-HTA.

> **#EHFG2018** – Forum 1:
How good are our medicines?

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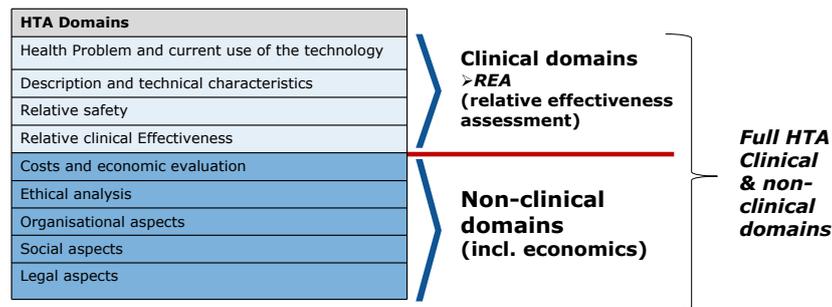
Figure 1: Definition and domains of HTA

Health Technology Assessment (HTA)

Definition

A multidisciplinary process that summarises information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner. Its aim is to inform the formulation of safe, effective health policies that are patient focused and seek to achieve best value.

Domains



Source: Adapted from EUnetHTA Joint Action Core Model (<https://www.eunetha.eu/hta-core-model/>)

EU initiative for strengthening cooperation on HTA

Nonetheless, shortcomings of the current project-based cooperation model have prevented the full potential of European cooperation on HTA being reached. The different national HTA processes across Europe result in duplication of work for national HTA bodies, as they carry out in parallel clinical assessments on the same health technologies. At the same time, manufacturers have to generate evidence and prepare multiple dossiers to comply with the HTA requirements in different countries. This duplication of efforts for both HTA bodies and industry can delay decision-making and ultimately patient access to innovative technologies – these were some of the key findings of the analysis of the European Commission and the supporting studies.^{1 3 4 5}

Joint clinical assessments of health technologies have been piloted by a group of HTA bodies in the framework of the EUnetHTA Joint Actions.⁶ However, these joint assessments have so far only been used at national level to a very limited extent, often due to administrative and legal hurdles, but also due to concerns around assuring consistently high quality and timeliness in a project setting. Last but not least, the project-based model of the current EU cooperation on HTA

implies that there is no guarantee for the continuation of activities or their financing in the long-term.

Improved evidence-based decision-making

In developing its initiative, the European Commission assessed the impacts of the current and possible models of HTA cooperation and conducted extensive consultations of all relevant stakeholders, in line with the Better Regulation Agenda[†]. Strengthened EU-cooperation was widely supported by stakeholders and citizens who responded to the Commission's public consultation, with almost all (98%) acknowledging the usefulness of HTA and 87% agreeing that EU cooperation on HTA should continue beyond 2020 when the current Joint Action ends.⁷ The Impact Assessment concluded

[†] The better regulation agenda is about designing and evaluating EU policies and laws transparently, with evidence, and backed up by the views of citizens and stakeholders. It covers all policy areas and aims for targeted regulation that goes no further than required, in order to achieve objectives and bring benefits at minimum cost.

that a permanent, sustainable model of cooperation is needed to reap the full benefits of EU cooperation on HTA. Such a cooperation can enable Member States to pool their HTA resources and expertise, as well as ensure that all Member States can benefit from the resulting efficiency gains and improved evidence base for decision-making.

On the 31 January 2018, the European Commission adopted a proposal for a Regulation on Health Technology Assessment,⁸ which provides a legal framework for strengthened and sustainable cooperation at EU level

Box 1: Four main areas of cooperation

1) Joint clinical assessments:

These assessments cover the clinical domains of HTA. They will be carried out for medicines, which undergo the EU's central marketing authorisation procedure (new active substances and new therapeutic indications) as well as for selected medical devices, which have received an opinion of expert panels set up under the new EU Regulations on medical devices.⁹

2) Joint scientific consultations:

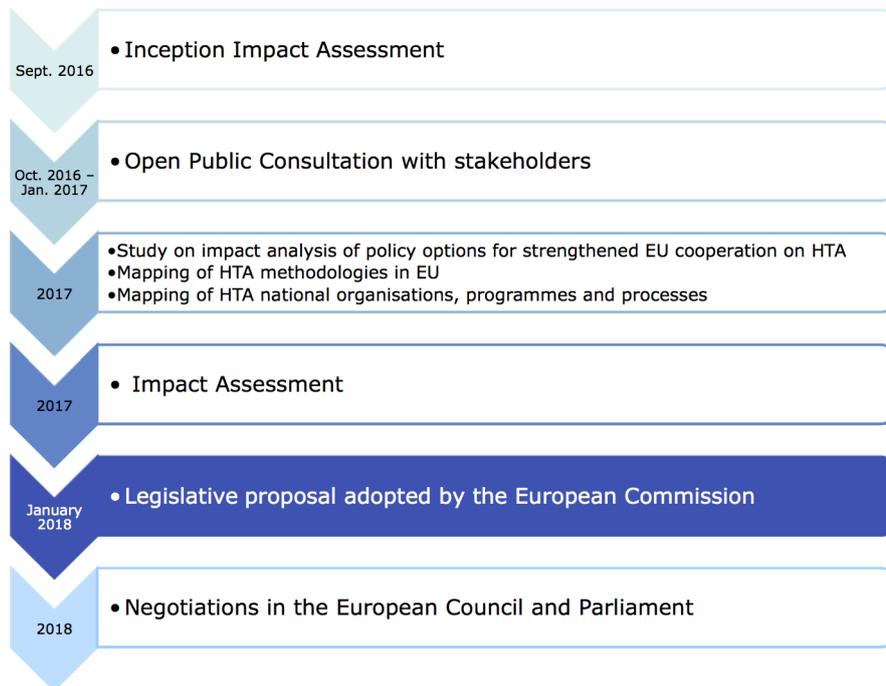
These consultations – which build on current activities known as “early dialogues” or “scientific advice” – will allow developers to seek advice from HTA bodies on evidence requirements for HTA as well as on the design of clinical studies to generate such evidence.

3) Identification of emerging health technologies:

This activity – also frequently referred to as “horizon scanning” – enables HTA bodies to be aware and better prepare for technologies which are currently in development and have high potential impact on health systems.

4) Voluntary cooperation:

Continued voluntary cooperation can take place in other areas, such as on health technologies outside of the above-mentioned product scope, or on non-clinical aspects of HTA.

Figure 2: Process of developing the HTA initiative

Source:

on HTA, focusing on common clinical aspects (see Figure 2). As outlined in the proposal, Member States will be able to use common HTA tools, methodologies and procedures and carry out joint work in the four main areas (see Box 1).

Individual EU countries will be able to complement joint clinical assessments with more context-specific analyses, for example on local disease epidemiology, or on economic, social, ethical aspects related to the use of the health technology. Member States will also continue to conduct their own appraisal at national level, i.e., they will continue to draw conclusions on the overall added value of a health technology for their health care system. Any subsequent decisions related to pricing and reimbursement also remain a Member State competence.

Key principles of the cooperation

A number of key principles were taken into account in the development of the European Commission proposal:

Member State-led cooperation

The Member States are the primary users and owners of expertise on

HTA; therefore, it is essential that they should drive the cooperation. The proposal provides for a Member State Coordination Group on HTA composed of representatives from national HTA bodies. The scientific-technical work is carried out by experts of these HTA bodies. The Coordination Group would oversee the work carried out by designated sub-groups dedicated to the specific types of joint work (e.g. sub-group on joint clinical assessments, sub-group on joint scientific consultations, see Figure 3) and set out the annual work programme. The European Commission would provide the secretariat for the cooperation, focusing on administrative support and on ensuring compliance with the regulation, e.g., in terms of adherence to procedures and timelines.

High scientific quality and timely outputs

Joint clinical assessments and other joint outputs of the cooperation need to be of highest quality and available in time so that they can serve as valuable inputs for decision-making in Member States. The pooling of expertise from HTA bodies across the EU, additional input by external experts (e.g. patients and

clinical specialists in particular therapeutic areas), and quality assurance mechanisms are all expected to contribute to the quality and timeliness of joint outputs. All Member States will be involved in drafting and approving joint outputs. This will also ensure relevance of joint work to different health care systems as it will allow, for instance, the inclusion of several comparator technologies in the assessment.

For joint clinical assessments of medicines, timelines will be aimed at ensuring that joint clinical HTA reports are available by the time of the publication of the marketing authorisation.

Transparency, independence and stakeholder involvement

Transparency is also a core principle, in particular for patients. Transparency entails making the HTA reports publicly available. Moreover, the proposal envisages the development of clear rules related to stakeholder involvement in the HTA process, rights and obligations of manufacturers, and avoidance of conflicts of interest, in order to ensure the independence and impartiality of the joint work.

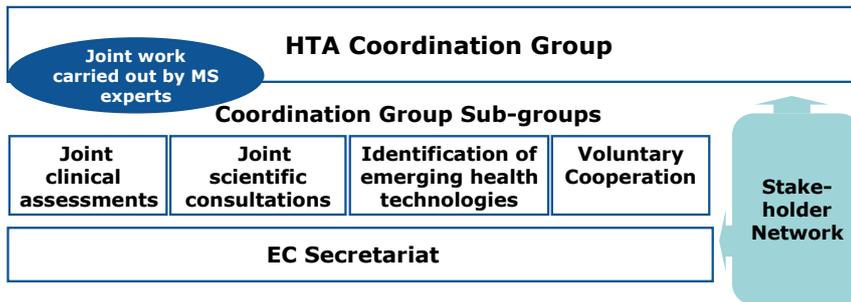
“enable Member States to pool their resources and expertise”

The transparent engagement of independent experts, including patients and therapeutic area specialists, in joint clinical assessments and other joint outputs can contribute to the high scientific quality and relevance of joint work. Stakeholders will also be able to provide input on a broader strategic level.

Respecting subsidiarity

Article 168(7) in the Treaty on the Functioning of the European Union stipulates that the EU shall respect the

Figure 3: Proposed structure of cooperation



Source: ⁸

responsibilities of Member States for the definition of their health policies and for the organisation and delivery of health services and medical care. In particular, Member States are responsible for decisions on pricing and reimbursement of health technologies; these are not within the scope of this initiative.

There is also an important distinction between (a) clinical assessments, with considerable scope for alignment in the Member States' procedures and methods for carrying out such assessments; and (b) non-clinical assessments, which focus more on domains (e.g. economic, organisational, ethical) that are linked to national contexts and closer to the final decisions on pricing and reimbursement which remain strictly in the hands of Member States. The proposed regulation focuses on clinical assessments, the domains of HTA which build on global evidence and where the EU added value of joint work is considered to be strongest.

Gradual phasing in

Both Member States and industry need sufficient time to adapt to the new EU system. A phase-in approach, tailored separately for medicines and medical devices can limit the number of assessments carried out at EU-level and allow a transitional period for Member State participation.

What is next?

The ordinary legislative procedure is ongoing. The negotiations on the proposal of the European Commission will continue in the Council under the Austrian Presidency during the second half of 2018. In the

European Parliament, the Committee on the Environment, Public Health and Food Safety (ENVI) is the lead committee responsible for the file; the Committees on Industry, Research and Energy (ITRE) and Internal Market and Consumer Protection (IMCO) have also issued opinions.¹⁰

“Health Technology Assessment is a powerful tool to assess the added value of products and compare this with other technologies. Ultimately it will facilitate patient access to innovative health technologies while at the same time contributing towards the sustainability of health systems.” – Quote from **Vytenis Andriukaitis**, the Commissioner for Health and Food Safety.

The European Commission proposal envisages that once the regulation is adopted and enters into force, it becomes applicable three years later. Following the date of application, a further three-year period is envisaged in the Commission text to allow for a phase-in approach for Member States to adapt to the new system.

Expected benefits for patients, Member States and industry

In summary, the legislative framework provided by the Commission proposal aims to address the shortcomings of the current project-based cooperation and ensure that joint outputs of the EU cooperation are produced at consistently high quality and in a timely, efficient and sustainable manner. It will enable Member

States to pool their resources and expertise and support them in taking evidence-based decisions for their health systems. For industry, the proposal will improve business predictability, including in terms of clearer evidence requirements for HTA. Patients across the EU will benefit from improved transparency and involvement in the HTA process. Ultimately, the proposal will contribute to promoting the timely availability of innovative health technologies with true added value for patients across the EU and to improved sustainability of health systems.

References

- ¹ Mapping of HTA national organisations, programmes and processes in EU and Norway, 2017. Contract nr. 17010402/2016/734820, ISBN: 978-92-79-77080-7.
- ² Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare.
- ³ For more information, see the Impact Assessment on Strengthening of the EU Cooperation on Health Technology Assessment (HTA) Accompanying the document Proposal for a Regulation of the European Parliament and of the Council on health technology assessment and amending Directive 2011/24/EU (COM(2018) 51 final)–(SWD(2018) 42 final).
- ⁴ Mapping of HTA Methodologies in EU and Norway, 2017, DG SANTE Contract No. 17010402/2016/736040.
- ⁵ *Study on Impact Analysis of Policy Options for Strengthened EU Cooperation on HTA*. Brussels: Sogeti, Austrian Public Health Institute, London School of Economics, 2017. (CHAFAEA/2016/Health/16).
- ⁶ Assessments page. EUnetHTA web site. Available at: <https://www.eunetha.eu/assessments/>
- ⁷ Public consultation on strengthening EU cooperation on Health Technology Assessment (HTA). European Commission web site. Available at: https://ec.europa.eu/health/technology_assessment/consultations/cooperation_hta_en
- ⁸ Proposal for a Regulation of the European Parliament and of the Council on Health Technology Assessment and amending Directive 2011/24/EU. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018PC0051>
- ⁹ See Regulations (EU) 2017/745 and 2017/746 and Regulation (EC) No 726/2004.
- ¹⁰ European Parliament Procedure File. Available at: [http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2018/0018\(COD\)&l=en#externalLinks](http://www.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2018/0018(COD)&l=en#externalLinks)

BLOCKCHAIN IN DIGITAL HEALTH AND LIFE SCIENCES

By: Daniel Burgwinkel and Richard Bergström

Summary: Blockchain brings the opportunity to improve processes throughout drug development, supply chain and health care delivery. The promising prospects of patient-reported outcomes, big data analytics and disease interception hinges on the integrity and authenticity of data. Fake data must be avoided as it can lead to wrong decisions, whether at the regulatory/payer level or in clinical practice. Society desperately needs new tools to manage data privacy, including next-generation tools for dynamic consent, with which citizens control access to their data. It has been demonstrated that cryptographic technologies using blockchain can be applied to life sciences and health care without creating new data silos.

Keywords: Blockchain, Digital Health, Cybersecurity, Data Sharing, Data Privacy

Introduction

The subject of blockchain is currently being discussed intensively by both business and information technology (IT) managers as well as regulatory authorities. The current state of play was well captured by the magazine *MIT Technology Review* in its May/June 2018 issue: the cover page read “Blockchain – hype or hope”. Everyone is trying to figure out where blockchain makes sense for them, and how to apply the new technology.

The Innovative Medicines Initiative (IMI), the world’s biggest public-private partnership in life sciences, recently launched a call on the use of blockchain in health care.¹ The call text, drafted by pharmaceutical companies, cast a wide net ranging from supply chain to clinical research. Business managers see new disruptive business models, and the technology fascinates IT professionals

who have had the chance to collect preliminary experience from the digital currency Bitcoin. Furthermore, the Food and Drug Administration (FDA) is looking at blockchain, e.g. in the Information Exchange and Data Transformation (INFORMED) initiative: “...emerging technologies such as blockchain to enable secure exchange of health data at scale”.²

What is Blockchain technology

The term blockchain describes a technological concept which stores data not in a central database, but rather distributed among the systems of users with the help of cryptographic protocols. The word “blockchain” was chosen because the data are stored in individual blocks which are then distributed and filed among the systems of the network participants and the order of the blocks is documented by means of a chain.³

> #EHFG2018 – Breakfast
Workshop 2: Blockchain for dummies

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Box 1: Distinguishing between different terms of Blockchain

Blockchain as a **technical concept** in IT, which uses cryptographic methods like hash-values and hash-trees that have been known for more than 30 years.

Blockchain **software** that provides programming code for cryptographic operations. In 2018, there are more than 50 different commercial as well as open source software products available.

Blockchain **applications** for the implementation of a certain use case. Typically, these applications are operated with the help of blockchain software or on a blockchain platform.

Blockchain **platforms** which use a certain software and are operated on the internet as a service, e.g. as an open peer-to-peer network or as a commercial service.

Blockchain as a service which provides the necessary software and services in a cloud. In such cases, a chosen blockchain solution can be operated on virtual computers in the cloud.

Even though it is only a technical concept, experts believe that this approach will revolutionise business models in various fields. If one wishes to use this technology for a given area of activity, the following questions arise:

- Which applications and use cases in Life Sciences can be realised on the basis of blockchains?
- What data can be sensibly stored in blockchains?
- Which transactions can be supported by blockchains?
- What technical restrictions exist?

A plethora of articles explaining the functional principles of blockchains can be found in the press and on the internet. For a basic understanding it is important to distinguish between the different terms (see Box 1). Depending on the concept,

Box 2: Key features of the Guardtime Blockchain for securing the eHealth System in Estonia

Which kind of data are stored in the Blockchain?

- Only cryptographic evidence is stored in the Guardtime KSI Blockchain.
- No patient data or personally identifiable information are stored in the KSI Blockchain.

How is patient data managed?

Patient data are stored in eHealth system and do not leave the borders of the Estonian systems. In the blockchain a cryptographic evidence (KSI signature) is created and stored in the blockchain and in addition in the eHealth application.¹

How do you proof data integrity in the overall process of patient data management?

Today typically every organisation runs a digital archive and there is no overall method to proof data integrity. With the new solution all involved health care organisations can check the integrity and provenance of the data with KSI Signatures.

How can you prove that you are compliant with patient consent?

In the current health care system, a patient has to trust that all parties act according to his consent. With the solution an evidence of data and process integrity in all processing steps can be created and matched with audit trails. In this way the research organisation can prove that the processing of the patient data was compliant with the patient consent.

business-relevant data can be stored in the blockchain (e.g. transaction data) or the data in the blockchain can contain references to external data, e.g. because the data requires a high storage volume or is confidential.

Blockchains can be employed in many areas and offer different functionalities. From a high-level view we can classify blockchain use cases in three categories:

- Blockchains for proof of data integrity and for data sharing
- Blockchains for registration and certification
- Blockchains for the settlement of transactions

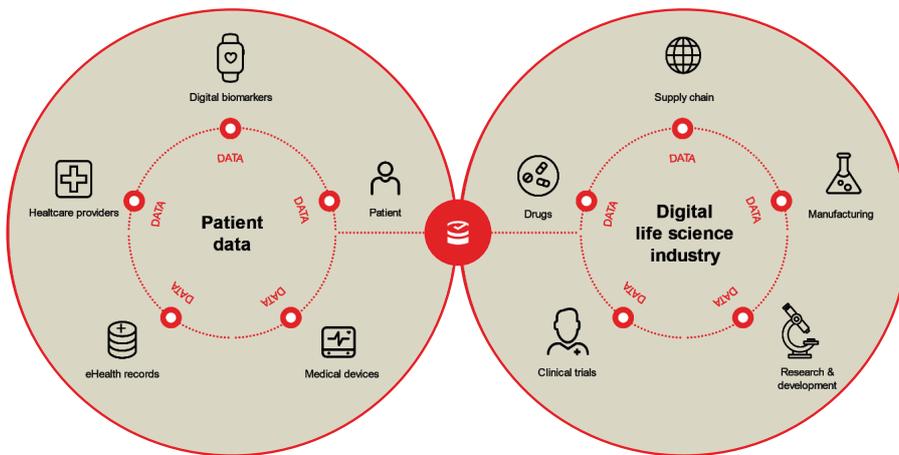
In this article we will focus on the first class of use cases, on data integrity and data sharing, that seems to have generated most of the interest so far in health care. Proof of data integrity can be provided using the blockchain, i.e. it can be verified that data has not been subsequently changed.

Practical example: Use of blockchains in eHealth in Estonia

In Estonia (see Box 2), blockchain technology is a component of the eHealth and eGovernment infrastructure and is used to ensure data integrity and to create an audit trail, which users have accessed the data.² The following steps are carried out:

- The data, e.g. a new patient record, is generated in the respective application. The patient data are stored in the eHealth database and only the proof of integrity is transmitted to the blockchain.
- The eHealth infrastructure of Estonia is connected to the Guardtime blockchain service. The company Guardtime was founded in Estonia and operates a blockchain, which is used by government as well as industry customers.
- The eHealth data are checked for integrity at periodic intervals. The time interval depends on the need for protection. In the context of

Figure 1: Use Cases for Blockchain in Digital Life Sciences



Source: Guardtime

cybersecurity, for example, important data are checked at short intervals in order to detect any changes made to the data by an attacker. For long-term archiving, typically long time intervals are selected for monitoring. In addition to periodically checking the entire database, individual documents can be checked if necessary, e.g. an external auditor can check the authenticity of a document.

Estonia has realised the following advantages with this blockchain concept:

- In the eGovernment and eHealth infrastructure, a uniform procedure for guaranteeing data integrity and access logging has been implemented. The uniform procedure based on the blockchain saves costs and increases security, since not every authority or hospital has to implement its own procedure for data security and access logging.
- The citizen can access his/her data via a portal and trust the eHealth system that the data have not been manipulated and that access has only been granted to authorised persons.
- Since the data in eGovernment and eHealth are sensitive, and some data types have a large file size, e.g. medical image data, it does not make sense to store the data in the blockchain. Estonia has implemented a sensible concept here and stores only the proofs of integrity and not the data itself in the blockchain.

- The blockchain technology was introduced step by step and further expansion steps are planned. In the first step, the data integrity and cybersecurity described above were implemented. In further steps, the expansion for the processing of transactions, such as the use of digital prescriptions in health care, will take place.

Advantages of blockchain over current practice

Until now, similar functions have been implemented with the use of digital signatures or storage media with procedures for integrity protection. In comparison to using digital signatures or hardware-based integrity protection, a blockchain has the following advantages:

- Blockchain technology can prove both the integrity and the completeness of a set of data, as well as the chronological sequence. When using digital signatures, data are signed with the key of a person or organisation. Thus, management of public and private keys is necessary and can be very cumbersome in the long run. Blockchain technology is primarily a software-based procedure and is thus independent of the hardware used. So even for data stored in the cloud, data integrity can be verified.
- The use of a blockchain for proof of data integrity is based on the following procedure: data are generated outside of

the blockchain, e.g. a document or data set; the proof of integrity is generated by means of a hash algorithm and filed in the blockchain; data are checked for integrity at regular intervals. The time interval is chosen based on the protection requirement. Thus, in the context of cybersecurity, important data are checked at short intervals in order to detect any manipulation of the data by an attacker. For long-term archiving, longer intervals are typically chosen for monitoring. In addition to periodic checking of the entire data pool, individual documents can be checked as required, e.g. an external auditor can check the authenticity of a document.

These functions are of interest in application areas where proof that data hasn't been retrospectively manipulated is particularly important. Examples include research data for medical products, diagnoses in health care, or the configuration of machinery.

Potential for secure data management in research and development

The use of blockchain in the health system of Estonia shows how data integrity and security can be ensured with blockchain technology. In addition, blockchain technology will enable Life Sciences companies to transform their research and development process to ensure data integrity in all process steps and in all environments, for example when capturing data for digital biomarkers. **Figure 1** shows the use cases in the ecosystem of Digital Life Sciences.

Outlook

The outlook for blockchain is wide-reaching and important, including in the examples of clinical trials, sharing patient records, patient-reported outcomes and also in security. When running clinical trials, significant efforts go into source data verification. The emerging trend to run “virtual trials”, with less involvement of a site with physicians and nurses, makes it even more important to care about data authenticity. For cross-border care, and even for elective care within one country, the sharing of health records provides a challenge: how to secure the safe sharing

of data, including the accompanying rules for protecting patient privacy. In the quest to focus on outcomes, and to pay for results, private and public players need to find ways to automatically capture data and keep track of the agreements they have made. Furthermore, the life sciences and health care sectors should be vigilant about cybersecurity threats which will likely increase in future.

References

- 1 Innovative Medicines Initiative (IMI). Available at: www.imi.europa.eu
- 2 FDA. Information Exchange and Data Transformation (INFORMED). Available at: <https://www.fda.gov/aboutfda/centersoffices/officeofmedicalproductsandtobacco/oce/ucm543768.htm>
- 3 Burgwinkel D. *Blockchain Technology*. Berlin, Boston: De Gruyter, 2016.
- 4 Republic of Estonia. e-estonia. Available at: <https://e-estonia.com/solutions/healthcare/>
- 5 Guardtime. Estonian eHealth Authority Partners with Guardtime to Accelerate Transparency and Auditability in Health Care, 2016. Available at: <https://guardtime.com/blog/estonian-ehealth-partners-guardtime-blockchain-based-transparency>
- 6 Guardtime. KSI Technology Stack. Available at: <https://guardtime.com/technology>
- 7 Khozin S. Digital Footprints in Drug Development: A Perspective from within the FDA. *Digital Biomarkers* 2017.

INCLUSIVE GROWTH AS A ROUTE TO TACKLING HEALTH INEQUALITIES

By: Emma Spencelayh

Summary: There are entrenched health inequalities between and within countries that continue to be unacceptable, in part because inequalities represent a failure of government to maximise the social and economic potential of its population. The Sustainable Development Goals provide a framework for cross-sector action and the translation of benefits from one sector to another. There are great opportunities for health policy makers and practitioners to tap into economic development agendas such as inclusive growth as a route to tackling health inequalities.

Keywords: *Inclusive Growth, Health Inequalities, Social Determinants, Sustainable Development Goals*

Revisiting the Declaration of Alma-Ata declaration

Thirty years ago, the declaration of Alma-Ata made it clear that the level of health inequality was ‘politically, socially, and economically unacceptable’.¹ Three decades on, we are still facing the issue of entrenched health inequalities between and within countries. For example, across countries, life expectancy varies by 34 years – a child born in Sierra Leone can expect to live for 50 years while a child born in Japan can expect to live for 84 years.² As an example of in-country inequalities, across the United Kingdom from 2014 to 2016, the gap in healthy life expectancy at birth between local areas with highest and lowest average health life expectancy was 18.4 years for females and 15.6 years for males.³

While there are clear and sound arguments for investing in health care systems as a route to improved health outcomes, tackling unacceptable variations cannot be left to the health care system alone, which is only one of many factors contributing to overall health outcomes. A wide variety of factors contribute to a person’s health and wellbeing, including access to education and good work, environmental factors such as decent homes and pleasant surroundings and strong social networks. These influences (the social determinants of health) are not distributed equally and are strongly shaped by government policy, including economic, social, housing and planning policies.

It can be difficult to determine the precise role the social determinants have compared to health care delivery or

> #EHFG2018 – Lunch Workshop 2:
Economic strategies for health equalities

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other factors. Recent research using data from more than 1.7 million individuals in 48 independent cohort studies in seven countries found that the independent association between socio-economic status and mortality is comparable in strength and consistency to the individual effects of other more widely recognised risk factors such as tobacco use, alcohol consumption, insufficient physical activity, raised blood pressure, obesity or diabetes.⁹

“the proceeds of economic growth should be shared more equally”

Viewing socio-economic status as an equal risk factor to tobacco use raises questions about the nature of prevention and the role of professionals working to improve public health. Where should public health professionals be located within a health system and are there sufficient incentives in place to collaborate and work across traditional sector boundaries? In England, public health functions were moved into local government from the health care delivery system following the Health and Social Care Act 2012 with the intention of supporting more holistic and integrated service delivery. Research suggests that while public health teams have integrated well with departments more closely associated with health such as children’s services or adult social services, there are weaker connections with economic development teams.¹⁰ Are we expecting too much of public health professionals in advancing the wider determinants agenda? Is the task of reducing health inequalities through action on the wider determinants expecting too much of an average public health professional or even health departments?

The 2011 Rio Political Declaration on the Social Determinants of Health refers explicitly to the desire to achieve a social

and health equity through a comprehensive inter-sectoral approach. And yet, it is still incredibly difficult in practice to make the case for investing in health care and health enhancing policies to non-health audiences, leading to criticism in some quarters of health imperialism. Instead of making the case for health in all policies in isolation, is there another way?

Can the Sustainable Development Goals (SDGs) play a role in bridging sectors?

The United Nation’s SDGs provide a framework and a call to action for ending poverty, protecting the planet and enabling people to enjoy peace and prosperity. The SDG framework provides an excellent opportunity to position a health in all policies approach within a broader comprehensive, inter-sectoral approach to national policymaking. It also provides the opportunity to show that good health has a role to play in supporting sustainable development more broadly. The Adelaide Statement II on health in all policies 2017 highlights the opportunities the SDGs provide to reach out across different sectors, while emphasising that health in all policies can be a vehicle to support SDG implementation, particularly in relation to improvements around policy coherence.¹¹

The health of a population has a complex, multi-directional relationship with other social and economic outcomes. Good health is of course of value to individuals but it is also a societal asset that can help enable people and places to flourish. Evidence suggests that progress on target 3.4 (reducing preventable mortality by a third by 2030) would have a role in determining the outcome of at least nine SDGs. For example, reducing the mortality and morbidity from non-communicable diseases could lead to a rise in productivity and household incomes, helping to achieve progress against Goal 8 (decent work and economic growth) and Goal 10 (reduced inequalities).¹² In turn, the SDGs provide an opportunity to make progress in the areas that are likely to affect people’s life trajectories and experiences such as the environment in which they live and the sorts of jobs available which should in turn support good health.

The SDG framework doesn’t offer a perfect blueprint for tackling health inequalities – for example, the health targets are absolute rather than relative and there is no mention of health inequalities within the overall set of indicators on inequality. However, the focus on policy coordination and policy coherence, as well as partnership working, highlights the need for activity that is mutually enhancing across sectors. In particular, there is a great opportunity to tap into work to promote more inclusive, economic growth.

Inclusive growth as a means to tackling health inequalities

Goal 8 promotes inclusive and sustainable economic growth, employment and decent work for all. There is a growing recognition that the proceeds of economic growth should be shared more equally across the population. Widening income inequality has been referenced as the defining challenge of our time and can be evidence of a lack of opportunity and risks concentrating power in the hands of the few, which can threaten economic stability and social cohesion.¹³

Gross Domestic Product statistics are the main way in which economic performance is measured and reported on at a national level. This focuses attention on policies that aim to affect the overall level of economic activity in areas such as skills development, labour markets, competition, investor and corporate governance, social protection, infrastructure basic services, which in turn shape patterns of who benefits from growth.¹⁴

Inclusive growth (see Box 1) is a term that originally gained prominence within the international development field by groups such as the World Bank. Though this term was originally used to discuss economic development in lower-middle income countries, it has quickly been adopted in higher-income countries too.¹⁵

Why does this matter for health outcomes?

Income inequality is important from a health perspective as it is widely accepted that there is a social gradient in health.

Box 1: Inclusive growth

There are multiple definitions of inclusive growth but there are several key ideas that are consistent, such as ‘ensuring opportunities for all’ and ‘broad-based growth’.

The OECD defines inclusive growth as “economic growth that creates opportunity for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society”.¹¹

The European Commission states that inclusive growth involves: “empowering people through high levels of employment, investing in skills, fighting poverty and modernising labour markets, training and social protection systems so as to help people anticipate and manage change, and build a cohesive society... It is about ensuring access and opportunities for all... making full use of [Europe’s] labour potential”.¹²

The association between socio-economic status and health status is well established. For example, the European Commission’s recent report on fairness notes that individuals with a poor family background are more likely to smoke or be overweight or obese than those from more privileged family background. The chance of reporting poor health for those from a poor family background are nearly 110% higher (after accounting for age and gender).¹³

“Implementation of the SDGs needs innovation in delivery and new policy approaches

As well as multiple definitions of inclusive growth, there are a number of indicator frameworks that seek to assess progress towards achieving inclusive growth, some of which recognise health as a specific component. Where health outcomes are included, they are often limited to overall life expectancy. The OECD’s dashboard of indicators does, however, include an indicator relating to regional life expectancy gap.¹⁴ OECD research

has outlined that health is a critical component of inclusive growth, both as a major dimension of wellbeing in itself and because of its two-way relationship with income, employment and other key aspects of living standards.¹⁵

Tapping into the inclusive growth agenda has the potential to facilitate mutually beneficial action across economic development and health sectors. For example, the OECD’s framework for policy action on inclusive growth focuses on action to:

- Invest in people and places that have been left behind, providing equal opportunities for all
- Support business dynamism and inclusive labour markets
- Build efficient and responsive governments.¹⁶

These areas of focus are well aligned with policy recommendations to address health inequalities arising from social and economic determinants. The World Health Organization’s (WHO) Commission on the Social Determinants of Health’s overarching recommendations highlighted the need to improve daily living conditions and tackle the inequitable distribution of power, money and resources.¹⁷

The World Economic Forum’s (WEF) virtuous cycle of inclusive growth shows a self-reinforcing cycle in which rising economic output and social inclusion support each other. The WEF also

argues that there is no inherent trade-off in economic policymaking between the promotion of social inclusion and that of long-term economic growth and competitiveness.¹⁸

The city of Malmö in Sweden has been highlighted as an exemplar for its work to embed a health in all policies approach as well as its attempts to create a more inclusive economy. This dual focus on people and place has the potential to be powerful policy levers for change. Implementation of the SDGs needs innovation in delivery and new policy approaches as exemplified by Malmö.

While it may be tempting to view inclusive growth as a silver bullet, it is also important to recognise its limitations. Growth may not be a sustainable goal in itself – either at a national or subnational level. In some areas, inclusive economics may need to facilitate policies that actively support the redistribution of resources within a neutral or ‘degrowth’ context.

Conclusions

A healthy population is essential for a thriving society and economy. The SDGs provide an opportunity and catalyst for health to bridge barriers with sectors such as economic development and to advance mutually beneficial policies. The inclusive growth agenda is creating a focus on inequalities in the broadest sense and it is important that action to tackle health inequalities isn’t attempted in isolation when there are clear opportunities for alignment and amplification of action. Whole system approaches are difficult to deliver in practice but the SDGs, with their emphasis on whole government action, provide new and much needed impetus for innovative approaches to policymaking.

References

- 1 Declaration of Alma-Ata: International conference on primary health care, Alma-Ata, USSR, 6–12 September 1978. Available at: http://www.who.int/publications/almaata_declaration_en.pdf
- 2 World Health Organization. *10 facts on health inequities and their causes (updated April 2017)*. Available at: http://www.who.int/features/factfiles/health_inequities/en/

- ³ ONS. *Statistical bulletin: Health state life expectancies, UK: 2014 to 2016*. ONS, 2017.
- ⁴ Stringhini S, Cameli C, Jokela M, Avendaño M, Kivimäki M. Socioeconomic status and the 25 risk factors as determinants of premature mortality: a multicohort study and meta-analysis of 1.7 million men and women. *The Lancet* 2017;389(10075):1229–37.
- ⁵ Terry L, Gilbert A, Tjoa P, Vaughan C. Reaching out: Influencing the wider determinants of health. New Local Government Network, 2017.
- ⁶ Government of South Australia and World Health Organization. *Adelaide Statement. Outcome Statement from the 2017 International Conference Health in All Policies: Progressing the Sustainable Development Goals*. Adelaide: Government of South Australia & World Health Organization; 2017. Available at: http://www.who.int/social_determinants/SDH-adelaide-statement-2017.pdf?ua=1
- ⁷ Nugent R, Bertram M, Jan S, et al. Investing in non-communicable disease prevention and management to advance the Sustainable Development Goals. *The Lancet* 2018;391(10134):2029–35.
- ⁸ Dabla-Norris E, Kochhar K, Ricka F, Suphaphiphat N, Tsounta E. *Causes and Consequences of Income Inequality: A Global Perspective*. International Monetary Fund, 2015. Available at: <https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf>
- ⁹ Samans R. *A new way to measure economic growth and progress*. World Economic Forum; 2018. Available at: <https://www.weforum.org/agenda/2018/01/towards-a-new-measure-of-growth/>
- ¹⁰ The World Bank. *Inclusive and Sustainable Growth, Global Monitoring Report 2014/15*. The World Bank; 2015.
- ¹¹ OECD. *Policy shaping and policy making. The governance of inclusive growth*. OECD; 2016. Available at: <https://www.oecd.org/governance/ministerial/the-governance-of-inclusive-growth.pdf>
- ¹² European Commission, *Europe 2020: A strategy for smart, sustainable and inclusive growth*, 2010. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>
- ¹³ European Commission Joint Research Centre. *What makes a fair society? Insights and evidence*. European Union; 2017. Available at: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106087/kj0716182enn.pdf>
- ¹⁴ OECD. *The Framework for Policy Action on Inclusive Growth*. Paris: OECD, 2018. Available at: <https://www.oecd.org/mcm/documents/C-MIN-2018-5-EN.pdf>
- ¹⁵ James C, Devaux M, Sassi F. *Inclusive growth and health. OECD Health Working Papers: No. 103*. Paris: OECD Publishing, 2017. Available at: <http://dx.doi.org/10.1787/93d52bcd-en>
- ¹⁶ OECD. *The Framework for Policy Action on Inclusive Growth*. Paris: OECD, 2018. Available at: <https://www.oecd.org/mcm/documents/C-MIN-2018-5-EN.pdf>
- ¹⁷ Commission on Social Determinants of Health. *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*. World Health Organization, 2008. Available at: http://www.who.int/social_determinants/final_report/csdh_finalreport_2008.pdf
- ¹⁸ World Economic Forum. *The Inclusive Growth and Development Report 2017*. World Economic Forum. Available at: http://www3.weforum.org/docs/WEF_Forum_IncGrwth_2017.pdf

Policy Brief Series on Health Systems for Prosperity and Solidarity

Using economic evidence to help make the case for investing in health promotion and disease prevention

By: David McDaid

Copenhagen: World Health Organization 2018 (acting as the host organisation for, and secretariat of, the European Observatory on Health Systems and Policies)

Freely available to download at: http://www.euro.who.int/__data/assets/pdf_file/0003/380730/pb-tallinn-02-eng.pdf?ua=1

The 2008 Tallinn Charter: Health Systems for Health and Wealth recognised that investing in health means investing in human development, social well-being and wealth. It stated that ‘health systems are more than health care and include disease prevention, health promotion and efforts to influence other sectors to address health concerns in their policies’.

Ten years on, investment in health promotion and disease prevention activities, at least within the health sector, remains

stubbornly low in many countries. For instance, OECD countries typically allocate between 2% and 4% of total health sector spending to these activities. Moreover, between 2009/2010 and 2012/2013 on average spending fell in real terms and still in 2014/2015 was only growing at around 2% per annum, a rate that is much lower than before the onset of the global economic crisis.



There are many different reasons for this, but undoubtedly some budget holders in health systems are sceptical about the case for focusing more on public health, contending that there is insufficient evidence available to justify such an investment.

This policy brief argues that this scepticism about the evidence is overstated. Moreover, the existing evidence

base can in fact be adapted to be useful in many different systems and country contexts across the WHO European Region.

PATIENT EMPOWERMENT DRIVING SUSTAINABLE CANCER CARE

By: **Kathy Oliver, Stefan Gijssels, Shannon Boldon** and **Suzanne Wait**,
on behalf of the All.Can international initiative*

Summary: Recent figures estimate that up to 20% of health care spending is wasted on inefficient interventions and care, and that up to two years of life expectancy could be gained if health care systems eliminated existing inefficiencies. The All.Can initiative was set up to improve the efficiency of cancer care, seeing this as a key step in achieving its sustainability. This requires a shift to policies that are genuinely patient-led. All.Can believes that we need to make bold policy choices, really listen to insights from patients, and use these insights to guide planning, evaluation and delivery of care.

> #EHFG2018 – Forum 5:
Patient insights for sustainable care

Keywords: Cancer Policy, Efficiency, Patient Empowerment, Sustainability

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* All.Can is an international, multi-sectoral initiative aiming to improve the efficiency of cancer care by focusing on patient outcomes. All.Can comprises leading representatives from patient organisations, policymakers, health care professionals, research and industry. It is made possible with financial support from Bristol-Myers Squibb (main sponsor), Amgen, MSD and Johnson & Johnson (sponsors), and Varian (contributor), with non-financial (in-kind) contributions from IntaCare and GoingsOn. For a full list of All.Can members, see: www.all-can.org

Patients at the centre of health systems

Patient empowerment has been central to health policy reforms in the past several years. Through greater health literacy, shared decision-making and person-centred care, this empowerment has become intrinsic to many health care system goals. In addition, there are numerous ongoing efforts to genuinely involve people living with health issues and with real experiences of care in defining research priorities, designing clinical trials, developing models of care, and evaluating the potential value of new treatment approaches.

Several important EU policies recognise that patients should be at the centre of health care systems, and that patient organisations should be a core part of health care policy and decision-making. Patient empowerment is increasingly recognised for being a key enabler of

high-quality and sustainable health care systems.^{1 2 3} When patients are involved in health care decisions and their preferences are listened to and acted on, the result is better health outcomes, more engaged patients and, potentially, lower health care costs.⁴

The theme of this year's European Health Forum Gastein is 'Bolder political choices to achieve the Sustainable Development Goals (SDGs)'. The SDGs were developed by the United Nations Development Program to mobilise global collaboration and partnerships around priorities for shifting our world onto a sustainable and resilient path.⁵ Drawing from the work of All.Can, a multi-sectoral initiative aimed at improving the efficiency of cancer care, this article looks at the potential role that patient empowerment can play in helping achieve more efficient and sustainable health care systems – in line with the SDG goal to “ensure healthy lives and promote well-being for all at all ages”.

Sustainability of health care systems: what is at risk?

Over the last decade, there has been considerable concern for the sustainability of health care systems. Budgetary pressures have arisen due to the ageing population, the escalating cost of new treatments and technology, and increasing disparities in access to all aspects of care. These issues have focused the attention of patient groups, health care providers, economists and policymakers on ways to protect sustainability and ensure future generations may benefit from the best care available within the boundaries of health system affordability.

The focus of concern should not only be on sustainability, but also on efficiency in health care systems. Recent figures estimate that up to 20% of health care spending is wasted on ineffective interventions,^{8,9} and that two years of life expectancy could be gained by removing existing inefficiencies in health care systems.⁷

Looking specifically at cancer care, inefficiencies abound. For example, one in three cancer patients does not receive pain medication appropriate to their pain level.⁸ Poor adherence to medicines costs €125 billion per year in Europe.⁹ Over €7.2 billion could be saved in Germany every year through better coordination of care leading to reduced hospital admissions.¹⁰ A 2015 UK report found that providing appropriate follow-up care for cancer patients through personalised care planning (as opposed to emergency hospital admissions) may result in savings of £420 million (€470 million) per year.¹¹

Each of these inefficiencies represents a missed opportunity: better care for patients and their families, better outcomes for the health care system, and better (and more sustainable) use of health care resources. For example, in Europe if all colorectal cancers were diagnosed in stage I, more than €4 billion could be saved annually, and overall survival would increase to 90% rather than 8%, resulting in an additional 230,000 lives saved every year.¹²

The key questions thus become: where do these inefficiencies in health care systems

exist? And what mechanisms do we need to eliminate them and replace them with efficient practices instead?

“patients should be at the centre of health care systems

Improving the efficiency of cancer care

Finding solutions to drive sustainable cancer care through greater efficiency is the core mission of All.Can, which was established to explore waste and inefficiencies in cancer care, and where policy efforts should be focused to yield the most meaningful benefits for patients. All.Can's members – a network of leading patient advocates, health professionals, researchers, industry representatives, data experts and policymakers – are committed to working together to improve cancer care.

Central to All.Can's mission is its definition of inefficiency: any aspect of cancer care that is not focused on what matters to patients. The patient perspective is, unfortunately, rarely central to the way we plan, deliver or evaluate cancer care.¹³ Processes drive outcomes, rather than the other way around. All.Can calls on policymakers – and the entire cancer community – to measure what matters to patients and use these data to drive a continuous cycle of improvement, embedding efficiency across the entire cancer care pathway.

Redefining efficiency in cancer care from the patient's perspective

Every effort to improve efficiency must start with a clear understanding of what matters most to patients – and, equally, what may be considered wasteful or ineffective from the patient's viewpoint. Patients have a unique perspective of living with a medical condition, experiencing care, and being in frequent contact with health care systems. Patients

truly see the big picture, and can identify unnecessary or wasteful services and best practices. Ultimately, they can significantly contribute to more effective and efficient health care systems.

All.Can's research found that clear definitions of waste and inefficiency from the patient perspective are lacking in the available literature, and ongoing initiatives that focus on reducing waste and improving efficiency are rarely rooted in patients' insights. Thus, the scope for patient empowerment in driving efficiency remains largely untapped.

'Every euro, pound or penny we spend on something that isn't adding to improving patient outcomes is money that's being wasted.'

Vivek Muthu, Member of All.Can

To help fill this gap, All.Can is conducting an international survey of cancer patients and caregivers, asking them where they have encountered inefficiencies across all aspects of care, and where efforts are most needed to drive meaningful change in cancer care (see <http://www.all-can.org/patientsurvey/>). The findings will be used to build a conceptual framework of inefficiency – and, by extension, efficiency – that can be used to guide policy recommendations and proposed policy actions in this area.

Preliminary findings from the survey indicate that even seemingly simple changes to the way we deliver care can make a huge difference to patients' experiences. For example, the timing of appointments is significant. One survey participant in the UK said: 'It was important to have appointments after 10am, so I could get free travel on the train.' Additionally, inconveniently-timed appointments often require that patients and family members need to miss work or get appropriate childcare, adding to the financial pressures which can result from a serious illness. Inefficiency in getting the right diagnosis and delays in getting to the right specialist were also frequently reported.

The survey is collecting responses until 31 October 2018, with full findings expected in January 2019.

Patient insights driving system change

Outcomes-based models of care have been advocated by many. The key is to implement them, and at scale. We now collect massive amounts of data from patients – but it is important to ask ourselves if we are using it appropriately. There is a responsibility, in collecting this data, to ensure we are not collecting data for data's sake, but to drive positive changes in care and policy that benefits all.

A key challenge to implementing outcomes-based models is the low availability of reliable outcomes data. Patient-determined outcomes data are often not systematically recorded in clinical practice. It is more common to see measures of process or transactional outcomes, used to assess hospital performance.^{13 14}

One reason for the poor availability of these data is linked to the fact that our health care information systems were not designed to collect comprehensive cost and outcomes data across the entire care pathway. Isolated budgets, fragmented information systems and lack of uniform electronic patient records, among other hindering factors, often make comprehensive collection of these data challenging.^{13 14}

There are, however, some good examples of promising initiatives where patient data are used to drive greater efficiency and better care. One such example is found in the potential of web-based approaches to provide follow-up care for lung cancer patients. A clinical trial in the US, France and other European countries allowed lung cancer patients to self-report symptoms on a weekly basis. The application analysed these symptoms using an algorithm to determine which patients needed to be called in for imaging tests. This was compared to 'usual care', where patients were subject to tests according to a fixed schedule – tests that were sometimes harmful and unnecessary.

There was a huge difference in survival shown early in the trial. Patients using this web application for follow-up care were found to have longer survival and better quality of life, as they only had to receive tests when deemed necessary.¹⁵

The examples cited above show the potential for using patient insights to drive greater efficiency and better care for patients as a result. The question is how to implement these examples at scale. The theme for the Gastein forum mentions 'bolder political choices', and there is nothing bolder than committing to take patients' and caregivers' views on board – and to drive changes to address those views – across all aspects of care, from planning to delivery and evaluation.

An interesting example of patient-led policy comes from the Dutch Ministry of Health. In 2013, it opened a 'waste hotline' to encourage citizens to report their experiences and ideas on waste in health care.¹⁶ More than 16,000 responses were received. Based on this evidence, it established a series of policy initiatives to eliminate waste, including: a national action plan to prevent waste; pilot projects that aim to eliminate waste; and sharing of best practices on the Ministry of Health website. The Dutch initiative draws from actual health system users to define waste and propose concrete policy changes focused on these findings. All.Can wishes to emulate this example in cancer care: using the findings from its patient survey to identify key areas on which to focus, thus driving meaningful change for cancer care.

Patient-led policy change: is it achievable?

"The goal is to change the clinical paradigm from "what's the matter?" to "what matters to you?"
Susan Edgman-Levitan, Executive Director, John D Stoeckle Centre for Primary Care Innovation, Massachusetts General Hospital

To achieve widespread patient-led health care policy requires commitment from all stakeholders – and most importantly, from

patients. It requires a shift in attitudes and behaviours, and policy frameworks to facilitate system change. All.Can wants this method of policymaking to become common practice – by showing its potential to achieve positive results.

Inefficiencies in cancer care, and health care more generally, are caused by a failure to focus on what matters to patients. Put differently, if one focuses care on what matters to patients, our health care systems would achieve better results and use resources more efficiently, thus becoming more sustainable and achieving the SDG goals.

References

- 1 European Patients' Forum (EPF). *EPF Campaign on Patient Empowerment: Roadmap for Action. 2017*. Available at: http://www.eu-patient.eu/globalassets/campaign-patient-empowerment/roadmap/roadmap_patient-empowerment_epf_2017.pdf
- 2 European Health Parliament. *Patient empowerment and centredness, 2015*. Available at: http://www.healthparliament.eu/wp-content/uploads/2017/09/EHP-papers_Patients-empowerment.pdf
- 3 All Party Parliamentary Groups (APPG). *Patient empowerment: for better quality, more sustainable health services globally*. London, 2014.
- 4 United Nations (UN). *Sustainable Development Goals, 2018*. Available at: <https://sustainabledevelopment.un.org/?menu=1300>
- 5 World Health Organization. *Health systems financing: the path to universal coverage. The World Health Report*. Geneva: WHO, 2010. Available at: <http://www.who.int/whr/2010/en/>
- 6 Organisation for Economic Cooperation and Development (OECD). *Tackling Wasteful Spending on Health (Revised)*. Paris: OECD Publishing, 2017.
- 7 Medeiros J, Schwierz C. Efficiency estimates of health care systems in the EU. European Economy: European Commission Directorate-General for Economic and Financial Affairs. *Economic Papers 549*, 2015. Available at: http://ec.europa.eu/economy_finance/publications/economic_paper/2015/pdf/ecp549_en.pdf
- 8 Cancer World. *Pain! The Denial needs to end*, 2017. Available at: <http://cancerworld.net/cover-story/pain-the-denial-needs-to-end/>
- 9 EFPIA. *Patient Adherence – 50% of patients don't take their medicine properly, 2012*. Available at: <http://www.efpia.eu/topics/people-health/patient-adherence>
- 10 Sundmacher L, et al. *Krankenhausaufenthalte infolge ambulant-sensitiver Diagnosen in Deutschland*. [Hospital stays due to outpatient-sensitive diagnoses in Germany] In Munich L (Ed) *Krankenhausreport 2015*;149–60.

¹¹ Macmillan Cancer Support. *Cancer cash crisis: counting the cost of care beyond treatment*, 2015. Available at: <https://www.macmillan.org.uk/documents/campaigns/cancercashcrisisreport-macmillandecember2015.pdf>

¹² EuropaColon. Unpublished data. 2018.

¹³ All.Can Initiative. Towards sustainable cancer care: reducing inefficiencies, improving outcomes. A policy report from the All.Can initiative. *Journal of Cancer Policy* 2017;13:47–64. Available at: <https://doi.org/10.1016/j.jcpc.2017.05.004>

¹⁴ Porter ME, Larsson S, Lee TH. Standardising Patient Outcomes Measurement. *New England Journal of Medicine* 2016;374(6):504–06.

¹⁵ American Society of Clinical Oncology. *Mobile-Friendly Web Application Extends Lung Cancer Survival*, 2016. Available at: <https://www.asco.org/about-asco/press-center/news-releases/mobile-friendly-web-application-extends-lung-cancer-survival>

¹⁶ Lafeber F, Jeurissen P. Reducing waste in health and social care in The Netherlands; *Eurohealth* 2013; 19(4):34–37.

THE CAPITAL-NCD-NEXUS: THE COMMERCIAL DETERMINANTS OF HEALTH AND GLOBAL CAPITAL FLOWS

By: Christian Franz and Ilona Kickbusch

Summary: In the past, the role of global capital flows for health has not been considered in the debate about key risk factors of Noncommunicable Diseases (NCDs). This is a blind spot in public health. A significant share of the global food and beverage industry is owned by institutional investors. Cross-border mergers and acquisition volumes in the food, beverage, and tobacco industries have substantially increased. Progress on preventing and controlling NCDs requires the public health community to engage in a forward-looking discussion to address investors' responsibility in relation to global health in general and the tsunami of NCDs in particular.

Keywords: NCDs, Public Health, Global Capital Flows, Commercial Determinants of Health, Obesity, Institutional Investors

Introduction

“[...] how can food and soft drink makers market and sell their products to the masses of children around the world, seeing them more as opportunities for profit, and turning a blind eye to the spiralling rates of childhood obesity and early onset diabetes?”¹ When World Health Organization (WHO) Director-General Tedros Adhanom Ghebreyesus asked this question in his opening remarks at the Global Conference on NCDs in Montevideo 2017, his words must have

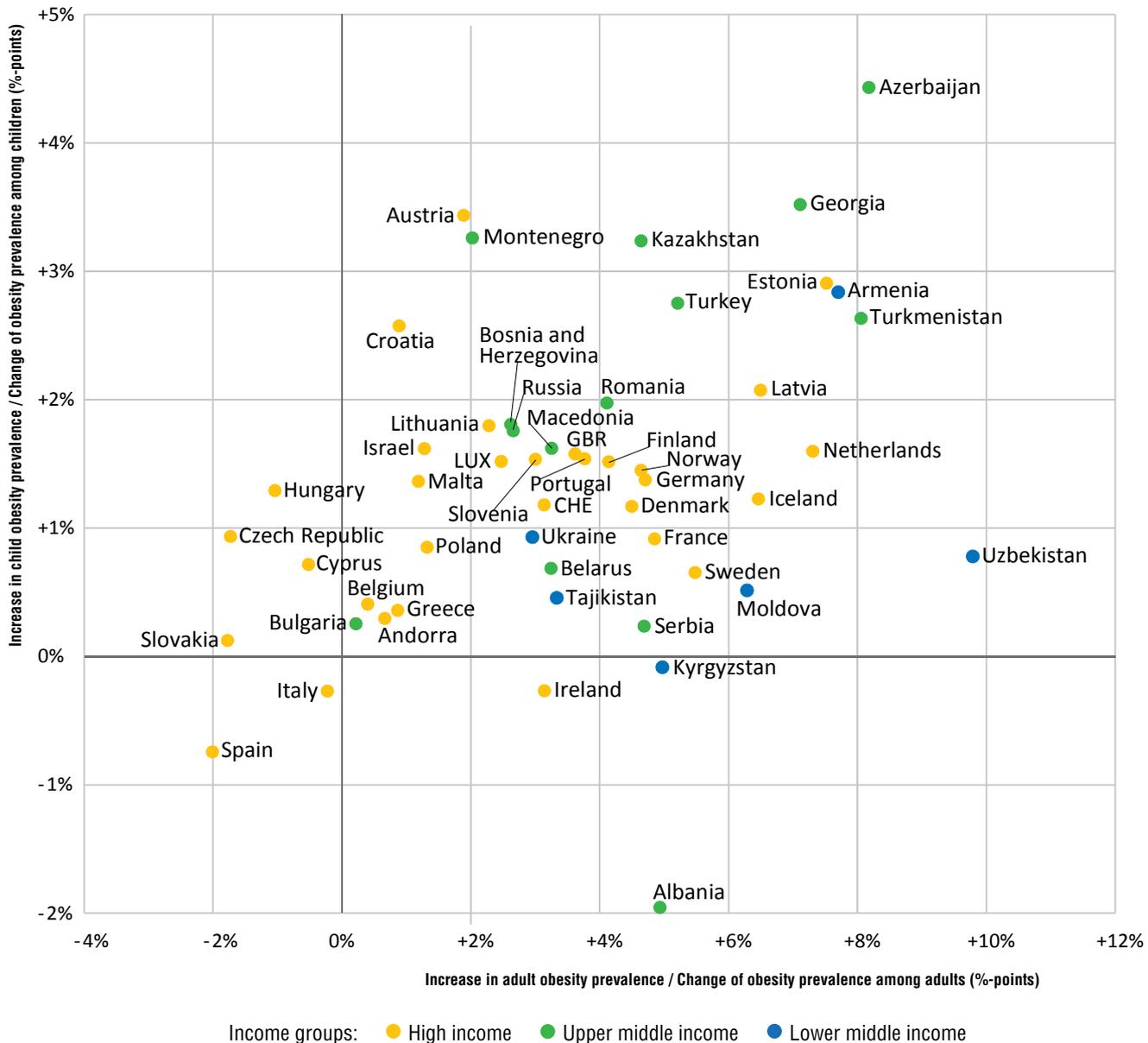
resonated with most attending Ministers of Health. Globally, the number of obese children and youths was estimated to have reached more than 107 million in 2015 – 30 million more than 15 years earlier and a 1.1 percentage point increase in prevalence.²

Out of 51 countries in the WHO European Region, in 42 countries, obesity among children and youth has increased (see Figure 1). In absolute numbers these developments appear even more dramatic:

> #EHFG2018 – Closing Plenary:
Commercial determinants of health
& global financial markets

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Figure 1: Where did obesity among children and adults increase in the WHO European region? Prevalence of obesity by country and income group, 2000–15



Source: Prevalence figures from GBD 2015 in Obesity Collaborators (2017). Calculations and illustration CPC Analytics.

since 2000, the number of obese adults has increased by 38 million. The number of obese children rose by 1.5 million.

Commercial determinants of health and NCDs

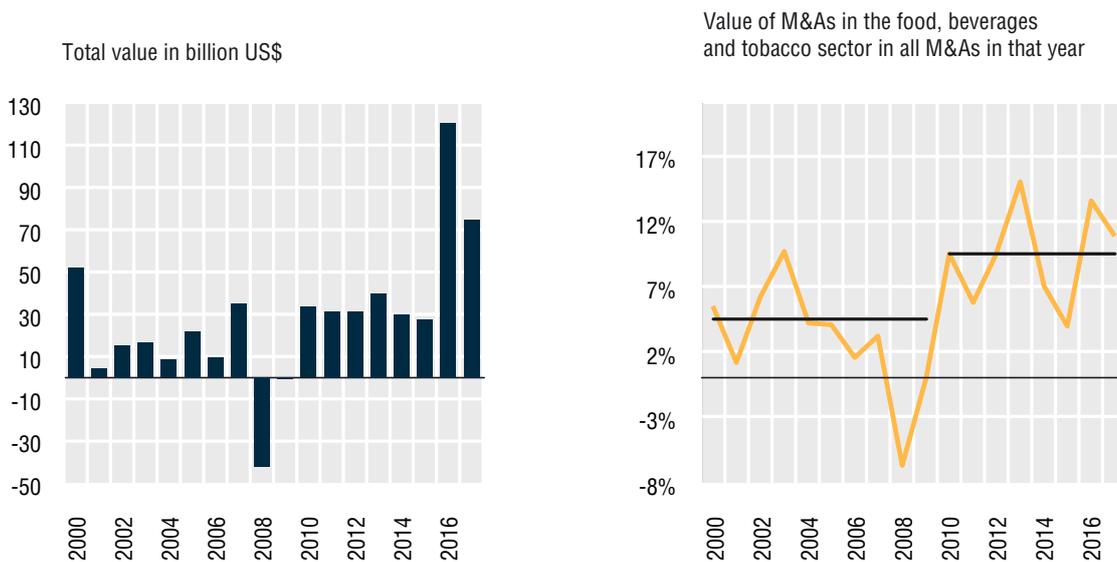
Dr Ghebreyesus' remarks also reflect a new perspective on the role of private sector firms: in a global consumer society, economic actors are increasingly considered as health actors. If corporations promote and sell products that are

potentially harmful to health, the argument that consumers can decide for themselves does not resonate to the same extent.

Certainly, public health analysis has always looked at the power of corporations – especially in the field of tobacco, but only more recently has it started to include other sectors in a more systematic way by discussing “unhealthy commodities”²³, “industrial epidemics”²⁴, “profit-driven epidemics”²⁵, and corporate practices harmful to health.²⁶ This type of

analysis is concerned with “risks *inherent* from consumption of, or exposure to, commercial products – such as ultra-processed foods and beverages, tobacco and alcohol” [emphasis added by the authors].²⁷

Proposed as a concept to unify such perspectives, the banner of the ‘commercial determinants of health (CDoH)’ suggests the systematic analysis of drivers and channels by which corporations have an impact on the NCD

Figure 2: Cross-border M&A purchases in food, beverages, and tobacco

Source: World Investment Report 2018, Table 10 (Annex); calculations and illustrations by CPC Analytics.

Notes for right panel: The average M&A value in the sectors food, beverages, and tobacco between 2000–2009 is calculated by excluding the two crisis years. If included the average would be even lower.

pandemic. CDoH are defined as “strategies and approaches used by the private sector to promote products and choices that are detrimental to health”²⁴. This single concept comprises a number of others: at the micro level, these include consumer and health behaviour, individualisation, and choice; at the macro level, the global risk society, the global consumer society, and the political economy of globalisation.

One of the key drivers identified within the CDoH is the internationalisation of trade, capital and information flows. Higher degrees of trade openness, as well as global media access, allow companies to reach more customers with their marketing messages and their products. Higher trade volumes can also come with a higher dependence on foreign products, changing food diets, and potentially less influence of national policies to shape food supply chains. The dynamic behind this driver is astonishing: in 2016 goods and services worth US\$ 22 trillion were imported around the world – up from US\$ 7.9 trillion in 2000 and an equivalent of 28% of global gross domestic product (GDP). While the effects of trade on health have been subject to much research, there is yet little understanding of the impact of global capital flows on health and the risk factors driving NCDs.

The relevance of global investors

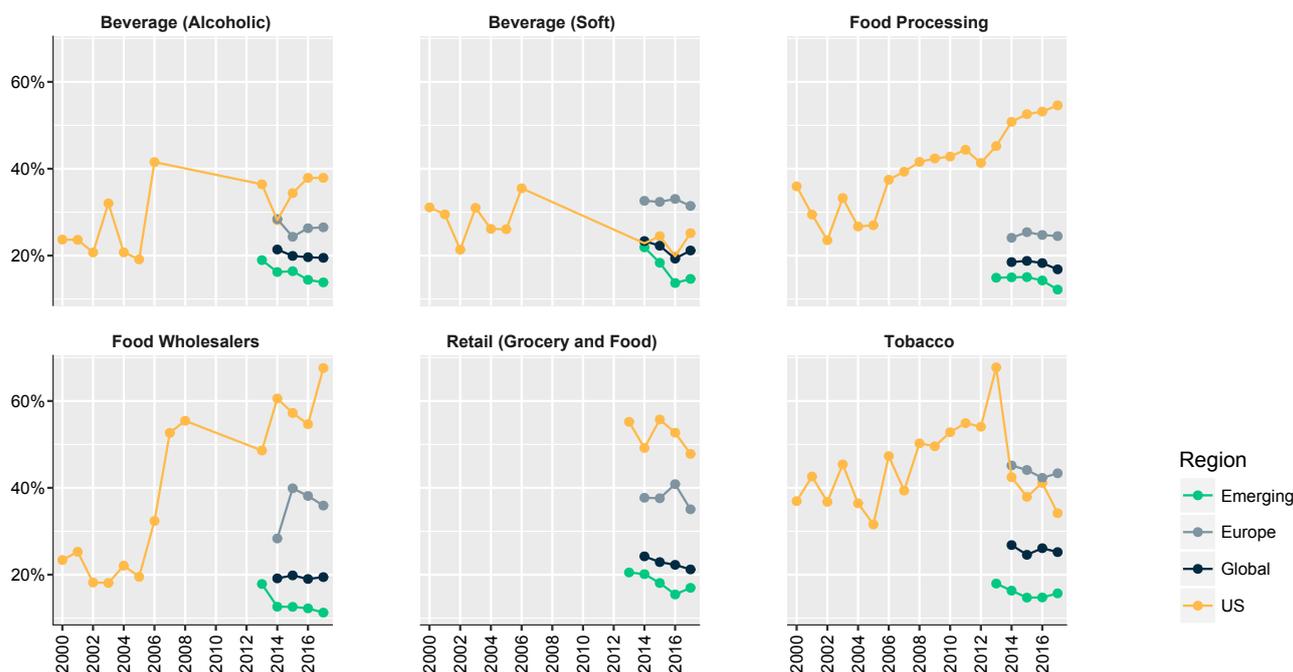
There are various ways in which global capital flows can affect industries relevant for NCD risk factors. While those might differ from industry to industry, the following four general aspects give an idea of the terrain:

- (1) **Ownership:** CEOs and other corporate officers are responsible for their business strategies and the impact their business activity has on stakeholders. In the end, however, the true accountability lies with the owners of that business, i.e., the shareholders.
- (2) **Industry specifics:** Large food, beverage, and tobacco firms are among the most internationalised businesses in the entire economy. While national regulation and cultural characteristics play a vital role for the final consumption basket, global sourcing strategies imply a heavy reliance on inputs from various countries and sectors. Economies of scale are an important factor in the profitability of food, wholesale, retail, and beverage firms, which usually have low margins per product sold. The setup of a global supply and production chain is a capital-intensive endeavour. Ideally, one product can be sold across countries without much customisation.

- (3) **Concentration:** Global investment activity can lead to or accelerate market concentration in countries or entire economic regions. International investors that actively manage their investments (such as private equity firms) have a great incentive to utilise synergies between their investments across sectors and countries. National competitors might see themselves confronted by multinational enterprises backed by international capital.
- (4) **Leverage:** Addressing the source of funding of firms – be it through equity (e.g. the selling of stocks) or through debt (e.g. loans of banks) – represents a potentially powerful lever to alter industry-wide business practices and strategies. It is this angle that triggered large divestment campaigns over the past 40 years in tobacco.²⁵

Given the list above, there is immense ground work to be done among public health experts. Too little is known about the scale at which global capital plays a role within the food, beverage, and tobacco industries in different countries. Moreover, it is not just the ‘how much’ which plays a role. For any political strategy it is relevant to ask about the actors. Pension funds, investment firms, insurers, and banks

Figure 3: How much of the stock is held by institutional investors? Share in all 'shares outstanding' by sector and region, 2000–17



Notes: Emerging refers to Argentina, Botswana, Bulgaria, Cameroon, China, Croatia, Hong Kong, India, Kenya, Malaysia, Namibia, Netherlands Antilles, Peru, Russia, South Africa, South Korea, Sri Lanka, Trinidad & Tobago, Vietnam, Zambia, Chile, Israel, Mauritius, Philippines, Taiwan, Bangladesh, Brazil, Colombia, Egypt, Indonesia, Ivory Coast, Jamaica, Jordan, Lithuania, Mexico, Morocco, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Serbia, Singapore, Slovenia, Thailand, Tunisia, Zimbabwe, Tanzania. Europe refers to Austria, Denmark, France, Germany, Hungary, Ireland, Italy, Spain, Sweden, United Kingdom, Czech Republic, Poland, Portugal, Turkey, Belgium, Cyprus, Finland, Greece, Netherlands, Norway, Switzerland, Malta.

Source: Damodaran Online, based on Bloomberg, Morningstar, Capital IQ and Compustat. Calculations and illustration CPC Analytics.

are active around the world shifting the savings of billions of people from portfolio to portfolio in order to maximise profits for the firm and savers. There will be differences across sectors. Some sectors and their key players might not be publicly traded, but rather owned by entrepreneurs themselves or wealthy individuals.

Finally, it is important to ask how to leverage owners' power over their firms for the fight against NCDs. The platform on which public health advocates speak to sovereign wealth funds will likely have to be different from private equity funds. And the strategy for the tobacco industry cannot be the same as with global food conglomerates.

The volume of global capital flows into food, beverage, and tobacco

In 2017, global foreign direct investments (FDI) into countries amounted to US\$ 1.4 trillion. Cross-border mergers and acquisitions (M&As) are an important part of FDIs in this context, because such

transactions represent a “lasting interest”^{*} in foreign enterprises (e.g. voting power or market access). M&As also imply that investors purchase existing business assets in the country (be it to incorporate or replace that business infrastructure). In 2017, such cross-border M&A purchases were estimated to have reached more than US\$ 690 billion.

The 2017 transaction value of cross-border M&As in food, beverage, and tobacco amounted to more than US\$ 75 billion (see Figure 2, left panel) which represented approximately 11% of the total value of cross-border M&As. What is striking is not only the dramatic spike in M&A-volumes in the past two years, but also the increased share of M&As in those sectors since 2010 (see Figure 2, right

panel). Clearly, over the past seven years, international capital has become a more important factor in these sectors.

The role of institutional investors

Institutional investors such as pension funds, insurance firms, and investment funds are key actors behind transnational capital flows. In OECD-countries alone institutional investors have assets worth US\$ 92 trillion under management (US\$ 5 trillion in emerging economies). Among them are gigantic OECD-region-based pension funds which have around US\$ 28 trillion worth of assets under management – an equivalent of 56% of the group's GDP.¹⁰

A possible way to get an idea of the power of institutional investors in relevant sectors is to look at their ownership in publicly traded corporations around the world. Companies are obliged to report not only their capital stock, but also how much of the shares are held by institutional investors, company officers, and insiders. This information is used in Figure 3,

* “The “lasting interest” is evidenced when the direct investor owns at least 10% of the voting power of the direct investment enterprise. Direct investment may also allow the direct investor to gain access to the economy of the direct investment enterprise which it might otherwise be unable to do.” See OECD: <https://www.oecd.org/daf/inv/FDI-statistics-explanatory-notes.pdf>

which plots the share of the stocks of corporations in the sector that is held by institutional investors for different regional averages.

The first relevant finding is that overall levels of institutional investor shares in firms of the selected sectors vary tremendously across sectors and regions. But in the US and Europe, the share of institutional investors is at least 20% in all selected sectors. A key reason behind the variation is the difference in how investments are intermediated and which investment products are preferred by institutional investors. Institutional investors generally play a much more important role for equity markets in the US than in Europe or most emerging economies[†].

In US, the growing share of institutional investors in food processing and food wholesalers is not only quite dynamic, but also robust. Before the end of the 2000s the average shares held by such investors in both sectors hovered between 20–30%. This changed dramatically in the years that followed: in 2016, more than 65% of the publicly traded food wholesalers and about 55% of the food processing industry were owned by mutual funds, pension funds and other institutional investors. A similarly strong effect is not visible, however, for the other regions – nor on the global scale.

Lastly, ownership of beverage firms – both alcoholic and soft drinks – lies less with institutional investors and has remained quite unchanged. An exception is the increase in ‘institutional ownership’ among American alcoholic beverage firms which has reached about 40%. This last finding is interesting given the immense concentration in the crafts beer market in the US over the few past years – driven by the big market incumbents who reacted to the wave of new product innovations in the market.¹¹

† Institutional holdings in the total market (excluding the financial industry) was almost 50% in the US whereas in emerging economies and Europe the figures were about 13% and 30% respectively. The global average was around 22%.

Conclusions

Given Dr Ghebreyesus’ supportive statements in Montevideo it was surprising that the Draft Political Declaration for the upcoming UN High-Level Meeting on NCDs has fallen short on bold suggestions on how to prevent and control NCDs.

Given the evidence on the size of the involvement of international investors in the food, beverage, and tobacco industries, the public health community needs to inquire into the impact of the globalisation of capital in those areas. More research is needed to understand ownership structures, strategies for market expansion, and the extent to which profits are maximised at the cost of health.

Institutional investors will play a crucial role in that regard. This is why the WHO Independent Commission on NCDs proposed to initiate a ‘health forum for investors’ at the WHO. Such a forum would aim to encourage shifts towards investments in healthier portfolios that “include attention to agriculture and food production, the introduction of health and nutrition impact measures of investments, and the role of public investments to shape private investments.”¹²

References

- 1 WHO. Dr Tedros Adhanom Ghebreyesus remarks at the opening ceremony of WHO Global Conference on Noncommunicable Diseases, Montevideo, 18 October 2017. Available at: <http://www.who.int/dg/speeches/2017/opening-ncds-conference/en/>
- 2 GBD 2015 Obesity Collaborators. Health Effects of Overweight and Obesity in 195 Countries over 25 Years. *New England Journal of Medicine* 2017;377(1):13–27. Available at: <https://doi.org/10.1056/NEJMoa1614362>
- 3 Stuckler D, McKee M, Ebrahim S, Basu S. Manufacturing epidemics: the role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol, and tobacco. *PLoS Med* 2012;9: e1001235.
- 4 Moodie R. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *The Lancet* 2013;381:670–79.
- 5 Kickbusch I. Addressing the commercial determinants is critical to emerging economies. *Ciência & Saúde Coletiva* 2015;20(4). Available at: <http://dx.doi.org/10.1590/1413-81232015204.19962014>
- 6 Freudenberg, N, Galea, S. The impact of corporate practices on health: implications for health policy. *Journal of Public Health Policy* 2008;29:86–104.
- 7 Buse K, Tanaka S, Hawkes S. Healthy people and healthy profits? Elaborating a conceptual framework for governing the commercial determinants of non-communicable diseases and identifying options for reducing risk exposure. *Globalization and Health* 2017;13:34. Available at: <https://doi.org/10.1186/s12992-017-0255-3>
- 8 Kickbusch I, Allen L, Franz C. The commercial determinants of health. *The Lancet Global Health*, 2016; 4(12), e895–6. Available at: [https://doi.org/10.1016/S2214-109X\(16\)30217-0](https://doi.org/10.1016/S2214-109X(16)30217-0)
- 9 Deutsche Asset Management. *Tobacco’s Investment Returns and Societal Costs*. London: Deutsche Alternative Asset Management Investment Limited, 2017. Available at: <https://dws.com/globalassets/deutsche-awm-global/datasources-for-new-cio-landing-page/esg/esg-report-issue-2-tobacco.pdf>
- 10 OECD. *Pension Funds in Figures 2018*. Paris: OECD Publishing.
- 11 Howard PH. Craftwashing in the US. Beer Industry. *Beverages*, 2018;4(1):1–13. Available at: <https://doi.org/10.3390/beverages4010001>
- 12 WHO. *Time to Deliver – Report of the WHO Independent High-Level Commission Noncommunicable Diseases*. Geneva: World Health Organization, 2018. Available at: <http://apps.who.int/iris/bitstream/handle/10665/272710/9789241514163-eng.pdf?ua=1>

HOW DO YOU USE EVIDENCE IN POLICY THE SMART WAY?

By: Isabella Röhring, Sabine Weißenhofer and Brigitte Piso

Summary: Research on the use of evidence in health policy, associated barriers and facilitators, implementation strategies and knowledge brokerage has advanced over the last two decades. Current findings show certain promising common patterns and factors. Despite the absence of a ‘one-size-fits-all’-conclusion, results provide a ‘toolbox’ of different strategies and methods that researchers, knowledge brokers and policymakers could select from and tailor to the setting and needs of the specific situation. Picking the right tools to aid evidence-informed decision-making on bold political choices will be challenging. Research at least supports the hope that these efforts will be rewarded.

Keywords: Evidence, Health Policy, Knowledge Transfer, Knowledge Brokerage

Introduction

All health policy researchers who use evidence-based methods, for instance to conduct, systematic reviews or health technology assessments, are used to conclusions like *“most of the trials had a high risk of bias..., there is insufficient high-quality evidence..., results should be interpreted with caution ... or: no conclusions were possible (at all).”*

They highlight the need for future research and trials that should close the evidence gap. On the other hand, they (at least sometimes) identify different kinds of interventions –ranging from pharmaceuticals and medical devices to complex health programmes – that have been proven ‘to work’ and ask themselves, why these demonstrably effective measures have not or only partly been adopted by health policy.

At the same time, health policymakers are confronted with day to day decision-

making. Decisions have to be made regardless of whether high quality evidence is available (or not). Time constraints may hinder the commissioning (or even reading) of sound reports. In the long run, this will cause both – researchers as well as policymakers – to be dissatisfied and raises an important question: how can evidence translation work? Depending on your occupational background you will have ideas on how to solve these issues. As a start, let’s see what research tells us so far. Towards this end, this article aims to identify and aggregate evidence on ‘How do you use research evidence in health policy the smart way?’

Research on evidence translation

The use of evidence in health policy has attracted increasing research interest over the past two decades. For example, the number of (systematic) reviews in PubMed including ‘evidence’, ‘health’ and ‘policy’

> #EHFG2018 – Lunch Workshop 1:
Policy in Evidence – re-examining
the connection

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Box 1: Proposed definition of research impact

“Research impact is a direct or indirect contribution of research processes or outputs that have informed (or resulted in) the development of new (mental) health policy/practices, or revisions of existing (mental) health policy/practices, at various levels of governance (international, national, state, local, organisational, health unit)”.

Source: Alla, et al.¹

in their title has increased from 3 in 1996 to 45 in 2014. Still, these numbers are quite ‘manageable’ compared to other health research fields.

For this article, we conducted a literature search for systematic reviews (via Science Direct and PubMed) and a hand search (via Google and Google Scholar). We only included systematic reviews from industrialised countries not limited to a specific time period and excluded reviews covering policy fields other than health; target populations other than health policymakers; and, in general, reviews covering the use of research evidence for specific diseases and conditions. Overall, we were able to identify eight systematic reviews that met our inclusion criteria.

These eight systematic reviews cover topics ranging from barriers and facilitators in the use of research evidence, implementation strategies and their effectiveness, to the field of knowledge brokerage. Overall, the included reviews were well designed and methods well described (e.g. search strategies, in-/exclusion criteria, data collection and analysis).¹⁻⁸

The definitions

Before exploring different factors in the use of research evidence in health policy, it is essential to achieve a common understanding of the terms used. Alla et al.

Box 2: Frequently mentioned barriers and facilitators to the use of research evidence

Barriers

- absence of personal contact and collaboration^{4 6}
- lack of availability, access and relevance of/to research^{4 6 7}
- mutual mistrust and skills^{4 7}
- costs^{2 4 6}
- low quality of research^{4 6}
- competing/conflicting interests^{4 7}
- political instability^{4 6 7}

Source: Alla, et al.¹

Facilitators

- personal contact and collaboration^{4 6 7}
- availability, access and relevance of/to research^{3 4 6 7}
- summary with clear recommendations or key messages^{4 7}
- high quality of research^{4 6}
- research supporting and targeting health policymakers’ needs^{2 4 7}

systematically examined definitions of the policy impact of public health research and identified four main types:¹

- research impact defined as a *demonstrable contribution to society and economy*
- research impact defined as an *effect, change or benefit to society and economy*
- *bibliometric* definitions (e.g. refers to a reference or citation)
- *use-based* definitions (instrumental use: direct impact of a specific piece of research; conceptual use: indirect way of influencing attitudes and decisions)

Overall, there is no common definition of research impact on health policymaking. Therefore, the measurement of impact remains challenging. There is a need for a uniform definition (**see Box 1**), which might be challenged by others.

Use of evidence: barriers and facilitators

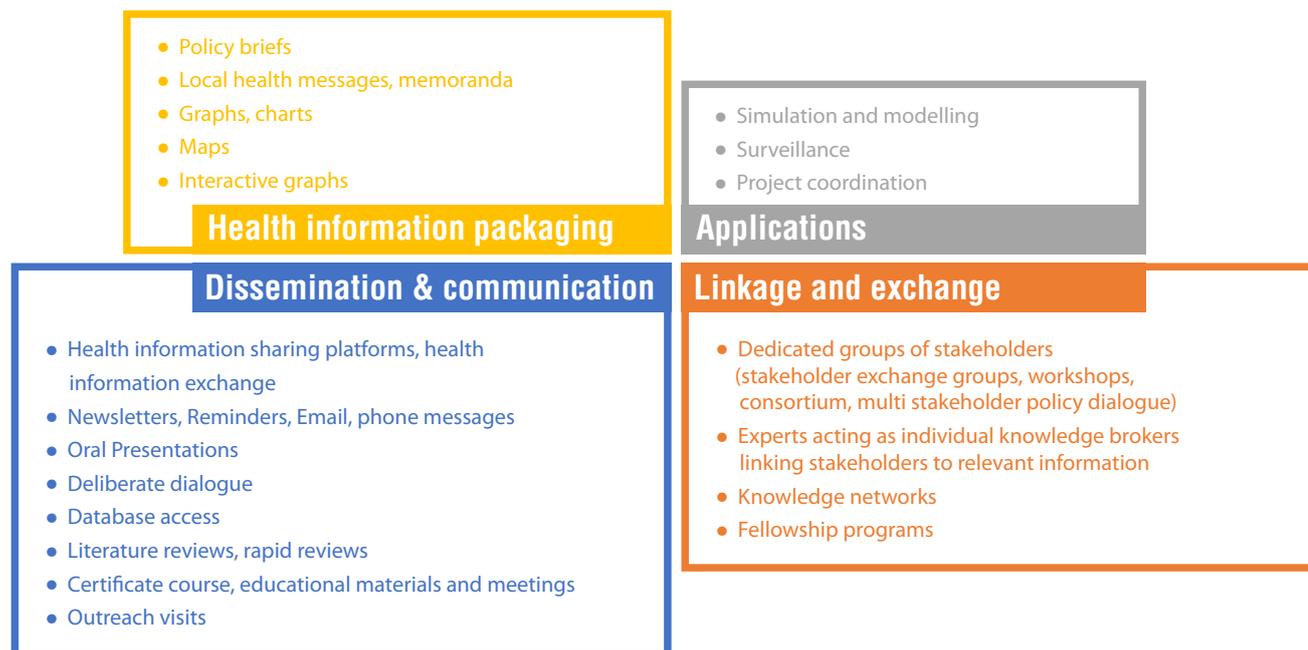
Five of the eight systematic reviews covered barriers and facilitators to the use of research evidence by health policymakers in different ways. **Box 2** provides an overview of frequently mentioned factors.

Within the political environment, factors such as split responsibilities, high employee turnover, institutional path-dependency, interest group pressure, as well as centralised governments, seemed to limit the use of research evidence.^{4 5} Moreover, research evidence was more likely to be used for smaller, more specific decisions (e.g. how to do something, the content of an intervention) than for general decision-making (i.e. whether to do it).⁵

“there is no ‘one-size-fits-all’-conclusion

To facilitate the consideration of evidence in policymaking, researchers can enforce two-way communication with policymakers, display research results in a clear and concise manner and ensure timely availability of relevant and high-quality research tailored to the needs of health policymakers.⁹ In general, organisations with a specific mandate who provide research evidence, knowledge brokerage and personal relationships appear to improve the use of research evidence.⁹ Depending on the context, some further aspects may facilitate or hinder the use of research evidence

Figure 1: Tools, mechanisms and strategies to promote the use of research evidence in policymaking



Source: Based on Blessing, et al. (Ref 2) and Refs. [2] [3]

(e.g. normative positions of policymakers, political priorities or the quality of research evidence). [2] [3] Overall, barriers and facilitators were assessed only with regard to their frequency of occurrence and not with regard to their importance. [5]

The ‘research on research-use’ concludes with well-known limitations and caveats (comparable to many other health research fields):

- Interventions might have non-intended side-effects [2] [3] (e.g. while increased two-way personal communication is vital and might improve the appropriateness of research evidence, it might also promote selective use of research evidence [2]).
- general conclusions are difficult to draw because primary studies differ substantially and hinder the synthesis of results (e.g. different wording, settings, key players or participants; missing empirical data [2] [3] [7]).
- Current empirical evidence is insufficient to draw common conclusions. [5]

Implementation strategies and knowledge brokerage

Apart from the basic concept of ‘using’ research evidence in health policy, new methods of knowledge translation between researchers and health policymakers have evolved in recent years. Half of the included systematic reviews covered implementation strategies, mechanisms and tools to enhance the inclusion of research evidence in policy processes as well as knowledge brokerage. [2] Moreover, the effectiveness of research implementation strategies or knowledge brokerage for promoting evidence-informed policy decisions and components of effective strategies received further attention. [3] [8]

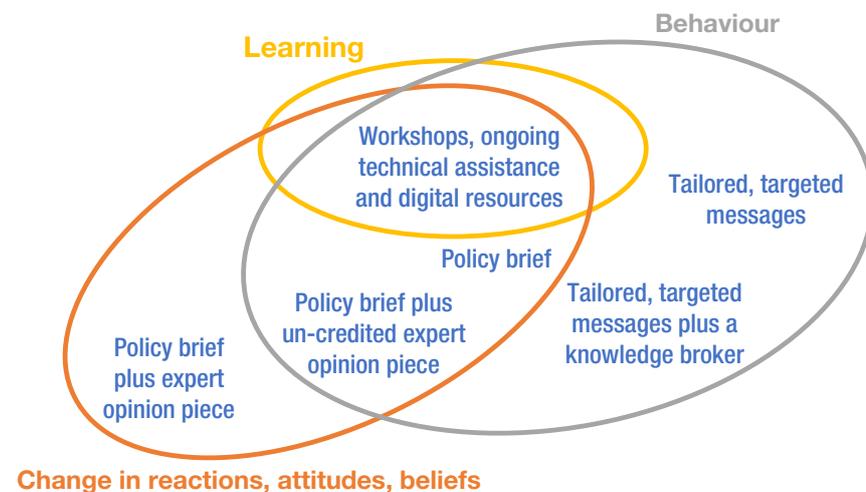
Strategies to improve the use of research evidence in health policy appear to be beneficial because decision-support would otherwise mainly be based on personal opinion or perception. [3] [4] These strategies have to consider the requirements and needs of all stakeholder groups (evidence producers, knowledge brokers and evidence users). [2]

Among the **requirements and needs** identified for health decision-makers

were, for example: a clear presentation of research findings and statements on effectiveness, as well as the inclusion of recommendations and dissemination of research evidence. [2] Information processing and collaboration with organisations that have been authorised (and have a proven expertise) was mentioned to be an important factor for improving the uptake of evidence research by policymakers. [3] Authors also pointed out that the requirements and needs of health policymakers might differ from the requirements of good scientific practice, e.g., selective use of evidence research. [4]

Based on the kind of information-use by policymakers, Blessing et al. grouped **mechanisms, tools and strategies** for the transfer of research evidence into policy processes into four broad categories: health information packaging; applications; dissemination and communication; and linkage and exchange (see Figure 1). [2]

These tools, mechanisms and strategies can be applied as single measures or in various combinations to make ‘multifaceted strategies’. [2] [3] Research findings on the effectiveness of single versus multi-component strategies appeared equivocal: [2] combining

Figure 2: Effectiveness of different implementation strategies at different levels

Source: Based on Ref ¹

tools, mechanisms and strategies may support the uptake of evidence into policymaking,^{2 3} but does not necessarily do so. It may even reduce the uptake (e.g. the combination of targeted messaging and knowledge brokering was less effective than targeted information alone).⁴

Looking at the effects of implementation strategies, they might develop their potential on three levels (see Figure 2):⁵ Level 1 – a change in reactions, attitudes or beliefs; Level 2 – learning; and Level 3 – behaviour. Research on the effectiveness of different implementation strategies is still emerging but preliminary research results show that most are effective on Levels 1 and 3.⁶

Finally, taking a closer look at the effects of knowledge brokerage activities, changes in knowledge, skills and practices of policymakers were reported in one systematic review. Knowledge brokers usually act as knowledge managers, linkage agents and capacity builders. Still, a number of questions remain unanswered and make it difficult to draw final conclusions on the impact knowledge brokering has (e.g. regarding the overlapping or not identical roles and activities of knowledge brokers, the influence of other factors that accompanied knowledge brokerage activities).⁷

Are there conclusions for a smart way?

Robust universal conclusions on the use of research evidence in health policy processes are hard to draw due to the context-specific nature and many different factors that have an influence. Nevertheless, research findings show certain common patterns and factors. Different stakeholder groups, i.e., evidence producers, knowledge brokers and evidence users both engage in similar activities: they build trust-based relationships, promote collaboration, understand the different needs of (other) stakeholder groups and foster knowledge exchange with added value in both directions.

According to recent research findings, there is no ‘one-size-fits-all’-conclusion. Current research provides a ‘toolbox’ of strategies and methods that researchers, knowledge brokers and policymakers can select from and tailor to the setting and needs of the specific situation. Picking the right tools to aid evidence-informed decision-making on bold political choices will be challenging. Research, at least, supports the hope that these efforts will be rewarded.

References

- ¹ Alla K, Hall WD, Whiteford HA, Head B, Meurk CS. How do we define the policy impact of public health research? A systematic review. *Health Research Policy Systems* 2017; 15(1):84.
- ² Blessing V, Davé A, Varnai P. Evidence on mechanisms and tools for use of health information for decision-making. *Health Evidence Network Synthesis Report* 54. WHO: 2017. Available at: <http://www.euro.who.int/en/publications/abstracts/evidence-on-mechanisms-and-tools-for-use-of-health-information-for-decision-making-2017>
- ³ Bornbaum CC, Kornas K, Peirson L, Rosella LC. Exploring the function and effectiveness of knowledge brokers as facilitators of knowledge translation in health-related settings: a systematic review and thematic analysis. *Implement Science* 2015; 10:162.
- ⁴ Innvar S, Vist G, Trommwald M, Oxman A. Health policy-makers’ perceptions of their use of evidence: a systematic review. *Journal of Health Services Research & Policy* 2002; 7(4):239–44.
- ⁵ Liverani M, Hawkins B, Parkhurst JO. Political and institutional influences on the use of evidence in public health policy. A systematic review. *PLoS One* 2013; 8(10):e77404.
- ⁶ Oliver K, Innvar S, Lorenc T, Woodman J, Thomas J. A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC Health Services Research* 2014; 14(2).
- ⁷ Orton L, Lloyd-Williams F, Taylor-Robinson D, O’Flaherty M, Capewell S. The use of research evidence in public health decision making processes: systematic review. *PLoS One* 2011; 6(7):e21704.
- ⁸ Sarkies MN, Bowles KA, Skinner EH, Haas R, Lane H, Haines TP. The effectiveness of research implementation strategies for promoting evidence-informed policy and management decisions in healthcare: a systematic review. *Implement Science* 2017; 12(1):132.

HOW CAN HEALTH SYSTEMS ADVANCE ECONOMIC AND FISCAL OBJECTIVES?

By: Jonathan Cylus, Govin Permanand and Peter C. Smith

Summary: The health system is one of the most important contributors to population health that lies within the direct control of policymakers. Yet when seeking additional funding for their health systems policymakers are often met with scepticism by those in charge of the finances. In this article we explore the evidence that health systems can advance economic and fiscal objectives, including good stewardship of public resources, macroeconomic growth, societal well-being and fiscal sustainability. We argue that a better understanding of the linkages between health systems and economic and fiscal outcomes may be useful when advocating for adequate, stable funding for health systems.

Keywords: Health Systems, Health Financing, Efficiency, Well-being, Sustainability

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Talking so you're heard – investment
in health

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Facing the sceptics

The 2008 Tallinn Charter on Health Systems for Health and Wealth states that: *Beyond its intrinsic value, improved health contributes to social well-being through its impact on economic development, competitiveness and productivity. High-performing health systems contribute to economic development and health.*

This assertion should not be controversial. Scholars such as Nobel Laureate Robert Fogel have established that improvements in health over time have made a major contribution to long-term productivity gains.¹ He argued that reduction of malnutrition, especially at younger ages, was the principal driver of this result. From a policy perspective, a key research question is therefore whether these findings can be extrapolated to modern

economies in which health services have made an increasingly important contribution to health improvements.

Yet health policymakers who seek to make the case for increased financing for their health systems are often met with scepticism within governments. This scepticism may be explained in part by a belief amongst some finance policymakers that health systems do not support (or may even undermine) key economic and fiscal objectives, as summarised in **Box 1**. The 'Health Systems, Health, Wealth and Societal Well-being' model developed for the 2008 Tallinn conference described the pathways through which the health system and national prosperity are linked, and summarised counter-arguments to scepticism about the economic rationale for health spending.²

Box 1: Why is there resistance in some countries to spending more on health systems?

There are wide variations in health system spending between countries with apparently similar circumstances, often due to a belief amongst some economists and other financial advisors that health spending is to a large extent an unproductive 'drain' on the economy. According to this view, the health sector consumes an increasingly high proportion of national income with few measurable returns compared to investment in other sectors. Specific concerns might include the following:

- 1) Because of widespread market failures, health systems consume more of the nation's income than is socially optimal. In particular, systems that provide generous health care coverage encourage excess expenditure because patients have little financial incentive to moderate their demands on the health system.
- 2) At a certain point, extra spending on health systems does not contribute markedly towards improved health. Many of the most important determinants of health lie outside the health system, so improvements in health might be better achieved through other programmes.
- 3) All health systems have numerous examples of misallocated resources and waste, and in some cases elements of corruption. It is argued that such inefficiency and misuse of finances should be eliminated, or that greater proof of efficient spending is provided, before considering increased spending.
- 4) The scope for productivity growth in health services is low relative to other sectors of the economy. While wage growth in the health sector keeps pace with other sectors, its level of output per worker does not. Over time it thus has a natural tendency to attract a higher proportion of national expenditure at the expense of other potentially more productive industries.
- 5) Much of the spending on health services contributes to longer lives that are not necessarily spent in good health. This creates a societal burden in the form of not only health services, but also long-term care, pensions, and other social programmes, sometimes for people who have minimal quality of life.

In this article we argue that the economic and fiscal objectives of finance policymakers are in many respects actively promoted by health systems, or at least could be, if adequate, stable resources were made available and health policy were developed with broader economic objectives in mind. Our policy brief, prepared for the recent WHO Tallinn Conference*, seeks to support health policymakers by framing available evidence and structuring arguments in a way that is likely to resonate with finance policymakers.² The intention is to help health policymakers secure a 'fair hearing' in governmental debates about public spending.

Our review of the mission statements and policies of finance and economic ministries of finance in the WHO European Region suggests four broad objectives that are relevant to health ministries: (1) the **stewardship of government funds**; (2) pursuit of **macroeconomic growth**; (3) promoting **societal well-being**; and (4) assuring **fiscal sustainability**. Using this as a basis, we summarise evidence on the extent to which health systems can promote these objectives, and the challenges that might arise when seeking to persuade economic policymakers of the health system contribution.

Is spending on health systems a good use of government resources?

The contribution to health outcomes

The prime objective of health systems is, naturally, to improve population health. There is a strong and growing evidence base that, especially where spending levels are currently low, additional health system spending does contribute to better health outcomes.³ There is also evidence that health promoting interventions that carefully target proximal behavioural risk factors such as tobacco, alcohol, unhealthy diet and physical inactivity also have important effects on health outcomes.⁴ Such public health interventions, including tax policy, should be included in any consideration of health system effectiveness. However, in spite of well-established research on social inequalities and health, policy interventions that target more distal socio-economic factors, such as education and income, often show less convincing evidence of positive health effects.⁵ In short, the best focus for policy action to improve health and health inequalities appears to be health systems.

Tackling inefficiencies

However, inefficiencies exist in most health systems, as they also do in all other sectors, with estimates of between 20–40% of resources being wasted according to the *World Health Report 2010*. More recently, in OECD countries, when broken down into clinical care (e.g., unneeded hospital procedures), operational issues (e.g., reliance on branded rather than generic medicines or unnecessary hospital referral) and governance issues (e.g., administration), it was estimated that a fifth of all health care spending is ineffective.⁶ This raises the question of whether additional health spending is likely to be put to good use. One way to demonstrate that money is being well spent is to monitor health system efficiency. While there is no single set of indicators that will give the complete picture of health system efficiency in a country, there exist many diagnostic indicators that can shed light on the efficiency of discrete parts of a health system and guide remedial action.⁷ Health policymakers have indeed made increasing use of efficiency metrics.⁸ However, it is important to note that it is possible to

* The WHO high-level meeting, *Health Systems for Prosperity and Solidarity: leaving no one behind*, took place in Tallinn, Estonia 13–14 June 2018.

have highly efficient elements within an inefficient health system – for example, the hospital sector may exhibit low unit costs, but be treating many patients who should be treated at much lower cost in a primary care setting. Therefore, whilst no single metric can give a complete picture of a health system's efficiency, careful analysis can use a range of such metrics to diagnose the main sources of inefficiency.

Achieving value for money

Beyond efficiency measurement, health systems can demonstrate their commitment to responsible use of resources. For example, securing an efficient allocation of resources within the health system has been an important focus of health technology assessment (HTA), particularly in the form of cost-effectiveness analysis (CEA).^[4] In their simplest form, these methods seek to identify whether a specific intervention should be funded when seeking maximum health gain for a limited publicly funded health services budget. The principles of CEA have secured widespread acceptance amongst policymakers, and its use can be a signal that health systems are becoming serious about making hard choices, rooting out inefficient practices and being good stewards of public funds.^[5]

There are numerous other ways of signalling to ministries of finance that health systems are serious about achieving good value for money. These may include identifying and reducing unjustified treatment variations, more flexible use of human resources (such as task-shifting), better procurement policies (such as negotiating lower medicines prices), or reorganisation of hospitals, just to name a few.

Are health systems an important driver of macroeconomic growth?

Quantifying the total contribution of the health system to the broader macroeconomy will always be challenging due to the many direct and indirect ways (often interlinked) in which the two might interact, including through the multiple macroeconomic consequences arising over time from increased life expectancy and changes in incentives to work, accumulate savings, etc.^[6] Therefore, rather than

trying to estimate the full contribution of the health system to national prosperity by attempting to model all the dynamic feedback effects, it makes sense to consider particular ways in which the health system creates direct and indirect economic benefits at the micro level, where the evidence is more clear-cut.

Positive benefits for a country's workforce

Health systems can affect the economy indirectly (via better health) through effects on the workforce, which materialise through multiple pathways throughout the life course. Numerous studies have shown that individuals in better health enjoy improved opportunities for economic participation (including through later retirement) and earnings compared to their less healthy counterparts.^[7] Research looking at the role of chronic diseases and associated proximal behavioural risk factors finds strong evidence that obesity and smoking, in particular, have adverse effects on employment, wages and labour productivity. While some policies to prevent these risk factors lie outside the immediate control of health care service providers, there remains a key role for the health system in its preventative function, and in limiting the progression and impact of chronic disease once established. Where health systems could perhaps be doing more is by addressing the major causes of disability amongst working age people, such as mental illness and musculoskeletal disorders.

Spinoff benefits

The health system can also further economic growth through its influence on the health of those who do not participate in the formal labour market, such as children, older people or those who depend on caregivers. For example, children in ill-health may be less able to attend school regularly or to develop the cognitive skills needed for many jobs, and older adults in ill-health may be unwilling or unable to invest in their human capital if they believe that their productive life expectancy is likely to be cut short by illness or death, making the returns not worthwhile. Health systems can also play an important role in 'freeing up' working-age caregivers whose formal

employment opportunities are limited due to the need to look after those requiring care, particularly in countries with large informal care sectors.^[8] Furthermore, many of those whose health status is improved, even if they do not participate in the formal labour market, will be able to make greater informal economic contributions, in the form of, for example, voluntary work and informal care.

Do health systems support societal well-being?

Improving health

Notwithstanding their prime focus on the economy, an increasing number of finance ministries include more general objectives of societal wellbeing in their missions. Health systems support societal well-being through a number of direct and indirect channels. The most tangible way is by improving health, a fundamental element of all concepts of well-being. Securing a long and healthy life makes an essential contribution to well-being in itself, and is also a prerequisite for fully realising an individual's potential, and there is wide recognition that good health makes a crucial contribution to human welfare. This is reflected in countless commentaries and instruments such as the Human Development Index, which rests on three pillars of health, education and wealth. Health is both valued in itself, enabling people to enjoy a long and rewarding life, but also as a prerequisite for maximising intellectual development and employment opportunities.

Enhancing social protection

Most publicly funded health systems also make a fundamental contribution to wellbeing by improving social protection and reducing impoverishment associated with ill-health. This 'insurance benefit' afforded by universal health coverage (UHC) takes at least three forms: *ex ante* reassurance that future adverse health shocks will not be financially ruinous for an individual's household; *ex post* avoidance of catastrophic expenditure when a health shock does occur; and the contribution to solidarity arising from the knowledge that others are similarly protected. The level of protection offered appears to be a major determinant of

the population's satisfaction with their health systems.¹⁴ This important benefit of the health system was for a long time not properly recognised, and yet it can now be seen as a major reason for the widespread push towards universal health coverage. Note also that most systems of UHC implicitly transfer resources from the healthy and the rich to the sick and the poor, in line with many people's concept of fairness and equity.

Quality of life

The narrow metrics of prosperity traditionally used in many economic debates, such as per capita GDP are profoundly inadequate as a measure of social well-being. They ignore improvements in well-being not captured by measures of income, most notably the increase in quality of life arising from health improvement. They positively rate economic activities which may be detrimental to health and well-being, such as from heavy industry, notwithstanding the environmental effects. They also ignore the contributions to the economy made outside of paid employment, for example in the form of child care and caring for family members in ill-health. The value placed on such factors should in principle be included in any comprehensive measure of national prosperity. Examples of how this might be addressed include the Sarkozy Commission's 2009 report, which explicitly states the need to shift emphasis from measuring economic production to measuring people's well-being,¹⁵ and the OECD's ongoing 'Better Life Initiative' which includes "measuring well-being and progress".

How does the health system influence fiscal sustainability?

Sustainability addresses whether tax revenues will be sufficient to maintain the proposed level of public expenditure in the long-term. But sustainability on its own is not a meaningful objective without a statement of what is to be sustained. Indeed, taking a very rigid perspective, spending absolutely nothing can be considered perfectly sustainable.

In many respects, sustainability transcends the otherwise separate objectives described in this article. For example, ministries of finance may seek to reduce taxes in order to promote economic growth. They may therefore take the viewpoint that reducing public spending on health – and thus reducing their financial obligations – is an important prerequisite in the short-term with a view to promoting longer-term sustainability.

Keeping the above in mind, population ageing is often the source of concerns about fiscal sustainability in many countries, related to expenditure not only on health services but also on other publicly funded programmes. Health policymakers can convincingly argue that a healthy older population is likely to be less costly for publicly funded health programmes than one that is in poor health for a number of reasons, including lower health and social care costs, an ability to remain in paid work (and continue to contribute greater tax revenues) for longer, deferred pensions, fewer claims for disability benefit payments, among others. In general, the future health care costs of an ageing population have been found to be highly dependent on how healthy that population can remain in older age.¹⁶ A crucial issue for fiscal sustainability going forward may therefore be the success (or otherwise) with which health systems can compress the period of morbidity (especially multi-morbidity) experienced by older people. In short, if carefully targeted to address sustainability concerns, the health system could make a positive contribution to fiscal sustainability across a wide range of public programmes.

Conclusions

This article has sought to demonstrate that much of the scepticism about the virtues of health system spending is misplaced, or capable of being addressed through careful formulation of health policies. We conclude by summarising the most important issues relevant to a health ministry seeking to have a constructive dialogue with a finance ministry:

1. Acknowledge the concern about inefficiencies in the health system and put in place (a) measurement instruments to expose and target sources of inefficiency and (b) policies known to be effective in reducing inefficiency.
2. Underline the key role of health systems in improving health, especially through their potential to delay the onset of disease and promote improved health-related quality of life. Note especially the potential for targeting risk factors and diseases that affect (a) labour force participation and (b) levels of dependency.
3. Underline the key role of the health system in promoting social protection, solidarity and equity, brought about by universal health coverage. Emphasise the key contribution to social welfare of improved health and financial protection created by the health system.

There are currently some weaknesses in almost all health systems that should be addressed to reassure finance ministries that health system funding is well spent. For example, public health programmes have not always been designed, targeted and evaluated as well as they might be. Few countries have developed large scale programmes specifically to target morbidity compression or conditions that are frequently associated with leaving the labour force, including mental health and musculoskeletal conditions. And it will always be difficult to provide evidence relating to the contribution of the health system to the economy as a whole, especially if reliance is placed on GDP as a metric of success. However, we feel that organising arguments and policies around the four areas described above may create a useful basis for constructive dialogue.

References

- ¹⁴ Fogel RW. Chapter 9. New findings on secular trends in nutrition and mortality: Some implications for population theory. In MR Rosenzweig, O Stark (Eds.) *Handbook of Population and Family Economics* 1997;1:433–81.

- 2** Figueras J, McKee M (Eds). *Health systems, health, wealth and societal well-being. Assessing the case for investing in health systems*. Maidenhead: Open University Press, 2011. Available at: http://www.euro.who.int/__data/assets/pdf_file/0007/164383/e96159.pdf
- 3** Cylus J, Permanand G, Smith PC. Making the economic case for investing in health systems: What is the evidence that health systems advance economic and fiscal objectives?, *Policy Brief*, World Health Organization, 2018.
- 4** Moreno Serra R, Smith PC. Broader health coverage is good for the nation's health: evidence from country level panel data. *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 2015;178(1):101–24.
- 5** McDaid D. *Using economic evidence to help make the case for investing in health promotion and disease prevention*. *Policy Brief*, World Health Organization, 2018.
- 6** Kawachi I, Adler NE, Dow WH. Money, schooling, and health: Mechanisms and causal evidence. *Annals of the New York Academy of Sciences* 2010;1186:56–68.
- 7** OECD, *Tackling Wasteful Spending on Health*. Paris: OECD Publishing, 2017.
- 8** Cylus J, Papanicolas I, Smith PC. *How to make sense of health system efficiency comparisons?*, Policy Brief No. 27. Copenhagen: European Observatory on Health Systems and Policies, 2017. Available at: http://www.euro.who.int/__data/assets/pdf_file/0005/324283/policy-brief-27-eng.pdf
- 9** Cylus J, Papanicolas I, Smith PC (Eds). *Health system efficiency: how to make measurement matter for policy and management*. Copenhagen: European Observatory on Health Systems and Policies, 2016. Available at: http://www.euro.who.int/__data/assets/pdf_file/0004/324283/Health-System-Efficiency-How-make-measurement-matter-policy-management.pdf
- 10** Drummond M, Sculpher MJ, Claxton K, Stoddart G, Torrance GW (Eds) *Methods for the Economic Evaluation of Health Care Programmes*. 4th ed. Oxford: Oxford University Press, 2015.
- 11** Glassman A, Giedion U, Smith P (Eds). *What's in, what's out: designing a health benefits plan for universal health coverage*. Brookings Institution Press: Washington DC, 2017.
- 12** Hsiao W, Heller P. *What Should Macroeconomists Know about Health Care Policy?* IMF Working Paper WP/07/13. Washington DC: International Monetary Fund, 2017.
- 13** Devaux M, Sassi F. *The labour market impacts of obesity, smoking, alcohol use and related chronic diseases*. OECD Working Papers, No.86. Paris: OECD Publishing, 2015. Available at: <http://dx.doi.org/10.1787/5jrqn5fvpv0v-en>
- 14** Loken KV, Lundberg S, Riise J. Lifting the Burden Formal Care of the Elderly and Labor Supply of Adult Children. *Journal of Human Resources* 2017;52(1):247–71.
- 15** Van Houtven CH, Coe NB, Skira MM. The effect of informal care on work and wages. *Journal of Health Economics* 2013;32(1):240–52.
- 16** Cylus J, Papanicolas I, Smith PC. An analysis of survey data from eleven countries finds that 'satisfaction' with health system performance means many things. *Health Affairs* 2013;32(4):734–42.
- 17** Stiglitz J, Sen A, Fitoussi JP. *Commission on the Measurement of Economic Performance and Social Progress*. Paris: INSEE, 2009.
- 18** Kingston A, Robinson L, Booth H, et al. Projections of multi-morbidity in the older population in England to 2035: estimates from the Population Ageing and Care Simulation (PACSim) model. *Age and Ageing* 2018;47(3):374–80.

Policy Brief Series on Health Systems for Prosperity and Solidarity

Making the economic case for investing in health systems. What is the evidence that health systems advance economic and fiscal objectives?

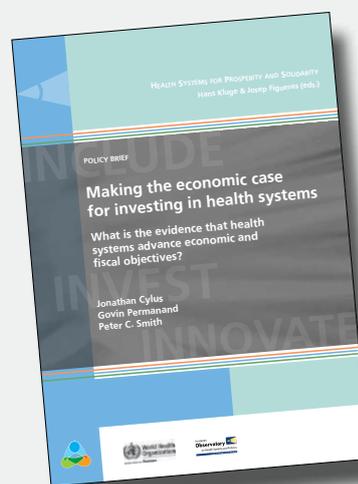
By: Jonathan Cylus, Govin Permanand and Peter C. Smith

Copenhagen: World Health Organization 2018 (acting as the host organisation for, and secretariat of, the European Observatory on Health Systems and Policies)

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Good health is a fundamental goal of all societies. Although health is determined by a large number of factors throughout the life course, the health system is one of the most important contributors to population health that lies within the direct control of policy-makers. Yet, health-policy-makers who seek to make the case for increased financing for their health systems are often met with scepticism within governments. This scepticism may be explained in part by a belief among some finance-policy-makers that health systems may not support (or may even undermine) key economic and fiscal objectives.

This policy brief contends that, despite these common concerns, strong arguments can be made that health systems



can play an important and largely favourable role in the economy. In fact, it finds evidence that the economic and fiscal objectives of finance-policy-makers are in many respects actively promoted by health systems or that this could be achieved if adequate, stable resources were made available.

This brief seeks to support health-policy-makers by framing

available evidence and

structuring arguments in a way that is likely to resonate with finance-policy-makers to help health-policy-makers secure a 'fair hearing' in governmental debates about public spending. To that end, the evidence and arguments presented in this brief are centred around the key objectives of the finance ministries in the WHO European Region as found in their mission statements and reflected in their policies: (1) stewardship of government funds; (2) macroeconomic growth; (3) societal well-being; and (3) fiscal sustainability.

INCREASING VACCINE UPTAKE: CONFRONTING MISINFORMATION AND DISINFORMATION

By: Martin McKee, Walter Ricciardi, Luigi Siciliani, Bernd Rechel, Veronica Toffolutti, David Stuckler, Alessia Melegaro and Jan C. Semenza

Summary: Despite the availability of safe and effective vaccines, several European countries are experiencing outbreaks of vaccine-preventable diseases. There are several reasons. First, parents may face barriers in accessing health services or may be unaware of the need for, or the means to obtain, immunisation. These problems call for enhancements to health systems, including the ability to address the needs of groups with low uptake. Second, there is extensive disinformation about vaccines, some reflecting a wider distrust in government but some being encouraged so as to undermine that trust. This requires new approaches to messaging, recognising how conventional messages can backfire.

> #EHFG2018 – Forum 10:
Vaccines for all

Keywords: Vaccination, Vaccine-preventable Diseases, Health Communication

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Progress and setbacks

The struggle between humans and microorganisms is never-ending. Time and time again, we have achieved remarkable progress only to face setbacks. Successes against vector-borne diseases such as malaria and dengue fever reversed as the mosquitoes took advantage of new ecological niches, such as the pools of water in discarded tyres, or conducive climatic conditions as a result of climate change. Bacteria provided us with a graphic demonstration of the effects of natural selection, as overuse of antibiotics favoured the small number that were resistant, giving them a competitive advantage. In many parts of the world, conflicts and displacement of populations have created even more opportunities

for the vectors and the agents that they transmit. Yet, there was one area where progress did seem assured. By harnessing the body's own immune system, vaccinations seem to provide an unassailable weapon against a growing number of infectious agents. Some were major killers, such as tetanus. Others were less often fatal but left in their wake large numbers with severe disabilities, as with polio or meningitis. One disease, smallpox, was even eradicated, while polio seems not far behind. And, unlike the other often temporary successes, the infectious agents involved had no defence. Yet, in mid-2018, newspapers across Europe were reporting outbreaks, and even some fatalities, from measles, a disease that is entirely vaccine preventable.¹

Although not infrequent, it is easy to forget just how devastating some vaccine-preventable diseases can be. An outbreak in Glasgow in 1907 left over 1,000 people dead.² In the closing years of the 20th century it was still killing one million children every year in sub-Saharan Africa. Even those who survived the acute illness were not always safe. About one in 1,000 children infected developed a form of encephalitis that would kill about 10% of them and leave another 25% severely disabled. Why is there a problem with immunisation rates?

Given the potential severity of infection and the availability of a safe and effective vaccine, parents in many countries across Europe are choosing not to have their children immunised. How can this be explained? Could it simply be that memories fade? Maybe. Few parents (and health workers) in Europe will have known a family whose child died from measles today. But the main reasons might lie elsewhere.

We in the health community need to ask if we are doing everything that is possible. At first sight, the act of injecting a vaccine into a child or an adult could not be simpler. But for that to happen, a whole series of arrangements need to be in place. First, health authorities need to know who is eligible to be vaccinated. There must be some sort of register listing the children residing in a particular area, something that is particularly challenging with populations that are mobile, or who are missed by existing systems, such as undocumented migrants. Second, authorities or someone on their behalf need to ensure that affordable supplies are procured and distributed. Third, coverage needs to be monitored, identifying groups in the population among whom uptake is low and developing appropriate responses. Some countries perform these functions very well, but others fail to. This requires resources, which also need to be invested in staff with the appropriate skills. A recent study in Italy has shown how immunisation rates have been affected by cuts to public health spending in some regions.³

We also need to ask why some parents actively refuse to have their children

immunised. Even though we know that the measles vaccine is extremely safe, many people, including a number of prominent celebrities, believe otherwise. The origins of the story are familiar. In 1998, the *Lancet* published a study proposing a link between pathological findings in the gut and developmental disorders.⁴ That much was uncontroversial. The problem arose from the last two sentences in the study, which stated that most of the children involved had experienced onset of symptoms after immunisation for measles, mumps, and rubella (MMR). It then suggested that future research should look for an association between the syndrome described and immunisation.

“the starting point should not be the myth itself, but rather the facts”

The problem was compounded at the subsequent press conference, when the lead author, Dr Andrew Wakefield, suggested that the three components of the vaccine should be given separately. This was based on a complete absence of evidence that either the combined vaccine was causing the problem or that separating the components would bring any benefit. However, the damage was done. Parents of children with autism began to attribute the condition to their child's vaccination. Immunisation rates fell dramatically in the United Kingdom and, subsequently, in many other countries, encouraged by irresponsible reporting by some sections of the media, some of which may have been politically motivated.⁵

Numerous subsequent studies have confirmed the absence of any association between immunisation and autism,⁶ but this has failed to convince a significant number of people. Authoritative statements by researchers and public health officials have often had the opposite effect to that

intended, confirming in the views of those who believe in a link that vaccine advocates are part of a giant conspiracy by a powerful pharmaceutical industry and a malign state. In this, they are joined by others, linked together by social media, who see immunisation as yet another means of control of the population by dark and mysterious forces.

What can be done?

So, what can the health community do when faced with a situation like this? First, and most obviously, there is a need to address those weaknesses that we have some control over, ensuring that there are systems in place that are adequately resourced, staffed by professionals with the requisite skills. Public health professionals have a critical role in asking why some groups in the population have persistently low rates of immunisation. Could it be that the services that provide immunisation are simply inaccessible or inconvenient? This is certainly true for some marginalised groups, such as Roma in some countries of Central Europe.⁷ Or could it be misinformation, where parents are simply unaware of the benefits of immunisation or the means by which they can obtain it for their children? This could be because the available information is in a language they are unable to read or written in a way that conveys an unintended message. However, obtaining these answers can be difficult, requiring a high level of skills in qualitative research, coupled with a long process of building trust with the communities concerned.

The design of appropriate systems to ensure high levels of uptake should, as far as possible, be informed by research. However, this is an area where there are some significant gaps. We have recently completed a systematic review on the role of the health system in immunisation. While there is a wealth of research on the individual determinants of immunisation, showing how factors such as family income, education, ethnicity, and much else can play a role, there is much less on the optimal way to develop and implement mechanisms that maximise uptake, especially among marginalised populations.

There is also one thing that health authorities across Europe could do relatively easily, but so far have not done. This is to coordinate vaccine schedules internationally. There are often good reasons why these differ, reflecting priorities of the authorities concerned or epidemiological specificities, but often they are simply a product of history. Improved coordination would benefit families who move between countries. But further, and as importantly, it would remove the opportunity exploited by the anti-vaccine movement to point to such differences as evidence of uncertainty about vaccine effectiveness, even though this is clearly not the case.

A different situation arises when the problem is not misinformation but disinformation. This refers to information that is deliberately spread knowing it to be false.

Disinformation can emerge and spread for many reasons. Some relate to a generalised distrust in governments, but there is also now growing evidence of deliberate manipulation on social media, using immunisation as one of a number of opportunities to actively undermine that trust for broader political purposes.¹¹ Another, related phenomenon is the perception that powerful vested interests, in this case the pharmaceutical industry, are concealing the truth about its products, again sometimes part of a wider issue of distrust of those perceived to be powerful.

It may be possible, through a process of reasoning, to encourage those holding certain beliefs to work through the arguments until it becomes clear to them that there is a logical fallacy or incoherence. It is better that people to see for themselves, rather than be told what to believe. However, care is necessary as provision of the information needed to tackle misinformation can easily backfire. There is now a large body of research showing that the authoritative correction of a myth can, counterintuitively, reinforce belief in it among those whose views are challenged.¹² One American study found that providing high-quality evidence that MMR did not cause autism actually reduced the probability that

families convinced that it did would have their child immunised.¹⁰ Moreover, authoritative evidence must compete with a mass of contrary advice, now easily found on the intranet. The concept of motivated reasoning describes how people actively search for evidence that confirms their prior belief and reject anything that challenges it. A study of uptake of vaccine against human papilloma virus (HPV) found that people who believed that it encouraged promiscuous behaviour actively sought evidence that it might not work.¹¹

Another challenge is that talking about misinformation can actually normalise it. For example, simply by talking about refusal to have one's children vaccinated may create an impression that it is widespread and thus socially acceptable.¹² Here the media plays an important role, as efforts to present opposing views in the interest of balance can give the impression that disagreement is widespread even where there is overwhelming consensus, as with climate change.

Finally, it is easy for pro-vaccine messages to disparage inadvertently those who decline immunisation, portraying them as irresponsible. Social identity theory tells us that this may be seen as an attack on groups who already feel excluded from mainstream society, with one Australian study finding that some parents identified vaccination as a marker of compliance with what was termed the "toxic practices of mass industrial society".¹³

There are, however, things that can be done to tackle false beliefs and associated disinformation. When addressing myths, the starting point should not be the myth itself, but rather the facts. Then, the myth can be introduced and debunked, before concluding with the scientific facts.¹⁴ Repeating the myth simply reinforces it.

It is also important to keep the messages simple. There may be many good reasons for children to be immunised, to protect them as individuals and also to create herd immunity. However, the more complex the rationale for immunisation, the more likely many people are to seek the much simpler answers, even if illogical and incorrect,

peddled by the anti-vaccine community. A tantalisingly simple lie may be more attractive than a complex truth.

It is also important to understand people's overarching worldviews and try to find common ground. In some cases, where concerns about immunisation relate fundamentally to the individual values, as in the example of HPV above, it may be better simply to set the facts to one side and address those values, showing how they need not be incompatible with immunisation.¹⁵ Where possible it is better to seek coherence with a broader view (such as concerns about government intervention or manipulation by the pharmaceutical industry) and limit the challenge to the specific disinformation.

Last words

Almost two decades into the 21st century, it seems remarkable that children in Europe are still dying from a disease that is entirely preventable with a safe and effective vaccine. If the first duty of government is to protect its people, then this is an area that is in need of urgent attention.

References

- ¹ Kmietowicz Z. Measles: Europe sees record number of cases and 37 deaths so far this year. *BMJ* 2018;362:k3596.
- ² Pennington H. Why can't doctors be more scientific? *London Rev Books* 2004;26(13):28–9.
- ³ Toffolutti V, McKee M, Melegaro S, Ricciardi W, Stuckler D. Austerity, measles and mandatory vaccination: cross-regional analysis of vaccination in Italy 2000–2014. *Eur J Publ Health* (in press).
- ⁴ Wakefield AJ, Murch SH, Anthony A, et al. Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *Lancet* 1998;351(9103):637–41.
- ⁵ Greenslade R. The story behind the MMR scare. Available at: <https://www.theguardian.com/society/2013/apr/25/mmr-scare-analysis>
- ⁶ Miller E. Measles-mumps-rubella vaccine and the development of autism. *Semin Pediatr Infect Dis* 2003;14(3):199–206.
- ⁷ Duval L, Wolff F-C, McKee M, Roberts B. The Roma vaccination gap: Evidence from twelve countries in Central and South-East Europe. *Vaccine* 2016;34:5524–5530.
- ⁸ Dyer O. Vaccine safety: Russian bots and trolls stoked online debate, research finds. *BMJ* 2018; 362:k3739.

⁹ Skurnik I, Yoon C, Park DC, Schwarz N. How warnings about false claims become recommendations. *J Consumer Research* 2005;31(4):713–24.

¹⁰ Nyhan B, Reifler J, Richey S, Freed GL. Effective messages in vaccine promotion: a randomized trial. *Pediatrics* 2014;133(4):e835–42.

¹¹ Kahan DM, Braman D, Cohen, GL, Gastil J, Slovic P. Who fears the HPV vaccine, who doesn't, and why? an experimental study of the mechanisms of cultural cognition. *Law Hum Behav* 2010;34(6):501–16.

¹² Cialdini RB, Demaine LJ, Sagarin BJ, Barrett DW, Rhoads K, Winter PL. Managing social norms for persuasive impact. *Social influence* 2006;1(1):3–15.

¹³ Attwell K, Smith DT, Ward PR. 'The Unhealthy Other': How vaccine rejecting parents construct the vaccinating mainstream. *Vaccine* 2018; 36(12):1621–6.

¹⁴ Rossen I., Hurlstone MJ, Lawrence C. Going with the Grain of Cognition: Applying Insights from Psychology to Build Support for Childhood Vaccination. *Front Psychol* 2016;(7):1483.

¹⁵ Tannenbaum MB, Hepler J, Zimmerman RS, et al. Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychol Bull* 2015;141(6):1178–204.

VACCINATION IS THE SOLIDARITY OF THE MANY FOR THE FEW

By: **Xavier Prats-Monné**

Summary: Vaccination saves lives. It protects our citizens of all ages and reduces illness, contributing to longer life expectancy. Yet, several EU Member States and neighbouring countries are currently facing unprecedented outbreaks of vaccine-preventable diseases due to insufficient vaccination coverage. To support Member States in addressing this challenge, on 26 April 2018, the Commission adopted an ambitious proposal for a Council Recommendation and a Communication that aim to improve vaccination coverage and reduce the risk of vaccine preventable diseases across the Union.

Keywords: *Vaccination, Vaccine Preventable Diseases, European Commission, Council Recommendation, Sustainable Development Goals*

Vaccination: a success story that needs to be told

Young Europeans can go through seasonal flu without much risk of serious complications; the older people amongst us cannot: in an average year, more than 40,000 Europeans die because of complications from flu, most of them aged over 65. And while most of us can suffer rubella without fear – this is not so for a pregnant woman whose unborn child is at risk.

Yet a substantial number of citizens, mostly in Europe and in other advanced economies, see vaccination as an unnecessary or even dangerous burden. These fears must be taken very seriously and addressed – even if hesitancy about vaccination, especially among health professionals, presupposes an extraordinary lack of trust in science and cynicism about how our societies work:

it implies that a global network of doctors, nurses, policymakers, researchers and international organisations, such as the World Health Organization (WHO), are intentionally harming adults and children, either for money or indifference, by exposing them to an unnecessary health risk through vaccines.

Thanks to vaccines, our societies achieved the eradication of smallpox, one of the most devastating diseases known to humankind, which caused at least 300 million deaths in the 20th century alone. In comparison, 100 million people died during the 20th century either directly or indirectly as a result of war and armed conflict.¹

Vaccination also enabled the near elimination of polio and the prevention of countless deaths from many other

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diseases such as measles, diphtheria and meningitis. Worldwide, every year, vaccination prevents 2.7 million measles, 2 million neonatal tetanus, and 1 million pertussis cases. In Europe, seasonal influenza vaccination prevents around 2 million people from getting influenza each year.² According to the latest WHO data, an additional 1.5 million deaths from measles could be avoided per year, if global immunisation coverage improves.³

Vaccination also means fewer medical visits, diagnostic tests, treatments and hospitalisations, leading to better quality of life and substantial savings in health care costs each year. For instance, in the European Union (EU) vaccination against seasonal influenza prevents around 40,000 deaths each year despite the low coverage (only 80 million out of the 180 million for whom it is recommended get vaccinated). Full implementation of the 75% coverage target set out by the 2009 Council Recommendation⁴ could reduce the burden by approximately 24,000–31,000 hospitalisations, 10,000–14,000 influenza-related deaths, and €77–99 million in health care costs.

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Vaccination programmes today are increasingly fragile

“It is unacceptable that in 2017 there are children still dying of diseases that should long have been eradicated in Europe”, Commission President Juncker said in his State of the Union address. Several EU Member States and neighbouring countries currently face unprecedented outbreaks of vaccine-preventable diseases

due to insufficient vaccination coverage. In 2017 alone, in the EU, over 14,000 people contracted measles – more than three times the number reported in 2016. In the past two years, 50 people died due to measles and two due to diphtheria.⁵

Vaccination means fewer medical visits, diagnostic tests, treatments, and hospitalisations

The risk of reintroducing poliovirus in the EU persists, putting the Union’s polio-free status at risk. Seasonal influenza vaccination coverage rates remain significantly below the 75% coverage target for older age groups, with an estimated 40,000 deaths from related complications. While national vaccination programmes are planned, organised, and conducted differently across Member States, all EU countries are grappling with preventable immunisation gaps and common challenges, such as declining vaccination coverage, supply shortages and decreasing confidence. As a result, vaccination programmes across the EU are becoming increasingly fragile.

Why does the EU need to act?

Vaccines might have become a victim of their own success. As vaccine preventable diseases are less prevalent, our societies tend to forget how many lives were lost before vaccines became available. Many also appear to be unaware that the health benefits we see today as a result of vaccination can only be maintained by continued high vaccination coverage in our populations.

At the same time, misconceptions about vaccination have shifted the public focus away from its benefits towards distrust in science and fear of possible side effects. There are several factors at play in this reticence: a lack of reliable information and, in some cases, suspicion in the providers of available information; lower acceptance of any potential risks associated with medicines administered to healthy individuals (in particular children); a lack of understanding on the individual versus community benefits of vaccination; and media controversies on vaccine safety fuelled by misinformation.

The variation of national vaccination policies and schedules poses an additional challenge. This can be a particular obstacle to people who move between several EU countries during their lives. A number of countries are also facing vaccine shortages due to both supply and demand issues. Industry has disinvested in vaccines in the EU, allegedly due to a fragmented and partially unpredictable demand. Data from 2014 suggest that 86% of vaccines produced in the EU are exported.⁶ Unexpected needs, such as outbreaks or increases in the target population are further hampering accurate forecast planning. As a result, some Member States are experiencing problems with vaccine availability or face high costs of vaccines. There are also research and development challenges, as substantial financial investment and expertise are needed to develop new innovative vaccines and improve or adapt existing ones.

Vaccination programmes have become highly vulnerable to budget cuts. Recent OECD data for seven EU countries suggest that none spent more than 0.5% of its health care budget on vaccines.⁷ Many economic evaluations of vaccination strategies concentrate on immediate health gains and household cost-savings. They do not include, as they should, the broader health and economic benefits for those vaccinated and society as a whole, such as indirect (herd) protection.

All the above lead to problems with vaccine supply and production, ineffective vaccination policies and procurement, and a decrease in vaccine uptake and confidence.

Working together to increase coverage and ensure access for all

To support Member States in addressing these challenges, on 26 April 2018, the Commission adopted an ambitious proposal for a Council Recommendation⁸ and a Communication.⁹

There is undeniable EU-added value in tackling vaccine-preventable diseases. A coordinated approach and collective efforts are needed from the Commission and EU agencies, national authorities,

our partners in the health care, education and research sectors, as well as civil society, to tackle our common challenges.

The initiative is supported by the Council, as discussions have already been undertaken with the Member States. It highlights the importance of inter-national and inter-sectoral cooperation, and proposes clear, concrete and sustainable deliverables to:

- tackle vaccine hesitancy and increase vaccination uptake;
- increase outreach to the most vulnerable groups;
- facilitate the compatibility of vaccination schedules across the EU;
- promote vaccine acceptance;
- support vaccine research and development; and
- strengthen vaccine supply, procurement and stock management, including in cases of emergency.

A key recommendation is for the European Centre for Disease Prevention and Control (ECDC) and the European Medicines Agency (EMA) to develop a web portal by 2019 to address genuine concerns with *clear, transparent and verified information* about vaccines.

In addition, Member States, national health authorities, and ECDC should work together to examine the feasibility of establishing *guidelines for a core EU vaccination schedule* by 2020.

In order to ensure the continuity of immunisation when citizens, in particular children, move from one Member State to another, the Commission proposes the development of an *EU vaccination card*.

Our proposal recognises that health care workers are at the frontline of vaccination. A *“Coalition for Vaccination”* will help to empower health care workers in addressing misinformation and increasing vaccination coverage in the EU.

The Commission will also *report on the State of Vaccine Confidence* in the EU to provide a much clearer picture and offer adequate support and solutions.

The proposed Council Recommendation on vaccination also reinforces synergies with other EU actions and policies including the implementation of the *2030 Agenda for Sustainable Development* and its Sustainable Development Goals (SDGs) in the EU and beyond.¹⁰ In line with SDG 3, which aims specifically to ensure healthy lives and promote well-being for all at all ages, the Commission puts forward actions intended to *improve access to safe, effective, quality and affordable vaccines for all and to support the research and development of vaccines*, also for the needs of developing countries.

Two other examples of our cooperative work in the area of vaccination will continue delivering results well beyond 2020. The first is the possibility to jointly procure vaccines under the *EU Joint Procurement Agreement*. The Agreement has been signed by 24 Member States and now covers more than 88% of the population of the Union. The mechanism aims to secure more equitable access to medical countermeasures and an improved security of supply, together with more balanced prices for the participating EU countries.

The second is a *Joint Action* through which Member States already work together on vaccination. This Joint Action, coordinated by France, involves 23 countries, a large number of stakeholders and international organisations, and supports cooperation between Member States to address vaccine hesitancy. This includes analysing barriers and enablers behind high and low vaccination coverage rates.

Conclusions

Eurohealth has an ambitious and noble aim: to bridge the gap between the scientific community and the policymaking community, by providing an opportunity for an evidence-based discussion on contemporary health system and health policy issues. I cannot imagine a more important or more urgent topic for such dialogue today than vaccination: a public health asset that no country or citizen can afford to take for granted. With the upcoming Council Recommendation, the European Commission counts on the commitment of Member States and,

above all, of the scientific and health care community, to improve confidence in vaccines, vaccine coverage and the effectiveness of vaccination. We will thus also contribute to achieving the UN SDGs for communicable diseases and to health security in the EU and beyond.

References

- 1 WHO. Bugs, drugs and smoke: stories from public health. *Smallpox chapter 1: eradicating an ancient scourge*. 2011. Available at: http://www.who.int/about/history/publications/public_health_stories/en/
- 2 European Commission. Questions & Answers: EU cooperation on vaccine preventable diseases. 26 April 2018. Available at http://europa.eu/rapid/press-release_MEMO-18-3458_en.htm
- 3 WHO. Immunization coverage. 16 July 2018. Available at: <http://www.who.int/news-room/factsheets/detail/immunization-coverage>
- 4 Council Recommendation of 22 December 2009 on seasonal influenza vaccination (2009/1019/EU). Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:348:0071:0072:EN:PDF>
- 5 ECDC. Measles cases in the EU treble in 2017, outbreaks still ongoing. 9 February 2018. Available at: <https://ecdc.europa.eu/en/news-events/measles-cases-eu-treble-2017-outbreaks-still-ongoing>
- 6 Vaccines Europe. The EU Vaccine Industry in Figures. Available at: https://www.vaccinesurope.eu/wp-content/themes/vaccines/images/Infographic_The_EU_Vaccine_Industry_In_Figures.pdf
- 7 Ethgen O, Baron-Papillon F, Cornier M. How much money is spent on vaccines across Western European countries? *Human Vaccines & Immunotherapeutics*. 2016;12(8):2038–45. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4994728/>
- 8 Proposal for a Council Recommendation on strengthened cooperation against vaccine preventable diseases COM(2018) 244/2. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A244%3AFIN>
- 9 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on strengthened cooperation against vaccine preventable diseases COM(2018) 245/2. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A245%3AFIN>
- 10 United Nations General Assembly. Resolution adopted by the General Assembly on 25 September 2015. *Transforming our world: the 2030 Agenda for Sustainable Development*. Available at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

> #EHFG2018 – Forum 12:
Sustainable strategies for
addressing health inequalities

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LGBTI PEOPLE AND HEALTH INEQUALITIES

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Summary: Lesbian, Gay, Bisexual, Trans, and Intersex (LGBTI) people commonly experience a range of health and social inequalities. Such inequalities are unfair, preventable and fundamentally incompatible with public health and human rights principles. This article draws on the European Commission's Health4LGBTI pilot to highlight some of the inequalities faced by LGBTI people in EU Member States, as well as their fundamental causes in relation to health services. In doing so, we propose that mandatory training for health professionals needs to be considered as one of the main interventional avenues towards reducing the health inequalities experienced by LGBTI people.

Keywords: Health Inequalities, LGBTI People, Access to Health, Health Professionals, Training

Introduction

*"I had ...a child psychiatry course. And I was... given a book. I was told: "Read it, it is our Bible". In this text book there was a description of homosexuality... It stated that it is a disease. It is a book from Soviet times and at the moment medical students still use it to study and consult teenagers brought to the crisis intervention unit." – quote from LGBTI person from Lithuania.*¹

Across the European Union (EU) life expectancy has been improving over the years. Yet despite this positive gain, considerable health inequalities continue to persist both between and within European Member States. Health inequalities refer to

the avoidable differences in health status between particular groups, populations or individuals. They result from social inequalities, the differences in the conditions in which people are born, grow, live, work, and age.² Health inequalities are fundamentally unjust or unfair because they are a consequence of a combination of factors such as the actions and policies of governments, social and cultural norms, as well as diverse socio-economic circumstances. This means that inequalities go against the principles of social justice in public health (e.g. fair and equitable treatment of people, and preventing disease, prolonging life, and improving the health of all populations). They are also fundamentally incompatible

Box 1: Defining LGBTI

L – Lesbian refers to a woman who is emotionally and/or sexually attracted to other women.

G – Gay refers to a person who is sexually and/or emotionally attracted to people of the same gender. It traditionally refers to men, but other people who are attracted to the same gender or multiple genders may also define themselves as gay.

B – Bisexual person is a person who is emotionally and/or sexually attracted to people of more than one gender.

T – Trans person is an inclusive umbrella term referring to people whose gender identity and/or gender expression differ from the sex/gender they were assigned at birth. It may include, but is not limited to: people who identify as transsexual, transgender, transvestite/cross-dressing, androgyne, polygender, genderqueer, agender, gender variant, gender non-conforming or with any other gender identity and/or expression which does not meet the societal and cultural expectations placed on gender identity.

I – Intersex individuals are born with physical sex characteristics that don't fit medical or social norms for female or male bodies. These variations in sex characteristics may manifest themselves in primary characteristics (such as the inner and outer genitalia, the chromosomal and hormonal structure) and/or secondary characteristics (such as muscle mass, hair distribution and stature).

Source: ³

with the 2030 Sustainable Development Goals (SDGs; for instance, SDGs 3 and 10 – ensure health and wellbeing for all at every stage of life, and reducing inequality within and among countries), and its commitment to 'leave no one behind' as well as essential EU values

reflected in the Charter of Fundamental Rights and Article 168 of the Treaty on the Functioning of the European Union (TFEU) on the protection of public health.

There is now a large, weighty, and growing body of literature that describes health inequalities experienced by different groups and populations. In terms of lesbian, gay, bisexual, trans and intersex (LGBTI – **see Box 1**) people, this body of literature is relatively substantial (albeit unbalanced in its lack of focus on the individual groupings) showing that, in general, LGBTI people experience considerably worse physical and mental health outcomes than the general population.⁴ For example, with regards to physical health the literature demonstrates that LGB people are at higher risk of developing certain types of cancer and at a younger age compared to heterosexual people.⁵ In terms of mental health, LGBTI people are at significantly higher risk of experiencing mental distress with LGB people being two to three times more likely to report an enduring psychological or emotional problem including suicidal ideation and suicide, substance misuse, and deliberate self-harm compared to the general population.

The social determinants of health inequalities experienced by LGBTI people such as stigma, discrimination in health care, social exclusion, and **heteronormativity** are well-recognised root causes of these poorer health outcomes.⁶ Indeed, in relation to health systems, barriers to the delivery of, and access to, health care and health systems for LGBTI people can partially account for inequalities and commonly include prejudicial attitudes and discriminatory behaviour by health care staff, unequal treatment, and unrecognised health care needs. Although by no means a panacea, universal access to safe, high quality, efficient health services and better cooperation between social and health care services with effective action on risk factors, can all help in the efforts towards reducing inequalities for LGBTI people (as well as other populations).⁷ One way of contributing to such efforts is through the provision of mandatory high-quality training for health care (and other relevant) staff with regard to the needs of LGBTI

people, to provide health professionals with the ability to challenge anti-LGBTI attitudes and practices amongst colleagues and patients; something that can be very difficult to do.

The European Commission is taking the battle against health inequalities seriously. As part of the Commission's commitment to work towards the UN Agenda 2030 SDGs both inequalities and health are specifically addressed. Furthermore, funded by the European Parliament and managed by a European Partnership on behalf of the European Commission's Directorate-General Health and Food Safety, this commitment is evident in the commissioning of a recent pilot project 'Health4LGBTI: Reducing health inequalities experienced by LGBTI people' (**see Box 2**).

Root causes of LGBTI health inequalities

*"Stigma, prejudice, and discrimination create a hostile environment where LGBTI people are subject to stressful social exchange that may have adverse implications for health-seeking behaviour and health outcomes later in life."*⁸

Health inequalities result from a complex interaction of environmental, social, cultural and political factors. The research findings of the Health4LGBTI project elicited a number of these overlapping root causes likely to contribute to the experience of health inequalities by LGBTI people including: cultural and social norms that preference and prioritise heterosexuality (**heteronormativity**); **minority stress** associated with sexual orientation, gender identity and sex characteristics; victimisation; discrimination (individual and institutional); and stigma. Each of these are addressed briefly below in relation to health(care):

Health inequalities can occur in contexts (e.g. hospitals, GP surgeries etc) where heteronormativity is at play. It can be defined as a set of beliefs and practices that gender is an absolute and unquestionable binary, therefore describing and reinforcing heterosexuality as a norm. In mainstream health care

Box 2: Health4LGBTI – Reducing health inequalities experienced by LGBTI people

The aim of this pilot project (2016–2018) was to improve the understanding of how best to reduce health inequalities experienced by LGBTI people. The project activities included (i) Research into health needs and challenges faced by LGBTI people and key barriers faced by health professionals when providing care for LGBTI people; (ii) Development of a training package aimed at increasing the knowledge, attitudes and skills of health care professionals when providing health care to LGBTI people; (iii) Piloting of the training package in six EU countries (Belgium, Bulgaria, Italy, Lithuania, Poland and UK); and (iv) A European conference presenting the results of the project.¹²

Further information: For details on Health4LGBTI, including full and free access to the research reports, training modules, and evaluation report see: https://ec.europa.eu/health/social_determinants/projects/ep_funded_projects_en#fragment2

settings where LGBTI people access treatment and care, being heterosexual, cisgender* or dyadic (non-intersex) is often assumed and accepted as the status quo. LGBTI people consequently become marginalised due to health professionals failing to recognise their lives, their gender, their bodies, their relationships and their families, meaning that needs are overlooked, and care is affected. Moreover, it also means that LGBTI people who do access health care and other support services may be less likely to be open and disclose their sexual orientation, gender identities or sex characteristics, and/or information relevant to their specific needs.

With regard to **minority stress** (one of the leading narratives explaining health inequalities experienced by LGBTI people), researchers explain that stigma, prejudice, and discrimination create a hostile environment where people are subject to stressful social exchange. Population groups who experience minority stress often show a greater incidence of mental health problems that eventually lead to poor physical health.¹³

Victimisation also appears to be a root cause of inequalities faced by LGBTI people and is commonly experienced as a direct consequence of their sexual orientation, gender identity, and/or sex characteristics. Katz-Wise and Hyde conducted a meta-analysis and found that accounts of self-reported victimisation of LGB individuals were substantial with 55% experiencing verbal harassment, 45% experiencing sexual harassment, 44% experiencing relational victimisation, and 43% general victimisation.¹⁴

In terms of **discrimination**, evidence shows that most LGBT people have experienced individual and institutional discrimination at some point in their lives. Individually, this ranges from hostility, personal rejection, harassment, bullying, to personal violence.¹⁵ Institutionally, this occurs where laws and policies in the public domain generate and/or sustain inequalities, for example when rainbow families are not recognised or where laws do not protect against discrimination based on sexual orientation, gender identity or sex characteristics.

Finally, overlapping with many of the above root causes, **stigma** also emerged as one of the leading causes of LGBTI health inequalities. Stigma comprises three different but related elements: anticipated stigma where LGBTI people show apprehension due to potential future occurrences of stigmatisation; internalised stigma where people devalue themselves as a result of their sexual orientation, gender identity or sex characteristics; and enacted stigma where people experience real instances of discrimination. Each strand of stigma may affect health-seeking behaviour in a specific way (e.g. inhibiting

disclosure of same-sex relationships or sex characteristics) ultimately shaping access to health care amongst LGBT people.¹²

“I once went for a stomach check-up and the GP asked me whether I had done an HIV test. He told me I should go to do it without even asking me whether I was promiscuous or not – I could have been a virgin.” – Gay man, Malta.¹³

Taking action for LGBTI people

LGBTI people in Europe experience significant health and social inequalities and these are often avoidable and thus preventable. Health policies and programmes need to be reviewed and reformed so that they fully reflect and mainstream the health needs of LGBTI people. In the short term, we believe that inequalities can be reduced via the development of health and social care services that are sensitive to the needs of LGBTI people as much as they are already attuned for non-LGBTI people.

“
fundamentally
incompatible with
the 2030
Sustainable
Development
Goals

Reducing preventable inequalities for LGBTI people is not only morally the right thing to do, but it is essential action in line with European efforts to meet the SDGs, to abolish discrimination on any grounds and to uphold and promote the human rights of LGBTI people. To this end, Health4LGBTI has developed a freely available and validated training programme aimed at increasing the knowledge, attitudes and skills of health professionals when providing health care to LGBTI people in an attempt to address some of the root causes of inequalities (**see Box 2**). Evaluative data

* Cisgender (adj.): A term referring to those people whose gender identity matches the sex they were assigned at birth.

from piloting in six EU countries has shown promising results; with increases in culturally competent knowledge and skills, attitudinal change, and changes in both day-to-day practices as well as relevant and necessary changes within health systems (e.g. recording mechanisms).

There is much to be done to ensure that both specialist and universal health services are truly inclusive and equally accessible to all regardless of gender identity, sexual orientation, or sex characteristics. Engaging with health professionals around LGBTI issues is a crucial step in the process to remove barriers, improve inclusivity, improve care, and ultimately reduce inequalities.

References

- 1 McGlynn N, Browne K, Pollard A, et al. *TASK 2: Qualitative research – Focus groups studies with LGBTI people and health professionals*, 2017: page 45. Available at: https://ec.europa.eu/health/sites/health/files/social_determinants/docs/focusgroup_sr_en.pdf
- 2 Marmot M, Bell R. Fair society, healthy lives. *Public Health* 2012;126:S4-S10; see also <http://www.health-inequalities.eu/about-hi/health-inequalities-statement/>
- 3 Amadeo F, Donisi V, Farinella F, et al. *Trainers' Manual – Reducing health inequalities experienced by LGBTI people – What is your role as a health professional?* European Union, 2018. Available at: https://ec.europa.eu/health/sites/health/files/social_determinants/docs/2018_lgbti_trainersmanual_en.pdf
- 4 Blondeel K, Say L, Chou D, et al. Evidence and knowledge gaps on the disease burden in sexual and gender minorities: a review of systematic reviews. *International Journal for Equity in Health* 2016;15(6):1–9.; Meads, C, Carmona C, Kelly M. Lesbian, gay and bisexual people's health in the UK: a theoretical critique and systematic review. *Diversity and Equality in Health and Care* 2012;(9):19–32.
- 5 Boehmer U, Miao X, Ozonoff A. Cancer survivorship and sexual orientation. *Cancer* 2011;117(16): 3796–3804; Boehmer U, Ozonoff A, Miao X. An ecological analysis of colorectal cancer incidence and mortality: differences by sexual orientation. *BMC Cancer* 2011;11(400):1–8; Cochran SD, Mays VM. Risk of breast cancer mortality among women cohabiting with same sex partners: findings from the national health interview survey, 1997–2003. *Journal of Women's Health* 2012;21(5):528–33.
- 6 Zeeman L, Sherriff N, Browne, K, et al. *State-of-the-Art Synthesis Report (SSR)*, 2017: Page 20. Available at: https://ec.europa.eu/health/sites/health/files/social_determinants/docs/stateofart_report_en.pdf
- 7 Health-Inequalities. *About health inequalities*, 2018. Available at: <http://www.health-inequalities.eu/about-hi/introduction/>
- 8 European Commission. *Pilot projects funded by the European Parliament, Health4LGBTI: Reducing health inequalities experienced by LGBTI people*, 2018. Available at: https://ec.europa.eu/health/social_determinants/projects/ep_funded_projects_en#fragment2
- 9 Elliott M, Kanouse D, Burkhart M, et al. Sexual minorities in England have poorer health and worse healthcare experiences: a national survey. *Journal of General Internal Medicine* 2015;30(1):9–16.
- 10 Katz-Wise S, Hyde J. Victimization experiences of lesbian, gay, and bisexual individuals: a meta-analysis. *Journal of Sex Research* 2012;49(2–3):142–67.
- 11 Haas A, Eliason M, Mays V, et al. Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: review and recommendations. *Journal of Homosexuality* 2010;58:10–51.
- 12 Whitehead J, Shaver J, Stephenson R. Outness, stigma, and primary healthcare utilization among rural LGBT populations. *Plos One* 2016;11(1):1–17.
- 13 Xuereb M. *A survey on sexual orientation and gender identity discrimination against lesbian, gay, bisexual and transgender persons in Malta*, 2008. MGRM.

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Implementing the 2030 Agenda for Sustainable Development

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The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) were adopted in 2015 by 193 Member States of the United Nations. Health and well-being for all at all ages is a goal, as well as an essential ingredient to all goals. It is a major outcome if all goals are implemented.

How far have we got?

Life expectancy in the WHO European Region is on the rise overall, but there is still more than a decade of difference between the highest and the lowest life expectancies in the Region. Premature deaths caused by the four major non-communicable diseases are on track to fall by 1.5% annually by 2020. If trends continue we might reach Target 3.4 – reducing by one third premature mortality from non-communicable diseases – earlier than 2030. Nevertheless, these improvements are uneven within and among countries.

In contrast, lifestyle-related factors are reversing too slowly: for example, trends in overweight and obesity rates are rising in most European countries; tobacco smoking rates in Europe are the highest in the world; and levels of alcohol consumption in Europe are only slightly declining. Cost effective NCD interventions are not implemented in many Member States.

Environmental risk factors, including climate change, are a growing threat. Child vaccination rates are improving in general across Europe. However, outbreaks of measles and rubella in some countries are jeopardising the Region's ability to eliminate these diseases. Violence and sexual abuse are still far more present and common than they should be.

Many countries are moving towards Universal Health Coverage but out-of-pocket payments have been increasing in many countries to over the 15% benchmark set at the recent WHO Tallinn +10 conference. The prices of medicine contribute significantly to this financial burden.

How to accelerate progress?

The WHO SDG roadmap, endorsed at the WHO Regional Committee for Europe in 2017, and building on *Health 2020* (2012), provides five strategic directions and four enablers to accelerate the implementation of the health related targets and goals.

Aim of the roadmap

To strengthen the capacities of Member States, to achieve better, more equitable, sustainable health and well-being for all at all ages in the WHO European Region.

The five interdependent strategic directions

- advancing governance and leadership for health and well-being
- leaving no one behind
- preventing disease and addressing health determinants

by promoting multi- and intersectoral policies throughout a life-course

- establishing healthy places, settings and resilient communities
- strengthening health systems for universal health coverage

The four enabling measures

- investment for health
- multi-partner cooperation
- health literacy, research and innovation
- monitoring and evaluation

How can the health community best contribute?

The roadmap contains more than 50 possible actions that can be taken at a variety of levels of responsibility. Each and every one plays an increasing role in implementing Agenda 2030. This includes, for example:

- “evidence informed” information for legal and regulatory frameworks, public policies and strategies in sectors outside health that tackle shared risk factors (e.g. exposure to air pollution) or unhealthy commodities (such as alcohol, drugs, tobacco);
- promotion of healthy consumer choices, economic and fiscal policies, (e.g. progressive taxation, removal of harmful subsidies) to reduce the consumption of harmful products;
- evidence based solutions to fortify the health promoting content of measures, policies and strategies across sectors;
- equity and human rights in daily work – from prevention, health protection, early identification of disease, treatment and rehabilitation;
- good legislation, governance, effective, accountable and transparent institutions and a competent workforce in public health;
- access to high-quality health and education services and protection from financial hardships;
- building the health workforce capacity on the SDGs;
- health literacy on the SDGs;
- information systems that provide integrated information for policy-making across sectors for health and well-being.

The health community plays an important role, in voicing its concerns and ensuring government accountability.

For more information

To support its Member States, the WHO has developed a range of SDG instruments and tools. Go to: <http://www.euro.who.int/en/health-topics/health-policy/sustainable-development-goals>



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