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WHO Regional Office for Europe High-Level Meeting: Health Systems Respond to NCDs



➤ Leapfrogging health systems responses to non-communicable diseases

- Nine cornerstones for health systems to respond to NCDs
- Policy perspectives
- Institutionalising inter-sectoral action
- Accelerating the transformation of public health services
- Leapfrogging in primary care
- Integrating nurses in advanced roles
- Information solutions
- Making health system transformation happen faster

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No time to waste: the promise of leapfrogging

The rates of premature mortality from noncommunicable diseases (NCDs) are declining across the whole of the European region. The inequity gap between countries is narrowing: evidence shows that the countries with the highest mortality burden are declining fastest. This is all good news, yet it is not happening fast enough. If current rates are projected, it may take another six decades for countries in Eastern Europe and Central Asia to reach today's levels in Western Europe.

In this special edition of *Eurohealth* we ask the questions: Can health systems 'leapfrog' over the intervening decades and dramatically accelerate the declines in the burden of both premature mortality and morbidity related to NCDs? Can we learn from other sectors (e.g. telecommunications, energy) where results could be achieved much faster through rapid adoption of innovation at scale? For instance, in many low income countries, mobile telephony has gained widespread adoption even in areas with no prior access to landlines. How can the same leapfrogging effect be reached in addressing NCDs?

The challenge is to speed up the adoption of what is known to work and avoid the errors that were made in the past. The available knowledge and experience on how to effectively prevent, manage and treat chronic conditions has increased tremendously. Interventions that were once controversial are now standard or best practice. In the 1970s, tobacco advertising was a fact of life and it was argued by the industry that "if it is legal to sell, it should be legal to advertise". Today many countries are adopting plain cigarette packets and banning advertising on the very boxes in which cigarettes are sold. On the side of clinical prevention, statins were first introduced in the 1980s and they have gone from being a controversial, expensive drug to a class that has now joined WHO's essential drug list and represents a cheap, additional means of managing cardiovascular risk.

Leapfrogging over decades of slow change in chronic disease outcomes requires more assertive adoption of the WHO best buys on NCDs: these have distilled the lessons of the previous decades and represent a cheap, easily implementable tool for all countries to reduce risk and better manage chronic conditions. In particular, those countries that today are faced with the same burden that others had in the seventies would benefit greatly from adopting the tools of the new millennium.

What we need is a more comprehensive, better aligned health system response to NCDs, which adopts and integrates at large scale technological and organisational innovations that have proven to be effective. A new report of the WHO Regional Office for Europe, *Health systems respond to NCDs: time for ambition*, proposes nine promising policy responses for a stronger health system response to NCDs. In this special issue, we want to go beyond the report and feature policies with leapfrogging potential, interventions that could do for health system strengthening what mobile phones did for telecommunications. To this end we explore various policy areas that play an important role in tackling chronic conditions: public health, primary care, the health workforce and information technology. We also bring on board the views and ideas of some prominent "voices", decision makers and stakeholders who animate the policy debate at various levels. And finally, we also reflect on how to leapfrog the so-called political "elephants in the room" that could seriously hinder progress in making real health system transformation.

We hope that today's decision makers will be inspired by the idea to leapfrog: to share and use each other's experience to make progress more quickly, but also to avoid and overcome the hurdles and mistakes that are slowing us down.

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HEALTH SYSTEMS RESPOND TO NCDs: THE OPPORTUNITIES AND CHALLENGES OF LEAP-FROGGING

By: Melitta Jakab, Willy Palm, Josep Figueras, Hans Kluge, Gauden Galea, Jill Farrington, Liesbeth Borgermans and Lucinda Cash Gibson

Summary: Health systems have a key role to play in the fight against noncommunicable diseases (NCDs). A more comprehensive and better aligned health systems' response can help to improve NCD outcomes and achieve the objective to reduce by one-third NCD-related premature mortality by 2030. However, this implies that countries will have to leapfrog, to implement innovative and effective solutions that will help to make progress much quicker. Managing the whole transformation process and using a solid evidence base to inform practice are key factors for success.

Keywords: Health Systems, Noncommunicable Diseases, Best Buys, Leapfrogging, System Transformation

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The importance of health systems

Noncommunicable diseases (NCDs) are the most important public health problem in the European Region, responsible for the vast majority of deaths and the highest disease burden. This also translates into important health system costs as well as wider implications for the economy and society. Tackling chronic diseases effectively cannot be done through simple silver bullet type solutions. As they are caught in a complex web of interrelated causal risk factors and health determinants, NCDs have been labelled a “wicked problem”, which require a systemic approach.¹

This is why health systems have such an important role to play in leading and coordinating the fight against NCDs. By addressing important barriers which stand in the way of scaling up core interventions and services, health systems can indeed accelerate improvements in NCD outcomes, saving the lives of millions of people and improving the lives of those living with—often multiple—chronic conditions. In a forthcoming report entitled: “*Health systems respond to NCDs: time for ambition*”² the WHO Regional Office for Europe makes the case for a more comprehensive and better aligned health system response to NCDs based on nine fundamental cornerstones (see **Figure 1**). The report is informed by five years of contextualised

country work focused on identifying and overcoming health system barriers, as well as developing robust health system strengthening strategies with a focus on NCDs. Based on a comparative analysis of this country experience, the report comes up with a set of pragmatic and actionable policy recommendations in each of these nine areas, which are intended to guide practicing policy makers in strengthening their health system.

“NCD health inequalities between and within countries persist”

In essence, effective health system stewardship for NCDs requires strengthening governance arrangements to ensure coherence across the different settings where NCD policies are developed, whether inside or outside the health system. Better governance is also essential for sustained sectoral and intersectoral health action with an institutionalised outcome focus. In order to scale up core NCD interventions and services in a people-centred manner, there is a need for ambitious transformation in how we deliver public health, primary care and specialist services, with a sharpened focus on outcomes, coordination, continuity and comprehensiveness. This service delivery transformation can be further supported through aligned strategies related to four health system functions: health workforce, health financing, pharmaceutical policy and information solutions.

The importance of leapfrogging

Overall, the European Region is doing relatively well in addressing some of the health determinants that can cause NCDs as well as managing chronic conditions. In countries that are lagging behind in terms of NCD outcomes, the decline in NCD

Figure 1: Nine cornerstones of comprehensive and aligned health system response to NCDs

<p>1 Strengthened governance ensures coherent policy frameworks and sustainable intersectoral action for NCDs connecting national, regional and local levels</p>	<p>2 Well-resourced public health services lead health promotion and prevention, applying universal proportionalism to drive the equity focus in public health action</p>	<p>3 Multi-profile integrated primary health care proactively manages community health and wellbeing</p>
<p>4 Adequately regionalised specialist services provide efficient and timely care for acute conditions</p>	<p>5 People-centredness is reflected in all health system functions</p>	<p>6 Fit-for-purpose health workforce delivers people-centred interventions and services based on evidence</p>
<p>7 Adequate and prioritised health financing enables coverage of important services and aligns incentives with service delivery goals</p>	<p>8 Access to quality medicines is ensured through comprehensive coverage, pricing policies and promotion of generics</p>	<p>9 Information solutions serve population health management, condition management in primary care, coordination across providers for seamless care, and self-management</p>

Source: ²

premature mortality is happening faster, which is promising. If current trends continue, the Sustainable Development Goals' commitment of reducing premature mortality stemming from NCDs by one third by 2030 will be met by the region on average.³

However, health inequalities between and within countries persist, particularly between the Eastern and Western parts, with people continuing to die prematurely from preventable and manageable NCD conditions. Even though high-burden countries are catching up, projections show that it will take another six decades to close this gap. This is why we need to find ways to accelerate progress, to leapfrog over these decades of continuous yet slow decline in mortality, and achieve a sharp improvement in NCD outcomes, both within and between countries in the region.

The idea of leapfrogging is not new. It has been successfully tried and tested in other sectors, applied to economic growth, sustainable and green development, even to military strategy. It comes down to skipping inefficient or even dead-end intermediary steps in the development process in order to achieve objectives and make progress more quickly. Fast adoption of innovation plays a key role in this, as we have witnessed in other sectors, such as telecommunications and energy. So-called frugal and disruptive innovations have managed to fundamentally change the way of thinking and approach in certain areas.^{4 5} They could also be applied in health systems to achieve a sharp acceleration in the improvement of NCD outcomes.

Leapfrogging in the health systems response to NCDs would mean skipping inferior, less efficient or more expensive ways of generating improved NCD

outcomes; moving directly to more advanced approaches representing today's good practices in delivering NCD-relevant core population interventions (e.g. tobacco, alcohol, nutrition and physical activity) and individual health services (e.g. early detection and high-quality management of cardiovascular diseases, diabetes, lung diseases and cancer). Leapfrogging implies a large scale qualitative change that is driven by innovation. However, here we are not restricted only to technological innovation. There is also a great potential for organisational innovation, for example in the way how public health services can be dynamically engaged with intersectoral action to address social determinants of NCDs, or through organising health service delivery in a more people-centred way, or in using financial incentives as well as deploying the health workforce, redistributing tasks and changing skill mix.

“Leapfrogging would mean skipping inferior, less efficient or more expensive ways of generating improved NCD outcomes”

There are exciting leapfrogging opportunities in health systems along each of the nine cornerstones presented above. In the next article a select group of policy makers and stakeholders highlight a wide range of leapfrog options to fundamentally transform the way in which health systems can address NCDs in a more strategic fashion i.e. through more effective intersectoral action, priority setting, fiscal policies, universal public health action balanced with targeted policies,

working more closely with the private sector, population health management, connecting NCD care to other resources in the community, larger units delivering primary care which allow for greater standardisation and integration, use of advanced technologies including big data and personal health applications, etc.

We also put the spotlight on five major leapfrogging opportunities in the health system response to NCDs and examine these opportunities to a greater extent through the five subsequent original articles.

- Developing sustainable intersectoral governance arrangements and operating models with clear mandates including for joint action, monitoring and financing arrangements (McDaid);
- Investing in stronger health promotion and disease prevention, including skill-sets and education, and promoting the principles of universal proportionalism in the design of public health action for NCDs (O'Dowd et al);
- Moving towards multi-profile primary care teams operating in larger units with proactive population health management at community level, establishing linkages to public health and community services and offering integrated services with specialists and hospitals (Borgermans et al.);
- Adapting the composition and skill set of the health workforce for future health challenges, in particular, rapidly expanding the role and task profile of nurses (Maier et al);
- Rapidly implementing information solutions in a range of areas to address previously intractable policy concerns but especially in the area of population health management, bringing increasingly concentrated specialist care closer to people through tele-solutions, and patient self-management (Marti et al).

The challenge and promise of leapfrogging

While we do believe that these five areas represent significant leapfrogging opportunities, we also believe that there are many more out there. Leapfrogging

does not imply single-policy solutions. Comprehensive concerted action is needed to align specific policies with interlinked and enabling health system functions. For example, strengthening the public health orientation and moving towards multi-profile primary health care requires a rethink of the health workforce, including the types of health workers needed, the duration and depth of their training, as well as the ways of collaboration between them. In the same way, a rethink of financial incentives is needed to achieve the desired results of many of the policy areas using leapfrogging. Current incentive arrangements often undervalue health promotion, disease prevention, intensified outreach efforts for early detection, and strengthened condition/disease management approaches.

“Leapfrogging does not imply single-policy solutions”

This multi-pronged approach is also illustrated in some of the listed country examples that have been used in the report, three of which we highlight here (see Box 1). The common threads were: building services around people, integration, and comprehensive thinking. To make it work, these were aligned with health system functions such as health workforce, translation of evidence into public health and clinical practice and incentives, etc. Technological innovation may be the spark but it only works if it is embedded in a more comprehensive set of policies.

The playfulness of the word “leapfrogging” masks the seriousness and the rigour needed to implement large scale systemic transformation. Any reform will need to take due account of the political context and path dependency that will also largely determine the options and the level of resistance to change. Disruptive innovations in particular, that

Box 1: Country examples highlight the importance of building services around people, integration, and comprehensive thinking

Kyrgyzstan: Community action for health amplifies the strength of primary care and strengthens early detection of hypertension

Many countries struggle to move towards a more proactive primary care model working in the community on health promotion, early detection and management of NCDs. Lack of a health workforce is a key impediment. Kyrgyzstan introduced a new model of health promotion based on community empowerment in conjunction with strengthening of primary health care. Village health committees (VHCs), made up of volunteers, work with primary health care services to identify health-related priorities and implement health actions. The main partners of the VHCs in the health system are the “health promotion units” at different levels, which provide the VHCs with regular training on evidence informed health actions and assist in their organisation. Primary care providers interact closely with the VHCs and thus increase their engagement within their communities, beyond receiving patients. Screening for hypertension was one of the most ambitious health actions. Awareness of having hypertension increased from 27% in 2007 to 45% in 2015. The increase was greater in rural areas, where VHCs work. Compliance with anti-hypertensive medicines also improved during this period.

England, UK: Health workforce projections trigger adjustments in training and employment policies

NCDs are significantly changing the demand for health services, increasing the need for health workers with a different skill profile. Health systems are slow to respond to this change in demand. The Department of Health in England has carried out a unique exercise to project demand for health services to 2035 and derive the need for different types of health workers. The analysis revealed that 80% of additional demand

is driven by increasing needs for health care and support associated with long-term conditions and NCDs. The future profile of demand may be very different from that of today with an anticipated increase in the demand for trained health workers in the art of behaviour change, counselling for physical and mental health, physiotherapy, simple care and nursing, as well as communication and involvement of people in decision making about their health and life choices. The policy response has included expanding the mental health workforce; creating new roles such as nursing and physician associates; expansion of nurse, midwife and allied health personnel training places; and additional physician training places.

Spain: Health intelligence enables population health management and people-centred services

Effective population health management is hampered in many countries by ineffective surveillance of health needs, granular enough to address health inequities. This is especially important in the field of NCDs, where risk factor clustering, multimorbidity, poor access to services and limited engagement with health improvement programmes are strongly associated with socioeconomic disadvantage. Spain has implemented a chronic disease stratification programme that combines strong surveillance and intelligence methods, using population-level data on risk factors and diseases obtained from records of health care delivery and utilisation, with local approaches to enhance health care activity in support of prevention and promotion for groups at higher risk. This is an example of using intelligence resources to align the delivery of preventive services with the health needs of the population in a proportionate manner, in order to support health equity.

For more information on these examples, visit the WHO/Europe website on Good Practices in the health system response to NCDs: <http://www.euro.who.int/en/health-topics/Health-systems/health-systems-response-to-ncds/publications/good-practice-briefs>

are likely to displace older organisational structures, workforce, processes, products, services and technologies, can face fierce opposition and important barriers. Not only professionals but also citizens and patients may refuse to engage with these changes.²⁴ As is highlighted in the last article in this Special Issue (Kluge et al.), innovative ways of engaging stakeholders is part of the key to successfully manage the whole transformation process, next to the use of a solid evidence base to inform practice.

In this sense, the expectation of leapfrogging has also become more

realistic as we know more than ever before not only about what works to improve NCD outcomes, but also about what are the economic costs of not taking action.²⁵ Cross-country learning on organisational innovations, new behavioural change models and the use of technology is happening faster than ever before. Lack of knowledge and experience is no longer a plausible excuse for not making progress.

Global and European NCD action plans propose a set of core population interventions and individual services, also labelled as NCD best buys.²⁶ They have a large population health impact, are proven

to be cost-effective in a large number of settings, and can be implemented in a wide range of health system endowments. Still, many countries in the WHO European Region have not taken advantage of these core interventions and services and there is great room for scale up. This is why it is time to act now. Ultimately, there is no escape from the complexity of an aligned approach to comprehensively strengthening the health system response to NCDs.

“Cross-country learning on organisational innovations, new behavioural change models and use of technology is happening faster than ever before”

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REGIONAL OFFICE FOR Europe

New report!

Health systems respond to NCDs: time for ambition

To be presented at the high-level meeting Health Systems Respond to NCDs on 16-18 April 2018, in Sitges, Spain.

The report will:

- Detail how health systems can make a difference to improving noncommunicable disease outcomes.
- Outline 9 cornerstones of a comprehensive and aligned health system response.
- Put forward 38 key messages that form an agenda for action with 160 potential policy responses.

Available in April via <http://www.euro.who.int/en/health-systems-response-to-NCDs>



HEALTH SYSTEMS RESPOND TO NCDs – OPPORTUNITIES AND CHALLENGES FOR LEAPFROGGING

Voices from the WHO European Region

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As part of this special issue on the WHO Regional Office for Europe's "Health systems respond to NCDs", some prominent 'voices' from across the WHO European region were asked to reflect upon the opportunities and challenges for leapfrogging in this field. This select group represents a diverse range of stakeholders i.e. international and national policy makers, academic researchers, as well as representatives from regional networks, health insurance funds and civil society.*

Keywords: NCDs, Health systems, leapfrogging, transformation, acceleration, innovation

Opportunities for leapfrogging

The growing burden of NCDs is one of the greatest challenges that health systems in the WHO European region are facing. As chronic conditions are intrinsically linked with a broad range of eco-political, social and individual determinants, leapfrogging could be possible in a wide range of health system areas to support fast adoption of innovation at scale. By leapfrogging we mean skipping inferior, less efficient, more expensive ways of delivering NCD-relevant core population interventions (i.e. tobacco, alcohol, nutrition and physical activity) and individual services (i.e. early detection and management of cardiovascular disease, diabetes, lung diseases, and cancer) and move directly to more advanced approaches representing today's best practices within the health system. As such, our respondents were asked to reflect on important policies to strengthen the health system response to NCDs in their country or region, and identify opportunities and challenges of leapfrogging.

Zsuzsanna Jakab highlights that "we know what to do to address the burden of NCDs – we need to implement the core NCD population interventions and individual services, also referred to as the 'NCD best buys'. Strong intersectoral governance embedded in the government structure is essential for implementing the best buys as well as strong public health agencies who can work closely with these intersectoral mechanisms. However, social determinants of health play an important role in how the best buys affect different population groups and how fast we achieve results. Therefore, an important area of leapfrogging is strengthening the equity orientation of health system policies to leave no one behind. This can be achieved through balancing the implementation of universal strategies with a scale and intensity proportionate to the level of disadvantage. For example, universal smoking bans in public places is a best buy, but an equity-oriented approach would also focus on prioritising smoking cessation workplace interventions in low-income and less-secure areas of employment with heavily subsidised or free nicotine replacement therapy and counselling. Designing equity into public health action is a critical area of leapfrogging in health systems, particularly for NCDs. More gender-sensitive health system policies are another area where

greater results can be achieved. Many of the solutions are not short term. However, there are good practices, such as creating awareness on perception of risk of CVD among women, and building capacity of providers to detect depression in men".

Recep Akdağ agrees about the critical role of intersectoral approaches and strong public health action and he highlights the importance of better priority setting. He uses the analogy of the 'Angry Birds mobile game' to explain the type of approach necessary to tackle the global burden of NCDs; "you need to hit the most vulnerable spots with your resources strategically and effectively", and gives the example of the effectiveness of mass media campaigns to try to reach the entire population.

Francesca Colombo underscores the need for "policies cutting across different sectors. A variety of policy instruments such as regulation and fiscal policies are very cost-effective (often cost-saving). Prevention is a good investment, yet prevention budgets (only 3% of total health spending) are the first thing to be cut, and policies can be hard to push through".

“Designing equity into public health action is a critical area of leapfrogging, particularly for NCDs”

Elena Andradas Aragonés highlights that leapfrogging can come from better population health management linking morbidity patterns to priority setting at regional and community level. She explains that the "National Health Services Population Stratification Project in Spain, which forms part of the implementation plan for the National Chronic Diseases Strategy – provides a technological tool for stratification by Adjusted Morbidity Groups at different levels, to be used in different regions. This facilitates the identification of the needs of each patient and, therefore, the most appropriate and efficient care plan. According to a survey of the Autonomous Communities [Regions] that have implemented it, the strategy's success lies in its adaptability and economic advantages".

Regarding delivery of individual services, **Nigel Edwards** sees an important opportunity to leapfrog in the "connection of NCD care to other service and resources in their community. These changes require larger units for delivering primary care. This in turn allows more standardisation of processes and also allows for new relationships between the hospital specialists and primary care". Another significant leapfrogging opportunity will come from "the creation of larger scale multidisciplinary team based services with a different mix of professionals. This will support a much needed, significant change – a shift from responsive to proactive models of delivery, to allow more focus

* The statements were selected from written and verbal contributions received from the various stakeholders to questions submitted to them, and then reorganized by WHO/Europe and Eurohealth editors.

on issues beyond the biomedical”. **Enis Bariş** agrees, and gives the example of primary care coordination for older people with multiple morbidities. “Take older people out of the hospital. They don’t enjoy the experience. They are over-medicalised, they are over-treated, and they are subjected to hospital-acquired infections which only add to their fragility. Far too often they are automatically picked up by ambulances and taken directly to the hospital. There is therefore a role for primary care to better coordinate this, to try to reduce as much as possible their hospitalisation”. These new relationships can facilitate the re-organisation of service delivery to overcome fragmented health care services and to be more people-centred and integrated, **Zoltan Voko** adds.

“ technological leapfrogging has provided a window of opportunity in managing diseases

Yet, to enable primary care to work more effectively with both public health and hospital services, a number of things are required as **Francesca Colombo** mentions, such as “better information systems for primary care, designing smart payment systems and better equipping health professionals with the right skills in order to meet the needs of chronic patients”.

Tom Auwers illustrates many of these points through the example of Belgium. “One out of four of our inhabitants are confronted with a chronic disease. As a government, our ambition is to guarantee that these patients get good quality care that serves their needs and allows them to continue to live in their normal environment. The most important standard for us is quality of life – and not only the quality of care. Our strategy is to reverse the so-called ‘care pyramid’: empowerment of the patient, support for informal caregivers, integrated primary care, support by secondary to primary care, and integrated financing as key concepts. We also emphasise intersectoral action: seven ministers have competencies in the area of health. Through different intermediate steps they developed and adopted a shared vision and specific actions to realise integrated care in the field. They are being implemented and evaluated as we speak”.

The role of innovative financing mechanisms supported by appropriate information systems, is also seen as an important lever for leapfrogging. **Brigitte van Der Zanden** points out that “the financial systems in many countries are structured in a way that the focus is on curing, rather than on preventing diseases”; “it is common knowledge that prevention is important, but the many health systems are built in a way that it is ‘gaining’ from diseases. It is not only the system that needs to change but also the perspective of everybody”. To turn this around, **Enis Bariş** sees the development of new payment modalities, as a way to facilitate the provision and operationalisation of high quality,

people-centred integrated health care. For **Pavlo Kovtonyuk**, “dealing with NCDs, long-term systematic information management is vital; information has to be gathered and systematised around individual patients, and it has to include unified health and financial data across all levels of care, and care providers. Moreover, the patient has to be empowered to work with this information and to take decisions accordingly”. **Veronika Laušin** agrees and adds that “payments in line with the achievements of efficiency and quality, will also be an opportunity to develop better management of NCDs as well as motivation for service providers to provide better quality and more active care”.

Several respondents see information system innovations as important levers for leapfrogging as they present opportunities to strengthen primary care services, to make health systems more people-centred, and to help people live independently in their homes, amongst other things. For **Itamar Grotto** “the use of advanced technologies, including Big Data, computerised applications and advanced medical devices and drugs offer many opportunities in the prevention and treatment of NCDs”. **Maria Chiara Corti** and **Francesca Colombo** agree, and note that information system innovations can also offer opportunities for clinical optimisation, personal health care records, and improved disease surveillance, as well as for advancing health research. **Silviya Pavlova Nikolova** explains that “technological leapfrogging has provided a window of opportunity in managing diseases and is a useful tool for data-sharing and monitoring. Currently, Bulgaria only maintains a the cancer registry and not data for any other NCDs. The use of adaptive learning and personalised health applications could strengthen our efforts in prevention, data gathering and timely detection of early disease symptoms”.

Main challenges in leapfrogging

Our respondents were also asked to reflect on what they consider to be the main challenges in leap-frogging and in using innovative methods to tackle NCD mortality and morbidity.

For **Katie Dain** a primary challenge is NCD governance; “for implementing effective policies in the region, especially those for NCD prevention, the issue is partnerships with certain industries, in particular those for tobacco, alcohol, food and beverages, and fossil fuels. The motives of such industries are directly opposed to the goals of NCD prevention, and governments must urgently review and adopt stringent regulatory mechanisms to prevent interference in policy making by these industries that could dilute or prevent adoption of health promoting policies. Far from accelerating the NCD response, such incompatible partnerships in fact drastically undermine efforts to improve health”. **Recep Akdağ** on the other hand, thinks that, in the presence of necessary regulations and precautions, a nuanced relationship between governments and the private sector – if appropriately managed – could assist in creating potential opportunities to support better governance of NCD outcomes. In his opinion involving private institutions in

the battle against NCDs could help to address the commercial determinants of health and inequitable NCD outcomes and reduce exposure to harmful risk factors.

Enis Bariş sees “path dependencies as the main challenge blocking us from leapfrogging. Many countries have not yet reached the ‘tipping point’ where people say we can no longer be dependent on the path we set 100 years ago. So instead, they try to improve things at the margins”.

Itamar Grotto, Enis Bariş, Pavlo Kovtoniuk, Veronika Laušin, Silviya Pavlova Nikolova and Zoltan Voko also see a major challenge in resistance to change – by people (professionals and the public) and by the system itself in terms of its organisation, structure and operations. They discuss how this is exacerbated by traditionalism, the bureaucratic mechanisms that aim to protect the organisations’ status quo, the lack of autonomy in purchasing of services, and the complex legal and regulatory frameworks, as well as the fear of higher expenses related to new processes and technologies.

Another source of resistance relates to concerns about data use, which hamper progress in making health system more knowledge-based to respond to NCDs and using health data to inform effective service delivery. **Francesca Colombo** is convinced that “it is possible to establish national health data governance frameworks that encourage availability and use of health data to advance public policy objectives while also promoting privacy protection and data security”. **Maria Chiara Corti** agrees, and adds that “legislation rarely offers solutions to overcome these struggles and to support efforts to integrate health and social personal information”.

Vasile Gustiuc sees a similar problem with current health workforce competencies. **Francesca Colombo** agrees: “health systems are too rigid. Take health labour markets. Entry into employment is restricted through controlled access to training. Tasks are restricted according to particular employment types. There is still ample self-regulation by professions. But despite these rules, skills mismatch is high, with nurses not using the skills they have to their full ability, and many physicians reporting that they do not have the training or transversal skills to perform the tasks they have been given”. **Nigel Edwards** also adds the issue of “professional silos that still exist”. Furthermore, **Zsuzsanna Jakab** sees the gender composition of the health workforce in particular as a challenge, as well as “the lack of the right skills and tools among health care providers to address gender bias in prevention, detection and management of diseases”.

Misaligned incentives are another concern, again linked to the health systems rigidity and resistance to change. **Francesca Colombo** adds that “wrong incentives mean that we encourage care that reflects what providers can do, and volumes of care, not what people need and outcomes of care”. **Nigel Edwards** gives the example of “activity-based payment for hospitals: it reduces their incentive to support new care models and the current payment and contracting models used. There is also a concern

that policy makers believe that these approaches will produce cash savings – largely through reduced hospital activity. While outcomes and productivity should improve, savings may be hard to achieve”. **Zoltan Voko** agrees and mentions how “careful stakeholder analysis is required to explore their roles and interests in the current system and implement the changes in such a way that the incentives motivate the majority of the stakeholders to support the developments”.

“Wrong incentives mean that we encourage care that reflects what providers can do, not what people need

Engines of transformation

Moving forward with some of these suggestions requires complex transformative processes at local, national and regional levels, where all stakeholders work together. As such, we asked our respondents where they see the engine of transformation in their country or region, and how could this engine be strengthened to go faster and further?

Next to the WHO Health 2020 European health policy framework, which aims to support action across government and society to improve population health and well-being, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality, **Zsuzsanna JAKAB** sees “initiatives such as the WHO Strategy for Women’s health and wellbeing and the Men’s health initiative [both of which] provide guidance on how to make health systems gender responsive”, as being aligned and complementary to this. She emphasises that “it is important to ensure that the gender and health equity agendas do not become parallel agendas but that they are fully integrated into national priorities to reduce the burden of NCDs”.

Similarly, **Elena Andradas** sees a powerful engine in “the refocusing of the Spanish health system towards health promotion and prevention. The Health Promotion and Prevention Strategy provides a framework to reach this goal through interventions targeted at health professionals such as guidelines and online training so that they become active stakeholders in this paradigm shift. Secondly, the local implementation plan of the Strategy enhances the inter-sectoral approach to NCDs, facilitating the transformation of local environments with structural changes that enables citizens to make healthier choices. Bringing together different sectors whose policies impact health is a powerful driver towards health in all policies. Health Equity is also, of course, a powerhouse of this transformation. Our unstoppable efforts to guarantee health equity include training on SDH,

equity, participation or intersectorality and tools such as national guidelines for integrating equity into health strategies, programmes and activities or WHO's Innov8 for reviewing national health programmes to leave no one behind".

Katie Dain adds that "while the impact of NCDs is observed in the health sector, these diseases have their roots across multiple sectors while solutions can be accelerated through partnership with the technology sector in particular. As such, governance structures are needed which enhance dialogue and allow collaborative exchange of expertise. Furthermore, actors outside government, including civil society, academia, and people living with NCDs, have unique and valuable competencies which can complement and strengthen government action on NCDs. A whole of government, whole of society approach can be facilitated through establishment of National NCD Commissions". Furthermore, she adds that "change can often be effected much more rapidly at the municipal level. Urbanisation, while presenting a number of challenges, can also represent an opportunity for focused and dynamic change which can subsequently be scaled up across neighbouring cities".

Several respondents also see patient involvement, citizen engagement and empowerment as important ways to support 'whole of society' approaches, and to deliver integrated people-centred care. For example for **Silviya Pavlova Nikolova** "the key word is engagement. Engaging patients in their own health

prevention and treatment process"; **Veronika Laušin** also sees "knowledge and education for the whole population on the importance of prevention related to the empowerment of individuals"; and **Tom Auwers** mentions that these principles were a key part of the Belgium health care reform.

Moreover, cooperation agreements, governance reform and institutional alignments, as well as comprehensive change management strategies and appropriate leadership, are also all seen as strong engines of transformation by a number of respondents. For example, for **Pavlo Kovtoniuk** "expertise and financial support work best if they are concentrated around 'agents of change'. Most transformations need strong political will and a powerful demand side".

Zoltan Voko highlights that "the current small engines are local initiatives. Therefore, supporting them by increasing their visibility and technical support for example, could also help the transformation". For **Brigitte van Der Zanden** "there is not only one engine for making change happen; it is a process that is maybe started by regional government but must be carried by four groups of stakeholders: citizens, government, health providers and knowledge institutes. Only when all these stakeholders are on board might there be a chance to be able to realise the complex transformation process, and the more everybody embraces this innovative way of thinking the faster it goes".



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CELEBRATING THE 10TH ANNIVERSARY OF THE TALLINN CHARTER

INSTITUTIONALISING INTER-SECTORAL ACTION: A TIME FOR LEAPING AND POLE-VAULTING

By: David McDaid

Abstract: Too often there are insufficient incentives or governance arrangements in place to facilitate intersectoral working and funding. Yet many cost-effective strategies to tackle the risk factors for NCDs are at least partly delivered beyond the jurisdiction of the health sector. This article looks at ways to kickstart intersectoral working and leapfrog, or perhaps even pole vault, over some of the barriers that have limited its use. Financial and governance mechanisms are available to help harness support and stimulate actions in other governmental departments, and indeed more widely within society, to attain the goals of both lower levels and better management of NCDs.

Keywords: *Intersectoral Action, Funding, Prevention, Early Intervention, NCDs*

It is vital that health systems devote greater levels of attention to noncommunicable diseases (NCDs), the most important public health problem in the European Region. This is not as straightforward as it sounds. There are many practical and institutional barriers to system change. To make substantive progress requires smarter thinking about the way that resources are allocated to health promotion, disease prevention, treatment and recovery in order to counter the challenge of NCDs. This article will argue that this smart thinking needs to go beyond the jurisdiction of health care services. There is a pivotal role to be played by health care systems in harnessing both support and stimulating actions in other governmental departments, and indeed more widely within society, to attain the goals of both lower levels and better management of NCDs.

Why is this the case? Well many of the most effective and cost-effective strategies to tackle some of the risk factors for NCDs and promote positive social determinants of health are at least partly delivered in other sectors.^{1 2} Take for instance the health benefits of active commuting. Urban planners will not usually work in health care systems. Yet they can play an important role in increasing sustainable physical activity by ensuring that new towns and other developments are pedestrian and cyclist-friendly in order to encourage more active commuting to work or school. Such active commuting is associated with reduced body mass index (BMI) and fat levels that in turn can reduce the risks of many chronic disease including obesity, diabetes and cardiovascular disease.^{3 4} In the same fashion, tackling harmful alcohol consumption will be more effective when it involves enforcement of drink-driving

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legislation, business and local government restrictions on retail access, advertising authorities monitoring of alcohol advertising and schools delivering health literacy and public health messages to young people.⁵

“finding examples of successful partnership working remain the exception

Yet despite the evidence on the benefits of early intervention and preventive actions, investment within health care systems remains stubbornly low. One study (solely of OECD countries in the Region) suggested that the highest level of expenditure on prevention was to be found in the United Kingdom at 5.2% of current health expenditure, with only Finland and Italy also spending at least 4% per annum on prevention.⁶ Moreover, this analysis also indicated that between 2009/10 and 2012/13, on average, spending fell in real terms and still in 2014/15 was only growing at around 2% per annum in the OECD, a rate that is much lower than before the onset of the global economic crisis.

These low levels of investment not only reflect major pressures on health system budgets but inevitable short term perspectives; one challenge is that investing in measures to tackle NCDs may take time to have an impact. Any reduction in avoidable use of health care services in some cases will be more likely to benefit budget holders and policymakers many years in the future rather than in the current financial year. This is why it is important to also work with budget holders in other sectors to encourage investment in actions against the risk factors for NCDs that will contribute to additional long (and in some cases short) term benefits to health systems. For example, working with a range of sectors to reduce the levels

of harmful drinking, will in addition to generating further additional long term health benefits, also have immediate benefits in terms of a reduced risk of violence and accidental injuries that need to be dealt with by the health system.

Calls for better intersectoral working arrangements are not new, but finding examples of successful partnership working remain the exception rather than the rule. For instance, one consultation in 2013 found that only 3 of 25 EU countries reported fully developed approaches to generate funds from different sectors for intersectoral interventions to promote gender equity and health.⁷ Too often there are insufficient incentives or governance arrangements in place to facilitate intersectoral working and funding. This article therefore looks at ways to kickstart intersectoral working and leapfrog, or perhaps even pole vault, over some of the barriers and cul-de-sacs that have limited its use. In particular, it looks at how good intersectoral governance arrangements with clear mandates potentially could rapidly facilitate greater levels of funding for this goal.

Leaping forward

Momentum towards the financing of intersectoral actions to tackle NCDs is growing; a review of actions in 2016 was able to point to some experience within and beyond the European region.⁸ These actions change governance arrangements in different ways, making it easier for health and other sectors to share resources and funding; importantly there can also then be joint accountability for the achievement of specific health related goals.

One way to leapfrog or even pole-vault over hurdles to intersectoral activity is to provide funding streams from health (or indeed other sectors) on a project by project basis where *funding is contractually conditional on having an intersectoral partnership* between health and one or more other sectors. These funds might be managed at a national or local level by health budget holders or by local governments. Social insurance funds potentially may also set aside some funds

for these types of activities. The process for allocating funding may be prescriptive, i.e. stipulating that funding is linked to use of a specific cross-sectoral programme to address an issue, or it may allow for innovation in the way in which a priority issue is addressed.

This may be a competitive process where organisations from two or more sectors have to develop a proposal setting out how funds will be used to address a NCD concern. Examples include schemes in Finland and Denmark where different tiers of local government apply for funding for intersectoral health promotion programmes.⁹ While in many ways relatively simple to design, these schemes tend to be time limited and often small in scale. This may mean that partnership sustainability beyond the terms of the contract may be difficult to achieve. But this barrier is surmountable. One approach used in the Public Health Agency of Canada's Innovation Strategy may provide a useful way of getting round this issue. To encourage appropriate sustainability, funding is provided in three phases for intersectoral projects. Potentially they can receive funding for up to eight years to scale up those projects shown in the first and second phases to be successfully implemented and evaluated.¹⁰

A more radical way of changing governance arrangements would be for health (or other sector) budget holders to set aside an agreed level of funding with the explicit intention to facilitate many different intersectoral activities to address NCDs and their determinants. Such funding schemes would not be time limited; governments would commit to having such funds in place for the very long term – ideally this would be done with cross-party consensus, so that schemes would be more likely to survive a change in government. In a sense this would mean *the creation of a 'Health for Wealth' fund*, operating for the common good in the same way that some Wealth funds, e.g. in Norway, are used. This would mean that even if specific intersectoral projects came to a natural end, or were shown to be ineffective, funding would be available to encourage new innovative ways of working together.

One challenge with a ‘Health for Wealth’ fund may be that it remains under the control of one ministry, e.g. health. This might mean that funds are at risk of being diverted to a different purpose than intended, for instance to plug shortfalls and urgent demands in other areas of the health care system. In countries with well-established governance and regulatory mechanisms, such as the UK, funds that in theory have been earmarked for a particular purpose, such as for public health or mental health, have quietly been used at local level for other purposes when budgets are tight. So to pole-vault over this potential obstacle one option would be to create new institutional structures, such as an independent agency, so that the way that *dedicated funds for intersectoral activities were used could be independent of but still accountable to one or more government departments.*

One example of this is the Health Promotion Switzerland agency. This agency receives funding from an annual surcharge on health insurance premiums; it then co-finances (via a competitive process) intersectoral projects that are aligned with its strategic goals, particularly in the areas of diet, physical activity and risks to mental health. Other examples include the Healthy Austria Fund and the recently established Lithuanian State Public Health Promotion Fund.

Leveraging resources from many sectors

Intersectoral action is not facilitated simply by allocating dedicated funds (often from the health sector alone) to specific projects and activities. It will also be helped if it is easier to leverage resources and funds from sectors other than health. Different sectors will also have different priorities and organisational and regulatory structures. They may not be persuaded that improving health outcomes is of sufficient importance, even if financially compensated for taking action. Health systems need to become more savvy in the way that they work with other sectors. They will need to identify and highlight benefits, including economic returns, of interest to these sectors from addressing risk factors for, or better managing, NCDs.

For example, measures to improve health literacy and mental health promotion initiatives in schools have been associated with education sector specific benefits, including reduced teacher stress and absenteeism, better classroom atmosphere and better educational attainment and reduced need to attend expensive special educational needs classes or schools.¹ In the same way if the police and transport sectors collaborate with health to reduce the risks of harmful drinking, as well as having direct health benefits, this will positively impact on the costs of dealing with road related accidents and congestion, as well as levels of anti-social behaviour and inter-personal violence. If sectors other than health become more aware of the benefits of addressing risks of NCDs, then the likelihood of potential buy-in improves.

“budget holders to set aside an agreed level of funding”

If buy-in is achieved, then one practical way to leverage funding from multiple sectors is to adopt a joint budgeting approach. This might involve some form of budget alignment to address a specific issue, with mutually determined targets and outcomes, or there may be a formal legal process to establish a pooled budget, often time limited, to be spent on agreed projects or delivery of specific services.

Leapfrogging cannot happen in isolation

As the saying goes, Rome was not built in a day. Even if the importance of intersectoral activities is recognised and financial incentives are provided, the extent to which implementation will be effective will in part be dependent on many other factors including the time needed to build trust and mutual respect between organisations in different sectors. This is a topic in itself for another article, but practical measures that can help include the co-location of staff from

different organisations in order to help build up relationships and strengthen trust, as well as the early involvement of all sectors in any planning and priority setting process. Contractual arrangements can also provide safeguards in partnership working. Finally, the whole process of intersectoral working can also be made even more effective if Ministries of Finance can be engaged and potentially take a lead in reforming governance and regulatory frameworks to further create the conditions to share resources and funding across intersectoral boundaries.

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ACCELERATING THE TRANSFORMATION OF PUBLIC HEALTH SERVICES TO TACKLE NCDs

By: John O'Dowd, Anna Cichowska Myrup, Martin Krayer von Krauss, Tit Albreht and Bernd Rechel

Summary: Noncommunicable Diseases (NCDs) are a major public health issue globally. This article identifies two priorities to support public health services in tackling NCDs. The first priority is to invest in strengthened health promotion and disease prevention systems through financing, improved professional education and clearer governance. The second priority is to promote proportionate universalism across public services, especially within universal health coverage. The implications of proportionate universalism for NCDs are significant, providing leapfrogging opportunities for Member States to accelerate population health and avoid a potential widening in inequity.

Keywords: Health Promotion, Disease Prevention, Proportionate Universalism, Health Equity, Universal Health Coverage.

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Introduction

Noncommunicable Diseases (NCDs) are the public health issue of our time. While progress is being made in terms of premature mortality related to NCDs, progress is heterogeneous across the WHO European Region and in particular, multi-morbidity (defined as an individual having two or more chronic diseases) and health equity are major challenges. More must be done to strengthen essential public health services across government and within the health sector, and to facilitate work across sectors for the promotion of health, the primary prevention of disease, and the prevention of further complications for those with established NCDs. This article

explores ways in which Member States can accelerate the public health services response to NCDs by learning about what works across the Region.

Health promotion and disease prevention are key

Across the European Region, there are differences in interpretation of the scope and definition of public health services. The European health policy framework and strategy, Health 2020¹ and the European Action Plan for Strengthening Public Health Services² define 'public health' as "the science and art of preventing disease, prolonging life, and

promoting health through the organised efforts of society”⁸. The “organised efforts” referred to in the definition are carried out by actors in government and society at large. Within government, numerous sectors are involved, including education, social services, agriculture, transportation and trade. Typically, a number of public health services are delivered from within the health sector, and one key challenge is to achieve horizontal alignment and integration of clinical, and public health services.

The European Action Plan sets out 10 essential public health operations (EPHOs), which illustrate the essential functions that are required to deliver an effective public health service at country level. These include specific public health and more general enabling functions such as governance, finance and workforce. Of particular interest to the issue of NCDs are the public health intelligence services that monitor NCDs, risk factors and determinants (EPHOs 1 and 2); services for health promotion (EPHO 4); and disease prevention (EPHO 5).

Health promotion and disease prevention services are central to the effort to tackle NCDs and mitigate risk factors such as tobacco and alcohol consumption, unhealthy diets and lack of physical activity. Health promotion services include interventions targeting the behaviour of individuals (lifestyle counselling or social marketing, for instance), as well as those aimed at the broader determinants of health (such as measures against tobacco, fat and sugar taxes or food labelling). Disease prevention services include activities that enable the early detection of disease, such as screening programmes for different cancers, as well as maternal and child health programmes, and those services which support behaviour change for those at risk of illness, or for those with established NCDs. We believe that there is an opportunity for Member States to leapfrog their approaches to public health services by adopting successful approaches to public health practitioner education and training and by adopting effective approaches to intersectoral delivery on public health outcomes.

Switching to public-health enhancing skill-sets by transforming education

At individual and population levels, delivering promotion and prevention services requires knowledge and competencies that are distinct from those typically required to address communicable diseases. Expertise in areas such as child and maternal health, healthy ageing, occupational health, nutrition, addiction, and violence and injury prevention becomes crucial, as do so-called soft skills such as intercultural competencies, counselling, collaboration and brokering partnerships. In this respect, one important regional feature is that much of the public health workforce currently in place in the countries that are members of the Commonwealth of Independent States (CIS) has been educated and employed to deliver hygienic and sanitary control services targeting communicable diseases. As such, a new cadre of human resources must now be put in place, in many countries of the Region, to augment the current public health workforce.

“governments will need to invest substantially more into health promotion and disease prevention

In order to secure the new human resources required to address the challenge of NCDs, governments will need to invest substantially more into health promotion and disease prevention. In the years following the 2008 financial crisis, governments chose to cut health promotion and disease prevention services, while expenditure on other health services continued to grow, albeit at a slowed pace. In comparison to other areas of health expenditure, funding for public health has also been on the decline in EU Member

States since 2009.⁹ Beyond financing, the regional trend to give lower priority to disease promotion and the prevention of NCDs is also apparent in the availability of educational programmes and the extent to which governments legislate for public health services.

Since 1990, organisations such as the Association of Schools of Public Health in the European Region (ASPHER), the Open Society Institute and many other bilateral and international funding agencies have invested considerable efforts in modernising public health education in CIS countries. In a review conducted in 2011, Adany et al.¹⁰ noted that much progress has been made in introducing the concept of ‘new public health’ and establishing new schools and departments of public health in countries of Eastern Europe and the Baltic states, but that progress has been much slower in the CIS countries. The Kazakhstan School of Public Health (KSPH), established in 1997, provides an example of the educational transformation required. The KSPH provides educational programmes informed by the work of ASPHER. Students include those wishing to be public health specialists as well as administrators and government employees. In addition, the school provides shorter courses for other specialists working in related disciplines within the health sector. ASPHER has produced clear recommendations for the content of masters-level education for public health professionals.¹¹ Learning from the wider European experience in the training of public health professionals and actors represents a simple and effective way of leapfrogging for Member States.

A toolkit is available for enhancing concrete intersectoral action

Intersectoral action on health is not a new concept. It builds on the Declaration of Alma-Ata¹² and is developed in the Ottawa Charter for Health Promotion¹³ and the 2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases.¹⁴ The 2010 Adelaide Statement on Health in All Policies¹⁵ sets out the prerequisites for intersectoral action. These include clear leadership and mediation across

interests; a systematic approach to take account of interactions across sectors; and clear accountability, transparency and participatory processes. The Adelaide Statement also describes a series of tools and methodologies that support this way of working, including interdepartmental and interministerial committees, joined-up workforce planning and development, community engagement and participation, and legislative frameworks. An illustration of how this can work out at country level is offered by New Zealand, where intersectoral action has been mandated by successive governments to address challenges such as long-term unemployment, low educational attainment and low uptake of early years education.¹¹ Again, adopting such tools and methodologies provides an opportunity for leapfrogging.

While progress is being made across the European Region in identifying people at greatest risk, such as those with risk factors for cardio vascular diseases (CVDs), it is also clear that when identified, people with risk factors or diseases, such as diabetes, are not receiving effective interventions aimed at prevention. Public health services must provide leadership in disease prevention and health promotion activities across the health sector and other sectors, such as transportation and the environment, in order to support all actors in tackling NCDs. Based on the New Zealand experience, it is possible to enhance prevention and promotion activities within and across sectors by providing leadership and adopting a variety of approaches, such as interagency cooperation, policy development, setting targets and monitoring implementation, and the judicious use of incentives. An example of public health services making the shift to prevention and promotion is provided by Slovenia, where strong leadership has been shown in restructuring services and establishing disease prevention programmes.¹²

Public services can be transformed through proportionate universalism

Intrinsic to both health promotion and disease prevention services are efforts to address social determinants and health

inequity, whether by increasing access (cultural mediation and interpretation services for minorities, or outreach services and mobile clinics for homeless people or sex workers), or through intersectoral action such as policies and plans on employment, housing, the environment, education and development. These services, therefore, play a key role in efforts to ensure that healthy lifestyles are accessible to all people, irrespective of their age, disability, marital status, gender, sexual orientation, religion, ethnicity and socioeconomic status.

In addition to prevention and promotion activities, efforts must be made to tackle not only the immediate risk factors and behaviours but also the ‘causes of the causes’, such as poverty and gender. Health equity, the desire for equality of health across all subgroups of society, through matching the level of health need with an appropriate resource, is a central goal of Health 2020. Socioeconomic deprivation in particular is strongly linked to increased levels of NCDs. There is also clear evidence of earlier onset of NCDs and of multiple NCDs, or multimorbidity, in groups affected by socioeconomic deprivation.¹³ The barriers to NCD control vary by socioeconomic deprivation, gender and age. This results in marked differences in life expectancy and healthy life expectancy across societies. Any approach that tackles NCDs must be tailored to account for inequity, as generalised approaches to health and social care can widen existing inequities.

Health inequity has proven remarkably resistant to public health action, despite attempts to focus on preventive care and upstream intersectoral action to address the “causes of the causes”. One of the reasons for this resistance is an over-reliance on targeting vulnerable populations as a strategy for reducing inequity. The Marmot review of health inequalities in England¹⁴ has suggested that targeting fails to reduce inequity and proposes that proportionate universalism provides a more secure approach to tackling health inequity. The report states that:

focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of

the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. This is called proportionate universalism. (p.15)

“clinical and public health professionals must be equipped with more sophisticated knowledge, skills and competencies

This approach fits well with Sustainable Development Goal 3.8 on universal health coverage (UHC). What is needed is a broader approach for Member States that uses the lever of UHC to tackle health equity from the outset, moving away from narrow, vertically targeted programmes focusing on individual diseases or population groups and instead considers health in a more holistic, multisectoral manner. Such approaches would allow health needs to be addressed in an increasingly proportionate manner: matching the scale and intensity to the levels of need.

The implications of proportionate universalism for NCDs are significant, providing opportunities for Member States to accelerate or ‘leapfrog’ progress on population health and avoid a potential widening in inequity. The approach requires enhanced skills and refined programmes of intervention that take account of groups within the population, focusing on each group to identify and explicitly addressing the barriers and levers for lifestyle change such as culture, gender, poverty, literacy and education. This approach requires clinical and public

health professionals to be equipped with more sophisticated knowledge, skills and competencies. Prevention programmes would also need to match this level of sophistication by analysing prevention needs in a much more granular manner, taking account of intelligence and data on inequity, as well as evidence concerning the barriers and levers for change, and explicitly linking this information to local prevention approaches for each group through the actions of different sectors and actors.

Public health services have a key role to play in the surveillance of health needs and in the creation of multisectoral approaches that can address health inequity in an effective way. This is especially important in the field of NCDs, where risk factor clustering, multimorbidity, poor access to services and limited engagement with health improvement programmes are strongly associated with socioeconomic disadvantage. Spain has implemented a chronic disease stratification programme that combines strong surveillance and intelligence methods, using population-level data on risk factors and diseases obtained from records of health care delivery and utilisation, with local approaches to enhance health care activity in support of prevention and promotion for groups at higher risk. This is an example of using intelligence resources to align the delivery of preventive services with the health needs of the population in a proportionate manner, in order to support health equity. This approach at the population level should be blended with our first message which strengthens investment in health promotion and disease prevention in order to deliver interventions to populations and individuals, overcoming sectoral barriers to action, and barriers to individual behaviour change.

Priority actions

Our first message is to invest in stronger health promotion and disease prevention. In order to deliver this priority, Member States need to increase resources to health promotion and disease prevention services and simultaneously strengthen professional education and continuous professional development programmes

to ensure that public health and clinical staff have the necessary competencies to deliver effective prevention and promotion services. In addition, the public health workforce must be equipped with skills and effective governance to broker NCD promotion and prevention within the health system and across sectors.

Our second message focuses on promoting proportionate universalism through public services, particularly with reference to UHC. The expansion of UHC provides Member States with a unique opportunity to improve population health while avoiding a rise in health inequity within different groups. To achieve this aim public health services will require robust surveillance of health equity, the use of systematic approaches such as health equity impact assessment, stronger multisectoral links and joint working, particularly with primary care services.

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HOW LEAPFROGGING IN PRIMARY CARE CAN CONTRIBUTE TO UPSCALING NCD CORE SERVICES

By: Liesbeth Borgermans, Jan De Maeseneer, David Beran and Juan Tello

Summary: In response to the exponential growth of noncommunicable diseases (NCDs), multi-morbidity and the related demographic changes, health systems need to leapfrog the implementation of NCD-relevant core population interventions (tobacco, alcohol, nutrition and physical activity) and individual services (early detection and management of cardiovascular disease, diabetes, lung diseases and cancer). This article describes four essential strategies to leapfrog NCD core services in primary care. These strategies are: 1) the creation of larger scale multidisciplinary team-based services with a different mix of professionals, 2) pro-active population health management, 3) goal-oriented care, and 4) coordinated and integrated service delivery.

Keywords: Leapfrogging, Noncommunicable Diseases, Primary Care, Multidisciplinary Care, Integrated Care, Population Health Management

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The need to tackle NCDs

Noncommunicable diseases (NCDs), multi-morbidity and the related demographic changes, especially ageing populations, are major factors endangering the sustainability of health systems. NCDs not only have an impact on people's health and quality of life, but also on the economy in terms of lower labour market participation and productivity (absenteeism, number of hours worked and levels of wages).¹ As the spectrum of ill-health changes, health systems have to respond. Policy action is needed to reduce the number of people dying prematurely and to increase the number of years that people live

in good health. The reason for urgent reform is clear: the power of existing interventions is not matched by the power of health systems to deliver them to those in greatest need, in a comprehensive way, and on an adequate scale. The mismatch between actual performance of fragmented health systems and society's rising expectations is a cause for concern and internal pressure for health authorities and political leaders.²

Accelerating the health system response

Important gains have been made in the WHO European Region for certain NCDs, sometimes at the expense of

other NCDs. For practically all countries where robust data are available, there is a clear decline in premature NCD deaths in the last decade. The decline is fastest in the countries with the highest mortality, and the Region is converging at a steady rate, leading to a reduction in east-west inequality. Almost all countries in the Region have comfortably achieved the original bold goal of a 2% annual reduction over the decade 2007–2017.¹⁴ The Health 2020 goal of a regional 1.5% annual reduction is well on the way to being achieved and even exceeded in the next three years.¹⁵ These data show that large improvements in health can be achieved at a reasonable cost, for individuals and for large populations.

“address disparities in NCD core services directly at the point of care”

The challenge remains, however, how to accelerate and maximise these declines in the context of multiple features, including: single-handed practices; episodic, reactive, fragmented care and problem-and disease oriented care; strong orientation towards curative services; overuse and underuse of services; and limited attention to health promotion, prevention and addressing the social determinants of health and well-being.

There are a number of ways in which health systems can leapfrog the implementation of NCD-relevant core population interventions (tobacco, alcohol, nutrition and physical activity) and individual services (early detection and management of cardiovascular disease, diabetes, lung diseases and cancer). By leapfrogging we mean skipping inferior, less efficient, more expensive ways of delivering NCD-relevant core population

interventions and individual services and move directly to more advanced approaches representing today's best practices in health systems governance, services organisation and financing. We present four essential strategies to leapfrog NCD core services. These are: 1) creation of larger scale multidisciplinary team-based services with a different mix of professionals, 2) pro-active population health management, 3) goal-oriented care, and 4) coordinated and integrated service delivery.

Leapfrogging strategies

From single-handed practices to multi-profile primary care-based teams

Multidisciplinary primary care teams have been set up in Belgium, Estonia, Finland, France, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom, to overcome the limitations of single-handed practices and doctor-nurse tandem*. Multidisciplinary primary care teams consist of various primary care entities, including primary health care practitioners, located in one place. These teams aim to proactively and adequately address the needs that patients and communities present on a health–wellness continuum and offer a comprehensive service (see Box 1).

Primary care teams have significant resolute capacity and can thus broaden the scope of individual core NCD services.¹⁶ There are two main reasons to embed core services more resolutely into these teams. The first is that most patients targeted by core NCD services can be diagnosed and treated within primary care, provided that health care practitioners have the requisite training and that the legal framework permits this. For example, the vast majority of patients with type 2 diabetes mellitus can be treated at the primary level, as can patients with hypertension, heart failure, those in need of secondary stroke or heart attack prevention, cancer screening and palliative care. Most chronic diseases generally only require short specialist interventions for complex diagnostic work-up or at the time of severe exacerbations and hospital admissions.

Box 1: Multi-disciplinary primary care teams

Services include:

- prevention and health promotion
- curative services
- patient education and self-management support
- patient and family caregiver empowerment
- psychological counselling
- social services, referral and care coordination

Teams include:

- family physicians
- registered nurses
- psychologists
- health promoters
- nutritionists
- clinical community pharmacists
- physical activity counsellors
- community health workers
- front desk staff

Source: ¹⁵

The second reason to embed core NCD services more solidly into primary care teams is that most people have more than one primary and secondary risk factor or chronic condition (such as hypertension, obesity, diabetes and depression) and present with multiple psychological and social needs.¹⁷ It would therefore make sense to treat their conditions and needs with an integrated framework of care provided by several professionals who address their patients' physical, emotional, and social disease-related challenges in a comprehensive manner.¹⁸ Single-handed general practitioners, even with peers or nurses in group practices, do not always have the time or competences to provide good quality patient education and support for patient self-management. These interventions are complex and time-consuming and require highly trained professionals, such as advanced nurse practitioners, supported by nutritionists and health psychologists, who help patients make lifestyle changes. This type

* For more information see ¹³

of comprehensive service offering is characteristic of multidisciplinary teams. Other interventions include the prevention of, among others, foot ulcers and limb amputation in diabetic patients, which require close monitoring by allied health professionals such as podiatrists. Another example is polypharmacy in patients who present with multimorbidity. Polypharmacy is closely linked to adverse drug reactions, risk of drug – disease interactions, inappropriate dosing and nonadherence. In this context, community pharmacists can provide important support and optimise medication reconciliation services before or after the patient is discharged from hospital.

“proactively understand the health and risk profiles of communities

Although primary care teams alone cannot improve all equity aspects and the determinants of health for all of society, they can address disparities in NCD core services directly at the point of care.⁸

From reactive to pro-active community population health management

Several tools offer important potential for leapfrogging of NCD core services by proactively understanding the health and risk profiles of communities. Insights derived from integrated health data management are crucial to population health management efforts by primary care teams. The analysed data provide both clinical and operational insights for entire populations at the community level of care. The approach is comprehensive in that it links information from a population level (e.g. determinants of health) with information from the patient level (e.g. health outcomes), since both levels influence one another.

Important examples of population health management tools are patient registries and health registries, using the WHO International Classification of Primary Care (ICPC-2) coding.⁹ ICPC-2 classifies patient data and clinical activity in the domains of general or family practice and primary care, taking into account the frequency distribution of health problems seen in these domains. It allows for classification of the patient’s reason for encounter, the problems or diagnosis managed, interventions carried out, and the ordering of these data by episodes of care. Based on these data, much more attention can be placed by teams on the prevention of complications, which is essential to improving NCD core services.

The International Classification of Functioning (ICF) is another useful tool that allows for the multidimensional assessment of functional status in patients.¹⁰ It is a WHO framework for measuring health and disability both at individual and population levels. As the functioning and disability of an individual occurs in a particular context, the ICF includes a list of environmental factors. Proactive management of individuals and communities is also enhanced by the use of risk stratification tools. These build on health data from empanelment, which is the assignment of individual patients to individual primary care providers with sensitivity to patient and family preference.

One example of a first generation risk stratification tool is the risk stratification tool for cardiovascular disease (CVD) recommended in the WHO Package of essential noncommunicable (PEN) disease interventions in which CVD and diabetes with their risk factors are considered in an integrated manner. This approach can be a good starting point for low capacity and low resource countries. When using second generation risk stratification tools, patients are risk stratified to identify opportunities for intervention before the occurrence of any adverse outcomes that would result in increased medical costs. These tools enable people to be grouped according to the “constellation” of diseases they experience and the support they receive, ranging from those in good health, for whom the appropriate interventions are health promotion and

screening, to those requiring end-of-life care. Risk stratification, using predictive modelling, is a key stage in evidence-based intervention focused on improved NCD core services.

In settings with low primary care capacity, population health management should be considered a staged process, requiring the development of teams that gradually implement new care processes, new competencies, changes in provider culture and the adequate use of information technology, all conducive to effective population health management.

From a problem-oriented model of care to goal-oriented care

The problem and disease-oriented model targeting disease-specific interventions is less well suited to the management of chronic illnesses, health promotion and disease prevention. It is not particularly conducive to an interdisciplinary team approach and tends to shift control of health away from the patient and toward the physician. Effective detection, diagnosis, and treatment of NCDs and multimorbidity requires the orientation of care to be directed at and evaluated in the context of individually-specified goals (goal-oriented care in terms of quality of life and goals that are important to the patient).¹¹

When applying a goal-oriented model of care, each individual is encouraged to achieve the highest possible level of health as defined by that individual. Characterised by a greater emphasis on individual strengths and resources, this approach represents a more positive approach to health care too. The patient is actively engaged in shared decision-making that respects and starts from their personal goals.

These goals often encompass lifestyle changes using a stepwise approach while setting realistic goals. Supporting patients with lifestyle changes is complex and time-consuming and requires highly trained professionals, such as advanced nurse practitioners, supported by nutritionists, physical therapists and health psychologists. Other goals that are often expressed by patients include dealing with adverse drug reactions. In

this context, community pharmacists can provide important support and optimise medication reconciliation services before or after the patient is discharged from hospital.

“greater emphasis on individual strengths and resources

From fragmented to integrated service delivery

Coordination within primary care teams ensures that a combination of health services and information is provided that not only meets a patient's needs, but addresses them in the right order. The main aim of care coordination is to improve NCD outcomes while containing overall health care costs. Effective coordination has been shown to:

- improve care outcomes, such as early detection of disease exacerbation, effective medication management and reduction in hospital admissions;
- avoid duplication of services and conflicting information from multiple providers; and
- increase patient and caregiver satisfaction.

Coordination can also prevent vulnerable populations from falling through the cracks in the health–wellness continuum.

Effective integration of care is complex, as it requires the coordination of health and social care, prevention, promotion and curative services, public health, rehabilitation, mental health, palliative care and the voluntary sector. Primary care teams need to work closely with other stakeholders and civil society organisations to ensure that programmes reach beyond patients to support their social health and the health of the wider community.¹²

Well-established processes are required to identify patients in need of care coordination. Mutually accepted interdisciplinary care protocols need to be shared between primary care teams and providers or organisations from other settings and levels of care. Care plans must be individualised, with regular case discussions and easily available knowledge sharing communities. Several new care professions have therefore been established to facilitate coordination of care, such as (nurse) case managers who fully engage in care coordination.

Obstacles that need to be addressed

The necessary changes can only be realised if there are a sufficient number of effective regulatory instruments that allow new service delivery models to grow. Regulatory instruments in support of new service-delivery models should address human resources (volume, type and distribution of services and skill-mix), educational requirements, governance, financing mechanisms, medicine policies, life course approaches to health, people-centred strategies and information solutions.

Countries need to show political courage, a medium and long-term perspective to their policy interventions and a whole-of-society approach to call in those stakeholders that currently are underrepresented in health policymaking, such as patient and family caregiver organisations, civil society, professional associations and health managers.

Conclusions

The ageing population and the increase in the number of people diagnosed with multiple NCDs are forcing policymakers and public health leaders to reform health care systems with increasing urgency. Scaling up NCD core services requires multi-profile primary care-based teams, pro-active population health management, goal-oriented care and coordinated and integrated service delivery. These necessary changes require timely and effective regulatory instruments that support their implementation.

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INTEGRATING NURSES IN ADVANCED ROLES IN HEALTH SYSTEMS TO ADDRESS THE GROWING BURDEN OF CHRONIC CONDITIONS

By: **Claudia B Maier** and **James Buchan**

Summary: The growing burden of noncommunicable diseases (NCDs) has put pressure on health systems and their workforce to provide high quality, person-centred care. Nurse Practitioners and other Advanced Practice Nurses are a rapidly growing workforce in an increasing number of countries. Despite the high levels of advanced practice potential to address NCDs, many countries in Europe are only at the early phase of considering or introducing expanded nursing roles. From an implementation perspective, governance is critical as it authorises nurses' expanded scope-of-practice, educational requirements and nurses' advanced skills and competencies. Payment policies require revisiting as they impact on practice uptake in multiprofessional teams.

Keywords: *Health Workforce, Skill-mix, Nurse Practitioner/ Advanced Practice Nurse, NCDs, Implementation*

Introduction

The increase in noncommunicable diseases (NCDs) is triggering adaptations to service delivery and workforce composition in some countries, and provides an improvement model for consideration in others. Primary care practices are under pressure to provide high-quality, comprehensive, person-centred care. In many countries, physicians are less likely to work in primary health care or in rural areas than in the past. In response to these challenges

and broader labour market issues, several workforce policies and strategies have been adopted in various countries across Europe. These include introducing financial and/or non-financial incentives (e.g. improved work-life balance) to educational programmes to address geographical maldistribution and quality of care.¹ However these interventions have often been narrow, single policies aimed at only one group or profession, when what is required to make a sustained step change in impact is to have aligned

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Box 1: Definition of Nurse Practitioner/Advanced Practice Nurse

The International Council of Nurses has developed the following definition: “A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A Masters degree is recommended for entry level.”²

A variety of titles are used throughout the world, including family nurse practitioner, adult nurse practitioner, nurse midwife practitioner, clinical nurse specialist, nurse anaesthetist, gerontological nurse practitioner, emergency room, as well as acute care clinical nurse specialist, among others.

or “bundled” workforce policies that can also take into account interprofessional workforce strategies which can re-allocate responsibilities and newly share workloads within teams, e.g. between physicians and nurses.

Several countries in Europe have expanded the roles of nurses. Expanding nurses’ scopes-of-practice can contribute to fill gaps in primary care, improve the quality of care – often for patients with NCDs – or alleviate provider shortages. Nurses performing clinical activities that have traditionally been reserved for physicians are increasing worldwide, and are commonly termed Advanced Practice Nurses (APN), or Nurse Practitioners (NP). Titles vary in different settings and countries (see Box 1). Their contribution is most prominent in primary care, notably in NCD care, where the APN role is often largely autonomous, but works in multidisciplinary teams, with scope to prescribe medications and perform other advanced clinical activities.

One recent literature scoping review suggested that NPs are able to provide 67–93% of primary care services.³ NPs and other nurses working in advanced roles typically take care of the common and stable NCDs, including monitoring and regular check-ups, treatment, secondary prevention, and provide patient information and self-management support. Physicians then often focus on the complex NCDs and patients with multimorbidity. While this is not the case in all countries, it is the underlying approach in many. Countries where there is increasingly rapid progress in adopting NPs and other advanced nursing roles are likely to have considered how to address legislative, regulatory, professional and payment barriers and “flip” these into enablers. Systematic reviews suggest that the quality of NP/APNs and other nurses working in advanced roles is at least equivalent compared with that of physicians; moreover when nurses work in advanced roles, patient satisfaction tends to improve and information to patients is more frequently provided.^{4–7}

Numbers of Nurse Practitioners are growing in some countries

In a recent six country analysis of NPs, the United States (U.S.) had the highest absolute number of NPs and rate per population (40.5 per 100 000 population), followed by the Netherlands (12.6), Canada (9.8), Australia (4.4), and Ireland and New Zealand (3.1, respectively) (see Figure 1). Except for the US, the number of NPs were small, but growth rates were high. Annual growth rates ranged from annual compound rates of over 6% in the U.S. to 27.8% in the Netherlands. Growth rates were between three and nine times higher compared with the rate of physicians, but starting at low levels.⁸

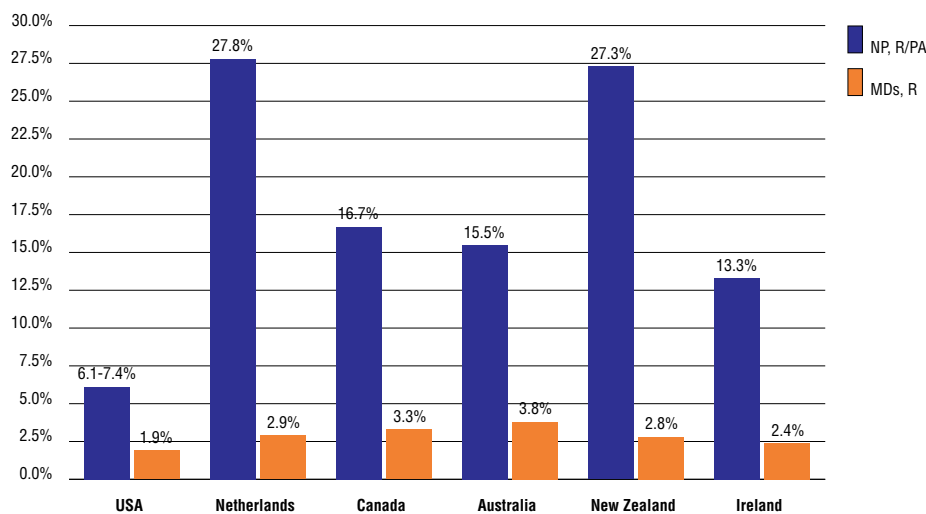
A 2015 expert survey on nurses in NP/APN and other advanced roles in 39 countries examined the extent of task shifting between the medical and nursing professions; that is, the extent to which nurses were officially authorised to work in expanded practice at the interface to the medical profession, measured by seven dimensions of clinical practice. The dimensions included authority to

prescribe specified medications, diagnosis, order tests, responsibility for a panel of patients, treatment, referral and first point of contact.⁹ Survey results highlighted a varying pattern, grouped into three country “clusters” but with a trend of expanding nurses’ roles across all clusters. Eleven countries, including seven from Europe were categorised as “cluster 1” and showed extensive task shifting, where NP/APN are authorised to work at high levels of advanced practice, measured by all the seven clinical activities. These countries included Australia, Canada, Finland, Ireland, the Netherlands, New Zealand, the UK (England, Northern Ireland, Wales, Scotland) and the U.S.⁹ Within this cluster, NP/APNs were able to cover a full or almost full patient visit in primary care. The education was usually at the Master’s level. A total of 16 countries*, all from Europe, reported some, whereas 12 countries showed no expansions of scope-of-practice. More than two-thirds of countries covered had expanded nurses’ official scopes-of-practice in primary care. The majority of nurses worked in advanced roles within teams, with various levels of physician oversight.

Health workforce reforms introduced since 2010 have expanded nurses’ clinical practice

11 countries (cluster 1) had or were in the process of expanding the scope-of-practice of NP/APNs or removing regulatory barriers to existing laws. From within Europe, Finland enacted legislation on nurse prescribing in 2010, the Netherlands adopted a law in 2011. England, Wales, Northern Ireland and Scotland expanded prescriptive authority for independent nurse prescribers in 2012.⁹ Other countries with more recent reforms on nurse prescribing include Estonia, France and Poland.⁹ In some of these countries the process has been lengthy, taking several years or decades. The Netherlands experienced a comparatively short time span from introducing to enacting the law, perhaps due to its initially time-limited duration of five years, linked to a nationwide evaluation.

* Sweden, Spain, Croatia, Cyprus, Portugal, Lithuania, Malta, Estonia, Latvia, Luxembourg, Denmark, Slovenia, Iceland, Hungary, Belgium and Italy

Figure 1: Yearly growth of NPs and physicians 2005–2015 in six countries

Notes: 2005–2015 or years available; Percentage rates refer to the compound annual growth rate of the NP and physician workforces. NP=Nurse Practitioner, MDs=Medical Doctors/Physicians, R=Registered, PA=Professionally Active.

Source: ⁸

The governance and regulatory models varied, ranging from national, sub-national regulation, to no regulation of NP/APN roles, relying instead on employer-level governance.^{10 11} In countries with national or decentralised regulation, restrictive scope-of-practice laws were identified as a barrier to progress. Thus, laws that were regularly updated in line with nurses' expanded skills were enablers to advanced practice. Countries with decentralised regulation were likely to result in uneven levels of advanced practice. In countries with no regulation, role clarity was limited and large practice variations existed. The role of regulation also varied across the various APN roles within countries, requiring a revisiting of regulatory approaches and practice.¹⁰

From policy to implementation: implications and policy lessons

Many countries have recently begun expanding the roles of nurses or have seen a proliferation of Master-level programmes to educate nurses with expanded skills and competencies. There is growing evidence pointing to the safety of care provided by nurses in advanced roles and potential further benefits, such as improved patient satisfaction, more patient information and self-management support provided.⁴⁻⁷ For countries early on in introducing new

roles, the experience of countries that have already gone through the implementation process may hold lessons for (leapfrogged) implementation, notably the lessons learned about the need to address regulation, legislation and professional barriers in a co-ordinated manner, which can enable more rapid scale up.¹²

Policy-amenable barriers to role expansion for nurses have been reported in virtually all countries. These barriers can include a lack of title protection, lack of role clarity, financial barriers in reimbursement, variations in education, unnecessarily restrictive regulations, and resistance by stakeholders. Yet, limited research has addressed what can be done to enable implementation.

Addressing governance and regulatory issues

The evidence highlights the central role that regulation of advanced nursing practice has on enabling implementation.¹² Regulation is important as it can facilitate or impede implementation of new roles, and helps formalise the NP/APN roles. It can set standardised minimum educational requirements and define practice competence and requirements. Moreover,

it can facilitate payment for NP/APN services. These are all factors necessary for successful implementation.

Policy options to improve the governance and regulatory approach include periodic reviews to assess if laws are in line with nurses' (and other professions) competencies and establish an agreed minimum level of harmonisation in decentralised contexts. Moreover, harmonised educational and practice-level requirements are critical to reduce practice variation and ensure quality.¹¹ An example of country experience in the Netherlands is provided in **Box 2** (overleaf).

Revisiting payment policies and reimbursement

Payment policies and reimbursement rates can pose barriers to implementation, if the new roles provided by nurses are not paid for, or if at very low rates.⁹ Uptake in practice depends on the creation of sufficient job positions in primary care. Payment and financing instruments can also enable the uptake of advanced nursing roles in primary care, as demonstrated in Estonia or Lithuania. In these countries, financial incentives had positive effects on creating demand for advanced roles for nurses in primary care.⁹ Using financial (dis-)incentives to create demand and overcome initial barriers to the uptake of new professional roles is a promising approach to accelerate practice uptake, particularly in the early stages of implementation.

Improving nurses' recruitment and retention

The evolution of NP roles with expanded practice and adequate salaries can also contribute to increased attractiveness of nursing as a career. There has been concern that existing nursing shortages may be further eroded by expanding nurses' roles, but experience in some countries such as the U.S., suggests the opposite, if linked to career opportunities and adequate pay.¹³ Creating more jobs at advanced levels, providing opportunities to lead innovative care programmes in teams, and higher nursing education, can stimulate greater interest in nursing as a career, and can encourage career development and retention.

Box 2: Netherlands: innovative policy instruments for authorising task shifting between physicians and nurses

In the Netherlands, task shifting between physicians and nurses (and other professions) was considered a workforce strategy to make the division of work between providers more efficient, to improve access to services (e.g. in out-of-hours care) and alleviate physicians' workloads. The following governance measures were adopted to enable the timely implementation of new roles of *Nurse Specialists* in routine care: first, the regulation of the title and second, changes to the law expanding their scope-of-practice (implemented via an "experimental law").^{9 11}

The regulation of the title "Nurse Specialist" with a Master's degree (also referred to as Nurse Practitioner in the English literature) was introduced in 2009. Furthermore, "Nurse Specialists" are by law requested to register in a registry (in addition to the title as registered nurse), held by the Dutch Nursing Association. The purpose was to ensure minimum educational standards, enhance role clarity and contribute to patient safety and quality of care. In addition, to expand the official scope-of-practice for Nurse Specialists (and Physician Assistants), the legal provisions were changed in 2011. A so-called experimental article (36A) was included in the Individual Health Care Professions Act allowing Nurse Specialists to perform certain procedures previously reserved exclusively for the medical profession, e.g. the prescribing of medicines, for an experimental period of initially five years. After a positive evaluation, the provisions were included in the Act. This legal instrument of an "experimental law" was initially introduced to overcome stakeholder opposition, since it allows evaluation of task shifting nationwide in routine care; and may be a policy instrument for other countries to consider when introducing expanded roles for nurses.^{9 11}

Aligning regulation, education and payment policies to implement advanced nursing roles

In conclusion, many countries have implemented, or are considering, introducing advanced roles for nurses in primary care settings. They can provide new services and help fill care and skill gaps, e.g. monitoring of patients with NCDs, regular check-ups, and (routine) treatment, as well as patient education and lifestyle advice. Regulation, education and payment policies, if well co-ordinated and aligned, can enable a more rapid scale up of the new nursing roles, and can therefore provide a leapfrogging type impetus to improving patient and provider outcomes.

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STRENGTHENING HEALTH SYSTEMS RESPONSE TO NCDs THROUGH **ALIGNED INFORMATION SOLUTIONS**

By: **Tino Marti** and **Tatjana Prenda Trupec**

Summary: The challenge that noncommunicable diseases (NCDs) pose to health systems sustainability can be faced with the potential that information solutions provide concerning accessibility, quality, efficiency and equity. Capitalising on the broad uptake of information technologies among people of all ages and the goldmine of health data stored in official databases, health systems can build more resilient, people-centred and integrated health services to monitor, prevent and manage NCDs. This article describes four complementary digital strategies to enable health system response to NCDs: 1) development of population health intelligence, 2) integration of electronic medical records with active clinical decision support tools, 3) scale-up of cost-effective telehealth solutions, and 4) personalised access to health information service.

Keywords: *Information Solutions, NCDs, Electronic Medical Records, Personal Health Records, Telehealth*

Background

The increase in chronic diseases, as a sign of the new epidemiological transition, severely affects societies and economies and tests the sustainability of health systems and their capacity. Strengthening health systems response to non-communicable diseases (NCDs) is now, more than ever, a top health policy priority and particularly urgent in those countries with longer life expectancy and higher mortality rates due to health risk factors.

In the last few decades, the digital revolution of information and communication technologies has become a staunch ally of modernising health systems and improving their capacity to face this new public health challenge. NCDs require capabilities for population health management at different levels, and an enhanced continuity and coordination between health care providers, made affordable only through advanced health information systems and technology-enabled care.¹

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At the individual level, the integration of clinically relevant data can lead to significant improvements in clinical practice with tangible benefits for patients, including individualised treatment plans and fewer duplicate diagnostic tests. Increasingly, lack of linkage between existing information systems is recognised as a barrier to better population health management and provision of coordinated health care. At the aggregate level, big data provides an opportunity to monitor system performance, and ensure effective and better targeted public health action and high quality of care for populations. An effective use of health information can drive evidence-informed policymaking, measuring coordination and outcomes of care pathways, compliance with national guidelines, resource use and costs, disease prevalence, and the analysis of relationships between socioeconomic status, health and health care.⁴

Digital strategies to enable health systems response

Information solutions give us the opportunity to address previously unsolvable complex problems and represent the quintessential opportunity for leapfrogging health systems in response to NCDs. Four essential information solutions strategies to align the health system response to NCD core services are presented (see Box 1). Each of these is discussed in more detail below.

Box 1: Key information solution strategies to address NCD core services

- 1) Exploitation of system-wide population health intelligence to tailor proactive care management initiatives
- 2) Integrated Electronic Medical Records with active clinical decision support tools to foster care coordination
- 3) Scaled-up telehealth solutions
- 4) Personalised access to health information services.

From siloed health registries to system-wide population health intelligence

Our health systems record millions of data every day which can be turned into insights and actions to prevent NCDs and cope with their consequences. Integrating siloed health registries into system-wide population health databases allows researchers and health care managers to understand, monitor, discover and predict people's future risks of mortality, morbidity and health services utilisation, including hospitalisation, re-hospitalisation and pre-hospital service usage.⁵

“Information solutions give us the opportunity to address previously unsolvable complex problems

Population health intelligence supports data-informed decision making through applications like health risk stratification tools, which are being adopted and deployed in countries such as Israel, Italy, Spain and the United Kingdom as a relevant strategy to tackle the challenges posed by chronic patients with comorbidities. Risk-grouping allows proactive care by supporting the development of disease, care, and case management programmes and fostering intersectoral collaboration, mainly addressed towards complex chronic patients with social needs. When clinicians validate stratification tags with contextual and additional clinical information, health services can become proactive, reducing hospital admissions and re-admissions, increasing patient satisfaction and improving health outcomes.⁶

Implementing health risk stratification systems and making them a lever to transform the model of care remains a challenge due to the technicalities of integrating markers into Electronic Medical Records (EMR) and the organisational development and change management involved. A feasibility appraisal performed in different Italian and Spanish regions concluded that communication, training, multidisciplinary deployment teams, engagement of clinicians, operational plans and friendly information displays were vital to successful implementations.⁵

The next leap in improving predictive capacity of health risk stratification tools is to include mental health and social information to enrich risk profiling, provide better clinical meaning and thus increase the uptake among health professionals.

From passive fragmented record-keeping to integrated EMRs with active clinical decision support tools

Health systems have widely adopted EMRs over the past 20 years. EMRs systematically collect health information generated by health professionals and support coordination and integration of multi-profile, multidisciplinary primary care-based teams, extending the principles of accessibility, continuity, and interactions over time. Advanced EMR suites include e-prescription, clinical computerised decision support systems (CDSS) based on clinical practice guidelines and coordination of care functionalities such as e-referrals and inter-consultations, which streamline the management of chronic patients and ensure the adequacy of individual preventive NCD interventions.

Frequently, the EMR adoption process has been left to the initiative of health care providers and consequently, most countries are currently facing critical challenges in integrating health information from different hospital and primary care EMRs. This gap in information continuity is especially relevant for the management of NCDs as their episodic nature requires strong coordination and collaboration between health care providers and health professionals.

Integrating EMR through Health Information Exchange (HIE) standards or developing a system-wide integrated Electronic Health Record (EHR) are strategies adopted by leading countries to overcome the information continuity gap. When these exchange systems are in place, health care providers and health professionals can access patient data from wherever they practice, allowing the quality of care to be improved and the use of care resources to be optimised. For instance, shared EHRs based on the standardised exchange of structured (data) and non-structured (documents) information between local EMR systems can offer a complete clinical profile overview from different health care providers, including information on medicines prescriptions—which can increase patient safety through drug-drug interaction warnings.⁶

Despite the recognised benefits of EMR and EHR, barriers to adoption are expected to come from health care providers regarding disincentives to share data due to competition, costs, limited return on investment, and concerns about data misuse and privacy. However, health system gains in terms of equity, quality, efficiency, coordination of chronic care management and expected better outcomes are a call to set up the right eHealth governance structures to manage regulatory and information management issues, such as interoperability and integration of information.^{7 8}

From pilot to scaled-up telehealth solutions

Telehealth comprises health services delivered from a distance, clinical and non-clinical functions, and the use of electronic means or methods for health care, public health, administration and support, research and health education.⁹ Different modalities of telehealth such as video conferencing, transmission of medical images, patient portals, remote monitoring of vital signs, continuing medical education and nursing call centres support the entire spectrum of chronic conditions from home to specialised care centres.¹⁰ Telehealth increases access to health care to populations for which care was otherwise not available, provides convenience to patients and providers, and

eventually can reduce costs. In clinical terms, telehealth and telemonitoring address care both for acute and chronic conditions allowing for the disruption of traditional services delivery.¹¹ Time and space constraints fade away blurring structural and organisational barriers and allow regionalisation, concentration, and decentralisation of services from hospitals to ambulatory settings including home and mobile devices.

Many telehealth pilots have failed to scale-up due to different barriers to implementation such as incentivising funding mechanisms, competing priorities, or legal and infrastructure constraints.¹² Additionally, social equity of access to telehealth services and related clinical issues like lower quality of patient-physician relationships, physical examination, and care with remote visits can become drawbacks for adoption.¹³

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Personal Health
Records can
become a
central piece in
person-centred
care

Moving from pilots to large-scale implementation requires facing several critical success factors. The European Commission Momentum Telemedicine project found that change management, involvement of clinicians and agreement with stakeholders were crucial in successful implementations.¹² Furthermore, adoption ultimately depends on the evolving business and policy context that shapes these trends, especially the integration of telehealth data into EMR systems and the introduction of value-based reimbursement formulas that influence decisions about technology investment. Other determinant factors in telehealth adoption include the penetration of clinician training combined with

progress in enhancing the usability of telehealth technologies in daily workflows, success in navigating evolving relationships between patients and their physicians, and the availability of evidence-based clinical guidance.¹³

From generic to personalised access to health information services

An essential function of public health and health care services is to provide health information and education to people through different information outlets. The internet has allowed health authorities and organisations to address population information needs easily through comprehensive health portals. Even though they are rich in practical health information, their design is one-size-fits-all and does not engage with users actively.

Some countries with advanced EHR, like Denmark and Estonia, have started to open their systems to people and thus provide personalised health information through secure Personal Health Record (PHR) systems. PHRs can become a central piece in person-centred care by granting patients access to their medical records and other relevant information, and thus engage, empower and boost self-care and self-management. Relevant health information such as immunisation records, laboratory results or screening due-dates in electronic form makes it easy for patients to update and share their files. They can reduce administrative costs with easy access to electronic prescription refills and appointment scheduling applications, enhance provider and patient communication through secure systems, and help caregivers to coordinate and improve health care quality.¹⁴

Moreover, access to their own health data can potentially enhance provision of integrated person-centred care and improve patient satisfaction. Complementary, mobile health applications promise to add improved access to personal health data and extend PHR functionalities and services. Integrating third-party mobile health applications in PHRs and EHRs still remains a challenge even to the most tech-savvy health systems which have not yet capitalised on citizens' wide uptake of mobile health applications. Differences

in patient motivation to use PHRs exist, but an overall low adoption rate is to be expected, except people with disabilities, the chronically ill, or caregivers for older people, suggesting practical gateways for self-care NCD management.

Conclusions

Health care systems need to take advantage of the potential of information technologies, their wide uptake among people of all ages and the goldmine of health data stored in official databases to monitor, prevent and manage NCDs.

Aligning the health system response to NCD core services requires system-wide population health intelligence, integrated EMR with active clinical decision support systems, scaled-up telehealth solutions and personalised access to health information and education services. Due to the disruptive nature of information solutions, health system administrators and managers have to foster their challenging adoption while facing legal compliance; at the same time they have to encourage digital health innovation among organisations, professionals and patients.

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In Memoriam: Professor Walter Holland (1929–2018)

It is with great sadness that we have to report the recent passing of Professor Walter Holland. Walter was Emeritus Professor of Public Health Medicine and a Visiting Professor at the London School of Economics and Political Science (LSE).

Arriving in the UK in 1939 as a refugee fleeing Nazi persecution from what is now the Czech Republic, and knowing just a few words of English, Walter went on to have a distinguished career in epidemiology, public health and health services research. A particular area of interest was respiratory disease, something that he had first studied while undertaking his national service as a Royal Air Force doctor in the early 1950s. He researched influenza at the Central Public Health Laboratory in London and in fieldwork around the country, and soon after worked with luminaries such as Austin Bradford-Hill and Richard Doll. Unusually ahead of his time, he actively collaborated with social scientists to understand the causes of respiratory disease, including its links with air pollution, smoking and poverty.

Walter spent many decades working at the Department of Health Services Research that he created at St Thomas' Hospital in London in the 1960s. He joined the LSE in 1998 and



was a permanent presence on Eurohealth's Advisory Board since its inception. He spent much of the last twenty years writing with a passion on the past and future of public health, including contributions to the journal cautioning policy makers and practitioners not to repeat mistakes, but instead learn lessons from the past.

On a personal level, we shall remember him as being helpful and supportive to younger colleagues, providing incisive, constructive critical comment; indeed Walter rarely missed an internal or external seminar or workshop. On all occasions he was thoroughly collegiate, courteous and open to new ways of thinking.

LEAPFROGGING THE ELEPHANTS: MAKING HEALTH SYSTEM TRANSFORMATION HAPPEN FASTER

By: Hans Kluge, David J Hunter, Rafael Bengoa and Elke Jakubowski

Summary: The economic and social costs of failing to address noncommunicable diseases (NCDs), coupled with an inability to transform health systems fast enough, are increasingly acknowledged. There is a particular urgency about health system transformation in favour of health promotion and public health if significant costs are to be avoided. It will mean confronting powerful vested interests which pose barriers to obstruct change and finding ways of leapfrogging in order to make faster progress thereby avoiding the pitfalls some mature countries have experienced. But there are grounds for optimism with examples of leapfrogging from countries across Europe holding valuable lessons for others.

Keywords: NCDs, People-centred, Resilience, Health Systems, Transformation

Introduction

Despite noncommunicable diseases (NCDs) being the largest cause of mortality in the World Health Organization (WHO) European region and a priority for countries, change continues to be uneven and often piecemeal. There is an urgent need to make more rapid progress as health systems come under mounting pressure from preventable illnesses. People-centred and resilient health system responses to NCDs remain a cornerstone to universal health coverage within the context of the Sustainable Development Goals.

The economic and social costs of inaction related to NCDs are increasingly

acknowledged and the failure to transform health systems so they become more oriented toward prevention and health promotion, even if politically inconvenient in some countries, will incur significant costs over time. This is especially so in middle income countries (MIC) where progress needs to be accelerated. To help meet the challenge, the notion of leapfrogging is of value.

Leapfrogging has been defined as a way for MICs to use innovation to accelerate development and achieve results equal to, or better than, those of older and more mature economies, and in less time. In respect of those newer economies faced with NCDs that threaten to bankrupt

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their health care systems, some observers insist that ‘there is a triple opportunity to follow a different path’.¹ Three types of innovation are critical to successful leapfrogging: new disruptive technologies, new operating models, and new behaviour change initiatives. None of these were available to high income countries when they were first confronted with NCDs although leapfrogging is an option available to any country. Rich countries are actively adopting it in order to build integrated care systems designed to tackle the social determinants of health, and promote population health both for quality and efficiency reasons and because they believe the evidence supports such action.

Some of the changes resulting from leapfrogging are straightforward, others are harder to achieve and require a receptive context for change (see below) in order to drive change at a policy level. MICs, or emerging countries, can often invest in new solutions more easily as they have fewer sunk costs in expensive infrastructure, equipment and hospital buildings, and weaker vested interests defending the status quo or advancing their particular interests. But there is little to prevent any country from building, or adapting, a health system in order to confront NCDs, using leapfrogging to make rapid progress.

“ helping countries bypass the policy dilemmas and entrenched structural interests

A well aligned system is preferable to loose, disconnected structures and many countries, recognising this, are making good progress to overcome fragmentation despite political and other obstacles. Leapfrogging will also come from single payer health systems which

are not only more cost-effective, but make the alignment of services easier to implement when tackling NCDs. Countries which are systematically adopting accepted best practice guidelines in health care and wellbeing, including no longer investing in interventions that do not add clinical value, offer another example of leapfrogging. Although we realise that there is no alternative to the ideal of aligned, comprehensive health system strengthening efforts, importantly, leapfrogging is possible and can be effective in accelerating change in selected policy areas or individual interventions only.

Receptive contexts for change framework

When it comes to making health system transformation happen, and take advantage of leapfrogging, there is value in adopting the receptive contexts for change framework.² Comprised of eight factors, five are pivotal:

- Environmental pressure
- Quality and coherence of policy
- Key people leading change
- Supportive organisational culture
- Managerial-clinical relations

When taken together and reinforcing each other, these factors can guide and shape transformational change efforts. There needs to be some alignment among the factors because, if they push and pull in different directions, then preserving and sustaining successful change is put at risk. The framework has informed the health system transformation initiative led by the authors on behalf of the WHO Regional Office for Europe’s Division of Health Systems and Public Health. Following meetings of invited experts in Madrid, Spain in 2015 and Durham, UK in 2017, the aim is to support Member States engaged in transforming their health systems.^{3 4}

Invariably, governments seek improvements in their health systems via policy, and through financial or structural levers. Yet, despite their best efforts, they often fall short of what is intended. An adherence to linear, mechanistic and

predetermined change is destined to fail when health systems are non-linear and emergent in their characteristics and properties. This is where leapfrogging can come into its own in terms of helping countries bypass the policy dilemmas and entrenched structural interests evident in more mature higher-income countries. By facilitating access to the sizeable evidence base available, it can also allow MICs to learn the lessons from failed experiments in bringing about change and avoid repeating the same mistakes.

Addressing the five factors will assist policymakers in putting in place a receptive context for health system transformation and NCD control. Each factor is briefly described with reference to how leapfrogging can help, including examples.

Factor 1: Environmental pressure

Environmental pressure is critical in creating the conditions for transformational change and in ensuring they remain in place long enough to become embedded, thereby enabling sustainable change to occur. Environmental pressure can come from various sources, including trends in NCD outcomes and their impact on the organisation of health services, changing competencies in the health workforce, financing strategies, drug policies and information technology solutions. Citizens themselves may also generate important environmental pressure for change. The public in most countries no longer accepts a passive role and rightly demands a greater voice in how health services are designed and delivered.

As the evidence shows, if environmental pressure is not conducive to the change efforts being implemented then it can be potentially disruptive. For example, financial crises can result in a range of reactions when it comes to transforming health systems, including delay and denial, collapse of morale, and the scapegoating and removal of managers. But financial crises need not be viewed only as a threat – they can also be seen as offering a ‘burning platform’ and an opportunity for radical reconfiguration and leapfrogging to enable change to

occur faster and at less cost. Digital health solutions and information sharing offer examples.

The political context, and impact of politics on shaping the environment governing large-scale change, is critical. Politics is a feature of all health systems and can determine whether and how far large-scale change succeeds or is resisted. This is especially so in respect of the so-called ‘elephants in the room’ which can seriously hinder progress. Two particular elephants are: the role of industry, and the overuse of medical services. In order to tackle these challenges, we require new forms of partnership and a rebalancing of the power structure so that governments and citizens set the agenda. There is a need for a regulatory framework based on transparency and joint accountability and risk sharing guiding traditional public-private partnerships, which are increasingly mistrusted and often deliver ‘white elephants’ in the form of expensive and unnecessary hospitals rather than what is required to improve health based on equal risk sharing and strong governance mechanisms. Instead, a new ecosystem built around people-centred primary health care that delivers health services across the life course approach and incorporates the essential public health operations, such as prevention, will reduce hospitalisation and pharmaceutical utilisations.⁵ This is very timely given the 40th Anniversary of the Alma-Ata Declaration, 25–26 October 2018.⁶

The Framework Convention on Tobacco Control is an example of what can be achieved to strengthen public health by confronting one of the ‘elephants in the room’ – the tobacco industry – and is viewed as a model for similar frameworks in other policy areas. Slovenia is a good example where tobacco control is being supported by a powerful coalition made up of government, civil society, creative individuals, media, international organisations like the WHO and the general public.

An important factor in achieving change is the temporal challenge. Electoral cycles often militate against long-term change when quick results are wanted. If the 3.0 Transformation Framework health system,

with its emphasis on health promotion and integrated care is to thrive, it will require supportive policies that incorporate longer-time horizons.⁷ At the same time, and this is an advantage of leapfrogging, having an ‘expectation of success’ and some quick wins offer reassurance to policymakers, who may be under attack over their policies.⁸ They also build resilience and ensure that policymakers remain confident that what they are doing is worth sharing and spreading. For example, since 2000 cancer networks in England have brought National Health Service organisations together to deliver high quality, integrated cancer services to their local populations.

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Factor 2: Quality and coherence of policy

The quality of policy developed at national and local levels is important in terms of both its analytical and process perspectives. Having policy that is informed by evidence and data, especially at a local level, is important in presenting a robust case for change and for persuading sceptical staff of the merits of the exercise. The most successful policies are those which consider questions of coherence and alignment between goals, feasibility and implementation requirements.

There is also a need for policies to be designed in a way that ‘connects actors vertically and horizontally in a process of collaboration and joint deliberation’.⁹ This should not require a long and cumbersome search for unanimity. Rather, it constitutes ‘a shared effort to establish a common ground for public problem-solving through a constructive management of difference that leaves room for dissent and grievance’.

Leapfrogging can add value in health systems that are not controlled by powerful entrenched professional interests. Information solutions can also be a powerful game changer catalysing integration of health services and stratification of the population into risk groups for NCDs as Israel, Denmark and Estonia have been showing.

Factor 3: Key people leading change

Leadership is paramount in developing and implementing policy. But the deep changes necessary to accelerate progress against the most intractable problems arising from NCDs require a unique type of leader – ‘the system leader, a person who catalyses collective leadership’.⁹ They also require unprecedented collaboration among different organisations, sectors and professions. A review of system leadership identified a number of common themes, which we have adapted, as shown in **Box 1**.

Building teams with vision and commitment is a key element of system leadership. It requires a skill set comprised of ‘soft’ skills in alliance building, persuasion, influence and political astuteness which are often the hardest skills of all to acquire or apply. Developing such skills may be easier in health systems that are less cluttered by existing powerful professional groups that can block change.

With regard to the health workforce, meeting the demands from NCDs entails revisiting and redesigning professional roles to ensure a skill mix that is flexible and adaptable in the face of growing complexity. For example, in some countries the deployment of community pharmacists is being actively encouraged to provide a first point of contact in local communities and reduce pressure on general practitioners (GPs). In another initiative, primary care practitioners are becoming skilled at social prescribing which poses a direct challenge to the overuse of services and treatments. It enables GPs, nurses and other primary care professionals to refer people to a range of local, non-clinical services including swimming lessons, organised walks, gardening, and cookery lessons. The Bromley by Bow Centre in London is one of the oldest and best known social prescribing projects.

Other leapfrogging health workforce changes include the expanded task profiles of nurses and midwives of the kind introduced in Ireland.¹¹

Factor 4: Supportive organisational culture

‘Culture’ is a fashionable and often over-used term. We use it to refer to deep-seated assumptions and values, officially espoused ideologies and patterns of behaviour. Culture can serve as a barrier to change and create inertia, especially in countries which have long-established health services in place.

In contrast, a supportive culture can be about challenging and changing beliefs about success and how to achieve it. Leaders can be champions for culture change. Key features governing successful culture change include: flexible working across boundaries (e.g. developing ‘boundary-spanners’, that is, people who operate at the edges of organisations and are skilled at working across them);¹² encouraging risk-taking; openness to research and evaluation; and a strong value base.

All health systems comprise a complex set of multiple cultures, many of them arising from the diverse professional and occupational groups or ‘tribes’ which make up health systems, and trying to shape these in order to improve quality of care has been at the heart of many, though not all, large-scale change initiatives.¹³ In MICs, where there may be an absence of powerful professional interests, it may be easier to overcome resistance to change if the political will exists. At the same time, some MICs can display as much resistance to change as more mature health care systems with powerful groups, like doctors with jobs in the public and private sectors, unwilling to forego their privileges.

Innovative ways of engaging key stakeholders have been successfully implemented in the Basque Country region of Spain and in Scotland where structured forms of engagement require groups of clinicians, managers and others to come up with solutions that are driven from the bottom up.⁸

Factor 5: Managerial-clinical relations

While relations between managers and all staff groups are important, the managerial-clinical interface is critically important in health systems, especially at a time of rapid change which can seem threatening to notions of clinical freedom and responsibility.¹⁴ Clinicians who are not supportive of change can exert a powerful block on it, even going so far as to sabotage it. Finding an acceptable accommodation between clinicians and managers is critical to the success of efforts to tackle NCDs.

Working to understand each other’s cultures and roles may seem obvious but does not always happen naturally, especially in those health systems which have matured over many years. Tribalistic loyalties to their clinical base tend to prevail. Finding champions for change is an essential prerequisite for sustainable change. A study of five professional sub-cultures (medical clinicians, medical managers, nurse clinicians, nurse managers, and lay managers) conducted in English and Australian hospitals argues that medical and nurse managers are best placed to support change, with nurse managers the most supportive.¹⁵ But even within the ranks of medical clinicians and medical managers are a significant minority who could be regarded as the future change champions as they support a team-based work process control model, and strategies that seek to improve work systemisation and service integration. In so doing they have distanced themselves from their medical colleagues. Leapfrogging would allow countries to focus on such individuals, developing and nurturing them and appointing them to key positions as appropriate.

Conclusion

Transforming health systems is a complex, and often messy, business. This is especially so in countries which have mature health services with well-established organisations and professional groups. While such systems possess many strengths, there are often particular challenges in bringing about much needed innovation and adaptation to changing circumstances. A tendency towards path dependency can make change harder to

Box 1: Common themes in system leadership

- System leadership is not easy but possible with blood, sweat and tears
- It requires a conflicting combination of constancy of purpose and flexibility
- It takes time to achieve results
- It starts with a coalition of the willing and a Vision
- It is important to have stability of at least a core of the leadership team across those involved
- Patients and carers are crucial in helping design the changes
- System leadership is an act of persuasion, political astuteness and managing emotions
- It helps to have tools, including an evidence base for change, which can help persuade the unconvinced
- System leadership requires distributed leadership instead of command and control
- There is a need for capacity strengthening to develop system leaders with the requisite skills
- Communication
- Culture change

Source: Adapted from Source ¹⁰

achieve and embed. While leapfrogging can apply, it is likely to meet resistance from structural interests. But for newer health systems in MICs, leapfrogging can potentially achieve much more, and more quickly, thereby saving time and resources. Leapfrogging needs to be accelerated and opportunities sought to enable those elephants in the room to be confronted. These are perhaps the most urgent tasks in the crusade against NCDs.

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In Memoriam: Professor Alan Maynard (1944–2018)

It is with great sadness that everyone connected with Eurohealth learnt of the recent passing after a long illness of Alan Maynard, Emeritus Professor of Health Economics at the University of York. Alan can be rightly considered one of the pioneering giants of health economics, and we were fortunate to be able to publish several of his contributions to the journal over the years. He also was a member of the International Advisory Board for the Health System Reviews (HiT) series published by the European Observatory on Health Systems and Policies. While much of his career was spent at York, some of us also had the opportunity to work with Alan on European health policy, technology assessment and other issues at the LSE in the early 2000s. Alan believed passionately in the importance of taking an evidence-based approach to health-policy making, something he often felt was not adhered to. He was not certainly afraid to speak his mind and to more than ruffle a few feathers on a regular basis. In recent years he also embraced social media to get his message across through

blogs and tweets. His arguments were highly influential in the decision to include what he deemed to be the 'fourth hurdle' of cost-effectiveness (along with quality, safety and effectiveness) as part of the decision-making criteria for the National Institute for Health and Care Excellence. *'Maynard Matters'*,* a wonderful collection of Alan's own writings, together with new pieces by colleagues celebrating his contribution, now



published and freely available from the University of York serves as a fitting tribute. On a personal level we shall remember that Alan was very kind, witty and more than a little mischievous. He was also an avid sports fan, which among other things included watching and inviting colleagues to watch Test Match cricket and other sporting events. He made health economics fun and will be very much missed.

* available at: <https://www.york.ac.uk/che/publications/books/maynard-matters/>

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