POLICY BRIEF 40

How can we transfer service and policy innovations between health systems?

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to-reach

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

What is a Policy Brief?

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

- Bring together existing evidence and present it in an accessible format

- Use systematic methods and make these transparent so that users can have confidence in the material

- Tailor the way evidence is identified and synthesised to reflect the nature of the policy question and the evidence available

- Are underpinned by a formal and rigorous open peer review process to ensure the independence of the evidence presented.

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

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

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Acknowledgements

What is TO-REACH?

Learning from other countries is a key tool for helping health systems to improve. Europe offers a unique potential for learning between health systems, bringing together many health systems with similar aims but all organized in different ways. However, these different approaches also mean that the process of learning from each other is not straightforward. Because each system is organized, governed and financed differently, what works in one place will not work identically in another. We need special methods to analyse how care has been organized well in one place; to disentangle the innovation and its local context; and then to transfer that innovation to a new, different context elsewhere. We need capacity for the research and application of these processes, which is currently seriously under-developed across Europe. And, as this process depends on working together across countries, we need a shared set of key priority areas on which we can collaborate.

The TO-REACH project – **T**ransfer of **O**rganizational innovations for **R**esilient, **E**ffective, equitable, **A**ccessible, sustainable and **C**omprehensive **H**ealth services and systems – was funded by the European Union's Horizon 2020 programme to help meet these needs. Its overall aim was to prepare for establishing a joint European research programme on health services and systems that will contribute to the resilience, effectiveness, equity, accessibility, sustainability and comprehensiveness of health services and systems. It brought together a wide range of partners (listed below). The key results from the TO-REACH project are set out in two policy briefs: one sets out **how** we can improve our ability for European health systems to learn from each other (this policy brief), while the other focuses on **what** topics this work should address (see the complementary policy brief by Hansen et al., 2021). These messages are summarized in Figure 1 below.

The COVID-19 pandemic has illustrated both the challenges and the opportunities of learning between health systems. Faced with the pandemic, health systems in Europe and beyond have been seeking to learn lessons from each other about how best to respond and to implement those lessons as quickly as possible, and often at remarkable speed. The speed with which some lessons have been shared and implemented in days or weeks highlights just how slow our existing processes normally are in comparison. But the challenges of learning from each other have also been highlighted, with a lack of clear means to identify the best innovations, how they exist within their organizational and system contexts, what is needed to transfer them elsewhere, and an overall lack of capacity for carrying out these tasks. While the TO-REACH project work was carried out before the pandemic struck, the challenges and potential solutions this project has identified will be even more relevant in the future reshaped by COVID-19. These findings will be especially important for the future European Partnership on Health and Care Systems Transformation envisaged under the Horizon Europe Research and Innovation Framework Programme.

Figure 1: Priorities for better learning between health systems
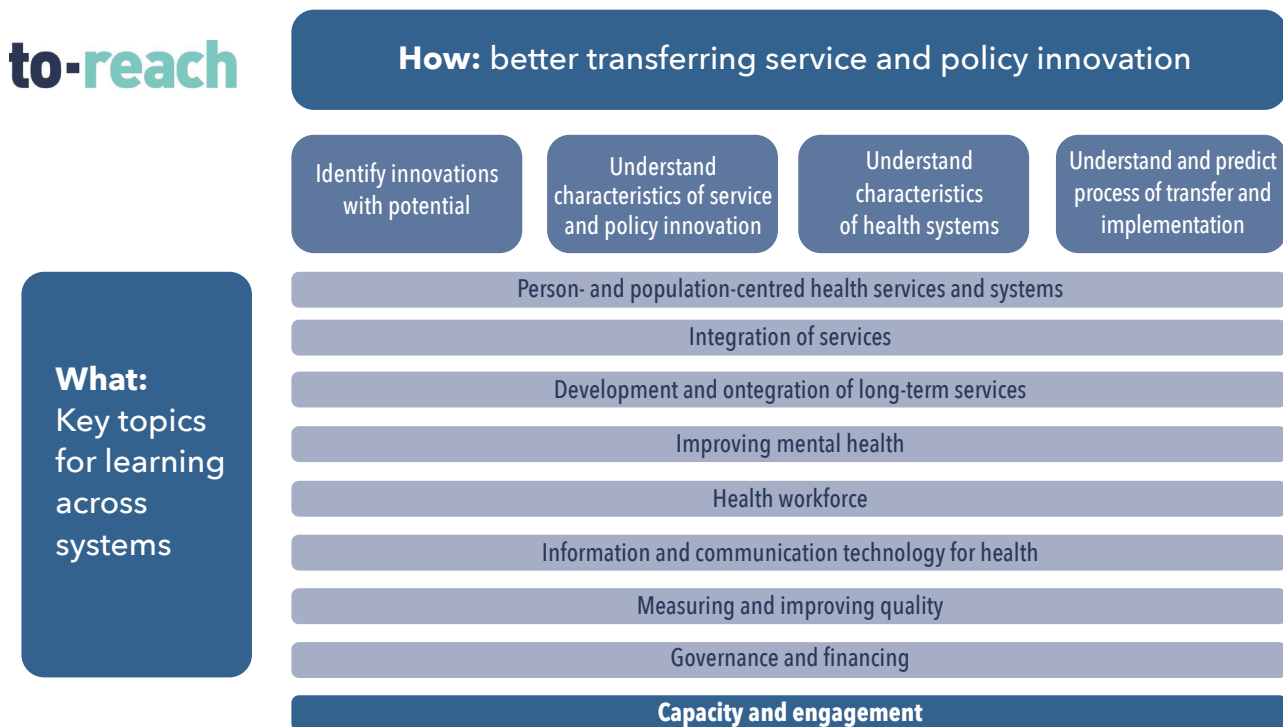
Source: TO-REACH Strategic Research Agenda, https://to-reach.eu/wp-content/uploads/2019/05/TO-REACH-draft-SRA_May-16-2019_FinalV.pdf

The TO-REACH consortium includes 28 partners from
20 countries:

- Istituto Superiore di Sanità (ISS), Italy
- Italian Ministry of Health
- Netherlands Organisation for Health Research and Development (ZON)
- Netherlands Institute for Health Services Research (NIVEL)
- European Observatory on Health Systems and Policies
- European Health Management Association (EHMA)
- National Institute for Health and Welfare (THL)
- Academy of Finland (Suomen Akatemiasa)
- Institut National de la Santé et de la Recherche Médicale (INSERM)
- Health Research Board Ireland (HRB)
- Rīga Stradiņš University (RSU)
- Latvian Council of Science – Latvijas Zinātnes padome (LCS)
- University of Malta (UOM)
- Research Council of Norway (RCN)
- Fundação para a Ciência e a Tecnologia (FCT)
- Babeș-Bolyai University, Cluj-Napoca (UBBCU)
- National Institute of Public Health (NIJZ)
- Swedish Research Council for Health, Working Life and Welfare (Forte)
- Health and Care Research Wales (WG – HCRW)
- Agenzia Nazionale per i Servizi Sanitari Regionali (Agenas)
- European Public Health Association (EUPHA)
- Public Health Agency (PHA)
- Chief Scientist Office of Israeli Ministry of Health (CSO-MOH)
- Department of Public Health – Section of Hygiene, Università Cattolica del Sacro Cuore (UCSC)
- Austrian Public Health Institute – Gesundheit Österreich GmbH (GÖG)
- Agency for Healthcare Research and Quality (AHRQ)
- Federal Office of Public Health (EDI – BAG)
- Canadian Institutes of Health Research (CIHR)

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Acronyms

DRG	diagnosis-related group
EU	European Union
P4P	pay-for-performance
PCAI	Patient Classification Systems International
TO-REACH	Transfer of Organizational innovations for Resilient, Effective, equitable, Accessible, sustainable and Comprehensive Health services and systems
WP	Work Package

Key messages

The TO-REACH project addressed **what** the key priority areas are where European health systems can learn from each other and **how** we can improve their ability to do so. This brief is one of a pair of policy briefs and looks at the **how** – that is, how health systems can learn from each other. It also looks at what determines success and failure in the transfer of service and policy innovations and in scale-up.

- Innovation transfer is more successful given certain attributes or contextual conditions:
  - It is easier to adopt and implement innovations that have a clear-cut advantage in (cost) effectiveness.
  - Knowing that the innovation will address the service or policy challenge, along with understanding the sociocultural context, is crucial in realising the potential for successful transfer.
  - Innovations have to be translated and customized to improve 'fit' with local conditions.
  - Customization requires a good understanding of the innovation itself; of how the innovation interacts with its context; and of the process of transfer itself.
  - Experts and decision-makers, individuals, organizations and networks, all play a role in innovation transfer and diffusion. Securing their commitment encourages success.

- Collaborative European research could most usefully address the aspects of innovation transfer that need to be understood better, including:
  - The particular health system characteristics and the wider context elements that are conducive to adopting, implementing and sustaining service and policy innovations.
  - How different levels of health systems manage innovation and the impact of these differences on the transfer of service and policy innovations across regions and countries.
  - The nature of the evidence needed to inform the transfer of innovations, including the types of knowledge needed in different settings and conditions and how they are used, as well as what gets lost in 'policy translation'.
  - The impact of service and policy innovations on health system performance, including any unintended consequences.
  - The research methodologies that can best advance cross-country learning, including how to identify country 'units' for comparison; how to handle context; and addressing measurement problems.

- European collaboration on research would provide a solid basis for addressing the challenges of health and care systems transformation and would help to maximise learning between European health systems.

Executive summary

Responding to health systems challenges necessitates innovations in service organization and delivery

Health systems in Europe face numerous challenges and there is an urgent need for innovative solutions to ensure that they continue to provide accessible health and long-term care that is of high quality, responsive, affordable and financially sustainable, while also addressing the underlying determinants of health to improve population health overall.

Innovations in the health and care sectors are often linked to technology. But introducing new technologies into a given system is not just about adding new, improved goods or services. They will affect the ways health services are organized and delivered. At the same time, the complex challenges faced by the European health systems mean that we must focus on innovation in service organization and delivery in their own right, considering the entire care continuum.

There is great potential for European health systems to learn from each other through rigorous comparative cross-national health services and systems research

Countries in Europe and beyond have been embarking on a wide range of reforms to address the various challenges they face. While reform efforts reflect the different ways in which health systems are financed, organized and governed, as well as their wider national contexts, there is also great potential to learn from the experiences of different countries. Rigorous comparative cross-national health services and systems research can help in understanding the range of approaches countries have adopted to address similar problems and offer opportunities for reconsideration of policies, cross-fertilization or even policy transfer.

This policy brief sheds light on *how* health systems can learn from each other about transferring service and policy innovations

For such cross-country learning to be possible and effective, we need to better understand what we know (and what we don't know) about how health systems can learn from each other, as well as the conditions for and determinants of successes and failures in the transfer (and possible scale-up) of service and policy innovations between regions and countries.

This policy brief looks at the evidence base around service and policy transfer between regions and countries, identifying what we already know as well as the main gaps in our current knowledge and understanding of the transferability of service and policy innovations in health services and systems.

We already have a good understanding of the main conditions for and determinants of successes and failures in transferring service and policy innovations. These are:

- *A good understanding of the main features of the innovation*

Systematic research has identified several attributes that mean innovations are more easily adopted and implemented. These include the innovation: (i) having a clear-cut advantage in (cost-) effectiveness relative to alternatives; (ii) being compatible with potential adopters' values, norms and perceived needs; (iii) being perceived as 'simple' to understand and use by key stakeholders; (iv) providing the opportunity for intended users to 'try it' on a limited basis; (v) having observable benefits that can be seen by intended adopters; and (vi) being adaptable or otherwise modifiable to the needs of potential adopters.

However, even when the innovation has all these attributes, it may still not be adopted. This is because decisions about adopting a given innovation do not occur in isolation but are determined by the interactions of the innovation, the intended adopter(s) and the particular context within which the innovation is to be introduced.

- *Recognition of the sociocultural context of transferring and receiving services and systems*

Successful cross-national learning not only requires analysis of the relevant institutions, but also of the wider political and economic system within which the health systems operate, along with the roles, interactions and relationships of the main actors, which may change over time and impact on the transferability of innovative practices. Policy-makers and researchers typically look for examples of innovations in countries that are close in terms of geography (neighbouring countries), shared history, language or the availability of published evidence. Key to any transfer is understanding whether and how the innovation in a given setting will address the policy challenge in the receiving setting. Depending on the degree to which the policy problems are (dis)similar, this may mean that the innovation has to be adapted or, if it is not suitable, other options may need to be explored.

- *Translation and customization of service and policy innovations to improve 'fit' with local conditions*

Innovations need to be translated or adapted to the receiving context. This requires an understanding of a range of processes along the transfer pathway. For example, the innovation will interact with the immediate context within which it 'works' (e.g. organization, region) in the originating setting and at the same time its workings will be affected by the wider system context. These factors might affect behaviour and the outcomes produced. Also, translation or adaptation already occur as services or policies move, before the actual transfer to a different setting takes place, because various actors will bring their own interpretations to the process. Finally, the nature of knowledge about the innovation includes not only codified, documented

information that is more readily available, but also tacit, local 'know-how' or insider knowledge. Such knowledge is more difficult to communicate over longer distances but may nevertheless be crucial to understanding the workings of the innovation.

• *Recognition of the role of experts and decision-makers in innovation transfer and diffusion*

Growing evidence points to the key roles played by a wide range of experts and decision-makers in policy transfer and diffusion. These include individuals who serve as 'policy entrepreneurs' or 'policy ambassadors', promoting or pushing service or policy innovations; organizations (universities, think tanks, international organizations) and networks, including knowledge networks that are based on a shared scientific interest, and research and policy networks, which bring together actors from civil society, government, the professions and industry. An increasingly important role in the exchange and/or promotion of policies can also be seen for national and international meetings and conferences, and in the context of Europe, the EU institutions.

But there remain several aspects of innovation transfer that we need to understand better

The review of the conceptual literature has identified a number of gaps in our understanding about the transfer and possible scaling of promising service and policy innovations. These are:

• *The system context within which innovations are being introduced*

There is currently little evidence around the particular characteristics of health systems that are conducive to adopting, implementing and sustaining service and policy innovations. We also lack sufficient knowledge of the wider health system context and its elements, and how this relates to transferability of innovations.

• *The arrangements at the different levels of the system and their impact on the transfer of service and policy innovations across regions and countries*

Several countries have established formal arrangements at the national level to support service innovation. However, there is as yet little evidence of the impact such initiatives have had, but also of how availability of such evidence could support successful transfer of innovations. Further, European-level actors can play an important role in both the development and spread of service and policy innovations, and we need to understand how innovations reach the European-level policy agenda and then spread across countries. Finally, the role of what has been referred to as 'transnational spaces', such as summits, conferences, meetings and workshops, is also under-researched.

• *The nature of evidence needed to inform the transfer of service and policy innovations*

We know that policy-makers draw inspiration from a variety of sources, but they may prioritize certain kinds of information over others. We need to better understand the types of knowledge that policy-makers need in order to act upon international evidence as well as the degree to which existing knowledge facilitates the adoption and implementation of innovations. Also, the conditions under which specific knowledge types are used or the motivators that cause actors to select specific 'knowledge claims' are not very well understood. A related issue is the need to better understand transfer of 'best practice', which is often shared without context and presented in forms that are scant on both tacit and practical knowledge, which may be key for a successful transfer. Thus, there is an urgent need to systematically trace what gets lost in policy translation. Finally, there is a need for the further development of approaches that will help in understanding the transfer potential for relatively novel innovations, especially those that are at an early stage in just a small number of regions or countries, or are changing rapidly.

• *The impact of service and policy innovations on health system performance*

There is lack of robust research on how service and policy innovations impact the performance of the health system, in both the originating and the receiving system. A related challenge is that of unintended consequences of innovations, such as reinforcing or even increasing existing inequalities in a given population. There is thus the need for much better understanding of how to best design (and transfer) innovations to avoid this.

• *Research methodologies to advance cross-country research*

While we often look for inspiration in countries that are historically or geographically close, or share other similarities, we may miss valuable opportunities for mutual learning from other settings. There is thus a need to develop more systematic and rigorous approaches to identifying country 'units' for comparison in order to optimize learning. New methodological approaches may also be needed to improve the study of the context required for the successful transfer of innovations. Finally, there is an urgent need to improve the empirical evidence base to inform transfer, including through better data, improved measurement approaches and longitudinal studies that look into the impacts of innovations.

POLICY BRIEF

1. Introduction: What is the problem?

Health systems globally face numerous challenges. While there have been significant advances in people's health and life expectancy in Europe (WHO Regional Office for Europe, 2018), relative improvements have been unequal between and within countries (Barber et al., 2017). Key pressures arise from the rising burden of chronic health problems and of multimorbidity, which, along with population ageing and increasing frailty at old age, lead to growing demand on already stretched services. Advances in medical and digital technologies have considerable potential for novel ways of organizing and delivering care. But countries have to ensure that any such technology is used effectively and appropriately, and at a cost that is affordable, with associated changes carefully balancing growing consumer expectations and respecting people's needs, wants and preferences (Elshaug et al., 2017). At the same time, many countries are facing shortages and an uneven distribution of health and care professionals, and there is a need to develop policies for the effective recruitment and retention of health and allied care workers within a changing context of service delivery, which requires adjustments to the composition and skills of those providing care (Barriball et al., 2015). These challenges come against a background of persistent and, in some settings, rising health inequalities and inequities in access to and utilization of health care services (Elstad, 2016).

Policy-makers in European health systems have recognized these challenges (WHO European Ministerial Conference on Health Systems, 2008; European Commission, 2014), but they have often had considerable difficulty translating this recognition into large-scale, sustainable and effective strategies for system and service organization and delivery. Approaches that would address the complexity arising from these various challenges sit at policy intersections between public health, health care and long-term care, and the wider regulatory framework within which these are embedded. Sustainable transformation must take account of these issues and consider the multifaceted set of interests and priorities of those involved in the organization, delivery and financing of services, which are likely to differ at the various tiers of the system and across different sectors.

There is a clear need for *innovative solutions* to ensure that European health systems continue to provide accessible health and long-term care that is of high quality, responsive, affordable and financially sustainable, while also addressing the underlying determinants of health to improve population health overall. Countries in Europe have been embarking on a wide range of reform efforts, which reflect, largely, the different ways in which health systems are financed, organized and governed, and the wider context within which they operate (Nolte, Knai & Saltman, 2014). At the same time, there is great potential to learn from different countries' experiences through comparative cross-national health services and systems research (Nolte et al., 2008).

Cross-country comparisons help understand the range of approaches countries have adopted to address similar challenges and so allow the experience of each country to provide "an experimental laboratory for others" (OECD, 2004). They offer opportunities for mutual learning and reconsideration of policies, cross-fertilization, or even policy transfer, where appropriate (see Box 1).

Box 1: Uses of comparative cross-national health services and systems research

Interest in learning from health policy, services and system experiences of other countries is not new and can be traced back to at least the 19th century. A notable example includes the 1942 review conducted by Sir William Beveridge of existing national social insurance schemes (known as the *Beveridge Report*) to inform welfare policies in Britain (Sigerist, 1943). It was however only from the 1960s that systematic cross-national comparisons became an increasingly important field in social science research to support learning (Weinerman, 1971; Mechanic, 1975).

There are different ways of thinking about comparative research in health services and systems (Marmor, Freeman & Okma, 2005):

- Learning **about** national health systems and polices: cross-national investigation can help better understand a country's own situation through comparison to clarify the policy problems to be addressed and the options that may be available (Marmor, 2017). Such knowledge does not necessarily offer actual lessons that can be learned from elsewhere, but an international perspective can inform policy development.

- Learning **why** health systems and policies take the forms they do. This type of analysis aims to explain why systems and policies exist the way they do and why they have developed in a certain way. They often seek to explain an observation from which to generalize by identifying factors that appear relevant to generating a particular outcome (Cacace et al., 2013).

- Learning **from** other countries for potential application of policies elsewhere. This type of study aims to understand processes and developments in one group of countries to inform policy learning in another. It sees cross-national experience as 'quasi-experimental' to draw lessons for possible transfer. It typically focuses on particular policy challenges common across countries and seeks to identify 'best practice' and/or potential for policy translation or, possibly, transfer.

Each approach can provide important insights and is equally relevant as it will help inform learning from elsewhere (Cacace et al., 2013).

Importantly however, in order for such learning to be effective, there is a crucial need to identify and understand what contributes to successful innovation in health services and policies, what needs to be in place for such innovations to be implemented more widely, and what we can learn for their possible translation to other settings within and across countries.

This policy brief seeks to contribute to this debate by first describing what we mean by innovative solutions in health services and policies and, specifically, why we need research on 'service and policy innovation' in health systems. We then present a synthesis of the evidence of what we know, and what we do not know, about the conditions for and determinants of successes and failures in the transfer (and possible scale-up) of service and policy innovations between

regions and countries. We particularly focus on gaps in our current knowledge and understanding of the transferability of service and policy innovations in health. Such understanding will help in shaping the European Partnership on Health and Care Systems Transformation to support closing these important gaps and so contribute to generating the much-needed evidence to inform the further development of resilient, effective, equitable, accessible, sustainable and comprehensive health services and systems in Europe and elsewhere.

2. What we mean by 'innovative solutions' in health systems in the context of this brief

What is 'innovation'?

"In the 17th century, 'innovators' didn't get accolades. They got their ears cut off." (Green, 2013)

The origins of the idea of 'innovation' can be traced back to ancient Greece, where it was used to describe changes to laws and political constitutions (Godin, 2008). Before the 20th century, innovation tended to be considered critically, or was even opposed. It was only from the mid-20th century or so that innovation came to be viewed as a positive 'thing', now widely perceived as "the emblem of the modern society, a panacea for resolving many problems" (Godin, 2008).

Innovation is most often linked to technologies, but there are other forms. A basic distinction is that between *technological* and *non-technological* innovation (OECD, 2005). Technological innovation includes *product innovation* (goods or services that are new or significantly improved) and *process innovation* (a new or significantly improved production or delivery method). Non-technological innovations include *organizational innovation*, that is, a new organizational method in business practices, workplace organization or external relations (OECD, 2005). Others have delineated political, educational and social innovation (Godin, 2014).

In many ways, innovation can be seen as an overarching idea that is widely and variedly used and interpreted, reflecting different sectors, disciplines and perspectives. In Box 2 we set out the common attributes of innovation identified in the literature.

Box 2: Common attributes of innovation

At the core of any (definition of) innovation is the idea of **novelty**. For example, Rogers (1983) defined an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption". The idea of novelty is of course also key to any form of *invention*. The main difference between an invention and an innovation is application; an innovation is something that can be used in practice (Witell et al., 2016). Inventions include any new product, service, process or idea but they must be introduced or adopted and used in a way that provides utility to society and that can be diffused to be considered an innovation (Sener, Hacioglu & Akdemir, 2017). In addition to the idea of novelty, an innovation also presents a **discontinuous change** (which can be small), that is, a break in business-as-usual. Viewed this way, innovation is different from *organizational learning,* which typically involves smooth, continuous development whereas innovation creates "jumps in evolution" (Toivonen & Tuominen, 2009). Innovation thus presents different managerial challenges compared to say, incremental organizational change or service development (Osborne & Brown, 2011). Finally, innovation can be understood as both a **process** (the process of innovating) and an **outcome** (innovation/s produced in the process) (Osborne, 1998).

Focusing specifically on health service delivery and organization, Greenhalgh et al. identified key features of innovation as:

- a novel set of behaviours, routines and ways of working

- directed at *improvement* of health outcomes, efficiency, cost-effectiveness or users' experience

- implemented by *planned and coordinated actions* (Greenhalgh et al., 2004b). The types of innovation that fall within this definition are wide ranging. It considers new technologies, such as digital technologies (e.g. eHealth); new procedures (e.g. minimally invasive surgery); the creation of new roles (e.g. nurse practitioners in primary care); the relocation of services from hospital into the community; the creation of new services (e.g. case management); or the introduction of new models of care (e.g. integrated delivery systems). All of these will have significant impacts on ways of working (Nolte, 2018).

Source: Adapted from Nolte, 2018.

Why we need research on 'service and policy innovation' in health systems

In the health sector, a wide range of activities are often collectively referred to as innovations, such as new ideas, beliefs, knowledge, practices, programmes and technologies (Dearing, 2008).

Technological innovation remains core and there are many examples of how the development of new technologies, such as drugs, diagnostic tools and therapies, have been key to improving population health globally. Prominent examples range from the discovery of penicillin and insulin in the early 20th century, along with the development of vaccines, safe anaesthesia and, more recently, antiretroviral therapy for HIV, to advances in diagnostic testing and imaging. However, to benefit populations, these discoveries all required addressing a series of policy questions such as:

- Who delivers the technology?

- Who will pay for it and how?

- Who ensures that people will be able to access the technology and how?

- What is the most appropriate setting for delivering the technology?

- Who ensures that there are sufficient supplies of the technology and the people delivering it?

- Who monitors that the new technology achieves the intended effects and how?

Thus, introducing new technologies into a given system will have important consequences for how health services are being organized, funded and delivered. For this to be successful, a good understanding of the organizational context within which they are being implemented will be essential (Greenhalgh et al., 2004a). Lack of attention to the wider context within which services and systems operate can have considerable implications for the successful implementation and spread of such innovations (Nolte, 2018). A useful illustration of this situation is that of the introduction of digital technologies in the health sector. While seen as a means to strengthen person-centred health services and systems by bringing services closer to people

and engaging them in their own care, the track record of the implementation, sustaining and spread or scale-up of digital technologies has remained poor (Greenhalgh et al., 2017). This is, in great part, because the introduction of new technologies often occurs without taking account of the wider organizational and systems changes that are required to embed these technologies into daily practice (Standing et al., 2016) (see also Box 3). Some commentators have noted that large-scale policy initiatives to rapidly implement telehealth technologies "despite known uncertainties around complexity, costs and benefits … have led to what might be considered inappropriate allocation of finite resources" (Wilson, Boaden & Harvey, 2016). Indeed, in France, the implementation of the personal electronic medical record was considered to have not succeeded because of failure to adapt the health system accordingly; this was estimated to have caused a loss of €210 million between 2004 and 2011 (Cour des comptes, 2012).

Box 3: Why the implementation of eHealth systems may fail: the importance of context

A 2012 review of reviews of the implementation of eHealth systems found that policies or implementation strategies generally did not consider the wider social context within which eHealth systems were to be introduced (Mair et al., 2012). Questions about the purpose and benefits of such systems and their anticipated value to users were neglected, as were the likely impacts that eHealth technologies would have for the roles and responsibilities of different end users (staff, patients), and the need to adapt systems to the local context.

Lack of attention to the wider context within which digital health technologies are being introduced was found to be a major impediment to the implementation of a national digital health innovation programme in the United Kingdom (Lennon et al., 2017). The programme involved a wide range of products and services (mobile applications (apps), personal health records, telecare, telehealth, wearable activity trackers, etc.) to enable preventive care, self-care and independent living at scale. There was a range of barriers to the embedding of technologies into daily practice at all tiers of the system, such as: lack of suitable information technology infrastructure; uncertainty around information governance; lack of incentives to prioritize interoperability; lack of precedence on accountability within the commercial sector; and a market perceived as difficult to navigate.

Source: Adapted from Nolte, 2018.

But, and perhaps more importantly, the effectiveness and impact of new technologies in health systems will be affected by the way health services and systems are organized. Indeed, the introduction of such technologies requires *innovation at organizational, service and system level*, too, to ensure that they will benefit populations and society as a whole. At the same time, and given the complex challenges health services and systems are facing, it will be essential to focus on *innovation in service organization and delivery and policies*. Such innovations need to stretch the entire continuum from health promotion and disease prevention to long-term and end-of-life care.

There are many examples of evidence-based service and policy innovations. Thus, there is now considerable evidence suggesting that many health promotion and disease prevention interventions are highly cost-effective (McDaid,

2018). For example, an increasing number of countries have put in place salt reduction strategies. But there remains uncertainty about the factors that are most important to the successful implementation of related programmes (Trieu et al., 2015), and overall investment in relevant policies has remained low in many countries in Europe.

Examples of innovation in service delivery include the introduction of organized care for people who have had a stroke (Stroke Unit Trialists' Collaboration, 2013) and the centralization of stroke services, which have been shown to significantly improve clinical outcomes among stroke patients (Morris et al., 2019). But similar to the example of salt reduction policies, despite the strong evidence base, approaches to stroke management and care continue to vary widely across Europe (Aguiar de Sousa et al., 2019). This highlights the need to better understand the factors acting at service and system levels that enable (or indeed hinder) the successful implementation of evidence-based stroke care across the region.

There is thus considerable potential to learn from the many experiences of countries across Europe by means of systematic, comparative cross-country health services and systems research. But as the examples above illustrate, we need to better understand the factors that contribute to the successful implementation of innovative health services and policies in different settings, plus the prerequisites of, as well as conditions for, their wider dissemination and implementation within and across countries to ensure learning that is effective. This might also mean deciding not to transfer a given service or policy innovation where relevant conditions are not suited or cannot be met for political, economic, social or other reasons.

3. What we know about the transfer of service and policy innovation

There are many examples of cross-national learning and transfer of innovation in public (health) policy. The spread of social (health) insurance systems across many countries in western Europe from the late 19th century (Mountin & Perrott, 1947; Saltman & Dubois, 2004) provides one such example, illustrating how domestic policies are shaped by international influences and relations between nation states (Obinger, Schmitt & Starke, 2013). In an increasingly globalized world, cross-national learning is inevitable, as countries and societies do not act independently of each other because of multiple interdependencies, which will impact on the policy choices of countries.

Understanding *when, why* and *how* policy (and, by extension, service) innovations move between countries has been the subject of much political and social science research, most prominently within the policy diffusion and policy transfer literature. It is beyond the scope of this brief to synthesize this vast and diverse literature. Box 4 presents a brief summary overview of the main concepts.

Box 4: Understanding policy movements: concepts and literatures
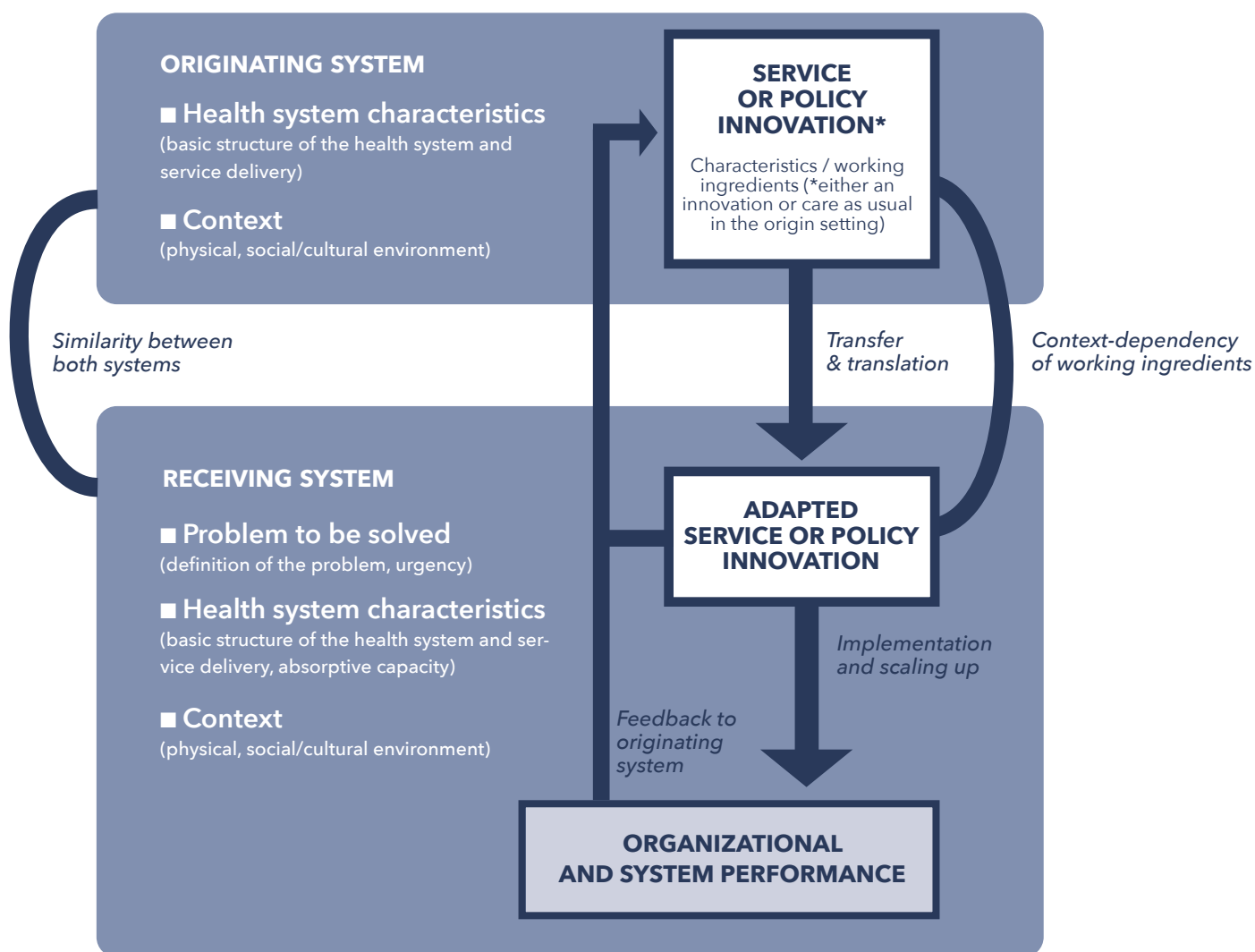
A range of concepts are concerned with 'policy movement' between countries (Stone, 2017). These include policy diffusion, policy learning, policy transfer and policy mobility, with the most recent idea of 'policy circulation' introduced as an overarching term to capture "the work involved in moving policy and the ongoing nature of such efforts" (Baker & Walker, 2019).

Policy diffusion studies date back to the 1960s, seeking "to map and explain sequential patterning related to the uptake of 'policy innovations' … and to understand when and why certain jurisdictions adopt policies from other jurisdictions" (Baker & Walker, 2019). Relevant studies often refer to the idea that policy choices converge as regions or countries adopt the policies of 'innovator' regions or countries. Policy diffusion research most often relies on quantitative methodologies (Obinger, Schmitt & Starke, 2013).

Policy learning studies emerged partly in response to diffusion studies that focused on the sequence of diffusion but provided less insight into the processes by which policy transfer occurs. Policy learning emerged in the 1990s, with the work of Richard Rose particularly influential in his attempts to understand the process of policy movements – or what he called 'lesson drawing', which is understanding the ways that policy-makers source, assimilate and apply knowledge (Rose, 1991). This concept recognizes that policy-makers operate within a given context, which influences (constrains) "truly rational decision-making".

Policy transfer studies date back to the late 1990s in the context of growing economic globalization and the rise of international organizations. Building on Rose's notion of lesson-drawing, policy transfer is "the process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system" (Dolowitz & Marsh, 2000). Policy transfer stretches the continuum from lesson-drawing as a voluntary process to coercive transfer. More recent work has (re-)interpreted policy transfer as shifting away from the idea of 'transfer' as such towards an understanding that policies are transformed 'by their journeys' from one setting to another one. *Policy mobility* studies are characterized

Figure 2: Conceptual framework: conditions for and determinants of successes and failures for the transfer of service and policy innovations between regions and countries

Source: Authors.

The comparative policy literature has highlighted the role of differences in the organization, financing and governance of health systems, and their role in health system performance. Yet, what is less well known is how service and policy innovations may explain differences in performance. Likewise, the literature on evaluation and implementation

research has examined the factors influencing the implementation of service and policy innovations and for achieving the intended effects. But what we do not yet fully understand are the specific conditions under which a given service or policy innovation that has been successful in one setting can be transferred to another one.

Here we summarize the evidence of what we know, and what we do not know, about the conditions for and determinants of successes and failures for the transfer (and possible scale-up) of service and policy innovations between regions and countries. The evidence review was guided by a conceptual framework, which may also serve as a basis for guiding strategic comparative research and assessment (Figure 2).

The framework highlights the key elements that we have investigated further in our review, focusing on:

• features of the service or policy innovation
• characteristics of the originating and receiving systems
• the process of translation and transfer.

Key to the transfer of any innovation is a good understanding of its main features

There remains a debate about the level of detail and nature of what precisely it is we need to know or whether emphasis should be on the *mechanisms* that make the innovation 'work' (Box 5).

Box 5: Attributes of innovation that facilitate its adoption and implementation

Greenhalgh et al. (2004a), based on a systematic review of the theoretical and empirical evidence on the diffusion of innovations in service organizations, noted that innovations are more easily adopted and implemented if:

- the innovation has a clear-cut **advantage** in (cost-)effectiveness relative to alternatives
- the innovation is *compatible* **with the potential adopters' values, norms and perceived needs**; it 'fits' with established ways of accomplishing the same goal (Dearing, 2008)
- the innovation is perceived by key stakeholders as 'simple' to understand and use (**complexity**) (also applies to more complex innovations that can be broken down into manageable components)
- the innovation provides the opportunity for the intended users to experiment with it on a limited basis (**trialability**)
- the benefits of the innovation **can be seen** by intended adopters (**observability**)
- potential adopters can adapt, refine or otherwise modify the innovation to suit their own needs (**reinvention**).

However, even where all these attributes are present, this does not guarantee adoption of a given innovation. This is because decisions about adopting do not occur in isolation; indeed, it is "the interaction among the innovation, the intended adopter(s), and a particular context that determines the adoption rate" (Greenhalgh et al., 2004a).

Service or policy innovations differ in their level of complexity. It has been argued that more complex innovations are more difficult to transfer (Rose, 1991), although there are examples of relatively complex innovations that have been implemented in many health systems, such as diagnosis-related groups (DRGs) as a means to pay for hospital services (Box 6).

However, there are different components of 'complexity': those relating to the innovation itself; the number and diversity of stakeholders involved in implementation and transfer; the interactions between different actors with the innovation and with the context from which it originates and is being transferred into – among other aspects. Relatively technical innovations (such as DRGs, see Box 6) might be easier to transfer than more 'politicized' reforms (Obinger, Schmitt & Starke, 2013). But even more technical innovations may be difficult to transfer where the wider institutional, political or societal context of the receiving system is not ready or receptive, such as in situations of 'involuntary' transfer.

Box 6: Global diffusion of DRGs: characteristics of the innovation

DRGs were first introduced in the USA in 1983 as part of a prospective payment system for hospitals under Medicare to control hospital spending (Chulis, 1991). Described as "the single most influential post-war innovation in medical financing", because it shifted the balance of power between the health care providers and payers (Mayes, 2007), DRG-type systems have been introduced in a number of high-income countries, although the degree to which they are used for payment purposes varies (Geissler et al., 2011).

Kimberly, de Pouvourville & D'Aunno (2008) carried out a systematic assessment of the factors that are likely to have influenced the global diffusion of DRGs (or more specifically, patient classification systems), which reflect, in part, those described in the wider diffusion of innovation literature (Greenhalgh et al., 2004b), while also highlighting key features of DRG-type systems (Kimberly, de Pouvourville & D'Aunno, 2008). Key among these are the characteristics of the innovation:

- DRGs are flexible and relatively easy to modify, which contributes to their acceptance by potential users
- DRGs are both a set of principles and a technology, and thus can serve the interests of a range of potential users
- DRG systems are adaptable to local context, and they are continually adapted and changed to meet the requirements of changing contexts.

The implementation literature has highlighted the importance of evidence of effect for the sustainability and spread of innovations within and across countries (Greenhalgh et al., 2004a). However, what remains less well understood is the *nature* of evidence that is required, ranging from controlled trial evidence to local information and evaluation studies. And while evidence of effectiveness of a given innovation is an important condition, this is in itself does not guarantee its adoption elsewhere.

The sociocultural context is crucial for understanding the potential for transferring service and policy innovations

There is commitment, at European level, to the overarching values of universality, access to good quality care, equity and solidarity (Council of the European Union, 2006), but the extent to which health systems realize these values varies between countries as do the wider societal values among populations across Europe (Hofstede, 1983). Understanding the value systems underpinning service structures and policies will be important in the assessment of the transferability of a given innovation.

Policy-makers and researchers tend to look to certain countries for examples of innovation. The choice is typically informed by geography (neighbouring countries), past (shared) history, language or the availability of published evidence (Stone, 2017). Overall, there is little robust evidence around the particular characteristics of health systems (both the originating and the receiving systems) that are conducive to the transfer of service or policy innovations to other systems, although there are tools to help analyse system characteristics systematically (WHO, 2000).

Key to any transfer is understanding whether and how the service or policy innovation in a given setting will address the policy challenge in the receiving setting. The underlying policy problems might differ between the originating and the receiving systems, as might the urgency of the problem. Depending on the degree to which the policy problems are (dis)similar, this may mean that the innovation in question will need to be adapted to meet the receiving country's policy needs, or it may turn out not to be suitable to address the policy problem, meaning other options need to be explored. The diffusion of DRGs across European countries illustrates some of these issues, as shown in Box 7.

what precisely it is about context that is relevant to the successful transfer of innovations (Box 8). Wang, Moss & Hiller (2006) describe context as "the particular social and cultural environment and the particular political and organizational system in a society". More recent understandings have moved away from the idea of context as a static concept and emphasized the dynamic nature of implementing and transferring innovations, noting that context comprises not only "a physical location but also roles, interactions and relationships at multiple levels" (Pfadenhauer et al., 2017). This also means that the process of transfer will be influenced by and shape the innovation, and these relationships are likely to change over time (Nolte, 2018). This will all impact on the transferability of innovative practices.

Box 7: Global diffusion of DRGs: characteristics of the receiving health system

In their assessment of the factors that are likely to have influenced the global diffusion of DRGs, Kimberly, de Pouvourville & D'Aunno (2008) described a number of key features of the health systems that 'imported' DRGs from the USA:

- DRG-type systems are essentially concerned with accounting for resource allocation and use in the health sector and, as such, of relevance to countries where health system performance is viewed as a priority:

  – Portugal introduced DRGs in 1984 as a basis for hospital budget allocation, with all public hospitals included from the early 1990s. DRG-based resource allocation was introduced in the context of chronic underfinancing of public hospitals at that time and there was an expectation that it would encourage the efficient utilization of resources to improve productivity and reduce uncontrolled cost expansion in the public health care sector (Mateus, 2011).

- The prospect of the ability to control costs (as was the case for its original introduction in the USA) was potentially of relevance to all systems concerned with controlling costs in the health sector, but the urgency of addressing the 'problem' differed:

  – Countries with relative economic stability may have had less pressure to adopt a system such as DRGs. Thus, Denmark and Sweden experimented early with DRGs but lagged in their implementation, possibly because they did not face the same pressures as, for example, the USA.

- Countries with more fragmented political and health systems may have more difficulty adopting DRG-type systems because of the wide range of actors involved:

  – Examples include Italy, Switzerland, Denmark, Germany and Sweden, where the (decentralized and fragmented) structure of government decision-making is seen to have slowed the adoption of DRGs (there will be "too many people to convince" to promote diffusion) (Kimberly, de Pouvourville & D'Aunno, 2008). Conversely, more unitary and centralized systems (e.g. Portugal) demonstrated that once the decision was made to adopt DRGs, the system was rolled out in a relatively short period of time (Mateus, 2008).

Box 8: The importance of context for transfer: the Evercare model for case management

The Evercare model was developed in the late 1980s for the Minnesota government by UnitedHealth Group, a for-profit health plan in the USA. A form a case management, this model of care seeks to address the needs of high-risk patients in particular, through the provision of preventive and responsive care for patients at high risk of deterioration in their health.

The Evercare approach to case management has been associated with reduced costs of care for older people living in nursing care homes in the USA. This was achieved through the reduced use of health services such as hospitalizations and emergency services. The approach was subsequently adopted in England, with policy-makers envisaging Evercare's experience as a means to free up hospital resources through targeted case management of high-intensity users or people at high risk of hospitalization.

Starting with pilots of the Evercare model of case management of frail elderly people in nine areas (primary care trusts) in England from April 2003, case management subsequently became part of the government's national policy for supporting people with chronic conditions. The 2004 NHS Improvement Plan stipulated the introduction of case management in all primary care trusts through the appointment of senior nurses (community matrons) by 2007. The anticipated benefits included improved quality of care and, by preventing or delaying complications, reduced (emergency) admissions and long hospital stays.

Yet these expectations did not appear to be justified. Evaluation of the Evercare pilot in the NHS in England failed to find the gains in lower emergency admissions and bed-days that would have been expected based on the potential cost savings suggested for the Evercare model in the USA. There are several reasons why the evaluations were unable to replicate the findings seen in the USA. In addition to likely differences in evaluation design, it was noted that the intervention identified previously unmet need, which may have affected the lack of association found in England (Gravelle et al., 2007). A 2015 meta-analysis of the effectiveness of case management in primary care highlighted the importance of contextual factors, with, for example, countries with a low-strength primary care system, such as the USA, more likely to show beneficial effects (Stokes, 2015).

Source: Nolte & McKee, 2008.

The urgency of a problem might influence the willingness to look for innovations developed elsewhere. However, the perception of the level of urgency and problem definition itself are likely to differ among stakeholders at the various tiers of the system, from policy level to organizational level and the individual service user level.

We have repeatedly highlighted the importance of 'context', but definitions of context vary, as does the interpretation of

Innovations have to be translated and customized to improve 'fit' with local conditions

There is increasing recognition that innovations (however defined) will need to be adapted to the receiving context ('the mechanism' by which they work); that is, they have to

be translated and customized 'to improve "fit" with local conditions' (Stone, Porto de Oliveira & Pal, 2019). This requires understanding of a range of processes involved along the transfer pathway. These include:

- the immediate context within which an innovation 'works' (e.g. organization, region) in the originating setting will have been influenced by the innovation itself and its workings are also affected by the wider system context within which it sits; these factors might combine to impact behaviour and the outcomes produced (Dalkin et al., 2015)

- translation or adaptation already occurs as services or policies move because different actors will bring different interpretations to the process well before the innovation has been transferred; here, networks, conferences, meetings and other fora often have an important role as a "locus for policy transfer" (Stone, Porto de Oliveira & Pal, 2019)

- the nature of knowledge about the innovation includes codified, documented information that is more readily available, as well as tacit, local 'know-how' or insider knowledge; tacit knowledge is more difficult to communicate over longer distances, but may be crucial to understanding the workings of the innovation (Lovell, 2019).

Growing evidence points to the key roles played by a wide range of (densely networked) experts and decision-makers both within and outside government and (inter)national organizations in policy transfer and diffusion (Stone, Porto de Oliveira & Pal, 2019). These include: *individuals* ('policy entrepreneurs' (Dolowitz & Marsh, 2000) or 'policy ambassadors' (Porto de Oliveira, 2020) who promote or push service or policy innovations at local, regional, national or international levels, typically operating within or through knowledge networks); *organizations* (universities, think tanks, international organizations such as the EU, World Bank, UN agencies); and *networks*. Stone, Porto de Oliveira & Pal distinguish *knowledge networks* (which are based on a shared scientific interest and research) and *policy networks* (which bring together actors from civil society, government, the professions and industry, and are viewed as a "vehicle for knowledge diffusion and policy transfer") (Stone, Porto de Oliveira & Pal, 2019). An increasingly important role can also be seen for national and international meetings and conferences as venues for the exchange and/or promotion of policies (Porto de Oliveira & Pal, 2018). Again, the example of the global diffusion of a DRG-type system provides a useful illustration of the role of these different types of actors and networks, as discussed in Box 9.

Box 9: Global diffusion of DRG: social actors

Kimberly, de Pouvourville & D'Aunno (2008) identified a range of what they describe as 'social actors' who have been key in the diffusion of DRG-types systems globally. These include:

- ***Carriers and champions***: Among the key players driving the introduction of DRGs in the USA were researchers at the universities of Yale and Michigan, who acted both as carriers of DRG systems (i.e. individuals who 'carry' the concepts and principles of the innovation) as well as champions who support change and promote their use in practice (Mayes, 2007). As "outsiders, they had the advantage of being able to see the strengths of [DRGs]" but "they did not necessarily have the authority or power to be effective champions with the ability to implement changes such as [DRGs]" (Kimberly, de Pouvourville & D'Aunno, 2008). Kimberly and colleagues noted that the absence of such carriers/champions might explain why some countries have experimented with DRG-type systems but have not implemented them as fully as might have been possible.

- ***Networks of users***: The rapid spread of DRG-type systems to Europe and Australia was facilitated by a range of meetings and events, as well as the formation of expert networks around DRGs from the mid-1980s (Wiley, 1992; Wiley, 2011). A defining feature of DRGs was the evolution of a DRG-focused 'research industry', which produced individuals with particular expertise in the analysis of DRGs (exemplified by the formation of the Patient Classification Systems International (PCSI) network) (Patient Classification Systems International, 2008). Such networks, Kimberly and colleagues argue, have not only facilitated information-sharing about DRGs as such but, more importantly perhaps, generated a sense of community and cohesion (as well as momentum), which provided "legitimacy and support that are needed to promote [DRGs] in the face of obstacles to their adoption and implementation" (Kimberly, de Pouvourville & D'Aunno, 2008).

- ***Major stakeholders***: Stakeholders have included, in addition to those who influence or make policy decisions, physicians, hospital managers and, where relevant (e.g. decentralized systems), regional health system managers. Kimberly and colleagues cite the example of Belgium, where strong opposition of physicians has meant that the implementation of a DRG-type system has lagged despite undertaking comparatively early research that was supported by the Ministry of Health in the late 1970s (Kimberly, de Pouvourville & D'Aunno, 2008). Where physicians were more involved in the development of the system from its inception, its acceptance by physicians was more likely (e.g. Hungary). Overall, and in line with the implementation and diffusion of innovation literature more widely, Kimberly and colleagues found that DRG-type systems were more likely to be adopted and implemented where key actors shared similar values and views on the benefits of such systems.

4. What we need to know about the transfer of service and policy innovation

Our review of the conceptual literature has identified a number of gaps in our understanding about the transfer and possible scaling of promising service and policy innovations, which we have identified as priority learning areas for European health services and systems research. These are:

- understanding the system context within which innovations are being introduced
- understanding the arrangements at the different levels of the system and their impact on the transfer of service and policy innovations across regions and countries
- understanding the nature of evidence needed to inform the transfer of service and policy innovations
- understanding the impact of service and policy innovations on health system performance
- research methodologies to advance cross-country research.

We describe each of these in turn.

We need better understanding of the system context within which innovations are introduced

Understanding of the system context is of key importance for the adoption, implementation and sustaining of service and policy innovation and, in particular, for evaluating the potential and likelihood for these to be transferred elsewhere (Nolte, 2018). This includes understanding of both the context of the system from which the service or policy innovation originates and that of the receiving or adopting system.

Clearly, health systems are complex, with differences at the various tiers of organization, governance and finance. But, as outlined above, there is little robust evidence on *what characteristics of health systems* are most conducive to the transfer of service or policy innovations to other systems. We also lack knowledge of 'context' and how this relates to transferability. Existing analyses of health system typologies might provide a useful starting point for characterizing what it is about context that we need to better understand (Marmor, Freeman & Okma, 2005). Box 10 provides an example of research that used an established welfare system typology to understand international variation in the effectiveness of pay-for-performance (P4P) schemes in primary care in a range of high-income countries, and which can help inform policy-makers elsewhere considering introducing such incentive schemes to understand the likely challenges they might face.

Box 10: The influence of different welfare regimes on pay-for-performance in primary care

There has been increasing interest globally in the use of P4P schemes in the health sector to improve the quality of services, encourage more efficient spending (Lagarde, Huicho & Papanicolas, 2019) and, ultimately, improve health outcomes. However, evidence of the impact

of P4P programmes has remained mixed (Mendelson et al., 2017). There are many reasons for this inconsistency, such as variation in the design and complexity of relevant schemes, as well as in the system context in which they are being introduced. Ammi & Fortier (2017) studied how the social and institutional context of countries influenced the adoption of P4P programmes for general practitioners in 13 high-income countries.

Using Esping-Andersen's typology of welfare regimes (liberal, corporatist, social democratic), they found that:

- In *liberal* systems (Australia, Canada, New Zealand, United Kingdom, USA), funders were more willing to engage with, and professional and provider associations tended to be broadly supportive of, P4P; physicians tended to be "more willing to accept, participate and respond" to such programmes.
- In *corporatist* systems (Austria, France, Germany, Italy), support for P4P programmes from professional and provider organizations was mixed; implementation tended to be delayed; physician participation was variable and generally lower than in liberal systems.
- *Social democratic* systems (Denmark, Finland, Norway, Sweden) had shown a "distinct lack of interest in using P4P to reward general practitioners", the only exception being Sweden.

The study was limited in that it relied on publicly available, English-language documents, introducing a bias towards English-language countries, along with variation in data availability for a range of P4P programmes studied. However, the study does provide an important illustration of a systematic approach to analysing the performance of a policy innovation (P4P programmes) and how this is impacted by different societal and institutional contexts, and vice versa. It also shows the potential of cross-national health services and systems research involving analysts from the studied countries to provide more detailed insight into the complex relationships between a policy innovation such as P4P with the range of actors and wider institutional framework, and how these influence adoption, implementation and roll-out – and, ultimately, the impacts of the innovation on individual, organizational and system-level outcomes. This can then help to inform other systems about the likely impacts of that innovation in their context.

Successful cross-national learning not only requires analysis of the relevant institutions, but also of the wider political and economic system within which health systems operate, as these have clear implications for what is and what is not doable or acceptable in terms of service or policy innovation (Klein, 1997). An important part of context is also the role of 'social actors', including international organizations and institutions, plus, in the context of Europe, that of the EU institutions in particular, which we explore in the next section.

We need better understanding of the arrangements at different levels of the system and their impact on the transfer of service and policy innovations across regions and countries

Several countries have established formal arrangements at the national level to support service innovation in particular. Examples include England (NHS England, 2018), Estonia (Ministry of Social Affairs, 2015) and Germany (Gemeinsamer Bundesausschuss, 2019), among other countries. However, we do as yet have little evidence of the impact such initiatives have had, and, importantly, how relevant evidence can also inform our understanding of the key health system requirements for the successful transfer of

innovations. Even if such evidence were available, it may not be easily accessible to international audiences if not published in the English language. Here, comparative analyses of national or regional strategies to advance service and policy innovations should be supported.

Much of our discussion has focused on the transfer of service and policy innovation between health systems. Yet, there are also a number of European-level actors that play an important role in both the development as well as the spread of service and policy innovations. EU institutions have an important role to play through legislative measures, such as in relation to health and safety, and professional mobility. However, other actors, such as the device and pharmaceutical industries, professional bodies, patients' organizations and the health service industry more broadly, are developing pan-European strategies to spread innovation.

The role of what has been referred to as 'transnational spaces', such as summits, conferences, meetings and workshops that are being promoted by international organizations, networks or private actors, is under-researched (Porto de Oliveira & Pal, 2018). There is a crucial need to better understand why some policies are circulating more than others, who the actors are that promote policies at the national, European or even global levels, and how policy translation is taking place. These 'transnational arenas' are not conflict-free and different actors will have various views on and interpretations of 'facts'. It will be important to trace who drives the agenda and whose voices are being heard as well as whether certain groups are excluded from participating (Porto de Oliveira & Pal, 2018; Stone, Porto de Oliveira & Pal, 2019).

There is thus a need for systematic and comparative social science, policy and economic studies of: the emergence of relevant service and policy innovations; how they reach the European-level policy agenda; and/or how they spread across European countries, in order to help understand the process of the transfer of innovations in health. Such analyses could also help to identify clusters of countries that share specific meso- and macro-level features (language, culture, health system features, actors) and their role in spreading or transferring innovations.

We need better understanding of the nature of evidence required to inform the transfer of service and policy innovations

We need to better understand the types of knowledge that policy-makers and others need to possess in order to act upon international evidence, as well as the degree to which existing knowledge facilitates the adoption and implementation of service and policy innovations. We know that policy-makers draw inspiration from a wide range of sources, including everything from informal exchanges with policy-makers from other countries and site visits, to formal exchanges in the context of international meetings (Dobrow et al., 2006). However, policy actors "are not perfectly rational and […] they tend to privilege what they believe rather than accept information that might challenge those beliefs" (Moyson, Scholten & Weible, 2017).

As noted earlier, we know about the range and nature of 'evidence' or knowledge, from scientific evidence to 'lay' or 'common' knowledge, all playing a role in policy learning. But the *conditions* under which specific knowledge types are used in policy learning and transfer, and the motivations for actors to select specific 'knowledge claims' are less well understood. This understanding is however crucial for assessing why a given service or policy innovation reaches the 'promising to transfer' agenda, or why it does not. Indeed, there is a lack of empirical evidence on why policies were *not transferred*; this may have been because successful polices were not recognized or because the policy innovation failed in the originating system (Lovell, 2019).

A related issue is the widely used idea of 'best practice' in knowledge and policy networks (Porto de Oliveira & Pal, 2018; Lovell, 2019; Stone, Porto de Oliveira & Pal, 2019). These are often promoted by international organizations or networks that bring together different administrations or groups, "each with its own interests", but to make these acceptable to a range of potential 'recipient' countries or settings, these practices need to be translated and simplified (Porto de Oliveira & Pal, 2018). As a consequence, 'best practices' are often (although not always) shared without context, which can lead to incomplete or inappropriate transfer (see Box 11). Furthermore, best practices are often presented in codified form as reports, evaluations and other outputs, and thus run the risk of disregarding tacit and practical knowledge that has been generated locally (Lovell, 2019), but which would be key to assessing the potential for a given service or policy innovation to be transferred and implemented elsewhere. Thus, there is an urgent need to systematically trace what gets or "is lost in policy translation" (Porto de Oliveira & Pal, 2018).

Box 11: Why does policy transfer fail?

The comparative policy literature has identified key instances for why policy transfer fails, including:

- *Uninformed transfer:* policies are transferred without sufficient knowledge about why and how they work in the country or system of origin.
- *Incomplete transfer:* some features of the policy are transferred but not others. But it may be the 'other' features that are important for the policy to work in the receiving country or system.
- *Inappropriate transfer:* contextual factors (cultural, political, economic) are very different between the 'donating' and the 'receiving' country or system, which will lead to differences in outcomes in the two systems (Dolowitz & Marsh, 2000).

Stone added the *successful transfer of unsuccessful polices,* referring to instances of the implementation and transfer of services and policies that lack an appropriate evidence base and are instead informed by "myth rather than fact" (Stone, 2017).

Challenges also arise from the relative novelty of some of the service and policy innovations that are not yet fully implemented in a given country but may be of interest elsewhere. These are typically not well documented and, without undertaking primary research, it is often only

possible to describe these innovations with limited scope for assessing their consequences. There is thus a need for the further development of approaches that help understand the transfer potential for service and policy innovations, in particular those that are at an early stage in only a small number of countries or which are changing rapidly.

We need better understanding of the impact of service and policy innovations on health system performance

There is a lack of robust research on how service and policy innovations impact the performance of the health system, both in the originating and the receiving system. As countries are seeking to address the different health system challenges we described earlier, there is a risk of duplicated or competing innovations. This has been identified as a significant, albeit frequently overlooked and even less studied, contextual factor (Pendharkar et al., 2016). Competing priorities may lead to disengagement, fatigue and uncertainty among stakeholders, and these may cause additional costs.

A related challenge is that of unintended consequences of innovations, again an issue of concern for both the originating and the receiving system (Nolte, 2018). There may be a risk of innovations reinforcing or even increasing existing inequalities in a given population. Research in the USA has also shown that wealthy communities tend to adopt innovations early relative to poor communities (Dearing & Cox, 2018), and this experience highlights the need for a much better understanding of how best to design (and transfer) service and policy innovations to ensure they benefit all citizens. This is related to the capacity of organizations, regions or countries to absorb innovation.

We need better research methdologies to advance cross-country research

As noted earlier, when looking for inspiration and possible solutions to domestic problems or challenges, policy-makers, practitioners and researchers tend to look at countries on the basis of historical ties, geography, or similarity in the principal organization and financing of health care (for example tax-based vs statutory health insurance systems; centralized vs decentralized systems). Such an approach may be reasonable, as a common or shared history might reduce the number of 'unknown' or uncontrollable factors that are likely to impact the transfer of policies, such as acceptability of a given service or policy innovation. However, at the same time, it might risk missing valuable opportunities for mutual learning. There is an urgent need to develop systematic approaches to identifying country 'units' for comparison in order to optimize learning.

We have highlighted the need for more systematic work to better understand the context for the transfer of innovations across systems. This may require innovative methodological approaches, too. One example is the 'Collaborative Reflexive Deliberative Approach' to systematically studying the implementation of team-based primary care systems in different countries that were more or less introduced at the same time (Russell et al., 2017). This approach enabled

better understanding of the common contextual factors that were seen to have influenced the successful implementation of teamwork in primary care in different settings. The idea of parallel evaluation of innovations that address the same problem and come up in different health systems may help to enhance the comparability of studies and, by implication, the factors that have facilitated (or hindered) the successful introduction of service innovation.

A continued challenge is the lack of longitudinal studies. Evaluations of innovations tend to be time-limited and are typically too short to systematically assess the long-term impacts of a given change (Nolte et al., 2012). As Moyson, Scholten & Weible (2017) have noted, "when quick, pragmatic policy changes are observed, they often do not result from policy learning". A sufficient time frame for monitoring and evaluation will be of particular importance for studying the impacts of the transfer of innovations, especially for scaling up processes. A related challenge is that of readily available data and information about innovation activity in different countries that would help to inform policy development in a given setting.

There are also several measurement problems in the study of transfer and implementation of service and policy innovations. Examples include measurement approaches to the readiness of health systems to learn from each other (Furnival, Boaden & Walshe, 2017) and relevant measures of capacity for innovation at different levels (organizations, health systems) (Harvey et al., 2010). There is a need to develop methods and tools to enable the systematic assessment of innovations from the perspective of transferability to other countries. Given the unpredictability of interactions between an innovation and an adopting organization or system, with many feedback loops, this may require the application of complex systems theory and the use of simulation models.

5. Conclusions

This policy brief has identified several gaps in our knowledge and understanding of the transferability of service and policy innovations in the health sector. These include: a lack of understanding of the context conducive to the transfer of innovation in both the country or system of origin and the receiving country; a need for better evidence on organizational arrangements at meso and macro levels and their impact on the transfer of service and policy innovations; a lack of understanding of the nature of evidence needed to inform the transfer of service and policy innovations; a need for better evidence on the factors that facilitate or hinder the implementation and scaling of innovations that originate from other countries or health systems; and for evidence on the impact of service and policy innovations on health system performance. A European partnership on transforming health and care systems can help to close these important gaps and so contribute to generating the much-needed evidence to the inform the further development of resilient, effective, equitable, accessible, sustainable and comprehensive health services and systems in Europe and elsewhere.

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