POLICY BRIEF 41

What are the key priority areas where European health systems can learn from each other?

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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.

What are the key priority areas where European health systems can learn from each other?

Contents

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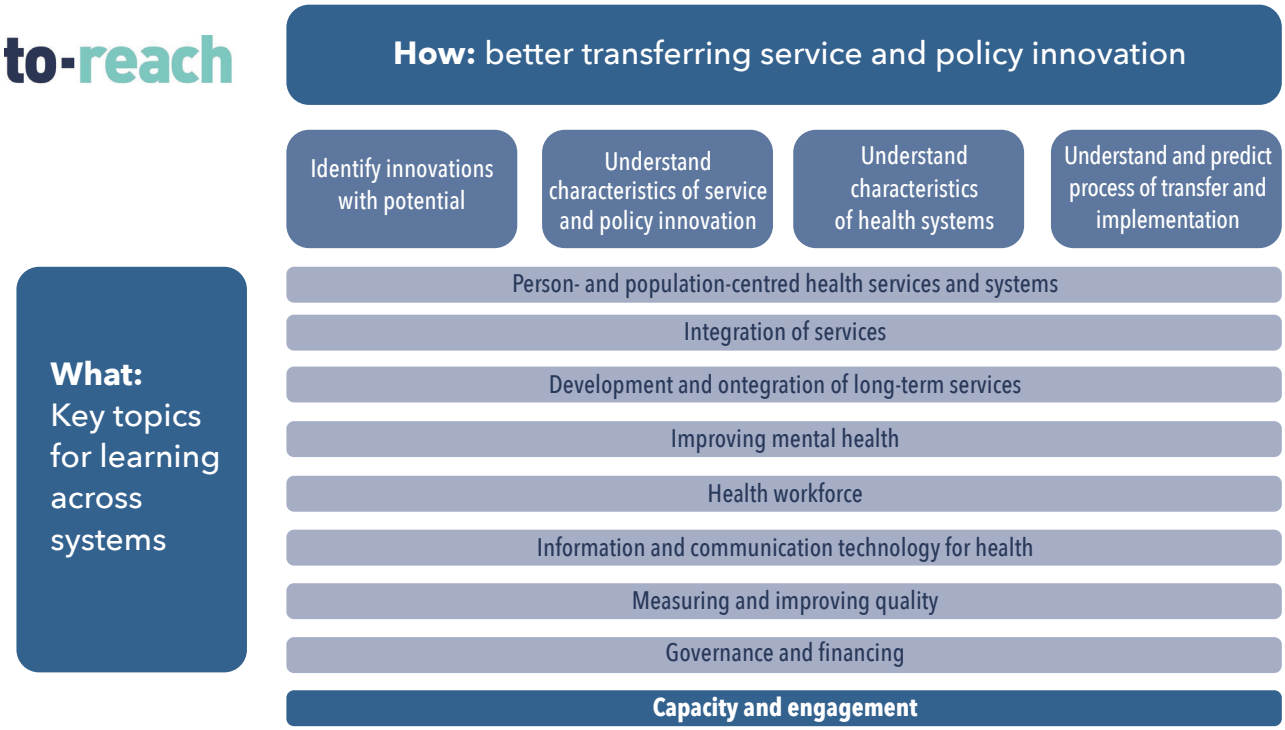
What is TO-REACH?

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 (see the complementary policy brief by Nolte & Groenewegen, 2021), while the other focuses on **what** topics this work should address (this policy brief). 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

AI	artificial intelligence
EHMA	European Health Management Association
ESFRI	European Strategy Forum on Research Infrastructures
EUPHA	European Public Health Association
GP	general practitioner
HTA	health technology assessment
ICT	information and communications technology
NGO	non-governmental organization
NIVEL	Netherlands Institute for Health Services Research
PREM	patient-reported experience measure
PROM	patient-reported outcome measure
SDG	sustainable development goal
TO-REACH	Transfer of Organizational innovations for Resilient, Effective, equitable, Accessible, sustainable and Comprehensive Health services and systems
WHO	World Health Organization

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 two and identifies the **what** – that is, what health system challenges are the highest priorities.

- There are multiple areas that have been identified as key priority areas for cross-country learning and innovation. They can be clustered among four domains:

  (1) **Person- and population-centredness.**

  (2) **Integration of services** across all health sectors and traditional health system boundaries.

  (3) Four **key sectors of care requiring reform**: long-term care, hospital care, primary care and mental health care.

  (4) **Preconditions for improved functionality of the priority areas above.**

- Person- and population-centredness is the main priority for future research and innovation and is the guiding principle for all other priority areas.
- Integration of services is a key prerequisite for person-centred care and the second priority.
- The key sectors of care require reform if they are to contribute to integrated person- and population-centred care and are also priority areas in their own right.
- Supporting mechanisms across all sectors are needed to improve the functionality of the identified priorities, specifically adequate: health workforce; information and communication technology; performance measurement and quality; financing; and governance.
- European collaboration on research would provide a solid basis for addressing the challenges of health and care systems transformation and help to maximize learning between European health systems.

Executive summary

European health systems could benefit from learning from each other about how best to address the common challenges, but service and policy innovations are not easy to transfer

European countries are undertaking a wide range of reform efforts to ensure that their health systems provide accessible, high quality, responsive, affordable and financially sustainable health care. At the same time, they face many common challenges, such as those associated with resource constraints, workforce shortages and a rising demand for services due, in particular, to the increasing burden of chronic disease. The COVID-19 pandemic has further compounded this, emphasizing the importance of health systems and services, as well as the vital role innovation plays in the health of the population and the adaptation of health services.

Lessons learned from the experiences of other countries offer significant potential for addressing these various pressures, but implementing service and policy innovations is not as simple as just copying what has been done somewhere else. Rather, we need to be able to identify innovations elsewhere, including what is distinctive about them in that specific setting, and understand how to transfer that insight to our own setting.

In order to learn from each other, one of the things that the countries need to understand better is what their common topics of interest are

Health systems remain primarily the responsibility of individual countries, or regions or localities within countries, and any endeavour of mutual learning must respect that. At the same time, if we are to work together to learn from each other between different systems, we need some common topics that we agree are important, to enable the necessary collaboration for this learning process. If these common topics are to be meaningful for health systems, they should reflect the priorities of health systems themselves; and they should be relevant for the central challenges that our health systems face for the coming years.

This policy brief draws on key documents and inputs from stakeholders within European health systems to propose a set of priorities for cross-country learning

This policy brief contributes to evidence-informed decision-making through identifying innovation areas most likely to dominate future policy agendas. These areas were identified through mapping documents and strategic roadmaps at national and international levels; national roundtable expert consultations in TO-REACH partner countries (15 consultations covering 14 Member States); and an online consultation with over 600 responses from 40 countries. A three-step conceptual framework then clustered, mapped and analysed priorities in a systematic and comparable manner.

Four priority areas have been identified:

1. **Health services and systems should be person- and population-centred, giving attention to individual and population needs.** Person- and population-centredness is the primary priority for studying health services and systems innovations, with analysis consistently indicating two points: the need for a stronger orientation towards the needs of people and their capacities (for example, by means of their involvement in the design of health systems and their provision); and the implications this has on the need to reconfigure services, through integration or other forms of care improvement. This is thus a guiding principle for all topic areas that have been identified and they should therefore be evaluated in light of this priority.

2. **Successful changes require the integration of services across all health sectors, as well as across traditional health system boundaries.** Two strands of integration were distinguished in the national documents and consultations: integration within and beyond the health sector. These are closely intertwined, and their boundaries are subject to interpretation, especially regarding social and community care services. A broad approach allows for various forms of integration, thus allowing for differences between countries' health systems.

3. **Specific sectors of care have been identified as requiring reform in order to move towards achieving integrated person- and population-centred care but are also priority areas in their own right.** These sectors are:

   - **Long-term care.** Developing long-term care and its integration with other services is seen as a key priority area by many countries in light of population ageing. Topics of interest include: deinstitutionalization; building workforce capacity; and development of long-term care in relation to other forms of care and social care services, including the development of mixed forms of long-term services.
   - **Hospital care.** Future hospitals must be redesigned to better serve a spectrum of cases, including chronic illnesses. Common areas of interest include: developing new roles and organizational structures for hospitals; and redefining their relationships with other types of care – while being mindful of the conditions that support achieving these goals.
   - **Integrated services require strong primary care services.** Development of primary care is a priority for all countries, with common questions including: how to design the most suitable forms of primary care in given local contexts; what tasks primary care should include; and how to improve access to primary care in order to optimize provision of care overall (e.g. reduce the overuse of emergency services).
   - **Mental health services require reinforcement.** The mental health sector receives less attention than others but has been identified as requiring more attention by

virtually all countries. Main policy aims in this area include: decreasing waiting times; improving prevention; adequate financing; and better integration with other services.

4. **Certain supporting mechanisms are needed across all sectors.** A set of priorities that transcend individual sectors and are preconditions for the improved functionality of other sectors has also been identified. These are:
   - **An adequate number and variety (across skills, roles and duties) of health care professionals.** Key topics identified within this area include: addressing staff shortages and attractiveness to health professionals; reducing regional imbalances through workforce policies and planning; and redistributing tasks and responsibilities.
   - **Adequate and people-centred digital health solutions.** Digital health is a game changer, but neither policies nor systems keep up with technological developments. Areas of interest include using information and communications technology (ICT) to support administrative tasks and processes; improving communication, e.g. via telemedicine; using ICT to support people and their self-management; and harnessing ICT for analysis of big data.
   - **Increased attention and measurement methods for quality improvement.** Addressing quality concerns crosses a broad range of health services and systems aspects, and is vital for reducing morbidity and mortality, making it a focus across all sectors and services. Key areas of focus include: implementation of effective patient safety and quality guidelines; and a shift from good quality of services to good quality of life.
   - **Improved financing.** Financing and funding is one of the most complex areas of health services and systems and is tightly interrelated to other priority areas. Topics of interest include: improving cost-efficiency; centralization of procurement; developing new models of remuneration; and adapting financing to prioritize equitable access to services.
   - **Improved governance.** Governance is usually considered in relation to other sectors, but also in relation to issues that transcend care sectors (e.g. quality) as well as in its own right (e.g. governance complexities due to the existence of various actors and regulations).

The scale and nature of challenges faced by European health systems mean they cannot be met by Member States acting alone and a partnership is needed

There is a high degree of commonality in the service and policy challenges facing health systems across Europe, as seen across different systems and by different stakeholders; however, these challenges are not being solved effectively by health systems acting alone. Many of these challenges have been identified for years, some for decades, and yet systems persist in struggling to address them.

Addressing these challenges will require bringing together stakeholders from across European health systems, including the public sector, private actors and civil society, including in particular patients and professionals. These priority topics identified through the TO-REACH programme provide a solid basis for a shared set of priority areas around which such a partnership can be structured, together with the methodological approaches for how to go about learning between different health systems set out in the partner policy brief.

POLICY BRIEF

1. Introduction

Health systems in Europe face numerous challenges, creating an urgent need for innovative solutions to ensure that health systems provide accessible, high quality, responsive, affordable and financially sustainable health services. European countries are undertaking a wide range of reform efforts to attain this, while also addressing challenges associated with resource constraints, workforce shortages, and a rising demand for services due, in particular, to the increasing burden of chronic diseases. The COVID-19 pandemic has further compounded this, emphasizing the importance of health systems and services, as well as the vital role innovation plays in the adaptation of health services and, through it, improving the health of the population.

Cross-country comparisons are a valuable tool for capturing the range of approaches countries have harnessed to address common challenges. However, every country's health system is organized, financed and governed differently, reflecting their national circumstances and underlying societal values. Consequently, one setting's solution cannot be directly transferred into other settings. Thus, we need to be able to identify innovations elsewhere, including what is unique about them in that specific setting, and understand how to transfer that insight to our own distinct setting.

In order to produce policy-relevant research and support cross-country learning, this brief first outlines the key challenges identified by relevant stakeholders in Europe that research should address, with an emphasis on challenges that dominate the policy agendas of today and for the years to come. Identifying these reduces disparities between research agendas and the needs of the end users of the research, as outlined in the seminal work on avoidable waste in the production and reporting of research evidence (Chalmers & Glasziou, 2009). Based on the work undertaken within the TO-REACH project, a set of priorities for such cross-country learning has been drawn. The methodological approach to identifying and mapping these research priorities is outlined in Box 1.

This framework resulted in the identification of multiple topic areas, clustered around four main domains: (1) person- and population-centredness; (2) integration of health and other services; (3) specific sectors that require reform and repositioning; and (4) improving the supporting conditions for all priorities. These four research priorities and their components are detailed in Section 2; Section 3 proposes steps towards a strategic research agenda; and Section 4 concludes.

Box 1: Methods used to identify and map research priorities

In accordance with traditional priority-setting approaches (Lomas et al., 2003; Viergever et al., 2010) both qualitative and quantitative approaches were used to identify research priorities. These were:

- Mapping policy documents and strategic roadmaps at national and international levels, including from major international and EU-funded projects.
- National roundtable expert consultations in TO-REACH partner countries, with 15 consultations covering 14 Member States.
- Online consultation among the wider scientific and stakeholder communities, with over 600 responses from 40 countries.
- Consultation responses were accepted via online submissions, and participation invitations were disseminated by numerous means, including through newsletters and social media accounts of partner (e.g. European Public Health Association (EUPHA); European Health Management Association (EHMA)) and non-partner institutes (e.g. non-governmental organizations (NGOs) and the European Commission). Responses were primarily from European countries, but also included the USA, Canada and Israel.

As a second step, a funnel approach (depicted in Figure 2) was used to cluster, map and analyse research priorities in a systematic and comparable manner in order to identify specific research problems. This approach consisted of the following steps:

- Identifying overarching ***grand challenges***, such as population ageing, rise of chronic diseases or financial pressures, on the sustainability of the health system.
- Refining through three steps (in non-fixed order):

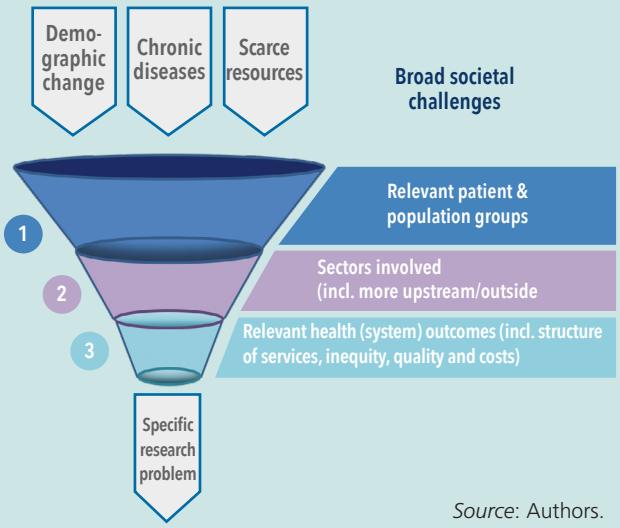
– *What are the **relevant patient or population groups**?* e.g. Does a problem occur for all elderly, for frail elderly or for frail elderly in a specific region or disease area?

– *Which **sectors are or should be involved**, including social care or sectors beyond health?* e.g. Does a problem occur in a specific sector, or in the transfer from one sector to the other? And *which sectors are part of the solution?*

– *What are the **relevant outcome dimensions**, either for the patient or population groups themselves or for the health system as a whole*? e.g. Are there specific problems in terms of *coherence* (such as shortcomings in coordination, under- or overprovision of services), *inequalities*, e.g. according to regional, gender, socioeconomic or disease related gradients; *quality* or *cost/affordability?*

- This 'funnel' approach produces a specific research problem or topic. While specific patient or population groups are used as the starting point of the funnel in Figure 2, the exact order can be switched in practice, depending on the problem at hand.

Figure 2: A funnel approach to derive specific research problems from the identified general societal challenges



Source: Authors.

However, identifying what priority topics cross-country learning should focus on is one half of the story. As mentioned earlier, the other key element is *how* this process of learning can work. This is covered in the complementary TO-REACH policy brief by Nolte & Groenewegen (2021). This second brief also covers supporting conditions for transfer of organizational innovations that concern issues such as research design and availability of data.

2. Research priorities and their components identified within the TO-REACH project

The four research priorities identified within the TO-REACH project and their components are summarized in Figure 3. The figure also shows, for each of the components, example questions that were raised during roundtable meetings and online consultations.

Person- and population-centredness has emerged as an overarching priority, followed by integration of health and other (social) services as a facilitator to achieve it. Further, specific sectors or health system functions that need addressing have been identified as: long-term care, hospital care, primary care and mental health care. Finally, the following supporting mechanisms have been identified across all sectors: workforce, digital health, measuring and improving quality, financing and governance.

While this order was based on the mapping of documents, it is difficult to rank the relative importance of the various areas because they are strongly intertwined and cannot be viewed separately. Still, to provide some indication of a structuring and prioritization between the areas, the Annex to this brief shows how many national stakeholders have identified the various topics as priority areas within their countries in the online surveys that were conducted as part of the TO-REACH consultation process (see Box 1).[a]

2.1. Person- and population-centredness

Person- and population-centredness has been identified as the primary priority for health services and systems. This is thus a guiding principle for all topic areas within this policy brief, which should therefore be appraised in light of this. The World Health Organization (WHO) describes it as *"putting the comprehensive needs of people and communities, not only diseases, at the centre of health systems, and empowering people to have a more active role in their own health"*. Achieving this goal requires a paradigm shift, with European stakeholders consistently indicating two points: the call for a stronger orientation towards the needs of people, empowering them to determine their needs and their capacities; and the implications this has for the reconfiguration of services, through integration or other forms of care improvement, and of professional orientations. This approach allows the system to adjust to people's needs and capacities, instead of the reverse, which is still the case in many countries. For example, the Swedish consultation noted that 'patient participation' is still supply-based, implying that people are granted health system access, rather than health systems being granted permission into people lives.

Below, we describe the key components within this priority area.

(1) Patient- and citizen-empowerment

A core element of person-centred health systems is patient- and citizen-empowerment, the "*process that helps people gain control over their own lives and increases their capacity to act on issues that they themselves define as important*" (European Patients´ Forum, 2015). Outlined below are the elements involved, with identified research questions presented in Figure 3.

Self-management, co-production and health literacy

Self-management is a crucial element of empowerment as it provides greater autonomy of citizens and leads to improved health, while also relieving overburdened health services and finances (Heide, 2015; PRO-STEP Project, 2018). Stakeholders signalled that people should be encouraged to be involved in their own care, as they are experts on their own health (European Hospital and Healthcare Federation, 2015, 2017; European Patients´ Forum, 2016).

However, caution is necessary as not all who are seeking care have the health literacy to control their own health or to share this responsibility with health professionals (McAllister et al., 2012; Chiapperino & Tengland, 2015; Cajita, Cajita & Han, 2016; Louw, Marcus & Hugo, 2017). Improving health literacy is thus essential to involving people in their care and reducing social and health inequalities and it is already a priority in a many European countries (Department of Health, Social Services and Public Safety, 2014; HM Government and NHS, 2014; Ministry of Health of the Czech Republic, 2014; Forskningsrådet, 2016; OECD, 2017).

Supporting informal carers

Long-term care is largely provided by informal carers; supporting them is vital, as they are often untrained and at risk of overburdening themselves, given their emotional bond to the person cared for (Naylor et al., 2016). One of the national meetings highlighted that "carers too can have care needs". As an example, Ireland's consultation, which involved over 200 experts, ranked their ageing population as a main priority, citing the increasing health difficulties faced by family carers as a contributor. A number of countries explicitly mentioned prioritizing supporting informal care, which could be provided through national strategies incorporating: training on how to provide care with reduced physical and mental effort; involving local networks; using respite care to prevent overburdening; and providing carers with stipends to lessen economic stressors (e.g. Federal

[a] In addition to the online surveys, we also attempted to cluster topic areas based on a content mapping of policy and strategy documents from all EU Member States and TO-REACH partner countries. Such a listing proved difficult because, among others, the largest share of challenges listed by stakeholders was not specific enough, e.g. did not refer to specific patient groups or sectors. Illustrative examples of such challenges are 'reducing waiting times', 'reducing co-payments' or 'attracting staff into rural areas'. Similarly, the majority of documents referred to challenges and problems relating to funding, cost containment, procurement and remuneration, but again only in general terms. Examples include 'reforming healthcare financing', 'curbing cost growth', 'reducing (e.g. pharmaceutical) spending' or, in contrast, 'increasing funding', 'improving public procurement' or 'introducing new payment policies'.

Ministry for Economic Affairs and Energy, 2015; Republic of Poland, 2015; Federal Chancellery, 2016; Government of Estonia, 2016; Ministry of Finance, 2016).

(2) A whole-population approach

Designing and providing health services and systems at a population level supports the value that these are a societal responsibility and broadens the focus beyond the health sector. This directly reflects the United Nations´ sustainable development goals (SDGs) (United Nations, 2015), including Goal 3: "Ensure healthy lives and promote wellbeing for all at all ages".

Health promotion and disease prevention

Effective population health measures require enacting strong health promotion and disease prevention policies at a national level (Tani, 2017), alongside supporting people and communities, and creating enabling environments. Many countries have acknowledged the importance of this issue and are designing their health systems and services to improve their population's long-term health, not just to cure illnesses. Countries including Belgium, Latvia, Sweden and the United Kingdom (Lietuvos Respublikos Seimas, 2014; Cylus et al., 2015; Obyn et al., 2017; SOU, 2017b) have addressed harnessing approaches such as lifelong learning (Department of Health, Social Services and Public Safety, 2014). Health promotion and disease prevention are often mentioned in relation to a specific issue and its solution (e.g. obesity and taxation), a specific disease area (e.g. cancer screening), or in reference to the integration of services between sectors. National meetings supported the various facets of prevention and revealed the conditions which support it. Some solutions specifically referred to financial tools, while others pointed to education as a starting point for preventative areas, such as healthy diet and sexual health. Specific example questions raised during roundtable meetings and online consultations are shown in Figure 3.

Leaving no vulnerable groups and regions behind

When undertaking a person- and population-centred approach, measures must also focus on vulnerable populations, as they often have difficulty accessing health services. Targeting these groups is essential for decreasing health inequalities and improving overall population health, through measures such as education programmes on seeking medical treatment (Ministry of Health of the Slovak Republic, 2013). Specific groups frequently mentioned in national documents were: children and adolescents; the elderly; pregnant women and young mothers; the socioeconomically vulnerable; migrant and refugee populations; people with a physical and/or mental impairment; and those with multi-morbidities (Welsh et al., 2015; Castaneda-Guarderas et al., 2016; Odgers et al., 2018). Refugees increasingly stand out among these groups, as the services they require, particularly regarding mental health, are different to those targeted at the wider population. National-level group discussions related to the types of groups to be considered vulnerable, which was summarized in the roundtable meeting in Malta as follows: childhood obesity, ageing population, migrants, mental health, obesity, diabetes, sexual health, cancers, cardiovascular diseases.

Regional differences also need to be tackled as concern over regional inequalities in access to health care grows, particularly regarding rural areas and specialist care. This was highlighted across Canada, Denmark, Finland, France and Romania (CIHR, 2011; Olejaz et al., 2012; OECD, 2016a; Vlădescu et al., 2016; Ministère des Solidarités et de la Santé, 2017). Socioeconomic and regional inequalities reflect structural asymmetries of access, including arrangements for care eligibility, funding, remuneration, and allocation of physicians (see also 'Improving the supporting conditions for all priorities' further below). Specific example questions raised during the meetings and consultations are shown in Figure 3.

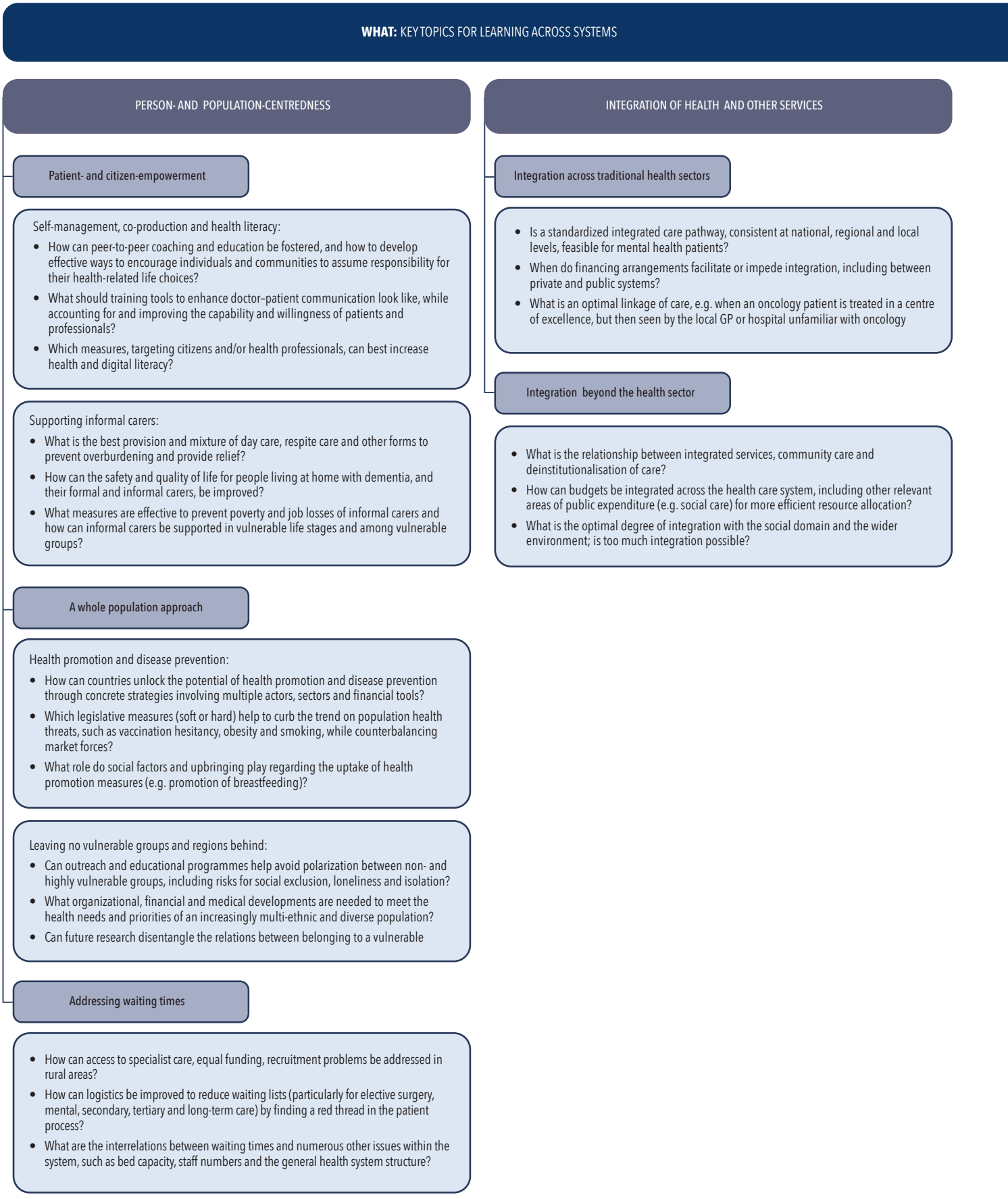
(3) Addressing waiting times

When placing persons and populations at the centre of health services and systems, services and systems themselves need to change. Waiting times closely reflect this need, highlighting suboptimal organization of care in densely populated regions, particularly prominent in those with vulnerable groups. Lengthy waiting times reflect numerous other issues, including inadequate bed and staff capacity, and inappropriate health system structures; waiting time research should thus incorporate these areas.

Many national roundtable meetings noted that waiting times were perceived as undesirably high. Countries noted focusing on specific sectors to address this, such as surgery (Ringard et al., 2013; Houses of the Oireachtas Committee on the Future of Healthcare, 2017), secondary and tertiary care and mental health care (Ringard et al., 2013; Houses of the Oireachtas Committee on the Future of Healthcare, 2017), long-term care (Albreht et al., 2016), and primary care (Socialdepartmentet, 2017). Waiting times were frequently referenced in national-level meetings. Ireland's consultation noted waiting times as a major concern to the Irish stakeholders, making it Ireland's second highest research priority (after an ageing population).

One explicitly mentioned approach to addressing the problem of waiting times is making services more efficient to meet the need (Danish Ministry of Health, 2017). Another issue is how to increase the number of qualified health professionals in less attractive settings or regions (e.g. in specific boroughs in large cities and depopulating rural regions) with long waiting times. Investing extra in specific settings or shifting tasks to less expensive services is also an option. Long waiting times elicit additional problems too, including corruption to circumvent waiting lists, making it important to also address as a stand-alone topic (Government of Greece, 2016). Specific example questions raised during roundtable meetings and online consultations are shown in Figure 3.

Figure 3: An overview of research priorities, their components and examples of questions identified within the TO-REACH project



WHAT: KEY TOPICS FOR LEARNING ACROSS SYSTEMS

TOPICS / COMPONENTS / EXAMPLES OF QUESTIONS

SPECIFIC HEALTH SECTORS THAT REQUIRE REFORM AND REPOSITIONING

Development and integration of long-term care services

- What mechanisms can facilitate the elderly population receiving care in their own homes/communities, as opposed to staying in hospital/nursing homes?
- How can the provision of long-term care be allocated to elderly, and chronically ill or disabled citizens, so that the burden of care falls more equally between the state and family members?
- How can a more structured use of caring science benefit the ways palliative care teams work?

Redefining hospital care

- What are the core tasks and roles of hospitals within integrated services? What tasks can be shifted to other services to increase patient-centredness and quality?
- How do factors such as the population size of a region or the structure of the health care system affect the necessary design for hospital reorientation?
- How can high-tech approaches within hospitals be balanced against the soft skills needed to provide person-centred care, especially for vulnerable groups with lower health literacy?

Strengthening primary care

- What is the ideal relationship between primary care and other providers of care within integrated services, and which interventions work best to strengthen interprofessional collaboration in primary care, making sure that people are cared for by a team in their local area?
- How can access to primary care be improved, and what is the right skill-mix for GPs, particularly in remote areas?
- What measures can help address the need for improved primary care facilities in the community, to divert patients from Accident and Emergency departments?

Improving mental health care

- What are the determinants of mental illness in children and adolescents, and how can prevention and early detection of mental health conditions be improved?
- What mechanisms work best to encourage political decision-makers to invest in special outpatient departments with a psychosocial focus?
- How can therapies be altered to also include other services and stakeholders (e.g. occupational care, employers)?

IMPROVING THE SUPPORTING CONDITIONS FOR ALL PRIORITIES

Adequate workforce, skill-mix, tasks and responsibilities

- What skills do health care professionals of the future need, especially in their relationship and communication with patients?
- To what degree do self-management, e-health, health promotion and disease prevention help resolve shortages?
- Could longer periods of joint training (of e.g. nurses together with physicians) before specialization help to provide better skills for integrated services?

Adequate information and communication technology for health

- How can e-health applications facilitate prevention or contribute to care within depopulating regions?
- How will relations between patients and health care professionals change through the uptake and use of digital tools (e.g. for data collection, information, diagnostics and self-management)?
- How can stakeholders gain trust in digital tools (and data from digital tools) for treatment and decision-making (including through appropriate guidelines and quality

Quality and suitable ways to measure it

- What are the effects of adherence or non-adherence of physicians to treatment guidelines?
- How can it be determined if further treatment is excessive or necessary?
- What are innovative, meaningful and robust quality indicators, and how can these be defined to also mirror quality of life rather than quality of provision?

Achieving better financing

- What is a good balance between public and private funding and treatment of patients?
- What can we do to abandon dual financing of health care services (health services provided by self-employed physicians vs health services provided in hospitals)?
- How to integrate budgets across the health system (and also including other relevant areas of public expenditure, e.g. social care) to enable efficient resource allocation?

Employing good governance

- How can governance and management strengthen quality, patient safety and cost efficiency in the best way, and how can governance support transfer of innovations across services and systems?
- How can countries learn from one another when aiming to achieve a good balance between local, regional and national responsibilities, between decentralization and centralization, and between institutionalization and deinstitutionalization?
- How can the learning capacity of the care system can be strengthened, and how can research contribute to this, e.g. by use of patient feedback at both the local and national levels?

2.2. Integration of health and other services

A fragmented service, lacking in coordination and information sharing, can quickly reduce care quality and cost efficiency, and can harm patients. Integrated services are harnessed as a solution, easing access and increasing overall care quality. Integration is a key requisite for person-centred care, as illustrated by renowned publications such as the WHO Framework on Integrated Health Services Delivery (WHO, 2016), the UN Report of the High-Level Commission on Health Employment and Economic Growth (Horton et al., 2016) and the UN SDGs (Target 3.8) (United Nations, 2015)[b]. Aligning with SDG 3.8, this section details integration both within and beyond the health sector. These are intertwined and their boundaries subject to interpretation, in particular when it comes to social and community care services.

(1) Integration across traditional health sectors

Integration typically encompasses established health care sectors, for example integrating primary, specialist and hospital care to improve navigation through health services (Nolte & Pitchforth, 2014). Fragmentation between sectors can affect vulnerable groups especially, thus disadvantaging those already vulnerable. Countries surveyed anticipate benefits in care quality through integrating services, and expect that coordinating and designing care around these new treatment paths may also yield savings, thus increasing the sustainability of health services and systems, and pairing integration with financial benefits for policy-makers (Hofmarcher, 2013; HRB, 2016; Houses of the Oireachtas Committee on the Future of Healthcare, 2017; OECD/European Observatory on Health Systems and Policies, 2017d).

Sectors and professions involved

Integrating services means breaking the barriers between silos, directing people seeking care to the lowest possible resource level which fulfils their need. This is often centred around an improved primary care service that is well integrated with hospital care, such as is the case in the United Kingdom and Belgium (Obyn et al., 2017; OECD/European Observatory on Health Systems and Policies, 2017d). Within primary care, particularly among general practitioners (GPs), there is a growing emphasis on groups of health professionals coordinating treatment, in particular for chronic diseases such as diabetes and cancer (Ministeriet for Sundhed og Forebyggelse, 2017). Concurrently, the rise in multi-morbidities requires health services, social care and informal care to collaborate to improve life quality for those affected (Heide et al., 2017; Hujala, Taskinen & Rissanen, 2017; Rijken et al., 2017; Zaletel & Maggini, 2020).

Integration as a means to an end

Efforts to improve service integration have not always fulfilled expectations, highlighting that there is no single form of integration that fits all contexts. Extensive evidence supports this, for example from studies focusing on quality outcomes, continuity of care or waiting times (Cortis et al., 2017; Imison et al., 2017; Kirst et al., 2017; Baxter et al., 2018; Briggs et al., 2018; Rodgers et al., 2018). It also applies to studies addressing the organization and cost-effectiveness of integrated care models (Damery, Flanagan & Combes, 2015; Mitchell et al., 2015; Cronin, Murphy & Savage, 2017; Kirst et al., 2017; Baxter et al., 2018). When advantages associated with integrated services do not materialize, it is not always clear why, highlighting the need for further research. In particular, research to understand the link between the conditions necessary for local implementation and supportive macro policies is lacking. Struckmann et al. (2017b) notes that context is scarcely addressed in most research (with some positive exceptions, e.g. Auschra, 2018). This reiterates the importance of studying context to help understand and predict whether positive results can be transferred and applied to different contexts (Damery, Flanagan & Combes, 2015; Baxter et al., 2018).

Integration of care was addressed in all national consultation meetings. In France, it was the main priority in order to reduce disruption, integrate care and utilize skilled professionals. Among online consultations, integration of care was the number one topic area (identified by 46% of respondents; see Figure A5 in the Appendix) highlighted as needing more attention in internationally comparative research. Specific example questions raised during roundtable meetings and online consultations are shown in Figure 3.

(2) Integration beyond the health sector

Integration cannot reach its full potential when confined to the health care sector. Health problems caused by housing, family relations, schooling, etc., can only be tackled alongside non-health care sector services. Through *"changes of the entire public health care system"* (European Commission, 2017c), integration can positively impact population health, equality, health service effectiveness, access and quality, and also support health promotion and disease prevention (see also Health First Europe, 2017; Rechel, 2020).

Integration of health, social and community care

Many stakeholders' contributions urge improved integration of social, community and long-term care between these and the wider health sector (European Federation of Nurses

[b] SDG 3.8 reads as follows: *"Achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all",* as part of SDG 3, *"Ensure healthy lives and promote well-being for all at all ages"*.

Associations, 2015; Houses of the Oireachtas Committee on the Future of Healthcare, 2017). Integrated services are perceived as a precursor to deinstitutionalization and community care, easing thresholds for access and collaboration so that even more complex cases can be treated outside of institutions. Canada and England serve here as examples for supporting community care through integrating services (CIHR, 2011; Department for Work & Pensions and Department of Health, 2017; OECD/European Observatory on Health Systems and Policies, 2017d). Furthermore, it is suggested that capacity to prevent and treat mental health issues is improved and more targeted within community settings (Almeida, Mateus & Tomé, 2015). Therefore, bringing together health, social and mental services is proposed.

Integration of health promotion and disease prevention

Health promotion and disease prevention increase in effectiveness when integrated with health services (Naylor et al., 2016). Northern Ireland, for example, prioritizes prevention within integrated services (OECD/European Observatory on Health Systems and Policies, 2017d), while other countries emphasize the integration of health promotion and disease prevention in primary care (e.g. the Netherlands), and stakeholders from other countries also point to integration with occupational health services (e.g. France) (Ministère des Solidarités et de la Santé, 2017). These variations are reflected across individual programmes, e.g. vaccination. Decreasing vaccination levels have initiated the exploration of new systems for increasing vaccination coverage, including in schools or workplaces. Under integrated services, reminders for such medical treatments can be the responsibility of child welfare services, schools or occupational care staff.

Health in all policies and health in all politics

The boundaries of broader health services can be difficult to define – as, for example, in the case of antimicrobial resistance due to non-prudent human antibiotic use (Paget et al., 2017). Broader, more integrated approaches to health problems, and working with professionals of varying skills, can help to prevent antibiotic over-use. Human health cannot be viewed in isolation from animal health or the SDGs as stressed in the *One Health* approach. This example illustrates the importance of avoiding hard boundaries between health and other sectors, such as transport, industry or agriculture, especially when adopting a prevention lens (Giesecke et al., 2016a).

As with integration within the health care sector, linkages with non-health sectors were discussed during most roundtables. In Finland, for example, occupational health care was seen as a means to promoting optimal workforce use, alongside the need to identify effective approaches for integrating social services and mental health care. Specific example questions raised during roundtable meetings and online consultations are shown in Figure 3.

2.3. Health sectors that require reform and repositioning

The priority mapping highlighted four sectors that, according to virtually all countries, demand attention and change when shifting towards integrated person- and population-centred care: long-term care, hospital care, primary care and mental health care. However, these are also priority areas in their own right. These sectors face similar challenges to integration, such as financing, governance and workforce issues. Each of these will be addressed in greater detail in the section entitled 'Improving the supporting conditions for all priorities'.

(1) Development and integration of long-term care services

An ageing population is one of the overarching challenges of our time and developing long-term care integration with other services is therefore viewed as a key priority area. Even if long-term health promotion and disease prevention cushion the effects of societal ageing, millions of citizens will still require long-term care at older ages. Meeting this need with a dwindling health workforce is hence one of our biggest health service and policy challenges.

Deinstitutionalization

Deinstitutionalizing long-term care goes beyond ageing and forms part of the European strategy for disability and barrier-free access (European Commission, 2010). This requires new health services to be developed (Government of Greece, 2016; Republic of Poland, 2016), affecting pre-existing services such as primary and community care. This is further impacted by the fact that a major share of long-term, non-institutional services is provided by informal carers, whose role requires acknowledgment and support (see 'Integration of health and other services' section). Deinstitutionalization therefore contributes to lower costs and a higher quality of life.

Capacities and mixed forms of long-term services

Long-term care is strongly linked to the capacity of the workforce required to provide said care. It furthermore requires development in relation to other health and social care services, e.g. within cross-professional approaches (Government of the Republic of Slovenia, 2015; OECD/European Observatory on Health Systems and Policies, 2017d). Extending long-term care also requires geriatric and palliative care to be improved (Albreht, Kiasuwa & Bulcke, 2017). Research would ideally help to find new long-term care models, while also balancing institutional care with other forms, e.g. day centres, mobile nursing at home (FUTURAGE, 2011). Experiences of deinstitutionalizing in different countries serve as examples for others seeking to innovate.

Population ageing was highlighted as a main priority across the national meetings. For example, the Irish consultation, involving 200 experts, provided a quantitative ranking which placed this topic as the number one priority, with their sub-

priority concerning the availability, location and affordability of nursing homes. Similarly, the Norwegian consultation encouraged exploring solutions to ensure sustainability of service delivery, for example through redesigning hospital care and deinstitutionalizing long-term care. Specific example questions raised during the meetings and consultations are shown in Figure 3.

(2) Redefining hospital care

Hospital services are the primary way of providing specialist care, and occasionally the main overall mode of health care provision. However, too much emphasis on in-patient care is linked to problems such as unnecessarily high bed capacities, low cost efficiency, bad integration with other services, subpar treatment pathways and low-quality care. How can future hospitals be redesigned to better serve a spectrum of cases, including those related to the long-term management of multiple chronic illnesses?

Future role, tasks and organizational structure of hospitals

Solutions linked to the hospital sector's problems include greater orientation towards people's needs; greater cost efficiency; and improved quality of care. Therefore, new roles and relationships between hospitals and specialist care are sought (e.g. the vanguard sites in England; NHS England, 2015). Specifically, a key change is occurring within disease management and prevention, reducing the number of patients needing hospitalization (Nolte & Hinrichs, 2012), reducing the length of hospital stay considerably (Rosen, Waltzburg & Merkur, 2015; Houses of the Oireachtas Committee on the Future of Healthcare, 2017; Lorenzoni & Marino, 2017) and shifting in-patient examinations and treatments to day surgery and ambulatory care networks. As a result, less bed capacity is needed and hospitals can increasingly focus on the more complex cases (Chevreul et al., 2015; Pavić & Vajagić, 2017). Thus, ensuring a timely discharge to other providers frees capacity and resources. Redefining hospitals will have repercussions on the composition and skill-mix of the hospital workforce and the sectors with which hospitals collaborate. Such redesign results in parts of health care funding being shifted to long-term and primary care providers, in turn increasing quality and cost efficiency while also lowering costs.

Linkage to other challenges

Redesigning hospitals and their role is not easily achievable, relying on governance funding and remuneration decisions, together with having a long-term strategy (McDaid, Merkur & Maresso, 2013). In some countries, challenges also include indebtedness of hospitals (OECD/European Observatory on Health Systems and Policies, 2017b; Pavić & Vajagić, 2017). This further underlines issues around: competition between providers; privatization of hospitals; and how health services can best be commissioned to public or private providers (Expert Panel on effective ways of investing in Health, 2015, 2016b). Some countries have already reformed their hospitals and their experience can therefore guide others towards good solutions. Notably, hospital service innovation is intertwined with questions about e-health to ensure the safe exchange of information; improved hospital governance to safeguard access, cost efficiency and good quality; and the suitability of new technologies for effective treatment (on health technology assessment (HTA) see the section entitled 'Improving the supporting conditions for all priorities').

The hospital sector was occasionally referred to during consultations, but mostly in general terms; for example, when shifting tasks between hospital and primary care. Thus, this brief does not provide strong guidance and recommendations on specific problems to address. However, various example questions were identified (see Figure 3).

(3) Strengthening primary care services

Modernizing primary care systems was one of the most mentioned priorities in the documents analysed, often in light of family and community care. This was often presented as a solution, given its advantages compared to other service types. One advantage is its high cost-efficiency potential, making it highly suited to serve as the first contact point (WHO, 2008; Boerma et al., 2015; Wilson et al., 2015). In addition, it can incorporate a person- and population-centred focus, comparatively easily including aspects of health promotion and disease prevention, making it suited to assuming the role of services coordinator. However, these advantages must be developed through focused policies.

Primary care: convergence or divergence across health systems?

Strengthening primary care is a priority in countries with weak primary care and a traditionally strong hospital sector (Ministry of Health of the Republic of Bulgaria, 2016; Pavić & Vajagić, 2017; SOU, 2017a). However, the ongoing development of primary care is also a priority in countries with a strong primary care system (Baird et al., 2018). Both groups are seeking solutions to similar problems, such as the most suitable form of primary care in a given community context (e.g. depending on population density) or what tasks should be incorporated in primary care, particularly regarding hospital and specialist services (OECD/European Observatory on Health Systems and Policies, 2017d). Another problem is ineffective emergency care use, mentioned for example in relation to Croatia and Slovenia (Albreht et al., 2016; Pavić & Vajagić, 2017; SOU 2017a). This often occurs when there are access difficulties, for example due to no out-of-hours services, or for financial reasons (Berchet, 2015; European Commission, 2015). This may result in overusing emergency services, which is inefficient and a poor substitute for primary care. This is an example where comparison and learning across European health systems allows the implementation of these models to be evaluated (OECD/European Observatory on Health Systems and Policies, 2017c; Baird et al., 2018).

Linkages to other challenges

Increased demands on primary care elicit discussion about the skill-mixes and competences of GPs and other primary care professionals, particularly in light of multi-professional

teams (Lember et al., 2015; Primary Care Workforce Commission, 2015). The latter point is of particular importance as the range of services provided in primary care differs considerably between countries, as does the availability of infrastructure, equipment and ICT support (see the section entitled 'Improving the supporting conditions for all priorities') (OECD – Directorate for Employment, Labour and Social Affairs Health Committee, 2017). In countries with less strong primary care, the issue is how to steer the flow of patients away from specialist, emergency or hospital care in a way that will be acceptable to patients. One method is by reimbursing family doctors to keep integrated records for consenting patients, in turn lowering cost sharing for patients who visit their family doctor before going to a specialist (Groenewegen et al., 2013; Schäfer et al., 2015). These weak incentives, although voluntary, may improve performance in some countries. One commonality across the countries is the primary care workforce shortage. Strengthening primary care and its problem-solving capacity can be addressed through increasing competencies of primary care professionals, which may make primary care a more attractive career path (OECD – Directorate for Employment, Labour and Social Affairs Health Committee, 2017).

The national and online consultations identified several problems and questions. Some referred to the organization of the primary care sector, e.g. by indicating the right balance between specialization and organization of the primary health and care services (e.g. Norway). Many roundtable discussions also identified macro-level governance and financial barriers; for example, finances remain too focused on secondary rather than primary or preventative care, and primary care payment mechanisms may be a barrier. In some countries, such as Romania, laws and regulations are frequently changed, resulting in no consistent long-term strategy for primary care. Example questions that were identified are highlighted in Figure 3.

(4) Improving mental health services

Mental health is a sector that receives less attention than others, frequently resulting in vulnerable patients enduring long waiting times, and overburdened health care professionals. Alongside the negative effects on individuals, this also increases societal costs (Naylor et al., 2016). A lack of political attention and capacity problems were mentioned in France, Ireland, Northern Ireland and Romania (Department of Health, 2014; Ministerul Sănătății, 2014; HSE, 2015; OECD/European Observatory on Health Systems and Policies, 2017a; Houses of the Oireachtas Committee on the Future of Healthcare, 2017). The main policy aim in the area of mental health is typically to decrease waiting times, alongside preventing mental health problems, disorders and suicides (Ministerul Sănătății, 2014; HRB, 2016; Naylor et al., 2016). Regarding distinct target groups, children and adolescents are viewed as urgent cases where waiting lists are not advised (Department of Health, 2014). Improved funding and better integration with other services are needed in order to address this; Finland, France, Ireland, Norway and Portugal reiterate this (HSE, 2015; Barbato et al., 2016; OECD, 2016b; OECD/European Observatory on Health Systems and Policies, 2017a). These developments call for new models of mental health care (European Commission, 2017a; Naylor, Taggart & Charles, 2017), and a new life-course perspective (ROAMER, 2015). Although the ideal format remains unknown, deinstitutionalization is often mentioned, and integrated, community services show more positive impacts (Almeida, Mateus & Tomé, 2015; EU Joint Action on Mental Health and Wellbeing, 2016; JA MH-WB, 2016; Rampazzo et al., 2016).

Several country meetings, e.g. in Finland and Norway, flagged the need for improved coordination between health care sector service levels, including between mental or somatic and social health care. Additional countries, e.g. Malta and Italy, also listed mental health as a topic of importance. Example questions are highlighted in Figure 3.

2.4. Improving the supporting conditions for all priorities

This section investigates priorities which transcend individual sectors and that were mentioned by virtually all countries mapped as they strongly link to overarching challenges, such as ageing populations and building sustainable and resilient health systems. Five areas have been identified: (1) Adequate workforce, skill-mix, tasks and responsibilities; (2) Adequate information and communication technology for health; (3) Quality and suitable ways to measure it; (4) Achieving better financing; and (5) Employing good governance. These are preconditions for the improved functionality of other sectors, alongside integrating person- and population-centred services and systems. The dimensions identified are strongly interrelated, e.g. workforce shortages cannot be resolved without financial resources, governance mechanisms and knowledge of where and how to employ digital solutions. Faced with diminishing health care workforces and financial shortages, many health systems are at risk, and their choices will depend on their expected return on investment. Learning from other health care models and systems is thus crucial.

(1) Adequate workforce, skill-mix, tasks and responsibilities

A health workforce suited to society's future needs is a priority area across many sectors. Developing the health workforce addresses three major problems: staff shortages and their unequal population distribution; lack of the right skills and competences; and inadequate assignment of roles and responsibilities (Expert Panel on effective ways of investing in Health, 2016a).

Staff shortages and attractiveness for health professionals

Current and future staff shortages is a priority for many countries, independent of population size or health care system. Causes include growing demand, increasing numbers of retiring physicians, inadequate specialization incentives and international labour migration (Joint Action Health Workforce Planning and Forecasting – WP2, 2016; Kroezen, Hoegaerden & Batenburg, 2018). Several solutions are proposed. Increasing training capacities is one (OECD,

2016c), however it is costly and difficult for countries with high levels of health professional emigration (European Commission, 2012; Fries-Tersch et al., 2018). Other solutions, including cultivating different skill-mixes or changing care demands (e.g. through e-health), may be critical solutions. Alongside this, improvements to the working conditions of the health workforce are required (Houses of the Oireachtas Committee on the Future of Healthcare, 2017). This may include raising wages (Almeida Simões et al., 2017), establishing group practices (OECD, 2016b), or improving quality and safety, for example through changing organizational culture to reduce burnout (Olejaz et al., 2012; European Commission, 2014; Expert Panel on effective ways of investing in Health, 2016a; European Commission, 2017b).

Regional imbalances and workforce planning

Regional and/or national imbalances and shortages have been observed across specialists, generalist professionals and nurses (European Commission, 2012; Ono, Schoenstein & Buchan, 2014). An equal distribution of the workforce is a future priority for some countries. Remote, depopulating areas are highlighted as they already lack basic medical services, sometimes resulting in waiting lists (see the 'Health sectors that need reform and repositioning' section). These measures require proper workforce policy and planning, including access to reliable and comparable information (Ono, Lafortune & Schoenstein, 2013). The Joint Action on Healthcare Workforce Planning and Forecasting initiative (Joint Action Health Workforce Planning and Forecasting – WP2, 2016; Kroezen, Hoegaerden & Batenburg, 2018) recommended addressing this through consistent terminology, data covering large parts of the continent, and a generalizable and flexible model of workforce planning.

Redistributing tasks and responsibilities

Many countries perceive a growing disparity between current skills and the skills needed to meet future demands. A common solution is to rethink the traditional role and task division between health and non-health professions (Ono, Lafortune & Schoenstein, 2013; Ono, Schoenstein & Buchan, 2014; European Hospital and Healthcare Federation, 2015; Tsiachristasa et al., 2015; European Hospital and Healthcare Federation, 2017; Maier, Aiken & Busse, 2017; The King´s Fund, 2017). This can help to relieve overburdened and expensive physicians, while the redistributed tasks can be performed by professionals requiring less training, who may be better positioned and trained to perform these tasks. This could free up resources, making services more cost-effective while also increasing care quality.

Transitions that health systems are undergoing also have implications for the roles health professionals could have as well as their required competencies. Physicians are traditionally trained to cure acute illnesses rather than to manage co-morbidities or to help individuals manage health problems within everyday life. Taking on the role of coordinator, supporter and coach for integrated person-centred services is challenging, and is viewed by the European Patient Federation and the EMPATHiE project as a major long-term priority (EMPATHiE, 2014; European Patients´ Forum, 2017b). Inter-professional cooperation also requires new skills, such as familiarity with other professionals' duties, including those in social care and public health (Health First Europe, 2017). Transitioning to digitally supported health services implies that digital skills are needed, alongside new professions to deal with technological innovations, big data, artificial intelligence (AI), and more. Balance is needed as the growing divide between current skills and skills needed implies that health professionals cannot develop all the required skills without reassessing their generalization vs specialization level.

National roundtable meetings pointed to issues relating to staff shortages, retention through improving salaries or working conditions, and around the health of the health workforce itself. A number of these issues were identified in France and the Netherlands resonated with this, discussing how to curb the declining quality of life of health professionals and to mitigate increased levels of absenteeism, burnout, isolation, as well as the high prevalence of addiction and suicidal ideation. Other example questions are show in Figure 3.

(2) Adequate information and communication technology for health

Digital health is undeniably a game changer for health, but both the policy frameworks for digital health and its implementation in practice are works in progress. For example, the flow of information is being hampered by paper communication and complicated by different standards, and there are also other forms of digitalization which the health sector has been hesitant or unable to use (European Hospital and Healthcare Federation, 2015, 2017).

Supporting administrative tasks and processes

One basic yet important area is the support of administrative tasks and processes. The widespread introduction of electronic patient records helps exchange information between different providers (Government of Greece, 2016; Lewandowski, 2020). ICT can also support decision-making by health professionals (Heide et al., 2015; International Consortium Personalised Medicine, 2017; Rijken et al., 2017), and can empower patients through giving them access to their own patient records. Unification is required for the multitude of fragmented IT solutions, but transparency and insight in the data collected by health services is also necessary, including regarding privacy regulations (EMPATHiE, 2014; Heide et al., 2015; Arrue et al., 2016; TRANSFoRm, 2016; International Consortium Personalised Medicine, 2017; Rijken et al., 2017; European Commission, 2018).

Improving communication

A second function can be seen through ICT communication. Telemedicine is a crucial technology, especially in remote areas, or for specialist care across different regions. Other forms of remote monitoring, in particular for chronic diseases, establish an alternative consultation methodology between patients and health care professionals. They can also encourage exchanges of innovation and professional

advice between health services, and between physicians and pharmacists. This enables quick, reliable exchanges of data, images and other relevant information, which facilitates collaboration (Government of Greece, 2016; Obyn et al., 2017).

Supporting people and their self-management

A third area is the use of ICT to encourage patients in self-management. Communication with health care professionals and self-monitoring of health status are forms of empowerment (European Commission, 2018). Stakeholders perceived technology to be one of the main priorities towards improving communication and empowering patients (EMPATHiE, 2014; European Patients´ Forum, 2017b). A prominent example is mobile phone apps that support the self-management of people with chronic illness. Certain disease areas are more suitable for self-management (PRO-STEP Project, 2017), however there is still a lack of understanding regarding how these tools should be designed in order to be user-friendly while yielding good results (Schug et al., 2012; EMPATHiE, 2014). Studies show that e-health can improve self-management, but cannot fully replace personal contact with health professionals, especially for those with lower digital or health literacy. To fully utilize the potential of e-health, close coordination with users (both professionals and patients) in developing the digital platforms, as well as education in using the technology, are both necessary (Ministère des Solidarités et de la Santé, 2017).

Facilitating the analysis of big data

Fourthly, analysing large amounts of data supports educating health systems and encouraging health systems and services research. This may result in discovering new linkages across epidemiological and clinical research, among diseases, or between behaviour, diseases and environments. However, major issues still need to be solved around standardization, interoperability and data exchange (ECHO, 2015; European Commission, 2016; TRANSFoRm, 2016). The European Strategy Forum on Research Infrastructures (ESFRI) views common infrastructure projects as valuable knowledge sources, particularly process-generated data, or as an additional information-gathering method for epidemiology, health care provisioning and health status monitoring (European Strategy Forum on Research Infrastructures Innovation Working Group, 2018). Big data and its results also have potential to increase service efficiency. ICT development may be a precursor for integrating communication, documentation and coordination services.

National roundtable meetings indicated the need for knowledge regarding designing and properly using e-health. For example, more information is required on how to properly utilize new e-health tools and how to ensure they become an asset rather than a burden. The emergence and diffusion of e-health also requires change management, as well as digitally literate health organizations, patients and citizens. Additionally, e-health is frequently supply-led, with insufficient attention given to ensuring that the innovation is available and user-friendly. Digitalization and new technology have implications for both service providers and users, but also for the transformation of health systems, contributing to improved access to good, equal and safe services for all. Example questions raised during the roundtable meetings and online consultations are shown in Figure 3.

(3) Quality and suitable ways to measure it

Addressing quality concerns was mentioned across the board, also as it crosses a broad range of health services and systems aspects, namely: effectiveness, accessibility, equity, patient-centredness, safety and efficiency (WHO, 2006; Lewandowski, 2020). Quality is vital for reducing morbidity and mortality; for example, quality screenings rule out diseases like cancer, or indicate the necessary treatment. Survivor rates often increase through raising the quality of disease management and services. This makes quality a focus across all sectors and services.

Patient safety, quality guidelines, and regional differences

Simple guidelines can drastically increase patient safety, while other changes require stronger efforts and cultural shifts (European Patients' Forum, 2017b). For example, the impact of organizational culture on burnout and quality of care could be addressed through a combination of organizational changes, supporting health professionals' stance towards patients and the workplace (European Commission, 2014). However, quality and patient safety are rooted in several problems, while effective quality guidelines address just one aspect (Crameri et al., 2014; Expert Panel on effective ways of investing in Health, 2014; Berchet, 2015; Forskningsrådet, 2016; U.S. Department of Health and Human Services, 2016). Developing better indicators is referenced by many countries, although documents emphasizing this are unspecific (Ministerul Sănătății, 2014; OECD, 2016d). In addition, quality of care is also impacted by region (Kroneman et al., 2016), related to access (see the 'Integration of health and other services' section), and reflective of differing spending levels between regions (Republic of Poland, 2015). Using routine data to measure quality, e.g. in hospitals, could also serve as a starting point for other sectors and countries (ECHO, 2015; European Commission, 2016).

Shift from good quality of services to good quality of life

As mentioned above, implementing person-centred services affects the quality of services. This leads to quality no longer being defined and measured solely by the medical and technological procedures, instead moving towards factors that matter for people (as reflected in the growing importance of patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs)). The aim now is to balance technical indicators with how people define what quality of life means for them. The European Patients' Forum also views the lack of subjective aspects of quality as a major problem (European Patients' Forum, 2014;

ROAMER, 2015; European Patients' Forum, 2017a), however the ICARE4EU project reminds us that quality outputs require a good foundation in databases in order to facilitate evaluation (Heide et al., 2015; Barbabella et al., 2017). This allows evaluation of the effectiveness of different measures, and better steers pricing and remuneration.

National meetings and online consultations pointed to the importance of increasing access to services, particularly for vulnerable and rural groups. As such, quality aspects regarding geographic differences in supply were also addressed when describing topic areas such as waiting times and regional workforce shortages. This illustrates how quality enhancement is an overarching lens applicable to all topics. Example questions raised during the roundtable meetings and online consultations are shown in Figure 3.

(4) Achieving better financing

Modes of funding and remuneration, along with financing, present another issue across countries. Financing and funding is one of the most complex areas of health services and systems, and is tightly interrelated to other priority areas.

Improved cost-efficiency and better procurement

Saving money is seen as a top priority, often in relation to overall health system spending (de Pietro et al., 2015; U.S. Department of Health and Human Services, 2016). In some countries, cost efficiency focuses on specific sectors or treatments (e.g. hospitals or long-term care) (Government of Latvia, 2015; Almeida Simões et al., 2017). Exactly how to utilize scarce resources is paramount, making procurement and HTA key, as well as the effective implementation of evidence-based guidelines.

Within service procurement, the priority is often to centralize procurement to increase economies of scale and competition between different suppliers. Centralizing procurement can also make expenditures more transparent and help to reduce informal payments and corruption (ASSPRO CEE 2007, 2013). Regarding HTA and pharmaceuticals, many countries have established institutions to help decide whether or not to approve a specific innovation or pharmaceutical and to make it part of the benefit catalogue (Ringard et al., 2013) or supported by the European Union (by aiming at EU legislation).

Funding and remuneration

Funding models do not always yield the desired effects. Adverse effects, such as underprovision of services due to unattractive remuneration, can be problematic. In many cases, this priority is about searching for new remuneration models and giving the right incentives to provide a good balance between quality and amount of services, and related costs. This is an intricate and sensitive process. Countries are seeking this balance, particularly in relation to hospital services, but also as regards the management of chronic diseases (Barbabella et al., 2016; Struckmann et al, 2017a). Questions posed in the literature include what budget should be available and which payment models stimulate the intended outcomes (Heide et al., 2015; Rijken et al., 2017). This problem also includes models for contracting physicians and supervising services provided by contractors. With growing momentum for value-based care models and outcome-based payments, population-based funding is being discussed in a new light.

Funding and equitable access

Improved funding also implies prioritizing sustainable, affordable funding of universal health services in line with the UN SDGs, e.g. by Estonia (Sotsiaalministerium, 2016). While universal health care is common in many countries, it is a priority for countries without it (European Patients´ Forum, 2017c; The King´s Fund, 2017). This is intertwined with health service affordability. Providing services that those in need cannot afford severely affects health outcomes (Devaux & de Looper, 2012; Expert Panel on effective ways of investing in Health, 2018). An area explicitly mentioned is the accessibility and affordability of pharmaceuticals, as co-payments make some medications unaffordable for vulnerable groups. Prioritizing patient access thus involves limiting co-payments to medical consultations and pharmaceuticals (International Diabetes Federation, 2016). In addition, there are general difficulties regarding the availability of costly pharmaceuticals in some countries. Safeguarding or establishing treatment access is increasingly problematic (European AIDS Treatment Group, 2016; Expert Panel on effective ways of investing in Health, 2016a; International Diabetes Federation, 2016; International Association of Mutual Benefit Societies, 2017). While this often means renegotiating with pharmaceutical industries or a stronger reliance on generics, it also involves identifying financial and risk-sharing instruments to guarantee access for those who need it (Albreht, Kiasuwa & Bulcke, 2017).

The national roundtable and online consultations yielded some specific priorities not discussed in documents with the same urgency. For example, how can resources be allocated and prioritized; how can appropriate services and target groups be defined; and how can private and public providers be compared? This links to the tension between increasing health care costs and solidarity through affordability options, along with prioritizing long-term efficiency over short-term cost control. Similarly, extensive discussions occurred around alternative funding methods for expensive pharmaceuticals. This meant that the financing discussion also became a values discussion, as reflected in some of the questions shown in Figure 3.

(5) Employing good governance

Governance is occasionally discussed as a priority, however not as prominently as some other areas, such as integrating services. Documents tended to be general as regards exactly what should be changed and how, and some related this to a specific sector, e.g. hospital service governance (Office of the Government of the Czech Republic, 2015; Republic of Croatia, 2015) or primary care services (CIHR, 2011). Governance is also considered when discussing quality (Danish Ministry of Health, 2015), calling for adherence to regulations and improved supervision (Reino de España,

2016). This applies to specific sectors and broad disease areas, e.g. structured cancer screening governance is viewed as a priority for the improvement of cancer prevention (Albreht, Kiasuwa & Bulcke, 2017). This topic is relevant in holding health services and their administrations accountable for spending and decisions (Houses of the Oireachtas Committee on the Future of Healthcare, 2017). Accountability is also essential for fighting corruption or 'creative billing' (Republic of Latvia, 2014; Albreht et al., 2016; Ministerstvo financií Slovenskej republiky, 2016). A last issue mentioned was about balancing freedom between local and central decision-making, for example, in Finland, Italy, the Netherlands and Romania (Ministerul Sănătății, 2014; Ministero dell´Economia e delle Finanze, 2015; Ministry of Finance, 2015; Kroneman et al., 2016).

The national roundtable and online consultations pointed to several specific priorities, both referring to governance at the macro and meso levels. For example, reference was made to governance complexities due to different actors and regulations, a lack of long-sightedness, control being prioritized over quality, and success being measured by numbers of treated patients. Some consultations also referenced clinical governance, particularly in hospital settings, while others mentioned financing issues. Governance (or health system leadership) also involves the knowledge and implementation of principles for priority setting in health and care services – deciding who should be treated when, how, where, and by whom. Example questions raised during roundtable meetings and online consultations are shown in Figure 3.

3. Reflections and discussion

This policy brief has detailed policy areas addressed at European and national level. This section reflects on the main lessons learned, including possible limitations with this approach.

Transforming health systems: towards European Partnership

Two overall lessons can be drawn from the topics of health service and policy innovation set out in this policy brief. First, there is a high degree of commonality in the service and policy challenges faced by health systems across Europe, as seen across different systems and from different stakeholders. Second, these challenges are not being solved effectively by health systems acting alone. Many of these challenges have been identified for years, some for decades, and yet systems persist in struggling to address them.

From this, it is clear that the challenge is of a scale and nature which cannot be met by Member States acting alone. On the other hand, given the responsibilities of the Member States for the organization and delivery of health services and medical care, neither is this an area which can or should be taken over by the European Union. What is needed, rather, is a partnership. Addressing these challenges will thus require bringing together stakeholders from across European health systems, including the public sector, private actors and civil society, including in particular patients and professionals. These priority issues identified through the TO-REACH programme provide a solid basis for a shared set of topics around which such a partnership can be structured, together with the methodological approaches for how to go about learning between different health systems set out in the complementary policy brief by Nolte & Groenewegen (2021).

Potential limitations

Potential limitations of the work we have undertaken as background to this policy brief are threefold. First, while much discussion around health policy priorities is framed in economic terms, concentrating on issues of finance and fiscal sustainability, broader stakeholder input tends to put more weight on equity and inequalities. Future research should thus consider both economic and non-economic dimensions, reflecting the full range of values of accessibility, quality, equity and fairness, as well as efficiency and sustainability.

Second, the analysis set out in this policy brief was carried out before the COVID-19 pandemic and may not reflect the new challenges and priorities that will inevitably arise from it. Even before the pandemic, though, it was striking that challenges facing health policy have been quite consistent over time, with issues such as person-centredness, integration of care, and health professional skill-mix being issues identified for many years and yet remaining as challenges still. On the one hand, this means that the issues described in this policy brief are likely to remain valid topics on which to focus for some time to come. On the other

hand, this lack of change raises a question about the effectiveness of whether the right research is being carried out and if the knowledge generated is being effectively taken up in policy and practice to bring about change.

Third, as described at the start of this policy brief, the persistence of a policy challenge should not necessarily be taken as indicating a need for more basic research. In some areas there is a great deal of evidence already available, but there may be a lack of capacity to assemble it and apply it effectively to the specific problem at hand. While the topics set out in this policy brief therefore provide a solid basis for cooperation between countries on service and policy innovation, the type of response may be different, balancing fundamental research, applied research and practical support.

4. Conclusions

This policy brief recommends a range of key priorities for studying service and policy innovation in health systems, identified on the basis of mapping relevant documents, roundtable discussions and online consultations. This process resulted in priority areas structured around prioritizing person- and population-centredness, integration of health and other services, and a range of specific sectors or health system functions requiring attention. These findings are especially relevant today, as health systems and services across Europe and beyond face numerous challenges, which have been further compounded by the COVID-19 pandemic. However, COVID-19 has illuminated the importance of health care services and systems; their ramifications across all aspects of daily life; and the urgent need to ensure they can effectively innovate to reach the health needs of populations.

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APPENDIX: RESULTS OF THE TO-REACH ONLINE CONSULTATIONS

An online consultation has been opened to collect views from stakeholders, thus providing an additional source of input on priorities, in addition to the document mapping and national consultation meetings.

(1) Responses to open questions

First, respondents were asked to describe (in open answers) one or more current challenges in the health system that they would like to see addressed. An extra set of questions asked for important anticipated challenges to be addressed. Responses were coded by topic, best fitting to the answers provided. Most of the current challenges were related to health systems governance issues (22%), and to service delivery innovations (10%)[c] (Figure A1).

When looking into the future, demographic changes become a major concern, being mentioned in the context of integration of care, patient centeredness and financial sustainability. However, also challenges directly related to aging are frequently reported among anticipated challenges (16%), followed by governance issues (16%) (Figure A2).

Figure A1: Important current challenges based on open questions, by frequency of responses

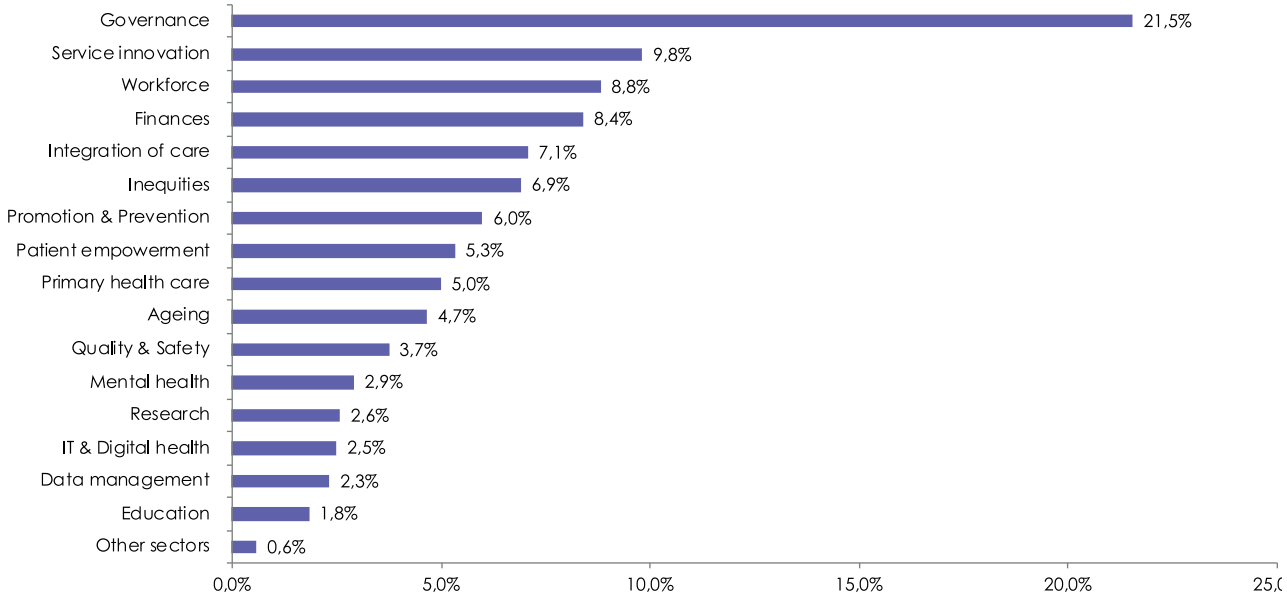
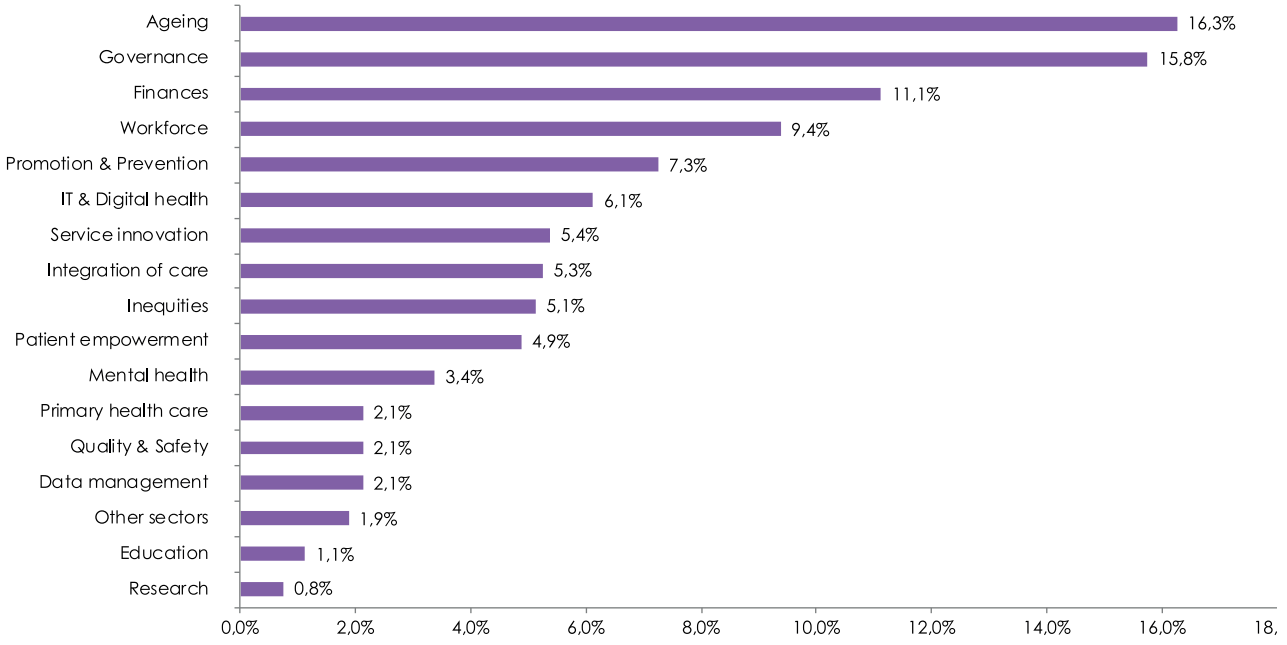


Figure A2: Important future challenges based on open questions, by frequency of responses



[c] Using this method, the total number of suggestions by topic was 1202, coming from 574 different participants related to current challenges. The respective results from anticipated challenges are 800 suggestions from 473 participants. From these, 139 important current challenges were identified.

As over half of respondents described themselves as researchers or experts, we compared their responses to those of all other groups, which include policy-makers, clinicians, members of patient organizations (see Figure A3). Issues related to governance are prominent in both groups of respondents. At the same time, researchers and experts seem to be comparatively more concerned about inequities and promotion and prevention in health care. The differences in emphasis seem to reduce when expected future challenges are taken into account (Figure A4).

Figure A3: Important current challenges based on open questions, by frequency of responses and respondent group

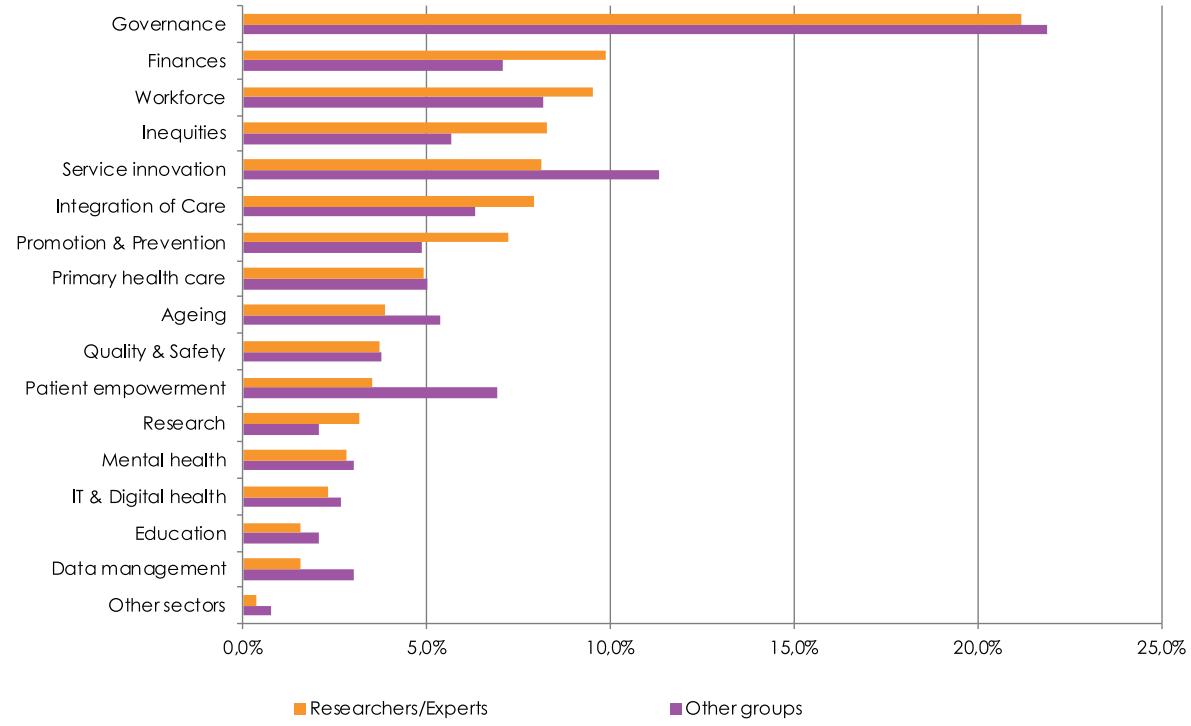
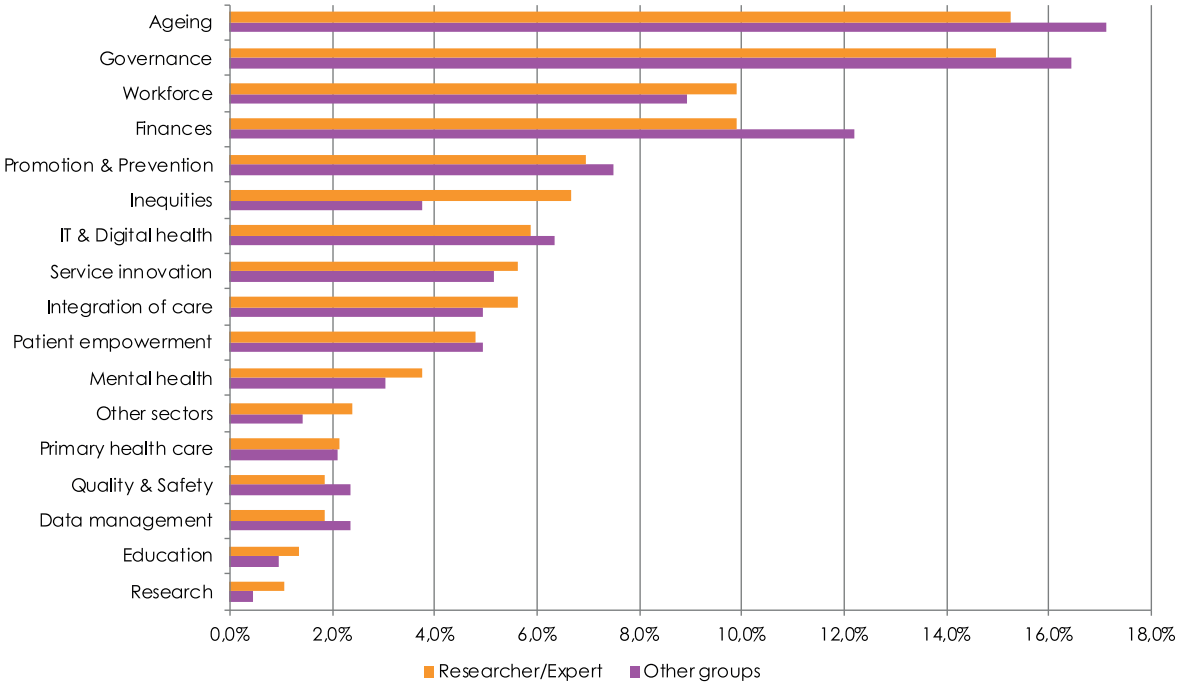


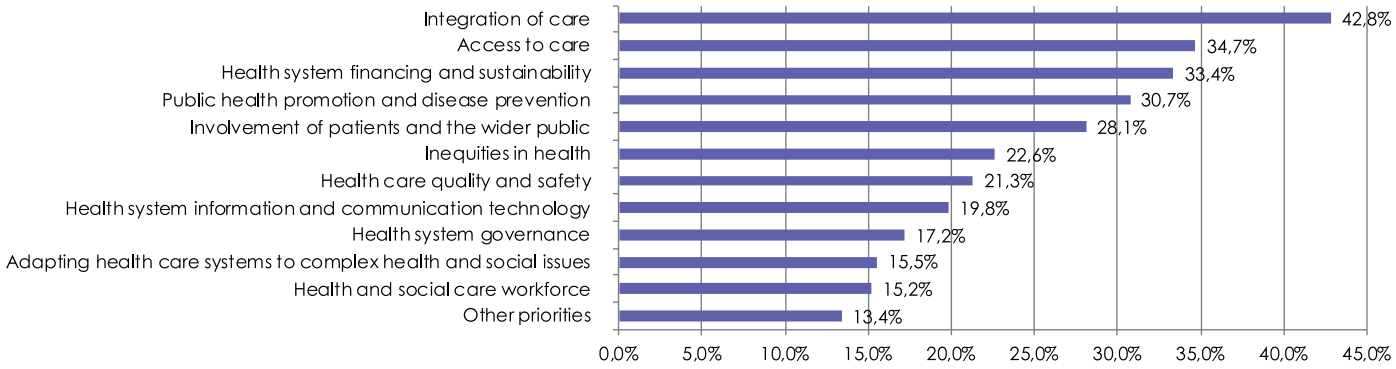
Figure A4: Important future challenges based on open questions, by frequency of responses and respondent group



(2) Responses on closed questions

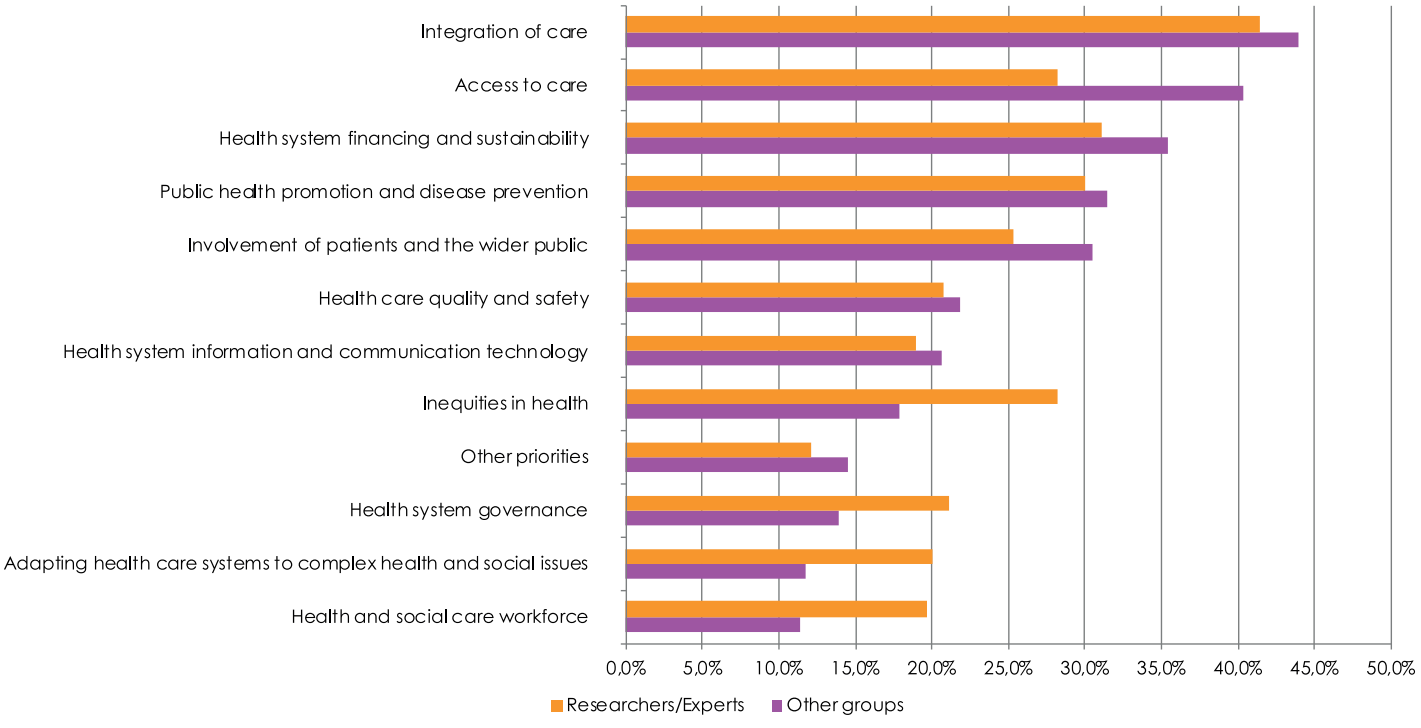
A second set of questions invited respondents to choose three priority areas from a predetermined list, based on findings from the document mapping and the national consultation, and on the inputs provided by experts. The list of priority topics also included two 'other' categories, which respondents could define themselves. Respondents were asked to choose the three topics out of this list that in their opinion would need more research in the future. The frequency of their choices is shown in Figure A5, and is based on 605 respondents indicating up to three priority areas. Integration of care has been indicated most often as a topic needing more attention, followed by access to care, financing and health promotion and disease prevention.

Figure A5: Topic areas based on closed questions that require more attention in future internationally comparative research, by frequency of responses



Also, in this case, we looked separately at the frequency of responses provided by researchers/experts as opposed to all the other groups of respondents (Figure A6). Both groups consider integration of care to be the main priority, but while researchers put greater emphasis on inequalities in health, other groups in contrast place more emphasis on the (related) topic of access to care.

Figure A6: Topic areas based on closed questions that require more attention in future internationally comparative research, by frequency of responses and respondent group



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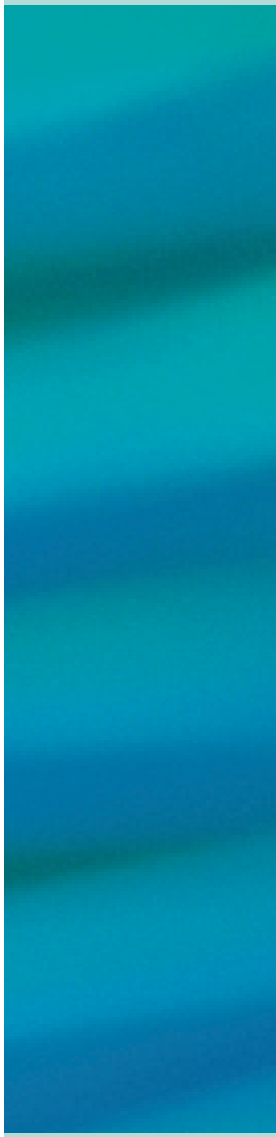

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