Scaling primary health care through networks and other models
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Abstract

Fulfilling the Astana vision for primary care as the foundation for population health will require a step change in the way primary care is organized and delivered. There is huge variation in primary care organizations – from solo clinics to city wide health centres – and no single blueprint for the future, but across the WHO European Region there is growing experience of team-based, services delivered through networks and larger primary care organizations.

This paper draws on a pragmatic review of available evidence, case studies in five countries and workshops with primary care experts to describe different forms of networking, collaboration, and organizational change in primary care, identifying potential benefits that can accrue and highlighting potential pitfalls. Opportunities include teamworking, extending digital technology; improving access; integrating with other services and opportunities to develop premises and build organizational development capacity. Risks include reduced continuity and professional disengagement. The paper describes policy levers to encourage new ways of working and sets out a three-stage, practical approach to guide policy-makers aiming to encourage large-scale primary care organization that better meet the needs of population.

Keywords
POPULATION HEALTH MANAGEMENT
PRIMARY HEALTH CARE
DELIVERY OF HEALTH CARE
SOCIAL DETERMINANTS OF HEALTH
HEALTH CARE REFORM
## Contents

Acknowledgements ........................................................................................................ iv  
Abbreviations ........................................................................................................... vi  
Glossary ..................................................................................................................... vi  

1. Introduction ........................................................................................................ 1  
   1.1. About this policy paper ............................................................................. 1  
   1.2. Methods and structure ............................................................................. 1  
   1.3. Terms .......................................................................................................... 3  

2. The need for change in primary care: pressures and opportunities ..................... 4  

3. Definition and range of primary care services ............................................... 6  
   3.1. Range of primary care services ............................................................... 6  
   3.2. Emergence of larger-scale primary care networks ..................................... 9  

4. Organizational design, ownership and governance of large-scale primary care ............................................................................................................... 10  
   4.1. Case study summaries .............................................................................. 10  
   4.2. Organizational design .............................................................................. 17  
   4.3. Voluntary or mandatory formation .......................................................... 20  
   4.4. Ownership .................................................................................................. 21  
   4.5. Governance ................................................................................................ 21  

5. The rationale for change: opportunities associated with larger-scale primary care teams and organizations ................................................................. 23  
   5.1. Multidisciplinary working and enhancing the primary care workforce .............................................................................................................. 24  
   5.2. Using digital technology in large-scale primary care ................................ 26  
   5.3. Improving access to primary care .............................................................. 28  
   5.4. Integration with other services ................................................................. 28  
   5.5. Opportunities to develop primary care premises ....................................... 29  
   5.6. Greater management capacity and operational support ......................... 30  

6. Methods to support the implementation of policy to introduce larger primary care organizations ................................................................. 32  
   6.1. Financial levers .......................................................................................... 32  
   6.2. Contracts as a lever for promoting large-scale primary care ................... 33  
   6.3. Organizational development support ....................................................... 35  
   6.4. Professional engagement and intrinsic motivation ................................... 36  
   6.5. Other vers of change .............................................................................. 36  

7. Discussion: implications for policy and practice ............................................. 38  
   7.1. A practical approach to increasing the scale of primary care teams and organisations ................................................................. 38  
   7.2. Policy levers for managing change ............................................................ 41  
   7.3. Managing the change process .................................................................. 41  
   7.4. Limits to methods for driving change ....................................................... 42  

8. Conclusion ......................................................................................................... 44  

References ............................................................................................................. 45  
Annex 1. Case study summaries ............................................................................. 49
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Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tr>
<td>COVID-19</td>
<td>Coronavirus disease 2019</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>PHC</td>
<td>primary health care</td>
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Glossary

<table>
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<tr>
<th>Term</th>
<th>Description</th>
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<tr>
<td>Primary health care</td>
<td>A whole-of-society approach to health that aims equitably to maximize the level and distribution of health and well-being through social, economic and health-care development focusing on people's needs and preferences both as individuals and communities</td>
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<tr>
<td>Primary care</td>
<td>A subset of primary health care offering essential, first-contact care provided in a community setting, closer to people's everyday environments</td>
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<tr>
<td>Primary care networks</td>
<td>Collaborations between multiple primary care providers around a common vision or purpose or shared task, with or without formal network governance arrangements</td>
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<tr>
<td>At-scale primary care organization</td>
<td>Organizations that either deliver primary care services and/or support others to deliver primary care services and have formed through a merger or takeover of smaller providers or formed by smaller providers to support them with service delivery. There is no minimum size for an at-scale provider, but they are all formed as the sum of multiple smaller teams and organizations</td>
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Executive summary

The 2018 Declaration of Astana sets a broad vision for primary health care (PHC) as comprehensive, inclusive and able to tackle the social determinants of ill health alongside preventing and treating illness in settings that are local and convenient for individuals and communities. Primary care services – offering preventive, curative, rehabilitative and palliative care – are an essential building block of PHC. If developed to its full potential, as set out in the Declaration of Astana, PHC can become the basis for equitable social and economic development, but this requires a solid foundation of high-quality, accessible primary care, and many primary care providers are currently struggling to deliver services – especially in rural areas – and looking for innovative ways to sustain and enhance the care they provide.

Across the WHO European Region, the teams and organizations providing primary care range from small clinics run by one or two doctors to large health centres covering whole cities. With such varied starting-points for innovation in each country, there is no simple, single approach to strengthening primary care that can be widely generalized, but some common themes are emerging. These include working at larger scale – with small practices collaborating in networks; merging together to form larger organizations or working with others to generate the scale needed to deliver a wide range of services and innovations. Throughout this policy paper, the term large-scale primary care encompasses these varied ways for small clinics and teams to work together for a more sustainable future.

Working at larger scale is enabling the development of multidisciplinary teams; investment in digital services; access to diagnostic and other technologies; and more management capacity to support change.

This report combines a pragmatic literature review with case studies in five countries with different types of primary care organization that illustrate different forms of networking, collaboration and organizational change. It describes how the case study organizations are using their larger scale in innovative ways to strengthen and support primary care for the future and deliver a broader range of services.

The report identifies a range of potential benefits associated with primary care networks and other larger-scale organizations, including: strengthening the workforce; increased ability to introduce digital technology; improving access; increased ability to integrate with other services such as public health and preventive services; opportunities to develop primary care premises; and greater management and organizational development capacity. It also highlights potential risks such as loss of continuity and disengagement of professional personnel.

The report describes the variety of organizational models for primary care networks that are emerging in different countries and examines the limited evidence for the impact of organizational design, ownership and governance on what they are able to achieve. It also considers the advantages and disadvantages of mandatory and voluntary participation in larger-scale service delivery.
Examining mechanisms policy-makers can use to increase the scale of primary care, the paper considers the potential role of payment mechanisms and financial incentives and the contracts in which these can be embedded. It also argues that, although financial levers may drive primary care doctors to work in larger groups or organizations, they are unlikely to be enough to fundamentally change the nature of their day-to-day work. This kind of transformational change needs significant support with organizational design and development and approaches that secure professional engagement and motivation to change.

Other potential drivers of change include regulation; targets and the using measurement and data transparency. Patient and public expectations can also highlight the need for change, especially if access to primary care becomes too difficult.

The report presents a three-stage, practical approach to guide policy-makers aiming to encourage the formation of primary care networks and other types of large-scale primary care organization in their country and, in doing so, better meet the needs of patients by providing person-centred care and contributing to the goal of improving population health.

The report concludes that there is no single or simple way to transform how primary care is organized and delivered. Primary care networks can offer a range of potential benefits depending on the context in which they emerge but that there are also risks and limitations associated with networked primary care. If this shift in the scale, design and organization of primary care is to be effective, the specific aims of policy to achieve this must be clear and relevant to the context in which it is introduced, to the professional priorities of the clinicians who will be affected by the changes and to the changing expectation of service users. Without attention to these factors and a significant amount of organizational development support to design and implement new ways of working, policy to form primary care networks is unlikely to succeed.
Introduction

The vision for primary health care (PHC) as the central pillar of Health for All and universal health coverage was established through the Declaration of Alma-Ata (1) and further developed in the 2018 Declaration of Astana (2). These emphasise the role of PHC as a whole-of-society approach to health that aims equitably to maximize the level and distribution of health and well-being by focusing on people’s needs and preferences both as individuals and communities. In the context of this broad vision, primary care is an essential building block for universal PHC, providing first-contact care in community settings close to people’s everyday environments.

The Declaration of Astana calls for services that are high-quality, safe, comprehensive, integrated, accessible, available and affordable for everyone along with collaboration with other agencies and organizations to tackle the wider social determinants of ill health.

Considerable evidence now exists about the contribution of well-organized primary care on better health and the cost–effectiveness of health services (3) and to better outcomes for people living with chronic diseases and the association of primary care services with high levels of continuity with improved clinical outcomes; reduced hospital admissions (4); and lower mortality (5).

Although these varied benefits have been attributed to primary care as a whole, it is important to acknowledge that the term primary care—with its core speciality of general practice or family medicine—covers a wide range of services organized, funded and delivered differently across countries. A 2020 Organization for Economic Co-operation and Development (OECD) report into the unrealized opportunities of primary care (6) identified 17 countries that have moved away from the traditional single-practice physician model into new configurations with multidisciplinary teams and supported by digital technologies, arguing that these new service delivery models, linked to better economic incentives and broader roles for patients, are the route to greater effectiveness, efficiency and equity. These models require larger scale to generate a sufficient volume of work to enable the development of multidisciplinary teams.

1.1 About this policy paper

This policy paper aims to describe why change is needed in the organization and delivery of primary care and to set out a practical approach to change that aims to ensure that primary care services are sustainable for the future and able to contribute to the wider vision for universal PHC.

The target audience of this policy paper is national and regional policymakers and managers in the WHO European Region who are responsible for implementing PHC reforms. The policy paper will also help PHC organizations, managers, PHC professionals and patient organizations to better understand the rationale behind and benefits of expanding PHC multidisciplinary teams through networks and other larger-scale organizational models.
1.2 Methods and structure

The policy paper combines pragmatic literature review, case studies and findings from two policy workshops with primary care experts from across the WHO European Region. It is an action-focused report that builds on lessons from case study countries to develop practical proposals for moving towards new forms of primary care delivered through multidisciplinary teams working in networks and other larger-scale organizations.

A literature search was conducted to update a previous systematic review of large-scale primary care covering publications in English between 1996 and 2022. The search included Medline, Embase, SSCI and HMIC databases, and the search terms included “general practice”, “family medicine”, “family practice”, “primary care”, “primary health care”, “ambulatory care”, “family doctor”, “family physician”, “primary healthcare” and “networks”, “federations”, “large-scale groups” and “collaborations”. Abstracts of 979 references were scanned to identify systematic reviews and other evaluations of services delivery models that support collaboration and joint working between primary care service providers. Additional papers were extracted on team working in primary care and on the impact of financial incentives and payment systems on the organization and delivery of primary care, with further papers identified through reference lists and suggestions from interviewees. Papers were reviewed to identify factors influencing, supporting or blocking the formation of networks and collaborations and evidence of the impact of different types of organization.

The case studies were selected to provide contrasting, illustrative examples of how primary care services are evolving through collaborations, networked arrangements and mergers between clinics to deliver services in new ways. They were not intended to provide a comprehensive overview of all models of primary care. Preliminary review of published reports about primary care in each country was supplemented by interviewees, with three or four key informants drawn from frontline clinical and managerial practice, academic institutions, government departments, health insurers and organizations supporting service development in public health and primary care. Annex 1 summarizes initiatives to develop large-scale primary care in each of the case study countries.

Section 2 describes the pressures on primary care providers that are driving increased demand, limiting the service capacity they can offer and affecting clinical outcomes and patient satisfaction across the European Region. Section 3 examines variation in the range of services delivered in primary care between countries and considers the balance that must be obtained between diagnostic and treatment work, prevention and public health interventions and collaborative work with specialists in integrated care pathways to secure a sustainable future for primary care. Section 4 describes the various organizational forms through which primary care is working at larger scale and Section 5 combines findings from the case studies with academic research and grey literature about the opportunities and challenges that larger-scale, networked primary care can present to work in new ways, stabilize care delivery and sustain services for the longer term. Section 6 examines policy options and other levers for change towards larger-scale primary care. The discussion in Section 7 summarizes the case for moving to larger-scale primary care as well as highlighting some associated risks. It sets out a practical approach for national and regional
policy-makers to promote the transition from small organizations focused on treating illness into a broader based sector that supports wellness and prevention, the diagnosis and treatment of illness and care coordination.

The five case studies in the paper are from United Kingdom (England), Estonia, Netherlands (Kingdom of the), Slovenia and Spain, which have all introduced or operate primary care networks or other types of larger-scale primary care organization. The case studies explore the factors driving the emergence of large-scale primary care and the policy, payment and other tools used to promote change.

1.3 Terms

The Declaration of Astana describes PHC as a whole-of-society approach to health that aims equitably to maximize the level and distribution of health and well-being by focusing on people’s needs and preferences both as individuals and communities, in the context of this broad vision, primary care is a subset of PHC offering essential, first-contact care provided in a community setting closer to people’s everyday environments. This report uses the term primary care to encompass services for disease prevention, health promotion, treatment, rehabilitation and palliative care. There is a wider vision for boosting collaboration between primary care, public health, social care and others to provide universal PHC and tackle the social determinants of ill health, but the report focuses on how best to organize and deliver primary care.

The term used in different countries for primary care physicians varies, with England and Netherlands (Kingdom of the) using general practitioner and other European countries referring to family medicine specialists. When this paper describes the work of physicians delivering primary care, it uses the term used in the country being described.

Throughout the report, the terms network and networked primary care organizations are used in a broad sense to include the formal and informal collaborations occurring between practices. This includes both loose alignments around particular themes and activities and collaborations with formal network governance structures. Table 1 summarizes the many different types of primary care organization that are emerging across the European Region, not all of which exist as formal or informal networks, so when describing the broad range of organizational models that can be seen in the European Region, not all of which are networks, the paper uses the term large-scale primary care organizations.

The terms for conditions such as diabetes and chronic lung disease also vary between countries. Chronic disease and chronic disease management are used here to describe these long-term conditions for which disease prevention and proactive management have an important place in primary care.
The need for change in primary care: pressures and opportunities

The vision set out in the Declaration of Astana is for primary care services as a foundation for universally accessible PHC, tackling the underlying causes of ill health alongside preventing and treating disease and providing diagnosis, treatment and palliative care. This vision is established at a time when patient and public expectations about the speed and convenience of access to care are growing and, in many countries, when demand for primary care is outstripping available capacity. Further, most countries have ageing populations with a growing burden of chronic disease. This is increasing demand for curative health care and creating an urgent need for primary, secondary and tertiary disease prevention and population health management programmes to reduce the burden of disease and the need for high-cost health care. In addition, access to primary care in rural areas is becoming harder in many countries due to difficulty in replacing rural clinicians when they retire, and addressing this issue requires rethinking how services are organized and delivered (8).

At a macro level, the Lancet Global Health Commission on Funding Primary Health Care argued that investment in primary care is often insufficient, especially in low- and middle-income countries, to provide universally accessible care (9). Acknowledging the growing need for PHC for an ageing population with an increasing burden of chronic disease, the OECD report on realizing the potential of primary care (6) described various weaknesses in available services, including inequity of access; suboptimal outcomes of care; avoidable hospitalizations; and inadequate preventive care.

At the level of primary care organizations, several factors are driving the mismatch between demand and capacity and jeopardizing the availability and quality of care. These include shortages of primary care doctors and nurses, especially in rural and remote areas. Younger doctors often have different career aspirations from their older counterparts, including working fewer hours. In some countries, non-medical clinicians have been used to boost the primary care workforce, but the extent of this varies (10). Further, traditional small practices with one or two doctors typically lack premises to accommodate multidisciplinary primary care teams and extended services; and the OECD report also highlights inefficiency in service delivery (6). Fig. 1 summarizes these pressures.

If developed to its full potential as set out in the Declaration of Astana, PHC can become the basis for social and economic development, but this requires a solid foundation of high-quality, accessible primary care. For the reasons described above, primary care in many countries is faltering and needs new and innovative approaches to stabilize in a new fit-for-purpose model of care that takes into account changing needs and users’ expectations. Across the Region, various initiatives and developments illustrate opportunities to increase capacity and better match need to available resources. Larger primary care organizations are emerging in several countries at a scale that can support a multidisciplinary team, investment in technology and new ways of working. An array of digital technology, including electronic prescribing, video consulting, remote monitoring of physical symptoms and online consultation platforms are reducing the need for face-to-face consultations in some clinical situations.
This is enabling some clinicians to remain active in the workforce through remote working and improving access for people in remote and rural communities who have access to digital technologies. Access to advice and support for self-care enables some potential service users to manage their own health problems, reducing the need for patient visits. A broader focus by primary care teams on tackling underlying behavioural and social determinants of disease aims, in the longer term, potentially to reduce demand for primary care services.

Fig. 1. Factors shaping the mismatch between demand and available capacity in primary care

External factors: policy, demography and public expectation

Governance ownership and resources

- Rising workload
- Workforce shortages
- Premises too small for extra staff & services

Internal challenges

- Funding pressures due to relative underfunding of primary care.
- Under – investment in digital and other health care technologies.
- Limited skills and capacity to manage change and improve efficiency.
- Changing career expectations of younger doctors re-clinic ownership.

- Aging population with a growing burden of chronic disease and increasing need for primary care.
- Developments in medical technology creating new demands for diagnosis and treatment.
- Changing patient expectations of timeliness, convenience and right to access treatment.
- Growing expectations of politicians and policy makers of the range of work which should be done in primary care.

This paper focuses on the meso level of primary care organizations to set out a case for change towards larger-scale, networked primary care and to explore potential risks and challenges. It presents evidence for rethinking the design and organization of services to ensure that patients have sustainable, equitable access to services that are appropriate to the nature and severity of their individual needs. The report argues that working at larger scale is important for ensuring a sound foundation for the core principles and function of PHC in assessing and managing illness while also releasing capacity for a broader set of activities including disease prevention, health promotion and, in some cases, also providing elements of specialist care.
Definition and range of primary care services

For many people, primary care is the first point of contact with their healthcare system, satisfying most of their health needs and also acting as the gateway to other health services. As noted above, primary care is a component of a wider vision for PHC as a whole-of-society approach to organizing health systems, bringing services for health and well-being closer to communities.

The type of organization through which people access primary care varies within and between countries, and this section will consider both the range of services delivered in primary care and the scale of primary care organizations across the European Region.

Key points

- The range of services delivered in primary care and the size and composition of the teams providing them reflect the political, cultural and policy history of the country in which they are delivered.

- Political and public tensions rise if primary care services are unable to respond to acute and ongoing illnesses, core functions of primary care.

- Following the Declaration of Astana, there is a move away from reactive models of primary care focused on treating illness into broader services that combine work to tackle the root causes of ill health and disease prevention with diagnosis, treatment and palliative care.

- There is no standardized size of primary care organization, and service providers vary from small clinics with one or two doctors to regional organizations serving hundreds of thousands of people. The case studies illustrate a growing trend of collaboration between practices into formal and informal networks of providers.

- Initiatives to transform the delivery model of primary care to larger scale should consider the potential impact of changes on the core functions and ensure that they will not be destabilized by introducing at-scale initiatives to broaden the range of services offered to include more preventive care.

- It is important to increase the scale and range of primary care services in ways that effectively balance policy-makers’ expectations of rapid progress with the need to keep patients and clinicians engaged with and supportive of changes.

3.1 Range of primary care services

The range of services provided in primary care varies between countries (as do the terms, as outlined above) and may combine any or all of the following:
• diagnostic, monitoring and curative services for acute and chronic symptoms, diseases and conditions;
• primary preventive services such as immunization, child development, noncommunicable disease detection and cancer screening;
• health promotion activities through contribution to multisectoral interventions designed to identify and minimize lifestyle and other risk factors for long-term illness;
• secondary prevention by proactively managing long-term conditions;
• in some countries, primary care gynaecologists and/or paediatricians form part of the core primary care team (as in the Slovenia and Spain case studies);
• pharmacy services, which primarily focus on medication and repeat prescribing, but may also include assessing and managing minor illnesses;
• ophthalmic and optician services;
• physiotherapy for rehabilitation and treating musculoskeletal disorders;
• midwifery;
• dentistry; and
• mental health professionals, including community teams that may be directly accessed by patients.

There is also overlap in some countries, with activities that may be described as community services such as community nursing or therapy (such as physiotherapy and occupational therapy), which are often delivered directly in the patient’s home or other community-based centres. These variations are illustrated in the case study countries.

In Slovenia, public health and preventive services have been a core element of community health care for decades, and their historic importance has shaped current primary care services. Following independence in 1991, a combination of national health policy priorities around universal access to care and specific programmes around noncommunicable diseases and protecting vulnerable populations laid the foundations of universally accessible primary care services, free of charge at the point of delivery, combining acute and preventive care. Practical guidance from the National Institute of Public Health supported the introduction of several prevention programmes, including reproductive health, child and adolescent health, oral health, vaccination and noncommunicable disease prevention and control, that are integral to primary care provision in addition to physician-led primary care teams (family medicine teams) for adults, paediatric teams, gynaecology teams and dentistry teams, who provide first contact care in their own clinical speciality. Health promotion centres were introduced in 2004, which are delivered through nurse-led teams based in the municipally owned community health centres.
Other ambulatory secondary specialist services are delivered in the same community health centres but independently of the primary care team, and referral is needed. More recently, further waves of health policy have broadened the range of primary care to include mental health services and health promotion initiatives focused on lifestyle risk factor reduction delivered by the health promotion centres (12).

Close collaboration between primary care and public health — an important strength of Slovenia’s health system — also contributed to the effectiveness of the health system in responding to the Coronavirus disease 2019 (COVID-19) pandemic, including providing surge capacity for testing and tracing, ensuring vaccination, identifying and responding to vulnerabilities, continued delivery of health promotion and disease prevention services and population health management, priority setting and demand management.

In a contrasting example, since the founding of the national health service in the United Kingdom, the bulk of general practice work has been diagnosing and managing acute and chronic illness, although general practitioners in England have always provided some public health and disease prevention activities, including child and adult immunizations, child development health checks, cervical smears and case finding for common noncommunicable diseases. However, in the past 20 years, national policy-makers have sought to increase both the disease prevention work and specialist work undertaken in general practice. For example, the 2018 policy paper Prevention is better than cure (13) called for greater investment in primary care to support preventive work, and a range of micro incentives are included in the national quality outcomes framework around case finding for blood pressure, smoking and obesity (14).

In relation to specialist care, various policy initiatives in England have tried to link selected areas of hospital work to general practice through integrated care pathways to shift care out of hospitals and into community settings. General practitioners with specialist clinical interests are able to contribute to integrated services, dividing their time between core primary care and integrated specialist care. But many areas lack general practitioners with special interests, and the rising workload of core general practice can make it hard to take time out for specialist work, so access to specialist care in general practice settings is patchy.

In contrast to England and illustrating the impact of historic policy choices, in Estonia after independence, family medicine doctors were required to set up private practices contracting with the Health Insurance Fund, while specialists continued to work within polyclinics – now transformed into outpatient departments (15).

The impact of national differences in the range of services delivered in primary care is hard to measure directly. Slovenia’s emphasis on chronic disease prevention and health promotion and its initiatives to improve family physician diabetes care were initially associated with a decline in diabetes mortality ahead of the European Region average, although this has since reversed. Equally, England’s strong focus on cardiovascular disease prevention has delivered a significant decline in cardiovascular disease mortality and, while the evidence base is weak, service innovations to improve access have been associated with reduced use of emergency hospital care (16).
This paper highlights the importance of preserving access to clinical assessment and care for acute and ongoing illness as a core function of primary care and a key driver of public and political dissatisfaction if it is not available. Poor access to primary care can also result in patients with missed and delayed diagnosis presenting later to hospital service and requiring more complex and costly care. However, if PHC is to reach its full potential, these core elements must be carefully integrated with disease prevention services, health promotion and initiatives to promote well-being to contribute to the long-term sustainability of health systems and overall well-being. In the future, this may also include delivering elements of specialist care in community settings in locations that are more comfortable and convenient for patients to reduce the use of higher-cost hospital and specialist services.

3.2 Emergence of larger-scale primary care networks

The scale and organizational form of primary care providers (described in more detail in Section 4) varies significantly within and between countries, reflecting historical policy choices about primary care. The case studies illustrate that, in Slovenia and Spain, where primary care is already delivered through larger teams and organizations, collaborations are forming with other institutions such as hospitals and social care providers to develop integrated services and extend the range of preventive and public health interventions delivered. In countries where primary care has traditionally been delivered by general practitioners or family medicine specialists in small clinics, there are pockets of innovative collaboration between practices to use larger scale to improve preventive care and address the social determinants of poor health. However, for most small practices, the pressures described above are driving a range of responses for which the primary aim is to sustain day-to-day provision of clinical services. These include collaborations between clinics to form local networks and mergers between clinics to form larger organizations. However, there is no simple or widely accepted definition of a primary care network or a large-scale primary care provider.

In many countries, the size of primary care providers is increasing in terms of the number of doctors and other clinicians working together, although there is no fixed definition of large scale. What is considered a large group in one country may be average or even small in another (Table 2). However, with a larger patient population, more health-care professionals are needed to deliver care for a diverse range of clinical needs, creating the demand needed to justify developing a multidisciplinary team. The primary care organizations in the five case study countries described in Section 4 illustrate the diversity of organizational types and workforce that is emerging across the European Region.

Collaborations between practices include informal joint working between primary care personnel around areas of common interest (for example, peer learning groups about diabetes care), formal joint working in response to contracts (as seen in primary care networks in England) and full organizational mergers between practices.
Organizational design, ownership and governance of large-scale primary care

Key points

- The scale and organizational form of primary care providers across the European Region varies significantly.

- The eastern part of the Region has more of a tradition of community health centres and polyclinics that house family medicine doctors and primary care alongside other services, whereas primary care in the western part of the Region has more often been delivered by primary care physicians working in small clinics or practices.

- Across the Region, new forms of primary care organization are emerging through the formation of formal and informal networks; through mergers between small practices; and through hierarchical organizations in which a parent company runs multiple small practices. The wide variety of ways in which this is occurring is illustrated through the five case study countries briefly summarized below, with Annex 1 providing further information.

- New types of primary care organizations are emerging in response to a range of policy stimuli such as new contractual and funding arrangements and political expectations to treat more conditions in primary care rather than more expensive hospital settings. Others are driven by local factors including working together to cope with rising demand, financial pressures and workforce shortages.

- It is unclear whether voluntary or mandatory participation in networks and other large-scale organization is more likely to result in change and improvement in service delivery. There are advantages and disadvantages to each approach.

- The organization and governance of networked organization needs to be adapted over time as the purpose of the organizations evolves.

- There is weak evidence about how different types of governance and ownership models affect the ability to drive change in how day-to-day care is delivered.

4.1 Case study summaries

This subsection summarizes five case studies by structuring for nine main features: (i) the historical foundation of primary care; (ii) the number and size of primary care practices; (iii) the percentage of practices working at larger scale; (iv) the ownership of primary care practices and relationship to public health services; (v) the clinical and professional workforce in primary care; (vi) the range of services provided; (vii) the experience to date of introducing larger-scale primary care; (viii) the factors driving the introduction of larger-scale primary care services; (ix) and the levers for change to larger-scale primary care services (Table 1). Source materials for these summaries are referenced at the end of each case study in Annex 1.
### Estonia

#### Historical foundation of primary care

Family medicine doctors were moved out of their employed status in polyclinics at the end of the Soviet era. They became self-employed clinicians in 1990 but often stayed working in the same premises.

#### Number and size of primary care practices

There are 412 contracted PC providers, of which 60 are PC group practices. Less than 1% are public providers (municipally owned). Most providers are privately owned, with defined patient lists. The population listed in the patient lists (insured) are entitled to PC free of user charges. For the rest, the providers may ask a fee to provide services. The number of people who need to pay privately for PC and how many providers provide services for a fee outside their patient list is not monitored.

#### % of practices working at larger scale

51% of family medicine doctors are part of a group practice, and 60% of family medicine practices contract with the Estonian Health Insurance fund via the group contract.

#### Ownership of primary care practices and relationship to public health services

Practices can be owned by family doctors or local municipalities that contract with the national health system through the Estonian Health Insurance Fund. Primary care is coordinated nationally by the Estonian Health Insurance Fund.

#### Clinical and professional workforce in primary care

Traditional small practices have only family medicine specialists. Group contracts require family medicine doctors to work with a physiotherapist, midwife and nurse.

#### Range of services provided

Core services: assessment, diagnosis and treatment

Family medicine doctors are not allowed to undertake any specialist care.

A quality bonus scheme defined in 2006 and enhanced in 2021 specifies a range of preventive care that must be delivered to qualify for bonus payments.

#### Experience to date of introducing larger-scale primary care

The Estonian Health Insurance Fund has introduced a contract for group practices that requires a minimum of three doctors to work together and requires the doctors to work with a physiotherapist, midwife and home nurse. However, some of the groups formed to occupy new health centres include six doctors each working as separate practices.
Factors driving the introduction of larger-scale primary care services

- EU funds to build new health centres
- Estonian Health Insurance Fund contracts for group practices
- Broadening the skill mix in primary care
- Younger doctors not keen to work alone

Levers for change to larger-scale primary care services

- The Estonian Health Insurance Fund group practice contract is linked to a higher rate of reimbursement.
- EU infrastructure investments are available for providers who share premises and provide an extended list of services (physiotherapist, midwife and home nurse).

**United Kingdom (England)**

**Historical foundation of primary care**

Traditionally, primary care is provided in small practices, drawing registered patients from the local area. Multiple policies over the last 25 years have encouraged groups of practices to work collaboratively. In the past 10 years, many small practices have merged.

**Number and size of practices**

- Approximately 6500 practices in 2022
- Average patient list size around 9500
- List sizes of individual practices vary from 2000-100,000 patients with the biggest super-partnership linking multiple smaller practices having over 500,000 patients.

**Ownership and governance of primary care clinics**

- Most practices are owned and run by one or more general practitioners who work in them.
- A growing number of general practice chains are emerging as limited companies or community interest companies, owned by a small group including general practitioners and running multiple small practices. The largest general practice chain has more than 500,000 patients.
- A small number of practices are now run by hospitals or community care organizations.

**Clinical and professional workforce**

- General practitioners may be (co-)owners of or salaried to their practice.
- General practice nurses may have a basic training to undertake simple screening, wound care, immunizations and chronic disease management or advanced training to diagnose and manage minor illness and injury.
- Other roles in general practice include pharmacists, paramedics, mental health workers, physiotherapists, physicians’ assistants, social prescribers and care navigators.
| Range of services provided                                                                 | Preventive work includes cervical cancer screening, immunizations, smoking cessation, case finding, secondary and tertiary prevention of long-term conditions, diagnosis and management of acute illness, long-term conditions and end-of-life care. Optional provision of some areas of specialist care if a general practitioner with a specialist clinical interest is working in the clinic. |
| Experience to date of introducing larger-scale primary care                                | Ad hoc voluntary mergers to form very large practices (some with more than 100 000 registered patients). Voluntary collaboration between some practices to deliver selected services (such as extended-access clinics evenings and weekends) in response to additional funding. Universal voluntary participation in primary care networks covering between 30 000 and 100 000 patients in response to financial incentives in the national general practice contract. |
| Factors driving the introduction of larger-scale primary care services                    | Enhanced contract with funding for participating in a primary care network. Additional funding for extra services (such as extended access). Voluntary mergers between practices stimulated by workforce and workload pressures. |
| Levers for change of change to larger-scale primary care services                         | National general practice contract Local enhanced contracts Additional funding streams (such as extended-access funds) Participation in innovative integrated specialist services |

**Netherlands (Kingdom of the)**

- **Historical foundation of primary care**: Traditionally, primary care is provided in small practices, drawing registered patients from the local area and offering primary care as independent contractors paid through health insurance. General practitioners must have postgraduate training and undertake 40 hours of training per year, including 10 hours of peer review work. About 95% of the population is registered with a general practice, although this is not compulsory.
In 2022, there were 11,754 general practitioners in 4,874 practices. Adjusting for part-time work, there were 5.3 full-time equivalent general practitioners per 10,000 inhabitants. 17% of practices are single-handed (staffed by one general practitioner); 44% of practices are staffed by two general practitioners. 39% of the practices are staffed by more than two general practitioners. Most general practitioners are self-employed (65%) and own their practice; 45% work as an employee or as a locum (which may be in addition to their self-employed role) in a health centre or practice.

A variety of ownership models are emerging, in addition to the traditional doctor-owned small clinic in which the general practitioners are independent contractors with insurers. Chains are emerging of practices owned by a parent company.

Most practices employ practice nurses who manage people with chronic diseases, carry out older people care and mental health care plus selected screening tests, wound care and immunizations. Some have advanced training to diagnose and manage minor illness. Other clinical roles in general practice include pharmacists, paramedics, mental health workers, physiotherapists, physicians’ assistants, social prescribers and care navigators. All practices employ practice assistants who have administrative tasks but also conduct telephone triage and clinical support.

General practitioners must provide “responsible care” to meet patients’ needs in accordance with quality standards described in the Care Quality Act and in professional guidelines on investigation, treatment and prescribing. General practitioners are gatekeepers to specialist services. Patients must be referred to specialists.
Large general practice organizations emerged in about 2010 in response to a new chronic disease contract negotiated between insurers and a care group – a new form of organization usually owned and run by groups of general practitioners. Most care groups cover 80-100,000 patients although a small number cover larger patient populations. In recent years, new types of large-scale general practice organizations have formed: chains of small practices owned by a parent company; large-scale video services offering top-up consultations to increase appointment capacity in small practices; and networks of not-for-profit practices owned by the general practitioners who run them.

The 2010 chronic disease contract led to the creation of care groups that supported small practices to improve the quality of chronic disease care starting with diabetes. Groups of general practitioners also work together to deliver out-of-hours services. Difficulty sustaining small practices due to workforce and financial pressures underlies new private companies taking ownership of some practices.

The introduction of bundled payments in the 2010 chronic disease contract was an early lever for change. Health insurers negotiate regionally for innovations in general practice care, some of which could be used to support working at larger scale. Although this is not their primary aim. National policy to integrate hospital, community, primary and social care aim to include general practice and care groups in these integrated systems but the terms on which individual practices will join these collaborations are not yet clear.

### Slovenia

- **Historical foundation of primary care**: A strong national focus on public health, nutrition policy and hygiene, with many family medicine services located in the same premises with these services.

- **Number and size of practices**: 21–25% of family medicine doctors work in solo or two-doctor clinics. In 2019, there were 59 community health centres.

- **Ownership and governance of primary care clinics**: 75% of family medicine specialists are employed by municipalities and work in community health centres owed and run by municipalities. 21–25% of family medicine specialists own their own practices, working under contract for the health system.
Clinical and professional workforce

Family medicine specialists are members of a multidisciplinary team based in community health centres, which include:

Since 2011, family medicine doctors have worked with a 0.5-full-time equivalent nurse practitioner.

Range of services provided

Family physicians undertake curative medicine but work closely with other multidisciplinary team members who deliver disease prevention services, health promotion campaigns, food and nutrition services and also work alongside primary care paediatricians and gynaecologists and some specialist clinicians.

Experience to date of introducing larger-scale primary care

75% of family doctors have worked for decades in large community health centres with a wide range of other clinicians (see above). The case study has not identified examples of redesigning curative family medicine services to be delivered by groups of clinicians working in new ways.

Factors driving the introduction of larger-scale primary care services

Historical existence of community health centres in which family medicine doctors practice.

Levers for change of change to larger-scale primary care services

National health strategies focus on health promotion and disease prevention, cancer services and mental health services with implementation support from the National Institute of Public Health.

No initiatives were identified related to increasing the scale of core family medicine services.

Spain

Historical foundation of primary care

The 1986 General Health Act enshrined primary care as a multi-disciplinary team-based speciality serving a geographically defined population, free at the point of delivery and acting as a gate keeper to specialist services.

Number and size of primary care practices

Primary care teams serve a population of approximately 25 000.

In 2015 there were approximately 85 doctors for 100 000 population combining family medicine and paediatricians (Kringos). However, this had fallen to 77 per 100 000 population in 2022 (ref BMJ).

Percentage of practices working at larger scale

All primary care teams serve similar size populations, so large-scale service provision is universal in Spain.
Ownership of primary care practices and relationship to public health services

Health services, including primary care clinics, are owned and run by the regional Autonomous Communities. The exact design of clinics and services varies in each autonomous community but they employ the majority of doctors and the wider multidisciplinary team.

Clinical and professional workforce in primary care

A typical primary care team for 25,000 patients has 10 family medicine doctors, 13 nurses, two nurse assistants, three paediatricians, one social worker, one dentist and 10 administrators. In some autonomous communities, including Catalonia, the primary care team is supported by midwives, physiotherapists, psychologists, psychiatrists, rehabilitation doctors and pharmacists.

Scope of services provided

Core services include assessment, diagnosis and treatment with access to laboratory tests and imaging. Family and community nurses combine family medicine with a focus on chronic disease management and home care. Disease prevention, health promotion, home care and community care are provided through collaboration between doctors, nurses, dentists and social workers.

Factors driving the introduction of larger scale primary care services

Catalonia was the first autonomous community to introduce primary care reform and this was generalised across the country through the 1986 General Health Act. The Covid pandemic drove changes in the scope and day to day work of primary care team members.

Levers for change to larger-scale primary care services

The 1986 General Health Act as the basis for primary care organization in the Autonomous Communities and the universal introduction of primary care teams.

### 4.2 Organizational design

Although the many primary care doctors across the Region, especially in the western part of the Region, continue to work in small practices – particularly in rural areas – many are joining together into larger organizations.

In addition to the longstanding organizational models at the top of Table 1 – small independent practitioner clinics and community health centres – five new organizational types were in evidence across the case study sites.

**Doctors salaried to an employing organization.** In Slovenia, about 75% of family medicine specialists are employed in municipally owned community health centres. A similar model operates in Spain, where the autonomous communities (regional governments) employ primary care personnel. In the other three case study countries, most doctors work as independent practitioners, contracting their services to the national health system. However, interviewees reported that younger doctors are becoming less interested in working as independent contractors, and new employment
models are emerging in which they are salaried to practices run by other doctors or owned and run by hospitals.

**Small practices merging together to create large practices.** There is no standard size for these mergers. Family medicine groups in Estonia have at least three family medicine doctors. In England, the average number of patients registered with a general practice increased from 5890 to 9657 between 2004 and 2022 (17). The largest general practice in the country, formed through a merger between several practices into a single organization, has almost 100 000 registered patients working under a single contract with the National Health Service, although the practice works across multiple sites and patients can choose whether they are seen in their local practice or in a shared clinic. Some super-partnerships are emerging linking multiple member practices to create a shared patient list over 500 000 patients, although individual doctors remain linked to just one or two of the participating clinics and retain individual contracts with the National Health Service. The administrative and payment methods for these organizations vary according to the contracts they hold.

**Groups of practices collaborating through informal alliances or networks.** These are formed around a common purpose: for example, primary care networks in Estonia and England in which general practices covering 30 000–50 000 patients or more sign up to a network contract without necessarily setting up a joint organization. Network funds are directed through one of the member practices and distributed between the participating practices according to agreed criteria.

**Chains of practices owned by an overarching parent company.** In Netherlands (Kingdom of the), companies are emerging that are buying small practices and running them through a central business infrastructure. In England, where general practices cannot be bought and sold, companies are competing for five-year contracts with the National Health Service to run individual general practices and creating scale through the sum of multiple contracts. The largest of these organizations provides care for more than 500 000 patients.

**Large-scale primary care support organizations.** These are exemplified by care groups in Netherlands (Kingdom of the) and general practice federations in England and are typically (but not necessarily) owned by the general practitioners to whom they provide support. The services they offer vary but may include some clinical services; administrative and technical support for human resources and information technology; training and development; and organizing coverage for absent clinical personnel in individual practices. Care groups in Netherlands (Kingdom of the) typically support groups of practices covering 80 000–100 000 patients, although a small number now cover much larger patient populations.

Table 2 illustrates the variety of organizational models currently delivering primary care services in our case study countries.
<table>
<thead>
<tr>
<th>Organizational model</th>
<th>Example countries</th>
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<tbody>
<tr>
<td>Traditional small practices</td>
<td>Traditional one- or two-doctor primary care clinic models (self-employed or salaried) contracting with the health system</td>
</tr>
<tr>
<td></td>
<td>England, Estonia, Slovenia, Netherlands (Kingdom of the)</td>
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<tr>
<td>Municipal community health centres</td>
<td>Employed family medicine specialists in municipality-owned community health centres working alongside other clinicians, but not yet developed into integrated multidisciplinary teams</td>
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<tr>
<td></td>
<td>Slovenia</td>
</tr>
<tr>
<td>Primary care teams working in regionally funded clinics</td>
<td>Employed general practitioners working as part of a government funded multidisciplinary primary care team for 20 000 patients</td>
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<tr>
<td></td>
<td>Catalonia, Spain</td>
</tr>
<tr>
<td>Networks</td>
<td>Small practices collaborating around a common purpose</td>
</tr>
<tr>
<td></td>
<td>Primary care networks in England</td>
</tr>
<tr>
<td>Membership of a larger organization</td>
<td>Individual practices supported by a larger organization that member general practitioners may or may not own</td>
</tr>
<tr>
<td></td>
<td>Care groups in Netherlands (Kingdom of the)</td>
</tr>
<tr>
<td></td>
<td>Group practice with a minimum of three doctors</td>
</tr>
<tr>
<td></td>
<td>General practice federations in England</td>
</tr>
<tr>
<td>Mergers to form a large practice</td>
<td>Large clinic (may be on multiple sites) owned and run by the doctors who deliver care</td>
</tr>
<tr>
<td></td>
<td>England</td>
</tr>
<tr>
<td>Chains of small clinics</td>
<td>Multiple small clinics owned by a parent company</td>
</tr>
<tr>
<td></td>
<td>England</td>
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</table>
Two important questions arise relating to these different organizational structures. First, what is the impact if doctors are obligated to work in larger groups and will services improve more if they join voluntarily? Second, what is the impact of different ownership models on the ability to improve quality, efficiency and sustainability (described in more detail in section 4.4) in day-to-day working practices?

4.3 Voluntary or mandatory formation

Large-scale primary care organizations may form voluntarily through local, bottom-up collaboration or as a result of a top-down policy to create larger groups – although the latter may be mandatory or voluntary. The basis on which they form can substantially affect what they achieve and what motivates those working in them.

Voluntary networks may form around identified commonalities (such as a common goal, challenge etc.) and through organic ties between different organizations, creating interdependence, collaboration, coordination and sharing of assets and information to effectively achieve a common goal. They often rely on existing social capital and resultant connections among people or organizations. Mandated networks tend to form when governing agencies require a group of actors to collaborate in solving complex problems through formally established links (18). Popp & Casabeer (19) also refer to mandated networks as intentional governance structures with set membership and processes, designed to use available resources to achieve specific policy goals.

Pettigrew et al. (20) and others report that if the objectives of mandated networks are closely aligned with those of the health professionals in them, they can stimulate opportunities for working together and offer legitimacy to what they do and may provide greater clarity of purpose and guidance on development. Largely, however, mandated networks are more likely to result in the disengagement of clinicians and stifle innovation (20). But leaving practices to organize voluntarily – especially in the absence of clear purpose and strong organizational development support may result in inequity and inefficiency.

Pettigrew et al. (20) also summarize experiences from Australia (divisions of general practice), New Zealand (independent practitioner associations) and Canada (various forms of family physician networks in Alberta, Ontario and Quebec), where participation in a general practice network has been incentivized through several mechanisms but not mandated. This suggests that, although voluntary membership can help to harness clinician engagement, 15–30% of general practitioners will never join a network voluntarily, and bringing about focused change through such networks can be difficult. Experience in Australia, where voluntary Medicare Local networks were introduced in 2011, was mixed in terms of the extent to which their networks aligned with natural populations and engaged with wider hospital and community services and in their power and authority to negotiate new ways of working. There was progressive disengagement by general practitioners from these organizations, which were phased out after only four years (20).
4.4 Ownership
The organizations described in subsection 4.1 include a variety of ownership models. Large primary care organizations may be owned and managed by the general practitioners who work in them, owned by municipal or national governments or owned by a private company (which may, in turn, be owned by a small group of doctors or by others). Some smaller practices receive management support by an external organization, which may or may not be owned by the doctors it serves.

Different forms of ownership have consequences for how the model operates. Vertical integration – where hospitals become the owners of PHC providers, which can improve care coordination but may have other negative effects – such as on prices or patient choice, which may be restricted, with referrals being directed to the hospital. Differences in organizational culture, attitudes towards risk and even the underpinning philosophy of care between hospital medicine and primary care create significant challenges. Economic theory suggests that, if the doctors are the owners and entrepreneurs, higher levels of innovation, efficiency and responsiveness to patients might be expected, whereas if they are employees, they may make less discretionary effort. Private companies are increasingly involved in operating primary care. There is limited evidence about its impact, although what there is tentatively suggests that private for-profit providers do not perform as well on some key measures and there is concern about the growth of private equity investment\(^\text{[21,22]}\). The key issue here is that aligning the interests of patients, payers, policy-makers and PHC professionals is already difficult using the payment and regulatory levers that are available. Adding a fifth set of actors to this, who may have very different interests to the other four and have significant power, means that careful thought needs to be given to the design of an ownership model that does not make the alignment problem worse.

4.5 Governance
Similar to other parts of the health-care system, effective governance with processes for effective decision-making, budgetary and performance management, quality improvement and the ability to manage external relationships will be an essential part of large-scale PHC. The considerations differ depending on the extent to which the provider is a network of organizations that retain some sovereignty – in which individual members may feel strongly about representation in governance structures – or whether they are unitary and formal organizations.

In his analysis of the potential for networks to achieve integrated care, Goodwin\(^\text{[23]}\) notes that different types of networks have different advantages and problems. All require strategies to build links and collective commitment between members, and the balance of power between managerial and professional interests requires constant attention to ensure professional engagement within an agreed system of regulation and governance to achieve strategic change. He concludes that networks are no panacea. The literature on networks as a mechanism for the governance and coordination of autonomous individual organizations suggests that they have shortcomings as a vehicle for managing change and day-to-day management, in contrast to learning, sharing work or developmental activities. This is a particular issue when there is a need to enforce decisions, create common standards or other situations in which the autonomy of the individual components of the network can veto, obstruct change or, in
extreme cases, leave the network. These models also require high levels of trust. They are also likely to be less effective at creating a unified organizational culture, shared goals and accountability than unitary organizations (24).

A study of four large-scale primary care organizations in England with different ownership models and organizational forms (two limited companies, one partnership of doctors and one social enterprise) examined how ownership and governance arrangements affected the organization and delivery of services (25). The authors found that each organization was governed differently and there were no off-the-shelf governance plans that can be applied to large-scale general practice organizations. Governance arrangements changed in response to periods of growth or failure, with new board members periodically appointed. Appointments were typically made to bring additional skills and experience to the board, although criteria for new appointments were not always transparent, which could cause distrust among members. The study concluded that emerging organizations must invest the time needed to agree on the vision, values and goals of the organization and then develop the simplest governance arrangements possible to achieve these.

That said, the ability of the executive group of an at-scale organization to direct day-to-day work in its member practices depended on two factors: whether member practices’ contracts were held by the at-scale organization or held by each practice; and board members’ willingness and ability to direct and manage member practices’ daily work. If members retained their own contracts as small practices and chose to collaborate with a larger organization, they retained more control over their day-to-day work. However, if smaller practices were effectively owned and run by the larger organizations (if the larger organization held the contract with the government or the insurer to deliver services), the governing body had more scope – if it chose to exercise it – to transform the day-to-day work of member practices (25).

Netherlands (Kingdom of the) case study highlighted the range of different ownership and governance models now evident in primary care organizations, with one interviewee describing how doctors can become disengaged from the work and the aims of the care group to which they belong if they are not involved in its governance. This was exemplified by an out-of-hours cooperative in which the scale and complexity of services delivered increased to the point that its board functions were transferred to non-medical managers. Distanced from day-to-day management decisions, the doctors who delivered and owned the service started to block proposals for change to the point that the board was restructured and general practice membership restored. This was described as having restored a sense of ownership among general practitioners but slowed decision-making.
The rationale for change: opportunities associated with larger-scale primary care teams and organizations

**Key points**

Building on the case studies and available evidence about the impact of networked and larger-scale primary care, it has potential to enable:

- the development of multidisciplinary skill mixed teamwork, enabling a wider range of services to be provided to patients;
- investment in digital technology to support better patient care and population health management;
- investment in premises to house larger clinical teams and innovative services, enabling better teamwork and one-stop services for patients;
- improved access, often supported by digital technology and wider skill mix, but with the potential for unequal access for people who lack digital skills;
- integration between primary care and other sectors and services, including public health and preventive care; and
- a more robust management infrastructure, to support change and improvement in primary care services, including greater standardization to improve quality and efficiency.

When national laws and regulations permit and premises are of sufficient size, elements of public health, community services and specialist care can be integrated into core primary care services.

The evidence base about the impact of primary care networks and other larger-scale primary care organizations is limited. This section therefore combines learning from published research with findings from the case studies to summarize opportunities around six themes of particular importance to the long-term sustainability of primary care and its ability to deliver the goals of universally accessible PHC.

The six themes are multidisciplinary teamwork; digital services; improving access; integration with other services; estates (or buildings); and organizational development and management capacity. The case studies are used to illustrate the various ways in which networks and other types of service provider can use a larger scale to deliver care in new ways. They do not offer a comprehensive overview of new ways of working in case study countries. When appropriate, they illustrate the challenges and limitations of collaboration and working at large scale.

Smaller practices have a range of benefits that remain the mainstay of remote and rural primary care provision (26) and may be jeopardized by
primary care networks. There are well-evidenced advantages in relation to
greater continuity, greater patient satisfaction and lower rates of
preventable hospital admissions (27), suggesting that, regardless of the
potential benefits of larger-scale primary care, they must be achieved in
ways that preserve the continuity, trust and patient satisfaction seen in
smaller practices.

Nevertheless, small practices face vulnerabilities, partly related to the
financial impact of keeping up with national standards, population health
delivery and regulatory requirements. For example, investment in new
technology, additional personnel or regulatory and reporting compliance
may take up a disproportionate share of clinic finances compared with
practices that can spread such costs over a larger group of clinicians.
Further, they face greater challenges in terms of poor negotiating power for
the price of consumables and reduced ability to cover for personnel absence.

5.1 Multidisciplinary working and enhancing the
primary care workforce
With shortages of primary care doctors across the European Region, a range
of other clinicians are taking on roles in primary care. These teams can both
boost capacity for diagnosis and treatment and contribute to preventive
care and public health campaigns (28).

The OECD reports (29) that 19 member countries have implemented
workforce development strategies to improve primary care delivery. In terms
of primary care networks, the feasibility of employing additional personnel
increases with the registered list size. A single-handed doctor with 1500–
2000 registered patients is unlikely to have sufficient clinical need or income
to justify employing additional clinical personnel, beyond a primary care
nurse. In contrast, a large group of doctors could each make a marginal
contribution to the costs of additional personnel for which the clinical needs
of a larger patient group would likely create enough demand to justify
developing an in-house service.

In each of the case study sites, primary care is delivered by a diverse range
of PHC professionals, with the widest skill mix in England, Slovenia and
Spain and a narrower range of clinicians in Estonia and Netherlands
(Kingdom of the) (Table 3). That said, primary care networks also have
potential to include personnel who work with specialist teams on integrated
pathways that bridge primary and specialist care. This applies to England,
which has a long tradition of integrated care. However, in Estonia family
medicine specialists are strictly separated from other specialist services.

In Estonia, policy to broaden the range and quality of primary care
encourages family medicine specialists to work in groups. The health centre
contract specifies that a minimum of three family doctors, three or four
family nurses, a midwife, physiotherapist and home nurse should be
included in one PHC team covering about 4500–6000 patients.
This policy sparked resistance from general practitioners, who were reluctant to merge their practices into a single legal entity – with the risk of loss of autonomy and control over working conditions. So options were introduced for insurers to contract with a single health centre housing several practices so that providers did not have to give up their own legal entity but could collaborate jointly under one contract. There are now 60 practices operating under these contracts (15). However, two interviewees commented that contract monitoring is weak so not every group has introduced multidisciplinary teams in accordance with contract requirements.

In Slovenia, which has about one primary health clinic per 1500 population, the number of family medicine specialists per capita varies from 40 to 69 per 100 000 population, with the lower end of the range reflecting reluctance among doctors to work in remote rural areas. However, other clinicians also work in community health centres (Table 2) (30), although one interviewee explained that, while the multidisciplinary workforce is co-located in community health centres, they may not exploit the opportunities of an integrated team. So, for example, patients with joint problems still need to see a doctor, who will refer to a physiotherapist in the same building rather than offering team-based access to whichever clinician has the skills

<table>
<thead>
<tr>
<th>England</th>
<th>Estonia</th>
<th>Netherlands</th>
<th>Slovenia</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practitioners</td>
<td>Family medicine doctors</td>
<td>General practitioners</td>
<td>Family medicine and paediatrics</td>
<td>Family medicine doctors</td>
</tr>
<tr>
<td>Nurses (some prescribers)</td>
<td>Nurses</td>
<td>Primary care nurses</td>
<td>gynaecology specialist doctors</td>
<td>Paediatricians</td>
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<tr>
<td>Health-care assistants</td>
<td>Home nurses</td>
<td>Psychologists</td>
<td>Registered nurses</td>
<td>Nurses</td>
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<tr>
<td>Pharmacists</td>
<td>Midwives</td>
<td>Care group top-up nurses</td>
<td>Community nurses</td>
<td>Midwives</td>
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<td>Social prescribers</td>
<td>Physiotherapists</td>
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<td>Pharmacists</td>
<td>Physiotherapists</td>
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<tr>
<td>Mental health workers</td>
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<td>Psychologists</td>
<td>Psychologists</td>
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<td>Physician associates</td>
<td></td>
<td></td>
<td>Nutritionists</td>
<td>Nutritionists</td>
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<tr>
<td>Paramedics</td>
<td></td>
<td></td>
<td>Occupational therapists</td>
<td>Nurse aides</td>
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<tr>
<td>Dietitians</td>
<td></td>
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<td>Speech therapists</td>
<td>Social workers</td>
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<tr>
<td>Care coordinators</td>
<td></td>
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<td>Physiotherapist</td>
<td>Dentists</td>
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<tr>
<td>Administrative personnel</td>
<td></td>
<td></td>
<td>Kinesiologists</td>
<td>Administrative personnel</td>
</tr>
</tbody>
</table>

Table 3. Skill mix in case study primary care services
needed to assess a patient’s needs. A small study on the role of first-contact physiotherapists concludes that they can safely be the first contact for patients with a range of musculoskeletal problems with high patient satisfaction (31).

This contrasts with a looser specification of the workforce of primary care networks in England, which were introduced in 2019 – in part because the pool of multidisciplinary roles from which to recruit varies in each area. Primary care networks have been funded to increase the clinical capacity of primary care by recruiting a specified maximum number of roles (determined by patient list size) from a government approved list of clinical and non-clinical roles. This includes paramedics, pharmacists, physician associates, mental health workers, physiotherapists, care coordinators and others. These roles have been introduced differently in different networks, with varying degrees of success in terms of personnel and patient satisfaction and personnel retention, but they have added significantly to the capacity of general practice in England (32).

Multidisciplinary primary care teams in Catalonia have a specified skill mix per population, including one family doctor and one nurse per 2000 adults; a paediatrician and paediatric nurse per 1500 children younger than 14 years; one dentist per 15 000 people; one social worker per team; along with nurse aides and health administrative personnel (33). The teams tend to serve a population of about 20 000 patients, with 370 teams covering a population of 7.5 million people across all of Catalonia. They also have dedicated time each week to meet together and discuss patients with complex needs.

In contrast, large-scale out-of-hours cooperatives in Netherlands (Kingdom of the) have a narrower skill mix, combining general practitioners who volunteer to do six- to eight-hour shifts for the service and nurses doing triage under the supervision of doctors. A minimum of 50 hours of out-of-hours work per year is required to remain on the general practice register (34).

Primary care clinicians often have to spend significant time on administrative tasks: for example, chasing information, signing certificates, providing information for various external agencies, scheduling appointments etc. The provision of good administrative support as part of the team – as seen in Catalonia, England and Netherlands (Kingdom of the) – can release clinicians’ scarce time for clinical tasks and enable better approaches to scheduling and time management.

5.2 Using digital technology in large-scale primary care
A growing range of digital technologies (also called eHealth) are being used in primary care settings with the following broad functions (6):

- electronic health records;
- electronic prescribing;
- telemedicine – including video and online consultations;
- remote and home monitoring of biometric measures such as blood pressure or blood oxygen saturation;
• patient portals and self-management support; and
• data analytics to identify patient risk group and target care.

Objectives for introducing digital technologies include improved efficiency, productivity and quality of care. Their role in supporting access and remote monitoring of clinical symptoms was evident during the COVID-19 pandemic. But the pandemic also highlighted the need for investment and for technical and managerial support, which is harder for small practices (35,36).

A recent survey of eHealth adoption in PHC in Europe reported the highest levels of implementation in Denmark, Estonia, Finland, Spain, Sweden and the United Kingdom, whereas uptake in Greece, Luxembourg and Slovakia was relatively low (37).

None of the case study countries has introduced the comprehensive range of technologies listed above, but each is making a sustained effort to increase the use of technology in different areas of general practice. Thus, in Netherlands (Kingdom of the), out-of-hours cooperatives provide access to electronic patient records through a connection to the general practice home visiting car, and sometimes a connection with the electronic medical record in the general practitioner’s usual practice. In England, electronic medical records and electronic prescribing are used universally. The use of online and video consultations has been extended since 2021 through a requirement in the national general practice contract to offer digital access and digital consultations (38). The speed of uptake increased significantly early in the COVID-19 pandemic and has also been helped by widely available digital platforms through which to connect remotely with patients. Some general practitioners in England have also implemented home monitoring of selected conditions including oxygen saturation among patients with respiratory problems and remote weight monitoring for patients with heart failure.

In Estonia, interviewees explained that the use of electronic records and management systems was initially driven by the need to submit billing and service provision data, to the Estonian Health Insurance Fund. Use of the service provision data has since been extended to support quality improvement initiatives, and the Estonian Health Insurance Fund has introduced payments for electronic consultations between family doctors and hospital specialists. Other areas of digital activity include online evidence-informed guidelines to support physician decision-making, electronic prescribing and using digital images.

Slovenia introduced an electronic referral system in 2017, and its 2020 health database reforms aimed to improve the quality of data and monitoring, although this is less well developed in primary care. Švab et al. (39) and others argue the reforms are too focused on payer needs and not designed to support providers. Doctors may thus perceive that using these systems is an obstacle rather than support.

In many regions of Spain, primary care and the multidisciplinary team delivering it have access to a primary care information system that also has information on hospital treatment within the region, social work records and a risk stratification tool to support proactive care for patients with chronic
illness, which are generally linked to guidelines and provide prompts and other tools such as electronic prescribing.

As noted above, the cost of investing in digital technology may be too great for a small primary care practice and more feasible if spread across a larger organization. In addition, developing, deploying and maintaining digital services is demanding. Although many practices demonstrated during the COVID-19 pandemic that they could introduce digital services (40), fulfilling the potential for digital technology to support more efficient ways of working requires a level of organizational redesign and change management support that is unlikely to be available in small organizations. Primary care organizations with significant management capacity that can focus on service redesign for effective use for digital services are described here in this report, but this needs to be done for a larger population size than traditional primary care units.

5.3 Improving access to primary care
Improving access has driven working at larger scale in both England and Netherlands (Kingdom of the). In England, a policy initiative in 2013 by then-Prime Minister David Cameron provided £50 million to the Prime Minister’s Challenge Fund for organizations that would deliver extended opening hours for general practice, with most of the successful applicants collaborating across practice boundaries (16). In contrast to England, where a wide range of different services and staffing models emerged, in Netherlands (Kingdom of the), general practitioners formed large-scale cooperatives in response to national policy to extend out-of-hours access and reduce pressure on overstretched emergency departments. These cooperatives have a uniform national model. They use telephone triage, always have physicians on site and are set up and controlled by the physicians, who are members of the cooperative and who provide care to between 100 000 and 500 000 people (41). The primary care teams described above in Catalonia have also extended opening hours from 8:00 to 20:00 by organizing the working day into two shifts.

Access may also be improved, as the wider range of services provided means that patients can receive more of their care in one location, with reduced travel to hospitals or other providers. And larger teams enable some team members to be sent to run clinics in remote and rural areas, improving access to primary care for these populations.

5.4 Integration with other services
The ambition of integrating primary care with other services, including hospitals, community clinicians (such as public health nurses, physiotherapists and pharmacists) and/or with social care providers and health promotion teams can be supported by the formation of larger-scale primary care organizations. This is because larger organizations will have sufficient activity to make more integrated ways of working worthwhile. This applies to clinical services but also more broadly. For example, Slovenia’s National Health Care Plan 2008–2013 (12) set out to link preventive, curative and emergency centres bridging public health and primary care in a national network of primary health centres, and since then, various national policies have broadened the workforce and clinical range of these centres.

Examples of horizontal integration include collaboration with community
pharmacy and social care services, which have either adopted a fully integrated model or evolved partnerships for delivering specific services while remaining independent organizations (42). There are also collaborations between public health teams and other community-based services to tackle the social determinants of poor health in accordance with the Declaration of Astana.

There are also increasing examples of successful vertical integration between primary and secondary care, especially for women and children’s health, chronic conditions and dementia (43,44). These have used different formats, such as delivering appointments by hospital specialists in primary care practices with or without the presence of the general practitioner/family doctor, or remote advice and support to general practitioners from hospital specialists, who are not directly involved in managing the patients using email or telephone, and Spain and the United Kingdom have many examples of this. The larger patient groups also means that general practitioners can develop specialist areas of interest and can support their colleagues and manage some work that would otherwise be referred to hospitals. The support of the hospital specialists and the development of shared pathways is helpful in making this work effectively.

5.5 Opportunities to develop primary care premises
Buildings will not, in themselves, transform primary care delivery, but can support larger-scale services in various ways. Large buildings can be used to pull small practices together into larger groups; to expand the primary care workforce by housing multidisciplinary teams and to house services that were previously delivered in hospitals, as seen with urgent care centres.

In Estonia, where poor infrastructure has been a longstanding concern and older doctors have been reluctant to invest in new equipment and premises, investment in new primary care buildings was a catalyst for developing larger family medicine groups. European Union funds were available to develop health infrastructure, and the Estonian Health Insurance Fund developed a group practice contract specifying the clinical personnel, equipment and services that should be delivered under the terms of the contract. This was important, since the existing premises were too small, and as small businesses taking on the risks of a long-term investment was difficult. England’s National Health Service also used investment in premises to increase the opening hours and range of primary care services. A programme of community health centres known as Darzi centres launched in 2008 aimed to combine core general practice services with walk-in acute illness clinics open 12 hours a day, diagnostic testing and other services. These are discussed further in the England case study in Annex 1.

The extended primary care teams that are emerging in some countries need space to work together. Co-location of multiple PHC services within the same physical space may offer increased opportunities for frequent, informal communication and interprofessional collaboration (45). However, co-location on its own may not be enough to stimulate teams to form, as seen in a case study of general practice super clinics in Australia (46), where clinics located in purpose-built facilities hosting multiple disciplines (commonly including mental health, community-based nursing, acute specialists and community education providers) did not necessarily result in interprofessional collaboration. This issue has also been reported in other countries and health systems (47).
In Netherlands (Kingdom of the), where out-of-hours cooperatives are organized according to national specification, they are typically located in buildings on or very close to a hospital site and integrated with hospital emergency services. Slovenia’s policy to combine primary care and public health services was enabled by the network of community health centres across the country in which primary care personnel are based, with some satellite clinics in remote areas. In England, however, despite near-universal participation in primary care networks, the individual clinics of network members deliver most services, with some extended hours and weekend appointments offered to all patients registered with the network from one of the member sites. Where larger, purpose-built health centres do exist, with enough space to offer shared services to patients from other practices, these are typically legacy buildings from past policy initiatives to improve the accessibility and range of general practice (48).

Many of the PHC centres in Spain have relatively generous allowances of different types of space to accommodate different professionals and activities. Some of this is multi-use, but space is quite often dedicated to a specific clinician or activity. This means that space may be underused and less flexible than it could be.

5.6 Greater management capacity and operational support

As policy is introduced to develop larger-scale primary care, organizational development capacity is needed to support these changes. Management capacity in traditional one- and two-doctor practices and even larger organizations is generally limited. Multidisciplinary teams in Spain and the United Kingdom include administrators, but change management capacity at the practice levels remains limited. Primary care networks in England receive a core sum and a support payment amounting to £1.77 per registered patient in 2021–2022, which should be used to support primary care network activities but is not linked to a requirement to employ a network manager (49). Thus, each of the more than 1000 primary care networks responded differently, with some employing a network manager, some paying for sessional management support, some contracting for management support from their local general practice federation and some without any management support and relying on their clinical director for management activities (50).

Evidence from an early prototype of primary care networks in England established in 2008–2009 with funds for a full-time practice manager describes various organizational changes introduced across networks. These included personnel education, standardized processes for data collection and call and recall and shared clinical support teams across member practices as their achievements. Observational time-series analysis on the impact of these changes reported improvements in various quality measures related to disease prevention and chronic disease management, which were greater than in neighbouring areas without networks (51).

The primary care chains and infrastructure support organizations described in Section 3 provide alternative examples of the impact of larger scale on the ability to support and develop primary care providers. These organizations provide a central team with capacity to support individual
practices with human resource functions (recruitment, payroll, appraisals etc.), information technology, education and training and to run “bank” personnel who can be seconded to practices with personnel shortages. In the chains that are emerging in England and Netherlands (Kingdom of the), the central management team either owns the practices in the chain or owns the contracts to run them and thus has management control over their day-to-day operations. In these circumstances, the central management team is also able to redesign day-to-day operational processes, and the study in England described above (25) suggests that this model has a greater opportunity than other organizational designs to transform and increase the efficiency of care.
Methods to support the implementation of policy to introduce larger primary care organizations

Key points

- Financial incentives to encourage provision at large scale are typically applied through contracts that must be negotiated with the payer and can take the form of capitation payments, performance-related pay, bundled payments and carve-out payments.

- Contracts and the financial incentives they encompass may not be enough to transform services on their own.

- Some countries have moved away from a self-employed model for primary care doctors, with multiple financial incentives towards salaried employment.

- Organizational development and change management support are also important for ensuring that contract-driven changes have their intended impact.

- Other methods to drive change include using regulatory or professionally defined standards of care that may be delivered more cost-effectively by working in networks or at larger scale, with shared accountability for performance.

- Ensuring the reason for working at large-scale resonates with professional values is important to engage clinicians in the proposed changes.

If policy-makers decide to pursue the development of networks or other forms of large-scale primary care — in pursuit of the potential benefits described above — a range of ‘policy levers’ are available to drive and monitor change. In their analysis of options to realize the full potential of primary care, the OECD identifies resources, organizations, incentives and measures as essential ingredients for change. The case studies highlight the important role of funding and financial incentives in stimulating change along with using contracts to specify what larger groups are required to do and how they are expected to work. Equally, they demonstrate the need for change management and organizational development support to help doctors in smaller clinics to change how they work.

6.1 Financial levers

In their work on financing universally accessible primary care, the Lancet Global Health Commission on Funding Primary Health Care (9) calls for more funding for universal primary care and highlights four groups of financial incentives that can be used to change the design and delivery of primary care to ensure it is accessible and equitable: (i) population-based capitation payments for a defined population; (ii) pay for performance for specific quality-related outcomes; (iii) carve-out payments for activity such as screening or care coordination or bundled payments for specific conditions covering the cost of all care related to that condition with the possibility of...
retaining savings; and (iv) budget payments to cover unavoidable fixed costs such as those associated with working in remote areas.

Although their overall aim is to maximize desirable effects and minimize adverse effects, each of these funding models has advantages and disadvantages. For example, research into pay-for-performance microincentives suggests that, although they can result in improvements in the desired activities, other areas of care may be neglected (52). Overall, the Commission argues that blended payment methods are typically needed to transform primary care provision, and these must be shaped by the country context in which they are developed.

Blended payment models were evident in each of the case study countries, but with some clear differences in the approaches taken to incentivize working at larger scale. Thus, primary care networks in England receive a management allowance for the additional costs of working together plus performance-related pay for delivering specific tasks and quality-related activities defined in a network contract. Primary care networks can also apply for additional carve-out funds for delivering additional services such as extended access hubs. Core funding for Estonia’s family medicine doctors is through a blended payment model, with a higher level of fixed-cost payments available through a group practice contract that specifies additional inputs and service delivery requirements compared with small practices. Similar additional payments were used in Netherlands (Kingdom of the) to drive the formation of large-scale care groups to support small practices to transform chronic disease management. Payments were made to the care groups, which passed them on to practices in accordance with agreed service changes and performance. And in Slovenia, national priorities around chronic disease management set by the Ministry of Health were funded through a carve-out budget that funded both delivery by frontline personnel and implementation support through the national Public Health Institute.

In addition to illustrating how different funding models have been used, these examples also highlight the importance of both contracting and organizational development support in scaling up primary care.

6.2 Contracts as a lever for promoting large-scale primary care

In England, Estonia and Netherlands (Kingdom of the), contracts offering additional funding have been used to encourage smaller clinics to form and work as part of a large-scale organizations.

Perrot (53) describes three broad groups of contracts in health care systems: delegation of responsibility, act of purchase and cooperation. The case studies from Estonia and Netherlands (Kingdom of the) illustrate contracts that approximate to acts of purchase (of services from primary care providers by the insurer), and the primary care network contract in England illustrates a contract to promote collaboration between practices.

Although contracts are the common vehicle across the three countries through which financial incentives to work at large scale are implemented, they have been used in very different ways. In Estonia, the contracts agreed between practices and the Estonian Health Insurance Fund define what is expected of a provider in addition to terms of
service and standards of care defined in national regulations. Contracts for group practices set additional requirement for working as a group in return for additional payments. These include a requirement to employ a physiotherapist and a midwife and longer opening hours. There are financial penalties for not meeting the terms of the contract: for example, only being paid 80% of the capitation sum if no nurse is employed. There are also additional financial incentives for health centres funded with European Union funding requiring participating centres to deliver these additional services for 20 years. However, one case study interviewee described monitoring arrangements as weak and was also concerned that excessive specification of the family medicine contract stifled innovation and the ability to work in new ways.

The chronic disease contract introduced in Netherlands (Kingdom of the) in 2010 was used to develop a different form of at-scale working, using financial incentives in the form of bundled payments for chronic disease management. The contracts were only accessible to individual small practices if they collaborated with others to form a new organization called a care group (Table 1) (54). The contract with the care group specified standards for diabetes services agreed with the Dutch Diabetes Federation, required using electronic records and drew on the clinical expertise of the primary care physicians who ran the care groups. Several of the care groups that formed in response to the chronic disease bundled payment contract have expanded their remit and now provide a wide range of support to individual practices including training, information technology and additional workforce support.

A third use of contracts to drive working at larger scale has emerged in England through a primary care network contract that offers individual practices access to a range of targeted microincentives only if they participate in voluntary collaboration with other local practices to achieve a combined list size of at least 30,000 patients. A management allowance is also offered through the network contract to cover basic clinical and general management activities needed to establish and run the network. Although this was voluntary, every general practice in the country joined a network since the income that would be lost through non-participation created a strong incentive to become involved. There was also significant additional funding for non-medical clinicians that could only be employed through networks, creating a further incentive to participate.

In these three contrasting examples, contracts have been used to move primary care providers towards organizational change in accordance with health ministry priorities, with Estonia driving the formation of larger practices but contracts being used in England and Netherlands (Kingdom of the) to promote collaboration between practices without requiring them to merge into larger organizations. None of the observed contracting models resulted in transformation of day-to-day clinical services for patients, suggesting that contracts alone may help to create larger and potentially more resilient organizations but are unlikely to significantly change how care is provided without other actions.

6.3 Organizational development support
The case studies highlight various ways in which transitioning from working in a small practice to a larger organization creates challenges for the doctors and others who seek to deliver services at large scale. In Slovenia,
the work of designing, piloting and evaluating disease prevention, chronic disease management and health promotion programmes could have overwhelmed the primary care clinicians who deliver them. However, the National Institute of Public Health supported their design, development and implementation in a phased programme over several years, starting with a small number of engaged community health centres followed by extending the programmes across all community health centres.

Netherlands (Kingdom of the) care groups were instrumental in supporting their member practices to establish diabetes care and other chronic disease management services. The support offered to practices included recruiting and training additional personnel, creating banks of nurses who could be seconded to practices with workforce shortages, helping to establish data collection and monitoring and negotiating with health insurers. Any of these functions could have slowed the pace of change towards new ways of delivering diabetes care if they were added to the day-to-day workload of general practitioners in Netherlands (Kingdom of the) (55).

There is also extensive literature on the need for effective team development to support new approaches to multidisciplinary working in primary care, providing a mixed picture about what works. Recognizing the need for team members to spend time together and develop shared plans for patients, multidisciplinary teams in Spain have time scheduled each week to discuss patients with complex needs, address problems with services and review quality.

Learning from the multidisciplinary teams that formed in England in response to the COVID-19 pandemic highlights the importance of developing shared goals and values across team members, sustaining team morale, defining professional roles and the extent to which these are shared across professional groups, developing necessary skills and drawing on technology to support team activities (56). Research into the recruiting of new professional roles into general practice in England through primary care networks reported a lack of shared understanding about the purpose or potential contribution of the roles, combined with overall ambiguity about what multidisciplinary working would mean for general practitioners. It concluded that successfully implementing the scheme requires extensive cultural, organizational and leadership development skills that are not easily accessible to primary care networks (32). The authors of an evaluation of the first few years of a primary care network in England (50) argued that “if primary care networks are to … develop services collaboratively with other practitioners such as pharmacists, dentists and the third sector, they will likely need additional management and professional expertise including: project management support; population health needs analysis; organizational development; financial management; and human resources and change management.

Co-location of multiple primary care services within the same physical space may offer increased opportunities for frequent, informal communication, which are important for interprofessional collaboration to occur. However, co-location may not be enough, as reported in community health centres in Slovenia, where family doctors may work independently of other clinicians in the same centre. This experience is similar to the Australian general practice super-clinics described above (46). These clinics were located in purpose-built facilities that could host multiple disciplines, which commonly included
mental health professionals, community-based nursing, acute specialists and community education providers. Evaluation of this primary care transformation programme revealed slow, incremental evolution of interdisciplinary care that failed to achieve the intended objectives.

**6.4 Professional engagement and intrinsic motivation**

Interviewees in each of the case studies described changing attitudes towards being a clinic owner and/or independent contractor among younger and newly qualified primary care doctors. Interviewees variously described younger general practitioners as wanting to work with others (interviewee from Estonia); reluctant to take on the financial risks and responsibilities of running a practice (interviewees from England, Estonia and Netherlands (Kingdom of the)); wanting a good work–life balance, which was seen as increasingly difficult to achieve as an owner clinician (interviewees from England, Estonia and Netherlands (Kingdom of the)). This suggests that the organizational design and ownership of larger-scale models of primary care must take into account the willingness of future doctors to carry management responsibility and risk. The chains and large-scale support organizations described above may have an important role in insulating future doctors from these factors.

Further, a study of general practitioners’ attitudes towards quality improvement in their work reported that most respondents considered this as a core part of their professional role, with 99% reporting undertaking some quality improvement work and many working collaboratively with other local practices to improve services (57). Although developing large scale primary care is different from a quality improvement project, the overall aim of working at large scale will be to improve services for patients and personnel, so the factors driving success are likely to overlap somewhat.

Research suggests that successful quality improvement projects are multifaceted, implemented over time as part of a suite of changes and targeting patients, personnel and the wider system (58). Applying a similar approach to redesigning and transforming primary care into larger-scale services suggests that the primary aims for scaling up should focus on issues that engage clinicians and that they see as important to themselves, to patients and/or to the wider health system. Another report about making the case for quality improvement highlighted the need to provide support for change management, developing the skills needed to work differently, providing data to track progress and involving patients in redesigning services.

**6. Other drivers of change**

The impact of progressive layers of policy building on small beginnings is seen in Slovenia, where the 2004 policy to increase preventive care and screening was embellished through additional policies around food and nutrition (2005 and 2015), diabetes and cancer care (2010, 2016), workforce and community nursing (2011), chronic disease control (2017) and mental health (2018) with impressive effects on the range of primary care and the outcomes it achieves. These policy levers were supplemented with the help of investment in training, evidence-informed clinical protocols and funding for implementation support provided through the National Institute of Public Health (12).
This paper has also described how national regulatory standards can help to define how larger primary care groups deliver care. For example, in England, a comprehensive regulatory framework for general practice was introduced in 2013 along with periodic inspections of practices to assess compliance with regulatory standards. The marginal cost to small practices with relatively small budgets for adherence to regulatory standards, along with the costs of participating in inspection and reporting, can be one factor jeopardizing their viability, creating an incentive to increase scale by collaborating or merging with other practices. Work by the regulator reported that, on the whole, practices with more than 10,000 patients tended to achieve higher gradings (59).

Measurement and data transparency are also important to support change and drive improvement. Case study interviewees noted the importance of data for monitoring progress towards the goals of working at large scale – where these had been clearly articulated. However, one interviewee from Estonia suggested that weak contract monitoring meant that family medicine groups did not necessarily deliver what was expected of them. In contrast, in England, which has detailed monitoring of performance against the primary care network contract, the focus on delivery and monitoring of microincentivized activities was argued by one interviewee to have diverted attention away from some of the wider contract goals of driving new ways of working across practice boundaries.

In their report on realizing the potential of primary care, the OECD concluded that good information systems are essential for tracking improvements in quality and efficiency but noted that, where robust measurement is in place, it too often focuses on input and output without sufficient attention to quality (6). Further, analysis of the potential for data reporting and transparency to drive improvement in health care argued the need for a clear focus for data collection based on, among other things, what matters to patients and using only a limited number of measures (60). That said, research on a cluster of larger-scale primary care organizations in England described very limited skills and capacity among practice personnel to collect, synthesize and analyse data to monitor progress against objectives (61).

Applying these observations to the context of large-scale primary care suggests that the quality improvement objectives of working at scale should be made explicit and monitored through a limited range of data and that, if this were openly reported, it could act as a stimulus to work at greater scale. It is also essential that people with the necessary data skills be allocated time to collect and analyse the data needs to inform change and monitor implementation and delivery.
Discussion: implications for policy and practice

This report is rooted in an understanding of primary care as part of the broad mission for PHC, as defined by WHO, to combine disease prevention, health promotion, treatment, rehabilitation and palliative care and empower people and communities to choose healthier lifestyles, prevent diseases and access early detection, treatment and recovery services. This mission to broaden and strengthen primary care is challenging, especially as services recover from the COVID-19 pandemic. At the national level, the WHO Regional Office for Europe has argued that it requires fair funding, public and community involvement in shaping future services and a new emphasis on multidisciplinary working; on collaboration between networks of practices; and on new modalities, including digital ones, to take primary care closer to people’s everyday lives.

Drawing on evidence from published literature and case studies, this paper has described why networks and other forms of large-scale primary care organizations may be better able to respond to current pressures and to deliver a broader mix of preventive and treatment services than traditional small clinics. The main reasons can be summarized as follows.

- They can recruit and support a diverse workforce, which is particularly important in areas with an undersupply of medical and nursing workforce.

- They can invest in digital and other technology to support new ways of delivering care.

- Pooling resources across small clinics or creating large providers enables them to extend access and expand the range of services provided.

- They have potential to develop larger and more appropriate buildings housing diverse services that can span assessment and treatment, disease prevention and public health services.

- They can create and sustain the management and organizational development capacity needed to innovate and improve services.

- They simplify negotiations between payers (government or insurers) and primary care providers, such as in relation to contract monitoring, quality improvement or service innovation.

7.1 A practical approach to increasing the scale of primary care teams and organisations

With diverse starting-points across the European Region, no simple blueprint for developing larger primary care providers can be universally applied. Rather, the case studies highlight how historical context, local and regional politics, access to funding, location (including rurality) and professional and patient expectations all shape the context in which efforts to scale up general practice are being made. Fig. 2 sets out a practical approach for policy-makers and frontline practitioners to reshape the design and delivery of larger-scale primary care.
Fig. 2. Three-stage plan for action: triggering, designing and implementing primary care networks and other types of larger-scale primary care organizations

**Range and focus of work**

<table>
<thead>
<tr>
<th>National or regional opportunity or issue</th>
<th>Homing in on a theme to engage clinicians</th>
<th>Deciding the scope and scale of change to be achieved</th>
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<td>Clinical issue relevant to the local population</td>
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<td>Public dissatisfaction with access pressing population health issue (eg. diabetes)</td>
<td>Addressing workforce shortages</td>
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<td>Reducing avoidable hospital attendance</td>
<td>Reducing workload/improving work-life balance</td>
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<td>Prevention/health promotion/treatment</td>
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<td>National or regional action</td>
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<td>Single “task” to encourage doctors to work together or service redesign</td>
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<td></td>
<td>Single area of care at scale (eg. diabetes) or deliver all services at scale</td>
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**Mechanisms to drive change**

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<td>for at scale working</td>
<td>and/or special payments to achieve scale</td>
<td>defined by regulatory or professional bodies</td>
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**Methods to support scaling up**

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<th>Workforce development support</th>
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<td>to redesign and implement working at scale</td>
<td>to enable new ways of working at scale</td>
<td>to introduce new clinical roles and build multi-professional teams</td>
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</table>
This approach offers a starting-point for policy-makers in areas where primary care is currently delivered in traditional small practices, to encourage the formation of bigger teams and organizations. It starts with defining a range and focus of work to suit the needs and context of the country, region or place where service developments are taking place; second, identifying the mix of levers for change that are most likely to achieve the stated goals; and third, to identify and provide the resources and other support for collaboration, network formation and working at larger scale. This approach can accommodate the redesign of small services into larger formations that are still able to maintain continuity and access to care from a trusted clinician for patients with ongoing complex problems. And it highlights the importance of providing implementation support for primary care providers to come together into larger groups.

With limited current research into primary care networks and other large-scale organizational models and into the policy levers for change, the approach should be seen as a starting-point. Its impact must be rigorously evaluated to add to existing research evidence and improve understanding about what works in relation to improving quality, outcomes and patient and staff satisfaction in larger-scale primary care.

This paper has highlighted these potential benefits of working at larger scale but has also described reasons why networks and other larger organizations may not develop new and more efficient ways of working. These include lack of clarity about what they are trying to achieve; insufficient change management and organizational development support; failure to develop the emerging multiprofessional workforce into teams with a common purpose; and limited use of data and technology to support change. Further, many countries have insufficient funding for primary care to support change and innovation. These issues all need to be addressed if the growing array of primary care networks and other organizations are to achieve their full potential.

With growing expectations about the range of services that primary care should offer, stretching relatively scarce primary care resources to cover diagnosis and treatment, health promotion and provision through population health initiatives as well as complex long-term care will be challenging. Stabilizing the provision of core primary care services needed to assess and manage acute health problems and chronic conditions is important to avoid increasing attendance at accident and emergency wards.

Given workforce shortages in many countries that are threatening access to primary care – especially in rural areas – efforts to promote working at larger scale must not drive doctors to leave the workforce because of increased workload or declining job satisfaction. This has implications for the range of ambition for large-scale practice, the sequencing of service redesign, the pace of change expected of clinicians and others and the level of support needed to enable them work in new ways.

This paper has also cautioned against losing the elements of small-scale primary care – especially those related to continuity of care and relational encounters between local clinicians and patients who know and trust them. It has outlined evidence of the benefits of continuity to individual patients, clinicians and wider health systems and described how these benefits that
are typically associated with small-scale practices can be preserved within a system of larger-scale provision.

7.2 Policy levers for managing change
There are number of mechanisms to drive change in the design, organization and delivery of primary care services including:

• contracts for additional services available to individual practices only if mediated through a large-scale organization, such as chronic disease management in Netherlands (Kingdom of the);

• targeted payments to develop services delivered at large scale, such as the Prime Minister’s Challenge Fund to increase access to general practice in England;

• investment in buildings that bring clinicians from small practices into a larger group;

• microincentives for tasks or activities undertaken by groups of general practitioners working together, such as the primary care network contract activities in England;

• implementation support provided to local clinics to deliver national priority services and initiatives, such as preventive care and public health initiatives in Slovenia; and

• regulatory changes and standards against which networks and larger groups may be able to perform better than smaller practices that have fewer resources available to support their achievement.

7.3 Managing the change process
The practical approach depicted in Fig. 2 includes three levels of action to support the emergence of primary care networks and other larger organizations.

First, national and regional policy-makers need to identify potential triggers to justify working at large scale – such as having access to new funding for premises (as seen in Estonia) or the political pressure caused by worsening access to general practice (England). Policy-makers need to be very clear about the clinical focus of any initiative to scale up primary care and about how it can potentially affect the assessment, diagnosis and treatment of current illness alongside other explicit goals pursued. They also need to decide whether to focus larger-scale working on a specific single issue (such as better diabetes care), a service sector (such as urgent or acute care) or a population health initiative around disease prevention and health promotion. Further, they must decide whether to allow local discretion to identify a condition or service that may be of particular local relevance and thus more likely to engage clinicians or whether to identify national priority areas for local implementation and whether to make participation in larger-scale working mandatory or voluntary.

Once triggers for action have been identified and clinical priority areas agreed, one or more mechanisms for driving change are needed. Contracts negotiated between payers or insurers and primary care providers can be used as the vehicle for applying financial incentives – as microincentives for
specific tasks delivered through groups of practices (as seen in primary care networks in England), bundled payments for specified packages of care (as seen in bundled payments in Netherlands (Kingdom of the)) or additional payments for adhering to contract specifications about working in larger groups (Estonia’s group practice contract and payments to primary care networks in England for employing additional clinicians). Alternatively, standards of care can be introduced that are difficult to deliver as an individual practice and easier to provide as part of a group. For example, a requirement to provide access to doctor appointments from 8:00 to 20:00 every day could not feasibly be achieved by a single-handed doctor. Care will be needed to ensure that models that will work for urban settings are not imposed on rural and sparsely populated areas.

The practical approach also includes providing operational management support for practices to redesign their services and learn to work with others and at large scale. Given the considerable work of designing and implementing ways of networking with other practices and of introducing new clinical roles into primary care, practical support is essential, especially since the case studies describe younger doctors as seeking a more bounded working life. Without this kind of support, there is a risk that doctors will respond to financial incentives or other drivers of change and join a network or larger group without changing their day-to-day work.

Where working at large scale is focused on workforce development and introducing new clinical roles, a wide range of development support is needed. This includes providing recruitment support for practices, helping them to clarify the roles and working arrangements for team members and redesigning care pathways to accommodate multidisciplinary team members. In addition, teambuilding support is essential to avoid professional isolation and build trust between team members as well as clinical supervision, education and training.

With growing workforce shortages and increasing demand across Europe, the rapidly changing role for digital technology in primary care is key. These technologies are tools to support high-quality services rather than ends in themselves. Optimally using digital technology in primary care is thus likely to require fundamentally redesigning day-to-day work (34). As such, the approach includes support for redesigning clinical pathways and implementing change, enabling practices to collaborate through networks and work in new ways across current organizational boundaries.

7.4 Limits to methods for driving change

This paper has highlighted potential benefits from large-scale primary care but has also described reasons why networks and other larger organizations may not develop new and more efficient ways of working. These include lack of clarity about what they are trying to achieve; insufficient change management and organizational development support; failure to develop the emerging multiprofessional workforce into teams with a common purpose; and limited use of data and technology to support change. Further, many countries have insufficient funding for primary care to support change and innovation. These issues all need to be addressed if the growing array of primary care networks and other organizations are to achieve their full potential.
Conclusion

With the ambitions for primary care set by the Declaration of Astana and the pressures it is facing in many countries, finding improved ways of working and delivering services will be essential. The traditional model of a doctor and nurse working together, sometimes with high reliance on specialists for elements of routine care, is no longer fit for purpose.

This paper explores how policy-makers can aid the development of new larger team-based models that can provide high-quality care for patients with increasingly complex needs, address concerns about access and support population health management and wider public health services. In doing this, the design of policy will need to guard against losing the best of traditional primary care: its ability to provide continuity and have the trust of its patients.

Developments in this area are relatively new, and there is limited direct research evidence to call on. However, there is a range of experience across the European Region and elsewhere that this paper has used to identify several possible models that can be adapted to consider the local and national contexts.

Experience shows that there is no single route to creating larger PHC teams, and the paper proposes an adaptable approach to support change, including clearly understanding the need for and objectives of change and the advantages this will bring to patients, the wider population and professionals.

Policy-makers need to be vigilant for potential triggers that can help to start the process of change, quick to seize opportunities, focused on keeping doctors and other PHC professionals engaged with the aims pursued through larger scale and deliberate in choosing methods to drive change that fit with their context. In addition to the standard levers available to policy-makers – contracts, financial incentives and the use of standards and regulation – investing in practical support for practices to learn to work at large scale is essential. The paper suggests a pragmatic approach, including investment in organizational development, support to implement digital services and methods to introduce new clinical roles into the team in ways that best fit with the needs of patients and the team. Failure to focus on these issues risks driving primary care physicians into larger groups that continue to work in individualistic and traditional ways.

As experience grows of operating the different types of larger models, whether these are networks or more formal organizations, there will be a need for more evaluation and research and for learning to be systematically collected and disseminated.

Keeping as many of the positive elements of the current model as possible while obtaining the benefits of larger and more multidisciplinary primary care will be challenging, but the evidence and case studies presented here suggest that this can be achieved.
References


Annex 1. Case study summaries

Estonia

Interviewees:

Kaija Kasekamp, consultant, WHO Barcelona Office for Health System Financing and PhD student, Tartu University

Eero Meriland, family medicine doctor, Tallin and Chair, Estonian Health Foundation

Ruth Kalda, Professor of Family Medicine, Tartu University and Head, Institute of Family Medicine

Laura Johanna Tuisk, Estonian Health Insurance Fund

A mixture of factors has shaped the current organization and delivery of family medicine through a mixture of traditional small practices and larger family medicine groups. These include policy decisions about reorganizing health services; the introduction of academic training and a professional association of family medicine; the availability of EU infrastructure funds to invest in new health centres, which led the Estonian Health Insurance Fund to contract for larger group practices to work in the health centres; changing attitudes of younger doctors towards clinic ownership and workload; and work shifting from hospitals to community settings, requiring a multidisciplinary workforce in the community.

After Estonia became independent in 1991, the Health Insurance Act launched the Estonian Health Insurance Fund, and the number of hospitals was reduced. Plans to introduce a primary care act to specify standards for family medicine were never presented to Parliament, but the professional Association of Family Doctors took a lead in developing a formal training programme for family medicine and specifying the role and minimum standards for delivering care. By the mid-1990s, several fully accredited family medicine doctors started to practise outside polyclinics as independent contractors. Over time, loans from the World Bank helped to develop academic family medicine, and EU infrastructure money was used to fund the building of health centres, which have acted as an important trigger for larger-scale family medicine services.

By the mid-1990s, when a growing number of family medicine specialists had been trained, the Ministry of Health began to define what was expected of family doctors, requiring them to work as independent contractors, hold lists of registered patients, provide continuity, coordinate care and act as gatekeepers for specialist services. Patients were able to choose their family doctor, and the number of patients per doctor was limited to between 1200 and 2000. Payment was through a combination of capitation, fee-for-service payments, basic practice allowances, additional allowances and bonuses. By 2003, family doctors had been separated from polyclinics and were working as independent contractors across the country.

Some family medicine doctors started to work in larger groups before the group practice contract was introduced, seeing the advantages of working
in a larger team to provide cross-coverage and share the workload. However, each interviewee described a reluctance among many older family doctors to lose the professional independence they enjoy in their own clinics alongside a different expectation among younger doctors. Many newer family medicine doctors dislike the idea of solo practice, are not keen to carry the management responsibilities associated with owning their own clinic and value the opportunities to work in a multidisciplinary team with access to training collaboration in a group practice.

By 2009, the Ministry of Health had started to encourage new clinical roles in family medicine, focusing on midwives and physiotherapists, and the 2015 health system development plan proposed to introduce family medicine groups covering 4000 to 6000 patients with 3–4 doctors and 3–4 other clinicians. Building on this shifting expectation, the Estonian Health Insurance Fund led the introduction of the group contract to optimally use newly built health centres and encourage multidisciplinary group practice. The contract pays family doctors at a higher rate than the traditional contract as an incentive for larger groups to form but also specifies a complex range of inputs in terms of physical space, equipment and professional roles (including midwives and physiotherapists) to qualify for the contract. There are now about 60 group practices in Estonia, with the other family medicine doctors working in solo or two-doctor practices.

One key issue highlighted by interviewees was the limits in monitoring compliance with the terms of the group contract and issues with its implementation in some clinics. They described situations in which several family doctors joined a “group practice” but, in reality, were still working as independent practitioners under a single roof. They also noted that not every group complies with workforce requirements – sometimes having too few doctors in the group or failing to recruit other professional roles.

One interviewee also suggested that the very detailed specification of what must be provided in a family medicine clinic – from square metres of clinic space to detailed specification of the equipment that must be available – stifles innovation.

The high proportion of solo family medicine doctors was seen as a barrier to improving primary care and, despite Ministry of Health support for developing group practices, a 2015 study showed solo practice to be more profitable. This and a desire to preserve professional autonomy continue to discourage some family doctors from joining larger groups.

The average age of family doctors in Estonia is high, with about one third older than 60 years and one in ten older than 70 years. Many of the older doctors work in rural areas, and filling vacant posts when they retire can be difficult. This leaves the possibility that the universal access to family medicine achieved after independence has been eroded in some areas.

Source
England

Interviewees:

Judith Smith, Professor of Health Services Research, University of Birmingham

Nav Channa, general practitioner, London

Jonty Heaversedge, Joint Medical Director, SE London Integrated Care System

Kerry White, Managing Director and Berge Balian, Medical Director, Symphony Healthcare

From the founding of the National Health Service in 1948, general practitioners worked as independent contractors with the National Health Service – owning and running their own practices and delivering services, free at the point of delivery – to registered patients who were eligible for National Health Service care. Initially working in solo or two-doctor clinics, often in inadequate premises, by the mid-1960s, a maximum list size of 2000 patients per general practice was introduced, and purpose-built health centres started to emerge that could house clusters of general practitioners working in groups.

In the mid-1970s, a three-year postgraduate training in general practice became mandatory, and the formation of the Royal College of General Practitioners in 1972 created a representative body for general practitioners that went on to lead initiatives in quality improvement and service design and development.

It was not until the 2000s that a combination of factors led more general practitioners to consider working in larger groups. These included: a new national contract for general practitioners that included microincentives for quality improvement work, which required additional personnel, administrative processes and data collection and reporting. This created a burden of work that was relatively harder to deliver in small practices than in bigger groups with more personnel to share in the work. Additionally, new regulations on quality, safety, premises and data governance were introduced for general practice, creating additional workload that was more difficult to deliver in a small practice. Between 2004 and 2019 the average general practice patient list size increased from 5891 to 8490 (according to GP magazine).

In addition to these changes, which created workload pressures on practices, policies have been introduced, starting in the mid-1990s, that encouraged working at larger scale. General practice fundholding and total purchasing pilots enabled practices to take on a budget for planned hospital care and retain a share of savings if referral rates were lowered. The infrastructure required to purchase hospital services and track referral activity and manage budgets led some practices to work together to undertake this work, and a few even merged. Although practices typically delivered their core services individually, some introduced in-house specialist clinics in selected specialities to reduce hospital referrals and generate savings.
General practitioners who were ideologically opposed to purchasing services for their patients formed collaborations called multi-funds to influence the design and delivery of hospital services. This also involved sharing data and peer review of referral activity by colleagues but did not require participating practices to deliver clinical services together. A new Labour government in 1997 considered these groups divisive, contributing to a two-tier (inequitable) National Health Service and therefore stopped general practice fundholding and introduced a new type of primary care organization to oversee purchasing hospital services, with general practice representatives on the governing body but less direct involvement of individual practices.

Long hospital waiting lists and pressures on hospital beds triggered a full-scale review of the National Health Service in 2008. Recommendations in the resulting Darzi report triggered another push towards general practice at larger scale. Among wide-ranging recommendations, the review called for developing community-based, general practitioner–led health centre groups large enough to deliver extended opening hours alongside diagnostic services and some specialist care. Although the centres themselves faced various criticisms and many closed due to their high cost, they were a prototype for subsequent developments, combining core general practice with extended access clinics, diagnostics and other services.

A set of fundamental reforms to the National Health Service in 2012 drew general practitioners into the work of commissioning (or contracting and paying for) health services through large-scale organizations that were not involved in services delivery. Although some general practitioners with an interest in system development and leadership took up roles in these organizations, others focused their energy on ad hoc service delivery innovations. The latter group could see the growing problems of small practices (driven by increasing regulation, financial and workforce pressures and growing demand) and found various ways to work at larger scale. These included forming networks around a common purpose; merging small practices to form larger organizations; and collaborating in response to government-funded service improvement initiatives (such as the Prime Minister’s Challenge Fund mentioned above).

Interviewees for this case study – all of whom have worked in or researched large-scale general practice organizations for decades – reflected in varied ways on the nature and legacy of this long and evolving history of general practice at large scale. Two interviewees argued that efforts to date to incentivize at-scale working in general practice had paid insufficient attention to preventive work and population health management. Another cited research findings that, whatever the objectives for at-scale working in primary care networks in England, there has been too little organizational development support to enable them to achieve their goals. Despite these criticisms, successive layers of policy have led general practitioners in England to a point at which working in collaboration with others – at larger scale than a traditional small practice – has become a normal part of their working lives.

Sources


Davies P. Darzi centres: an expensive luxury the UK can no longer afford? BMJ. 2010;341:c6287.


Netherlands (Kingdom of the) case study

Guy Sculpen, Medical Director, Co-Med Ltd

Rowan Smeets and Arianne Elissen, Department of Health Services Research, Maastricht University

Sophie de Reus, Integration Operations Manager and Jan Shaap, Chief Executive, Dokter Drenthe

Tomas Gobbels, Senior Integration Commissioner, VGZ health insurance cooperatives

Primary care in Netherlands (Kingdom of the) has traditionally been provided by general practitioners, most of whom work as independent contractors in small one- or two-doctor practices. In 2020, fewer than 0.15% of the population had to travel more than 10 minutes by car to the nearest general practice, and general practice out-of-hours centres cover care outside office hours.

General practitioners must complete a three-year postgraduate training and undertake 40 hours of training per year, including 10 hours of peer review work. Primary care is free of user charges to all residents, and although being registered with a general practice is not obligatory, more than 95% of the population is registered.

In the early 2000s, general practitioners in Netherlands (Kingdom of the) tackled growing dissatisfaction about workload and working hours and established large-scale out-of-hours cooperatives. The cooperatives involved between 40 and 500 general practitioners and served populations range from 50 000 to 500 000 patients. Evaluations of these services reported improved job satisfaction among general practitioners, reasonable levels of satisfaction among patients, a low prevalence of safety problems and a general shift towards telephone consultations with home visits if considered necessary. Patients were generally less satisfied with telephone consultations than face-to-face encounters.

In 2010, another initiative was introduced that led general practitioners to work collaboratively in the form of bundled payments for chronic disease management – initially tested on type 2 diabetes and later extended to chronic lung disease and managing cardiovascular risk. Contracts for these services were negotiated between health insurance companies and general
practitioners but not through individual practices. The contracts could only be held by large-scale general practice organizations called care groups, which were formed and governed by the member general practices. The care groups supported individual practices to deliver chronic disease care specified in the contract through, for example, providing training and information technology support and sending additional personnel to practices if needed.

When they were introduced in 2010, there were about 50 care groups that have evolved in different ways. Four or five have grown in size and broadened the range of services they offer and the support they provide to practices. The majority have remained smaller, serving populations less than 100 000 and offering less organizational support to practices.

The status of general practitioners is high in Netherlands (Kingdom of the), with about 20% of medical school graduates choosing to become general practitioners. Despite this, recently graduated general practitioners are less interested that their predecessors in owning their own practice and taking on the associated management and employment responsibilities. As a result, general practitioners approaching retirement age were having increasing difficulty in finding another doctor to take over their practice.

This has triggered the formation of a new type of large-scale general practice organization – owned and run by a private company. Groenewegen & Timans identified three main types of large-scale practices emerging: privately owned chains; networks of practices owned and run as not-for-profit organizations by the general practitioners who own the member practices; and large providers of remote consultations, which can be purchased by small practices to provide additional appointment capacity for their registered patients. The chains and not-for-profit networks are relatively new in Netherlands (Kingdom of the), so it is too early to evidence their impact on personnel and patient satisfaction and on quality and outcomes. Nevertheless, these developments are consistent with the trends towards working at larger scale that are described in the other case studies.

Sources:
**Slovenia** case study co-authored by Pia Vracko

Interviewees:

Pia Vracko, Public Health Physician, National Institute of Public Health, Slovenia

Zalika Klemenc-Ketis, Professor of Family Medicine, Maribor Medical School, Slovenia

Primary health care in Slovenia is delivered mostly by family medicine specialists employed by municipalities and working in community health centres, with 25–30% of family medicine teams (in 2018) operating as private concessions contracted through the Health Insurance Institute of Slovenia to deliver care through the national health system. One interviewee reported that some doctors are switching from community health centres to private practice due to the heavy workload and long hours in the public sector.

Since independence in 1992, the government has introduced policies to ensure universal access to health care and to strengthen the role of primary care in improving chronic disease care. Services aim to deliver patient-centred integrated care through multidisciplinary teams.

Slovenia’s longstanding network of publicly funded, state-owned community health centres were transferred to municipalities after independence in 1992 and continued to house family medicine doctors and other primary care clinicians, employed and managed by municipalities. The community health centres were similar to polyclinics – providing a combination of primary care and specialist services, diagnostics, community nursing and therapies and dentistry. Slovenia also had a long tradition of public health work and, before independence, had already introduced a range of integrated services for noncommunicable diseases and set up training for primary care doctors and nurses to promote healthy lifestyles. Among the four case study countries, Slovenia’s primary care teams appear to have the strongest focus on disease prevention and health promotion. In the mid-1990s, family medicine became a compulsory speciality in undergraduate medical training, and a department of family medicine was launched with a four-year residency programme launched in 2000. Family medicine doctors work alongside selected specialists within community health centres, acting as gatekeepers for specialist care, but their own diagnostic and curative services are typically intertwined with disease prevention and health promotion services delivered in community health centres.

Reforms from 2004 onwards including a series of national plans and built up a range of disease prevention and health promotion services in community health centres, including chronic disease screening and management, food and nutrition programmes and health promotion centres. Subsequent waves of policy focused on cancer and mental health and additional chronic diseases. One interviewee described the central role played by the National Institute of Public Health in supporting the design and implementation of disease prevention programmes – initially working with a small group of leading health centres supported by EU funding then spreading out to a second wave of centres and, after several years, to all...
community health centres. Improvement and innovation in the day-to-day work of family medicine doctors tends to be driven by the doctors themselves in response to local patient needs and the skills and interests of the doctors. The Slovenian Family Medicine Society has also played an important role in improving standards and strengthening primary care.

The origin of large-scale primary care is hard to identify in Slovenia, given its long history of family medicine services located in large community health centres (albeit with a significant proportion of family physicians working in small practices). A mix of doctors, nurses and therapists is certainly well established in community health centres, offering a combination of preventive care, health promotion and having some involvement in family medicine services. However, one interviewee explained that there is little multiprofessional teamwork in response to clinical need. For example, patients with joint pains first visit the family medicine doctor, who refers on to the physiotherapist.

A key insight for policy-makers is that, even with funded implementation support for chronic disease management provided by the National Institute for Public Health, implementing a programme to across all health centres has taken several years. This highlights the elapsed time that is needed to embed new ways of working – even when resources are available to support change.

Slovenia’s performance across international quality indicators is argued to reflect the strength of its disease prevention programmes. In 2019, the rate of avoidable hospital admissions overall and for diabetes was below the European Region average, with the rate of avoidable hospital admissions due to hypertension and congestive heart failure also below several neighbouring countries.

Similar to the other case study countries, Slovenia faces workforce challenges, with uneven distribution and low levels of some health-care personnel. A shift to digital services during the COVID-19 pandemic helped to maintain access to health care, but there is a steady flow of family medicine doctors out of community health centres into private practice, where they have more control over their workload, with shorter working hours. The number of family medicine specialists ranges from 48 to 74 per 100,000 population (2019 average: 60), with increasing shortages due to geography and population need and difficulty in recruiting and retaining primary care physicians in some areas. There are also shortages of primary care paediatricians and community nurses across the country.

Primary care providers are increasingly dissatisfied, with intermittent strike threats, and 23 of 34 primary care physicians in the city of Kranj resigned in 2019 because of unmanageable workloads. Their actions were reported to have created a political crisis, which may perhaps act as a trigger for rethinking the delivery of family medicine to include more professional care for curative work – as seen in England and other European countries.

Sources
The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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