



**World Health  
Organization**

REGIONAL OFFICE FOR **Europe**

***MAKING PROGRESS TOWARDS  
HEALTH WORKFORCE  
SUSTAINABILITY IN THE WHO  
EUROPEAN REGION***

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## ABSTRACT

Recognition that health system effectiveness and improvements in population health are critically dependent on an appropriately skilled, supported and deployed health workforce is growing. This paper reports on progress in recent years on achieving the aims and objectives of the WHO global code of practice on the international recruitment of health personnel in the European Region, within the broader context of challenges to human resources for health (HRH), and Health 2020, the European policy for health and well-being. Meeting HRH challenges will require effective monitoring of health workforce flows, improved workforce planning that is well integrated with transformative education of the health workforce, and effective retention, distribution and skill mix to improve overall health workforce performance. WHO is collaborating with partners to improve the evidence base on health workforce trends, effectiveness and sustainability, facilitating collaboration between countries and supporting networking and the process of advocacy, communication, monitoring and information-exchange within the Region, and building technical capacity in countries.

## Keywords

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## **EXECUTIVE SUMMARY**

A range of human resources for health (HRH) challenges related to education, planning, retention, deployment, regulation and performance must be met if the health workforce is to enable the achievement of health system objectives and population health goals. A coordinated effort across policy domains and Member States is required to meet the challenges effectively and sustainably. The WHO global code of practice on the international recruitment of health personnel (hereafter referred to as the Code) represents an important framework to guide national and international efforts on this issue (1).

This paper reports on progress in recent years in achieving the Code's aims and objectives in the WHO European Region within the broader context of health policy objectives, as set out in Health 2020, the European policy for health and well-being (2), and the development and implementation of effective strategic responses to the HRH challenge.

The interconnection between achieving a sustainable health workforce and strengthening health systems was stressed at the 62<sup>nd</sup> session of the WHO Regional Committee for Europe in 2012 (3) and was reinforced in the consultation on human resources for health in high-income countries in Norway in 2013 (4). It was given global impetus by the Recife Political Declaration on Human Resources for Health (5) and was endorsed at the Sixty-seventh World Health Assembly in 2014 (6). This core message – that health systems effectiveness needs an appropriately skilled, effectively deployed and suitably motivated health workforce – is now restated in the draft *Global strategy on human resources for health: workforce 2030* (7).

In the European Region, the Tallinn Charter: Health Systems for Health and Wealth (8) has emphasized the need to invest in health systems to achieve improved effectiveness. The focus must be on capacity-building to support the health workforce to be a driver of positive change in health system effectiveness, and not regarding the workforce merely as a cost (and therefore a target for arbitrary cost reduction). Investment must be directed at the ultimate goal of improving population health, so must be informed by evidence, directed by coordinated policy action, tested by effective monitoring and underpinned by networking to enable the building of a common vision among stakeholders and Member States.

Achieving a sustainable health workforce requires concerted policy action at Member State level. This encompasses, but is not limited to, transformative education, workforce planning, retention, distribution of workers, regulation and skill mix. It is equally important to monitor the effects of combined policy action on service delivery, service user outcomes and population health: remedial actions should be taken swiftly when poor performance is identified.

The Code continues to be highly relevant in the Region, both in the context of growing regional and inter-regional labour mobility and more broadly in relation to making progress on achieving health workforce sustainability and health system effectiveness. A sustainable and effective health workforce is integral to achieving the Health 2020 goals. It is therefore imperative that policy-makers and strategic planners pay attention to, and engage fully with, health workforce enablers.

The review of progress to date suggests a clearer commitment and understanding by all stakeholders that focusing policy and strategic attention on achieving a sustainable health workforce is key to the delivery of safe, quality health services that will enable delivery of the Health 2020 goals. Evidence from across the Region demonstrates variable and uneven progress, with uncertainty about the longer-term stability of the workforce without continued policy attention and investment.

In support of this policy action, WHO is collaborating with partners to:

- **improve the evidence base on health workforce trends, effectiveness and sustainability** by improving health workforce data, facilitating policy dialogue and supporting the development of HRH observatories: these actions contribute to more effective policies to identify and target priority health workforce issues and provide evidence to support the case for more investment in the health workforce;
- **facilitate collaboration between countries and support networking and the process of advocacy, communication, monitoring and information exchange** within the Region to maintain Member States' commitments, track progress and identify good practice and effective policy: this is driven by recognition of the importance of having a common regional vision on health workforce sustainability; and
- **build technical capacity in countries** by supporting improved workforce planning and policy, developing relevant tools, processes and protocols, and targeting training and development on health workforce planning and data analysis: this will include an emphasis on identification of, and focused support for, countries with critical health workforce shortages.

The Tallinn Charter and Health 2020 make specific reference to the need to deal with the challenges raised by health workforce migration. The WHO Secretariat (at global, regional and country levels) will continue to work with stakeholders to raise awareness, provide technical support and promote effective implementation and reporting of the Code. Member States in the Region have already made good progress, but the work to develop, strengthen and maintain implementation should be viewed as a continuing process for all Member States and relevant stakeholders. Full realization of the objectives of the Code requires that Member States, working with stakeholders, expand awareness and implementation of the legal instrument to its fullest potential.

## REFERENCES

1. World Health Assembly resolution WHA63.16 on WHO global code of practice on the international recruitment of health personnel. Geneva: World Health Organization; 2010 ([http://www.who.int/hrh/migration/code/code\\_en.pdf](http://www.who.int/hrh/migration/code/code_en.pdf), accessed 24 July 2015).
2. Health 2020: a European policy framework supporting action across government and society for health and well-being. Copenhagen: WHO Regional Office for Europe; 2012 (EUR/RC62/9; <http://www.euro.who.int/en/health-topics/health-policy/health-2020-the-european-policy-for-health-and-well-being/publications/2013/health-2020-a-european-policy-framework-supporting-action-across-government-and-society-for-health-and-well-being>, accessed 24 July 2015).
3. Technical discussion. Action towards achieving a sustainable health workforce and strengthening health systems. Copenhagen: WHO regional Office for Europe (EUR/RC62/TD/2; [http://www.euro.who.int/\\_data/assets/pdf\\_file/0003/172380/RC62td2-Eng.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0003/172380/RC62td2-Eng.pdf?ua=1), accessed 24 July 2015).
4. Helsedirektoratet, WHO, Global Health Workforce Alliance. Consultation on human resources for health for high income countries. Preparatory meeting for the Third Global Forum on HRH. Oslo: Helsedirektoratet; 2013 ([http://www.who.int/workforcealliance/knowledge/resources/oslo\\_consultation\\_report/en/](http://www.who.int/workforcealliance/knowledge/resources/oslo_consultation_report/en/), accessed 24 July 2015).
5. WHO, Global Health Workforce Alliance. The Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage. Geneva: World Health Organization; 2013 ([http://www.who.int/workforcealliance/knowledge/resources/3gf\\_finaldeclaration/en/](http://www.who.int/workforcealliance/knowledge/resources/3gf_finaldeclaration/en/), accessed 24 July 2015).
6. World Health Assembly resolution WHA67.24 on follow-up of the Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage. Geneva: World Health Organization; 2014 (Agenda Item 15.8; [http://apps.who.int/gb/ebwha/pdf\\_files/WHA67/A67\\_R24-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_R24-en.pdf), accessed 24 July 2015).
7. Global strategy on human resources for health: workforce 2030. Draft for consultation. Geneva: World Health organization; 2015 ([http://www.who.int/hrh/resources/glob-strat-hrh\\_workforce2030.pdf?ua=1](http://www.who.int/hrh/resources/glob-strat-hrh_workforce2030.pdf?ua=1), accessed 24 July 2015).
8. WHO European Ministerial Conference on Health Systems: “Health Systems, Health and Wealth”. Tallinn, Estonia, 25–27 June 2008: report. Copenhagen: WHO Regional Office for Europe; 2009 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/78918/E92150.pdf](http://www.euro.who.int/_data/assets/pdf_file/0006/78918/E92150.pdf), accessed 24 July 2015).

## **1. INTRODUCTION**

Recognition that health system effectiveness and improvements in population health are critically dependent on an appropriately skilled, supported and deployed health workforce is growing. Equity and universal health coverage will only be attained through substantive and strategic investments in human resources for health (HRH)<sup>1</sup> at global, national and system levels.

A range of HRH challenges related to education, planning, retention, deployment, regulation and performance must be met if the health workforce is to enable the achievement of health system objectives and population health goals. A coordinated effort across policy domains and Member States is required to meet the challenges effectively and sustainably. The WHO Global Code of Practice on the International Recruitment of Health Personnel (hereafter referred to as the Code) represents an important framework to guide national and international efforts on this issue (2).

This paper reports on progress in recent years in achieving the Code's aims and objectives in the WHO European Region within the broader context of health policy objectives and the development and implementation of effective strategic responses to the HRH challenge.

### **The health policy background**

The endorsement of the Tallinn Charter: Health Systems for Health and Wealth by the WHO European Ministerial Conference on Health Systems in Tallinn, Estonia in 2008 (3) reflects Member States' commitment to strengthening health systems.

The central tenets of the Tallinn Charter were reaffirmed by the WHO Regional Committee for Europe in 2012 when it approved Health 2020, the European policy for health and well-being (4). Health 2020 focuses on significantly improving the health and well-being of populations, reducing health inequalities, strengthening public health and ensuring people-centred health systems that are universal, equitable, sustainable and of high quality.

Health 2020 is based on four priority areas for policy action:

- investing in health through a life-course approach and empowering people;
- tackling the Region's major health challenges of noncommunicable and communicable diseases;
- strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance and response; and
- creating resilient communities and supportive environments.

Health 2020 reconfirms the commitment of WHO and its Member States to ensuring universal coverage, including access to high-quality and affordable care and medicines, and adopting a primary health care approach as the cornerstone of health systems in the 21<sup>st</sup> century. Its aims will be achieved through a combination of individual and collective efforts, with Member States, WHO and partners' close working being key to success.

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<sup>1</sup> The 2006 world health report (1) defined health workers as "all people engaged in actions whose primary intent is to enhance health". This includes physicians, nurses and midwives, but also a range of other workers, such as laboratory technicians, public health professionals, community health workers, pharmacists, supply chain managers, physical therapists, dentists and oral health professionals, and support workers whose main function relates to delivering or supporting the provision of preventive, health promotion or curative health services.

It is an adaptable and practical policy framework that provides a platform for joint learning and sharing of expertise and experience between countries, while recognizing that every country is unique and will pursue common goals through different pathways.

Health 2020 also stands as a reminder of the vital connections between health, wealth and well-being. Good health benefits all sectors and the whole of society and is essential for economic and social development. The health and social welfare sectors, for example, employ around 10% of the Region's workforce. The health sector workforce in most countries is overwhelmingly composed of women, and improvements in the status and contribution of the workforce can be a mechanism for improving gender equality.

Good health can also support economic recovery and development. Health 2020 reinforces the criticality of the health workforce, noting that high-quality health system inputs can only be achieved with sufficient human resources. Health services are labour-intensive, with human resources accounting for as much as 60–80% of total recurrent expenditure in health systems. Health performance and economic performance are interlinked, with improvement of health workforce effectiveness being the key connection.

### **Developing a sustainable health workforce strategic response**

Meeting population health challenges in Europe by adopting a more evidence-informed, population-based and people-centred approach to health service delivery poses significant HRH challenges. These are not unique to the European Region and are not felt equally in Member States, but most will resonate with policy-makers across the Region. The challenges include:

- addressing skills shortages, unbalanced geographic distribution and workforce sustainability
- improving motivation and retention
- improving health workforce effectiveness and skill mix
- transforming health workforce education to meet population health needs
- addressing health worker mobility and migration.

In essence, health workforce sustainability highlights a dynamic situation in which a broad-based policy focus on achieving and maintaining (sustaining) a workforce that best meets identified needs is required. The policy focus reflects national policy priorities, resources and international obligations also recognizes that some level of flow of workers between regions, sectors and countries is inevitable (5).

Meeting these HRH challenges requires:

1. effective monitoring of health workforce flows to support workforce policy and planning;
2. improved workforce planning, well integrated with transformative education of the health workforce; and
3. effective retention, distribution and skill mix to improve overall health workforce performance.

These elements of an effective HRH strategy will be examined in more detail in this paper. The WHO Regional Office for Europe has already provided technical support to countries on these issues through initiatives such as a toolkit for country health-workforce strengthening that was launched at the 62<sup>nd</sup> session of the WHO Regional Committee for Europe in 2012 (6).

There is good if variable progress in the Region on addressing HRH challenges, which manifest in different ways in Member States and which can represent a daunting prospect to some if not addressed effectively and comprehensively. The European Commission (EC) estimated that there were around 17.1 million jobs in the health care sector (accounting for 8% of all jobs) in European Union (EU) Member States in 2010 and that

more than 55% of employees in the sector held at least a post-secondary degree (the average for all sectors was below 33%). The EC also estimates, however, a potential shortfall of around 1 million health care workers by 2020, rising to 2 million if long-term care and ancillary professions are taken into account (including shortfalls of 230 000 doctors, 150 000 dentists, pharmacists and physiotherapists, and 590 000 nurses) if no action is taken to address the HRH challenge (7).

The scale of this challenge requires coordinated and concerted action involving a range of stakeholders, government departments and international agencies. Actions must be framed within a strategic approach to human resources for health if they are to have sustained success.

A national-level health workforce strategy must have a clear driving vision, be aligned with broader health systems plans and priorities, take a patient/consumer-centred perspective and be informed by evidence and analysis, without being rigid or set in stone – it must be flexible and adaptable (8). This reflects Health 2020's emphasis on relevant, resilient and adaptable policies being at the heart of health system delivery.

Health workforce strategies that amount to little more than detailed fixed-in-time documents or one-off data-based plans or projections soon lose relevance and applicability (9). The policy effort does not end when the plan is approved: key components of the strategic plan need to be implemented, evaluated and adapted as changes occur in the health priorities and health system with which it is aligned and to which it directs the necessary health workforce enablers and support. A health workforce strategy cannot be sustained in isolation. The health workforce is an enabler of the achievement of health system goals and population health priorities. An effective health workforce is therefore a strategic aim, but better health is the ultimate strategic goal.

The Tallinn Charter and Health 2020 refer to the need to develop suitable policies and strategies to attract, retain and effectively deploy health workers and deal with challenges raised by health workforce migration through implementing the provisions of the Code. As the Tallinn Charter states, “the international recruitment of health workers should be guided by ethical considerations and cross-country solidarity and ensured through a code of practice” (3).

## **Europe and the development of a global HRH strategy**

The need for sustainable health workforce strategic approaches at national and regional levels has been echoed recently on the international and global stage.

The 62<sup>nd</sup> session of the WHO Regional Committee for Europe in Malta in September 2012 hosted a technical discussion on action towards achieving a sustainable health workforce and strengthening health systems that included a roadmap for implementing the Code in the Region (10). WHO, in collaboration with the Directorate of Health of Norway and the Norwegian Agency for Development Cooperation, organized a consultation on human resources for health in high-income countries in September 2013. The aim was to enhance common understanding of HRH challenges and increase countries' engagement in advancing global HRH solutions. The consultation concluded that appreciation of the inherent complexities in the HRH field is growing, providing fresh opportunities for policy intervention at system level. Technological advances, demographic trends, the relative growth of noncommunicable diseases and the impact of long-term care need to inform the planning and development of a fit-for-purpose health workforce for the future (11).

The Third Global Forum on Human Resources for Health met in Recife, Brazil in November 2013. The forum adopted a political declaration on renewed commitments to HRH that stresses the importance of

investment in HRH to attaining universal health care and called for action on workforce development at all levels (12).

The Sixty-seventh World Health Assembly adopted resolution WHA67.24 on follow-up of the Recife Political Declaration on Human Resources for Health in May 2014 (13). The resolution requested the WHO Director-General to develop and submit a new global strategy for human resources for health for consideration at the Sixty-ninth World Health Assembly in May 2016. This will represent a critical component of the WHO strategic vision towards universal health coverage in the framework of the post-2015 health development agenda.

A draft global strategy on human resources for health (**Box 1**) has been issued for global dialogue (14). A final version will be submitted to the 138<sup>th</sup> session of the WHO Executive Board in January 2016.

### **Box 1. The draft global strategy on human resources for health**

The draft, entitled *Global strategy on human resources for health: workforce 2030*, is primarily aimed at planners and policy-makers in Member States, but it will also be of relevance to partners and stakeholders active in the health workforce area. This includes public and private sector employers, professional associations, education and training institutions, trade unions, bilateral and multilateral development partners, international organizations and civil society.

The overall vision is to “accelerate progress towards universal health coverage and the Sustainable Development Goals by ensuring equitable access to a skilled and motivated health worker within a performing health system”. The goals are to:

- implement evidence-based HRH policies to optimize the impact of the current health workforce, ensuring healthy lives and effective universal health coverage and contributing to global health security;
- align HRH investment frameworks at national and global levels to health systems’ future needs and health labour-market demands, maximizing opportunities for employment-creation and economic growth;
- build national and international institutions’ capacity for effective leadership and governance of HRH actions; and
- ensure that reliable, harmonized and up-to-date HRH data, evidence and knowledge underpin monitoring and accountability of HRH efforts at national and global levels.

*Source:* WHO (14).

Preparatory work for the development of the global HRH strategy highlighted that overall patterns of inflow migration of health workers to Organisation for Economic Co-operation and Development (OECD) countries were increasing. The draft strategy includes a specific target that high- and middle-income countries should meet at least 90% of their health personnel needs with their own HRH by 2030 and do so in conformity with provisions of the Code (14).

Paralleling the development of the global strategy, WHO is supporting improved HRH data through the creation of a WHO minimum data set on HRH and related national health workforce accounts. The intention is that this progressive improvement in HRH data will streamline Member States’ reporting requirements, effectively linking strategy and monitoring for the Code.

## **Working with Member States and other partners**

The Regional Office is working at regional and country levels within the frame of Health 2020 and against the backdrop of a developing global HRH strategy to assist Member States in addressing health workforce challenges by:

- improving the quality of data for HRH profiling and analysis through harmonizing standards, definitions and indicators;
- monitoring health workforce dynamics, trends and progress on addressing HRH challenges to support informed decision-making;
- facilitating multistakeholder dialogue on HRH at national and subregional levels (through, for example, the South-eastern Europe Health Network (SEEHN));
- organizing capacity-building workshops and training courses on how to use WHO tools and other guidelines for HRH policy analysis, planning and management;
- contributing to the scientific evidence base for policy-making through research activities and symposiums; and
- building and maintaining technical cooperation, networks and partnerships in HRH thematic areas with all relevant agencies and organizations.

The Regional Office is working closely with Member States and other partners in these actions, notably the EU, Eurostat and OECD, and with professional associations, regulators, academia and civil society.

The remainder of this paper highlights initiatives and actions led, enabled or supported by WHO as a partner organization with Member States and others who share a recognition that the health workforce is critical to improved population health in Europe and a common purpose about what can be done to achieve this objective. The Code provides a focus for this coordinated effort. It has been identified in the Region and globally as a policy instrument with potential power and reach beyond the primary concern of health workforce migration to cover other connected aspects of health workforce planning and policy.

## **2. THE WHO CODE**

### **Purposes of the Code**

Member States' unanimous adoption of the Code at the Sixty-third World Health Assembly on 21 May 2010 marked a watershed in policy focus, specifically on the issue of health worker migration and more broadly on HRH. The Code sets out a broad-based, voluntary, policy-oriented approach to the issue of health worker migration at national and international levels. It recognizes the complexities and dynamics of migration, emphasizes the need for more effective monitoring and analysis of trends, and places migration in a broader health workforce policy and planning context. Its main purposes are summarised in **Box 2**.

### **Box 2. Main purposes of the Code**

The main purposes of the Code are to:

- establish and promote voluntary principles for the ethical international recruitment of health personnel, taking into account the rights, obligations and expectations of source countries, destination countries and migrant health personnel;
- serve as a reference for Member States in establishing or improving the legal and institutional framework required for the international recruitment of health personnel;
- provide guidance that may be used where appropriate in the formulation and implementation of bilateral agreements and other international legal instruments; and
- facilitate and promote international discussion and advance cooperation on matters relating to the ethical international recruitment of health personnel as part of strengthening health systems, with a particular focus on the situation of developing countries.

*Source:* WHO (2).

The Code signals that health workforce sustainability should be the overall goal for Member States. In attending to their domestic labour market situation, destination countries will reduce the need for international recruitment and source countries will reduce the so-called push factors that create out-migration. As such, the Code sets out key principles for any Member State that wishes to develop a more effective approach to health workforce sustainability and migration. Much work remains to be done, however, if the Code is to meet its stated objectives and become a fully effective policy instrument.

### **Implementing the Code**

Reports on implementation progress have highlighted variable pace across countries and regions (15–17). The European Region made greatest progress in the first round of reporting in 2014: by March 2014, 40 out of 53 countries in the Region had provided national reports on implementation, against a global average of around one in four (17).

The Code assigns the central implementation role to Member States and other stakeholders (such as recruiters, employers, professional organizations and nongovernmental organizations)<sup>2</sup>. Member States are encouraged to publicize and implement the Code in collaboration with all stakeholders, incorporate it into applicable laws and policies, consult with stakeholders in the decision-making process and involve them in other activities related to international recruitment of health personnel.

In the European Region, WHO has worked with partners such as the EC (7) to monitor progress, fostering the process by producing supporting documents (the roadmap, policy briefs and toolkit (6)), supporting countries to better manage the mobility of health professionals and facilitating and engaging in interregional collaboration and policy dialogue on health workforce migration (18) (notably at an interregional workshop in Amsterdam in 2013 that is discussed below).

The WHO Secretariat convened a global expert advisory group comprising technical experts and representatives from Member States from each WHO region<sup>3</sup> in January 2015 to facilitate the first review of the Code's

<sup>2</sup> For more details, see Article 8, Implementation of the Code (2).

<sup>3</sup> The European Region representatives were from Hungary and Ireland.

relevance and effectiveness. The group's report concluded that the Code is highly relevant, especially in the context of growing regional and interregional labour mobility. It advised, however, that it should be subject to periodic review to ensure it continues to be a key framework for addressing issues arising from global and regional migration of health personnel, health workforce development and health systems sustainability, and that low awareness, advocacy and dissemination of the Code in other countries should be addressed (19).

A recent review of the Code's applicability by the EU Joint Action on Health Workforce Planning and Forecasting reinforced its continued relevance in Europe (20) (**Box 3**).

### **Box 3. EU Joint Action on Health Workforce Planning and Forecasting review**

The main findings on the applicability of the Code in the European context include the following.

The Code cannot address inequalities and deepening HRH imbalances within the EU, but its principles are relevant to the free-movement zone of the EU.

Within the context of free movement of the labour force, retention measures seem to be the most feasible and effective way of keeping the health workforce in the source countries, as migrating is a voluntary choice. It can be fostered by creating fair and equitable working conditions. Retention focus can be enhanced at European level by disseminating good practices and sharing case studies.

Circular migration has been identified as a tool that can also be effective within the EU context. Institutional-level bilateral cooperation, tailored to the needs of different types/profiles of health professionals, seems to be the most feasible option.

Employment of foreign health workers from other EU countries has to be based on ethical principles, avoiding discrimination on the basis of nationality and/or the country of first qualification when offering jobs. Directive 2005/36/EC (amended by EU/2013/55) should be properly implemented and no extra barriers introduced.

*Source:* Joint Action, Semmelweis University, Health Services Management Training Centre, Hungary (20).

## **Effective monitoring of health workforce flows**

Monitoring of international flows of health workers is a core element of the Code. It is necessary to track trends in the magnitude of flows (and ideally the patterns of source and destination countries) and enable national policy-makers and planners to be informed about the implications of trends. National health workforce strategies or plans developed without such monitoring will fail, but monitoring without links to national strategies and planning represents a missed opportunity to improve system effectiveness, underpin effective workforce planning and contribute to workforce sustainability.

The need for effective tracking of migration flows has been given added impetus by the Code requirements. The focus must be on improved national-level monitoring, but it is also critical that efforts address overall data improvement for health workforce planning and policy-making and do not consider migration in isolation from other labour market dynamics. Mobility dynamics have changed, and will continue to do so, in response to changing opportunities in labour markets. Recent WHO European Observatory on Health Systems and Policies research on health workforce mobility in Europe highlights changing levels of mobility flows following the economic crisis, with an overall trend towards increases in cross-border flows of health professionals (21) (**Box 4**).

#### **Box 4. Health professional mobility in Europe: analysing trends and dynamics**

A recent analysis of health professional mobility in Europe conducted by the European Observatory on Health Systems and Policies and the European Health Management Association (EHMA) Health Professional Mobility in the European Union Study (PROMeTHEUS) noted that policy-makers in Europe are facing the challenge of ensuring an adequate supply and distribution of the health workforce. The information base from which they operate, however, is patchy, of limited quality and outdated.

The study (21) highlights a lack of knowledge of available data sources and their limitations that will need to be considered in any response to mobility and domestic workforce developments. Monitoring and good-quality statistics on the workforce will improve workforce planning and forecasting and act as an early warning system on shortages and imminent regional imbalances that would enable policy-makers to take informed and timely action (22).

Health professional mobility, already changing as a result of EU enlargement, has recently been affected by the effects of the financial and economic crisis. PROMeTHEUS notes that as the gap between wealthier and poorer EU Member States widens, a new map of Europe and its mobility flows based on the relative strength of countries' economies and their ability to train, attract and retain health professionals may be emerging.

The impact of the global financial crisis and its aftermath in Europe has changed labour market dynamics in many countries through reducing new job opportunities and job moves (turnover), increasing out-migration from some parts of the Region (notably in the south and east, but also in countries such as Ireland (23) that had previously been importers) and reducing wages, employment conditions and pensions.

The study (21) concludes that this changing map raises new policy questions for the EU as a political entity built to foster prosperity and reduce asymmetries between its Member States; these can only effectively be answered with accurate data and strategic intelligence.

Full implementation of the Code can lead to systematic monitoring of flows. This should be a core component of any national approach to analysis of health labour market flows, but is often hampered by poor and incomplete data.

Current joint efforts by the Regional Office, Eurostat and the OECD to improve data collection on health workforce aim to help fill the data gap on international flows, with a particular focus on inflows to high-income countries. A new module on health worker migration has been added to regular joint data collection on health workforce employment and education to reduce data collection burden on national authorities and improve consistency in international databases.

Member States will have to be confident that their own information systems enable effective monitoring of health workforce flows and, where feasible, improve national-level capacity across all occupations (**Box 5**).

**Box 5. Switzerland: developing a national professional register for health professions**

The national professional register (NAREG) in Switzerland, launched in autumn 2014, registers data of 21 health occupations, including midwives, nurses and nurse assistants. Medical doctors are not included, but the NAREG is analogous to the national professional register for doctors.

The database registers name, gender, nationality, registration number, occupation and education (including country and date of issuance, or diploma recognition) throughout Switzerland. NAREG aims to provide information and security for patients, improve quality of care and gather statistical data and information for national and international authorities. It reflects improving workforce planning throughout Switzerland and the sharing of statistical data among cantons.

*Source:* Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen – und Direktoren (24).

WHO is supporting the development of minimum data sets for health workforce analysis (25) and working with individual Member States to support improvements in their capacity to monitor flows and implement effective policies on health workforce mobility. In the Republic of Moldova, for example, it has led work on better management of health workforce flows as part of the biennial collaborative agreements with the Ministry of Health (26) (**Box 6**).

**Box 6. Republic of Moldova: analysing health workforce flows**

A study of health workers originating from the Republic of Moldova but living and working in Romania was conducted in 2013 with support from the WHO country office in the Republic of Moldova. Results of the study, including factors in both countries that contribute to migration, were presented by the Ministry of Health and WHO at a roundtable meeting in June 2014. The meeting brought together representatives of the ministry, professional medical associations, the EU, international organizations and related projects in the area.

The study examined the situation of health professionals from the Republic of Moldova who were working in the Romanian health system, focusing on factors that motivated their emigration, professional and social integration, and prospects of returning.

The study and the ongoing process of strengthening the Republic of Moldova's capacity to manage the migration of health professionals are components of the EU-funded project "Better managing the mobility of health professionals in the Republic of Moldova".

*Source:* WHO Regional Office for Europe (26).

### **3. TRANSFORMATIVE EDUCATION AND EFFECTIVE HEALTH WORKFORCE PLANNING**

#### **Education and workforce planning in context**

The Code emphasizes that no country is completely isolated as a self-contained health labour market. Each sees workers moving between regions, sectors and national boundaries, so policy and planning must take account of these flows. It also highlights that a national health workforce strategic plan, supported by an effective workforce planning process, is the basic foundation for health workforce quality and responsiveness and supports the move towards health workforce sustainability.

The production of sufficient numbers of skilled workers with technical competences and whose background and social attributes make them accessible and able to reach diverse clients and populations is a central objective of health workforce development. A strategic planning approach allows coordination and alignment between education and training providers (the source of new trained health workers) and health system funders, regulators and employers. The link between education and planning must be clearly articulated; planning is partly about technical capacity, but also about political will and multistakeholder involvement in health workforce strategy (27).

Where this link has not been effectively established, it leads to the production of new workers who are not well equipped to provide safe and effective care, or overproduction of workers with skills that are not required, or underproduction of scarce skilled staff. This is not a sustainable approach in a context in which most health systems are seeking to improve effectiveness and contain costs.

#### **Transformative education**

The quality of education and training is a matter of national importance to each country. Quality assurance reflects the collective responsibility of the academic community, health systems, regulatory authorities and governments and involves a broad scope of activities, including accreditation of education institutions and programmes and professional regulation (registration, certification and licensing).

The Regional Office supports Member States by:

- transforming health professional education and training towards Health 2020 aspirations;
- providing technical consultancy and support to countries in their efforts to improve the quality of health professional education and training; and
- building national and institutional capacity to introduce an evidence-based approach in education and practice.

It is important that initial training of health professionals fosters a commitment to evidence-based practice and competence development and maintenance through engagement in lifelong learning as an integral component of ongoing professional practice. Lifelong learning is not restricted to the academic setting and can also be pursued through innovative learning models, such as virtual education. Undergraduate and postgraduate curricula should prepare health professionals who are competent not only to meet the needs of a range of patient groups, but also those of changing health services (28).

Member States need to be confident that curricula are relevant to population health priorities and career opportunities are competitive to promote the recruitment of sufficient numbers of well skilled and motivated people to the health workforce. This may require curricular review and redesign and the development of recruitment packages that target potential recruits at an early age.

Undergraduate health professional education should be guided by the WHO *Framework for action on inter-professional education & collaborative practice* (29) to enhance skills in collaborative teamwork and inter-sectoral cooperation. Interdisciplinary education opportunities should be developed around specific health topics, such as the management of noncommunicable diseases.

When effectively aligned with health system priorities and health population goals, education can be a driver for positive change in health workforce sustainability. It must focus on pre- and in-service training and be an integral element of any overall strategy to improve health workforce capacity and sustainability (see, for example, the description of Regional Office support for strategic directions in nursing and midwifery in **Box 7**).

### **Box 7. Education and the transformation of the nursing profession**

The *European strategic directions for strengthening nursing and midwifery towards Health 2020 goals* document (30) sets out 12 action areas under four priorities – scaling-up and transforming education, workforce planning and optimizing skill mix, ensuring positive work environments and promoting evidence-based practice and innovation – and four supporting mechanisms: regulation, research, partnerships, and management and leadership.

The accompanying compendium of good nursing and midwifery practices (31) provides examples of how new roles, changed skill mix and innovative practice, underpinned by appropriate education, are developing in the Region. It clearly illustrates how the nursing and midwifery workforce, which collectively forms the largest proportion of the health workforce in Europe, can evolve to meet contemporary challenges.

Concerns about current or future shortages of health workers exist in many countries in the Region, but there are also worries about possible imbalances of certain categories of health workers. Although it is not straightforward to compare future skills demand to future supply, efforts must be made to develop methods and indicators to provide insights into future mismatch in European health labour markets. Such analysis will ensure that education and training is targeted at skills gaps and assist policy-makers and social partners in designing and implementing the labour market and training policies Europe needs to meet ongoing health challenges (32).

WHO is supporting a recently launched OECD/EU project examining skills mismatches in the health sector. The main aim is to assess changes in numerous policies (before and after the economic crisis) and future plans.

### **Effective workforce planning**

Improved education and training is only part of the process of strengthening health workforce sustainability. Alignment with effective workforce planning, which can assess and signal skills shortages and future health workforce requirements, is also required. Member States need to use accurate and complete data, appropriate methods and relevant tools to make evidence-based decisions on monitoring and planning the health workforce. This not only informs the assessment of workforce demand, supply and mobility, but also guides appropriate matching of skills with changing health needs.

WHO has been directly involved in supporting improvements in health workforce planning at country, regional and global levels. For example, it has been supporting the development of a national HRH observatory in Kazakhstan that will contribute to improved data analysis and planning capacity (**Box 8**).

**Box 8. Kazakhstan: establishing a national HRH observatory**

The concept of developing HRH for 2012–2020 in Kazakhstan is about forming effective health workforce policies to ensure quality health services. In addition to establishing a national HRH observatory, actions will be taken to improve the regulatory system, develop methods and tools for health workforce planning, develop a system of motivation and incentives for health care workers and health professionals' education, training and continuing professional development, and strengthen the role of nongovernmental organizations and professional associations.

*Source:* Meddoc.kz (33).

WHO supports online facilities that give access to a range of workforce planning models and tools (27, 34) and is also involved with the EU Joint Action on Health Workforce Planning and Forecasting which, as was noted above, provides a platform for information-sharing and learning among countries (35).

Health workforce planning and forecasting mechanisms are recognized as being crucial in supporting evidence-based policy and tackling expected health workforce shortages. The Joint Action is developing new tools to enable Member States to implement planning and/or enhance current planning processes (35). The work is well progressed with several reports published, including minimum planning data requirements (36) (which was the result of a shared process involving 37 EU partners) and user guidelines on qualitative methods in health workforce planning and forecasting that were developed with support from a broad network of international representatives (37).

Most Member States have scope to improve the effectiveness of their workforce planning processes. A review of health workforce projection models in 18 OECD countries, including 12 from the European Region, highlighted that most models were unidisciplinary (commonly focusing only on doctors) and many were “fairly traditional” in their approach, concentrating on demographic trends to assess future supply and demand (9).

The review noted, however, that some models include a broader range of variables and have started to take into account possible extensions of the roles of certain providers, including so-called horizontal substitution (between general practitioners and medical specialists, for example) and vertical substitution (doctors and mid-level providers such as physician assistants and nurse practitioners). The review shows that models in countries such as the Netherlands and Switzerland suggest that a significant part of any projected gap in certain categories of health workers might be addressed by implementing such changes in staff mix and skill mix (9).

The review concludes by noting that “health workforce planning is not an exact science” and that the models on which it is based must involve a series of assumptions about how the various supply-side and demand-side factors might evolve.

The results reinforce the need to have in place an effective model at national level that serves as a connection between the education sector as the provider of new workers and the organizations that will make use of their skills. The planning approach must be aligned with service delivery needs and funding sources and

take account of changing supply and demand scenarios. Without this model in place to send the correct signals, the education sector is at risk of educating the wrong type of worker with the wrong skills to meet population health priorities and health service requirements, consequently undermining workforce sustainability.

## **4. EFFECTIVE RETENTION, DISTRIBUTION AND SKILL MIX**

### **Retention, distribution and skill mix in context**

Health workforce sustainability is about much more than education and planning. These are necessary elements, but must be complemented by a policy frame that supports the workforce to be motivated and effective, matches workforce distribution with population access priorities, and sustains an effective mix of skills and staff.

Workforce retention is finally receiving the policy attention it requires, based on recognition that high levels of attrition are wasteful and undermine health system quality, access and responsiveness. Out-migration of health workers is a very visible form of workforce attrition and can be a symptom of lack of policy focus on retention. The Code recognizes this and makes it clear that improving health workforce retention requires multipolicy effort, taking account of workforce needs and career objectives.

Poor distribution of the health workforce across regions, sectors and specialties can prevent good access to health for some communities and may contribute to poor-quality health services. Some countries have used international recruitment of health workers as a solution to filling posts in underserved areas, but this can exacerbate maldistribution in source countries.

The Code gives a clear message that relatively more policy and funding effort will have to be expended on improving retention of workers and making distribution more equitable, rather than focusing solely on initial supply. This will reduce costly attrition (including migration) and give greater workforce stability and availability and improved access to quality care.

### **Improving retention**

In parallel with the development of the Code, WHO and other partners addressed the issue of internal mobility of health workers (mainly from rural to urban areas) by developing evidence-based recommendations on increasing access to health workers in remote and rural areas by improving staff retention (38). This WHO policy document, developed following a process of evidence assessment and interpretation, provided 16 evidence-based recommendations on increasing access to health workers in remote and rural areas, covering aspects of education content and location, regulation, financial incentives and professional and personal support.

WHO supported the development of a policy brief designed to inform deliberations on how to improve retention of health workers in rural and remote areas of the SEEHN Member States. The brief noted that certain preconditions are needed to make success in retention more likely (a national HRH strategy, reliable HRH information, a broad focus on all health workers and attention to management issues) (39).

The WHO regional offices for Europe and the Western Pacific enabled a policy dialogue on international health workforce mobility and recruitment challenges in Amsterdam in 2013. The meeting brought together

policy-makers from source and destination countries, representatives from intergovernmental and regional organizations, civil society organizations, health professional employers, private recruitment agencies and academia to debate effective policy mechanisms for the fair and ethical international recruitment of health personnel. The technical report of the meeting (40) synthesized five key messages for policy-makers in the regions (**Box 9**).

**Box 9. WHO policy dialogue on international health workforce mobility and recruitment challenges, Amsterdam, 2013**

The five key messages were:

- 1) enhance advocacy efforts to maintain the momentum and raise awareness about the Code
- 2) foster dialogue and build cooperation with stakeholders
- 3) identify good practices and expand the evidence base
- 4) assess and report on changing trends in health labour markets
- 5) make use of the need for reform to sustainably strengthen the health workforce.

*Source:* WHO Regional Office for Europe (40).

Retention of health professionals in rural and remote areas was also the focus of a recently concluded multicountry project in northern Europe. The Recruit and Retain project was a Northern Periphery and Arctic Programme initiative funded by the European Regional Development Fund with local matched funding. It set out to find solutions to persistent difficulties in recruiting and retaining high-quality health professionals to work in the public sector in remote rural areas of northern Europe and was completed in 2014 with the dissemination of a range of evidence-based tools and recommendations (41). These final outputs were informed by consideration of the WHO recommendations on retaining staff in remote and rural areas (38).

Most recently, the EU supported an expert consortium led by EHMA on a study analysing dimensions of the challenge of recruiting and retaining professionals in the health sector. The results include an overview of recruitment and retention practices in EU Member States, European Free Trade Association countries and three non-EU countries, with additional in-depth analysis of how successful recruitment and retention practices were implemented and what contextual factors facilitated or hampered their success. The final report includes recommendations for policy-makers locally, nationally and at EU level on approaches to improving retention (42), which are also based on the evidence-based recommendations developed by WHO in 2010 (38).

## **Effective distribution**

Problems of poor access to services in rural regions created by health professional shortages are a particular focus of attention for policy-makers. An analysis of geographic distribution of doctors in OECD countries highlighted that doctors were distributed unequally across different regions in virtually all OECD countries, including those in Europe (43).

Several key factors that created this so called maldistribution of doctors were identified, including the relative unattractiveness of some localities as places to live and work (often related to the absence of schooling for children, lack of suitable housing and poor access to cultural and professional activities) and the tendency for doctors to be attracted to urban-based hospital specialization rather than rural-based general practice. Member States have to consider compensatory packages that will encourage health professionals to work in rural locations.

OECD identified three main areas of policy intervention to address maldistribution:

- first, target future physicians to maximize the pool available for practice in relatively underserved regions, with the key action being the selection and education of medical students;
- second, target current physicians with a suitable incentive system and regulatory measures to influence their location choices; and
- third, do with less: that is, accept that staffing levels will be lower in some regions and focus on service redesign or configuration solutions through expansion of involvement in health service delivery by non-physician providers and service delivery innovations (better use of telemedicine, for example).

These same policy considerations will apply to other elements of the health workforce that are unevenly distributed in relation to current need. Policy-makers in most countries will have to blend a range of elements of these three strategies and review the mix over time (43). **Box 10** highlights a multi-element policy response in France to tackle geographic maldistribution.

**Box 10. France: a multi-element approach to tackling maldistribution of the health workforce**

The Pacte Territoire-Santé [Territorial Health Pact], a 12-element programme aimed at improving recruitment, retention and geographic distribution of health workers, was adopted by the French government in 2012. The 12 measures are distributed across three categories: changing education and enabling newly graduated professionals to be placed; improving working conditions; and investing in underserved areas. Specific measures include the following.

The Contrat d'Engagement de Service Public [Commitment to Public Service Contract] gives medical students a scholarship of €1200 per month if they commit to work in an underserved area on completion of their studies for a minimum of two years. There were 591 such contracts in 2013, 881 in 2014 and a projected 1500 by 2017.

The Praticien Territorial de Médecine Générale [Territorial Practitioner of General Medicine] is a contract for newly graduated medical doctors working in general medicine that guarantees a minimum income in the first two years of practice and improved social protection. There were 180 contracts in 2013, 345 by the end of 2014 and an estimate of more than 400 by the end of 2015.

The Maisons de Santé Pluriprofessionnelles [Nursing Homes Multiprofessional] contract aims to support multidisciplinary teamwork and end the isolation of young health workers in rural areas. Composed of at least two general practitioners and a paramedic professional, the nursing home has a contract with the regional health authority that sets up a common working project in accordance with the territory's needs. A subsidy is provided by the state. The number was reported to be 370 in 2013, 640 in 2014 and an estimated 820 by the end of 2015.

Telemedicine projects are being developed in nine new pilot regions.

*Source:* Braichet (44).

Other countries in the Region are also recognizing and addressing the issue of maldistribution, most notably in relation to the need to encourage sufficient health professionals to be deployed in primary care and rural areas (**Box 11**).

**Box 11. The Russian Federation: placement of medical doctors in rural areas**

The federal programme “Country doctor” has been running since 1 January 2012 under Article 12 of Federal Law No. 326 on obligatory medical insurance in the Russian Federation. Young doctors who agree to work in rural areas for a period of five years are given a one-off compensation payment of 1 million roubles. The project initially included only primary health care doctors under the age of 35 but has been extended to doctors of all specialties aged less than 45. Figures from the Ministry of Health show that the number of doctors in rural areas that have the greatest shortage of health care workers increased by almost 7000 – from 44 758 to 51 730 – between 2011 and 2013.

*Source: medportal.ru (45).*

Retention, distribution and mobility must be considered as connected elements in the policy frame to achieve workforce sustainability. The Code can act as a policy support mechanism to link national workforce planning objectives and international mobility dynamics (**Box 12**).

**Box 12. Ireland: the International Medical Graduate Training Initiative**

The International Medical Graduate Training Initiative of the Government of Ireland gives doctors from low- and middle-income countries the opportunity to gain a range of clinical experience and training that is not easily available in their own countries before returning home. Doctors on the programme provide health services to communities in Ireland that might otherwise not have had access.

The Government has been committed since 2010 to implementing the Code. Using it as a guide, Ireland is working to develop plans and strategies to strengthen the domestic health workforce and handle international recruitment in an ethical way. Ireland has reportedly now increased its production of nurses and doctors to the level required for self-sufficiency and measures are being put in place to retain the health personnel (including doctors and nurses) the country trains. The cornerstone of the new plan for doctors is the 2014 strategic review of medical training and career structure, which includes 25 recommendations to make medical careers in Ireland more attractive for home-trained doctors.

*Source: WHO (46).*

**Effective skill mix**

An appropriately skilled workforce with the right mix to respond to the population’s changing health and care needs is at the core of an approach to workforce sustainability and is a major factor influencing how well systems perform.

Many health systems have not yet achieved the optimum balance of skills and staff to contribute to workforce sustainability. Health professionals are often constrained from their maximum potential performance because of system barriers, unresponsive regulations, inadequate in-service training and lack of clarity on roles and scopes of practice (47). The end result is that health professionals may be employed below their skill level, notably in the case of internationally recruited health workers (48).

**Box 13** shows an example that illustrates how appropriate skill mix with clearly defined roles has improved patient care. The prudent use of the right professional with the right skill set is not only cost-effective, but also leads to greater patient satisfaction and better outcomes.

**Box 13. Finland: nurse consultations for acute health problems and noncommunicable diseases**

Particular patient groups with acute health problems and noncommunicable diseases have been reallocated from the care of physicians to nurses working in new advanced roles. Nurses consult with the multiprofessional team or work in pairs with physicians in health centres and emergency care units. This has resulted in nurses undertaking one third of acute visits and more than half of all patient visits, with three quarters of patients not having to be referred to physicians or requiring a follow-up visit (49).

In some cases, the nurses work in nurse-led health stations supported through e-consultation with physicians working in larger health stations. Nurses have the authority, knowledge and skills to examine, assess, treat and follow up different patient groups. Health promotion, patient education and ensuring patient safety are essential competences.

Nurses working in remote health stations supported through e-consultations with physicians are capable of managing 70% of service demand, referring only 22% of patients to physicians (31).

An OECD review highlighted the scope in many countries to improve health system performance, access and responsiveness through the deployment of nurses in advanced roles such as nurse practitioner and clinical nurse specialist (50). The review pointed to a growing evidence base informing policy-makers that such roles can enhance the quality of care and be cost-effective. Similar findings have been reported from across the Region and beyond in the compendium of case studies WHO has compiled (31) and in a recent report from the International Council of Nurses (51).

WHO is working in the Region to improve the evidence base on effective approaches to skill mix. It is supporting an OECD/EU project examining skills mismatches in the health sector. It is also engaged with the European Observatory on Health Systems and Policies and other partners in a new project to address health workforce skill-mix issues systematically, with the intended outcomes of providing decision-makers with better understanding and tools and realizing the potential of the health and care workforce.

Member States should rethink health worker roles and optimize skill mix to respond to demographic trends, technological advances, patterns of disease and changing population health needs. Changing roles and shifting tasks can lead to better use of the available workforce and more efficient and responsive health services. The ability to achieve an effective mix of skills and staff is dependent on addressing barriers and harnessing enablers, including regulation (52), payment, training, employment, and working conditions and governance.

## **5. THE CODE AND EFFECTIVE MULTISTAKEHOLDER INVOLVEMENT**

Health workforce problems or challenges are not just caused by limitations in the workforce: they also reflect broader health system, economic, political and societal issues. As such, health workforce sustainability can only be achieved when the policy-solution focus reaches beyond the health sector: it requires intersectoral whole-of-government involvement and whole-of-society engagement.

The Code has been developed in the light of this broad-based recognition. It can be a catalyst for multistakeholder engagement and involvement of civil society and professional associations, trade unions and other parties in responding to challenges to health workforce sustainability.

Countries in the Region are already using the Code as a mechanism to develop a more sustained approach to national policy dialogue on health workforce issues, including engaging with other government departments and nongovernmental stakeholders from civil society, trade unions, regulators and professional associations. In Belgium, for example, 19 stakeholders signed a charter in 2012 proposed by stakeholders involved in international health, including the Belgian Government, nongovernmental organizations, academic institutions and private companies. The charter essentially translates the Code into concrete commitments (53).

The Code and the ethical perspective on international recruitment it advocates can also be used to inform fair and effective approaches to recruitment that can be negotiated within bilateral agreements involving multiple government departments and other agencies. One recently agreed bilateral agreement is described in **Box 14**.

### **Box 14. German and Filipino governments' bilateral agreement, 2013**

The governments of Germany and Philippines are reported to have negotiated a bilateral agreement to formalize the migration of nurses to Germany. The agreement, signed in March 2013, includes the following key points.

Regulation on the deployment of Filipino health care professionals is clarified, including a full pre-departure briefing about relevant laws, regulations, policies, procedures, norms, cultures and practices in their countries of origin and destination.

Filipino workers' welfare is preserved, promoted and developed. The agreement states clearly that health care professionals will receive their work contract before departure and the working conditions offered in the contracts will be "comparable" to German workers and not "less favourable" than those for similar German workers.

The agreement promotes exchange of ideas and information, with the aim of improving and simplifying job-placement procedures.

The agreement stipulates the promotion of human resource development in Philippines.

A joint committee of relevant stakeholders (such as trade union representatives) from Philippines and Germany has been set up to monitor implementation.

*Source:* HealthWorkers4all (54, 55).

Civil society also plays a critical role in support of health workforce sustainability. The "Health workers for all and all for health workers" project is a European civil society initiative that contributes to a sustainable health workforce worldwide (56). It involves organizations from eight EU countries and other stakeholders and offers an online collaboration platform (57). The project focuses on Code implementation and aims to

highlight interdependencies between shortages of health workers in the south and increased demand in Europe (**Box 15**).

**Box 15. Health workers for all and all for health workers**

The EC is funding this three-year project that aims to develop and share appropriate tools for policy analysis and resulting action on health workforce retention and support. The eight partner European countries – Belgium, Germany, Italy, the Netherlands, Poland, Romania, Spain and the United Kingdom – and civil society organizations are using the project to advocate for a sustainable health workforce. It has developed a collection of case studies on Code implementation and HRH strengthening in Europe, with an emphasis on the role of nongovernmental actors and a multisectoral approach. The Regional Office actively supports the project, which has the Code at its base.

*Source:* HealthWorkers4All (56).

European civil society partners are calling on the EU and its Member States to accelerate efforts and commit to taking action on implementing the Code. A call to action, “A health worker for everyone, everywhere!”, launched in Madrid in June 2015, invites European leaders, decision-makers, civil society representatives and interested individuals and organizations to sign on. The call to action refers to improvement in five main areas: planning and training for a long-term sustainable health workforce; investment in the health workforce; respecting the rights of migrant health workers; thinking and acting coherently at all levels (national, regional and global); and playing a part in Code implementation (58).

These examples emphasise that the Code can be the entry point to a broader focus on developing new national-level health workforce policy and planning mechanisms, or strengthening those that already exist, and for engaging with broader society. They also serve as a reminder that health workforce migration may be an issue of policy concern to ministries of health, health regulators and health sector employers, but also has implications across the policy remit of other government departments (such as those responsible for immigration, trade and employment).

## **6 SUSTAINING PROGRESS IN ACHIEVING AND MAINTAINING HEALTH WORKFORCE SUSTAINABILITY**

### **Summary of progress**

The Code continues to be highly relevant in the Region, both in the context of growing regional and inter-regional labour mobility and more broadly in relation to making progress on achieving health workforce sustainability and health system effectiveness. A sustainable and effective health workforce is integral to achieving the Health 2020 goals. It is therefore imperative that policy-makers and strategic planners pay attention to, and engage fully with, health workforce enablers.

The review of progress to date suggests a clearer commitment and understanding by all stakeholders that focusing policy and strategic attention on achieving a sustainable health workforce is key to the delivery of safe, quality health services that will enable delivery of the Health 2020 goals. Evidence from across the Region demonstrates variable and uneven progress, with uncertainty about the longer-term stability of the workforce without continued policy attention and investment.

All health systems face significant risks if the health workforce is insufficient in number or skill mix, poorly distributed, or workers are not educated to the right level to ensure they can deliver safe care. Particular challenges remain in sustaining the health workforce in remote and rural areas, although recent attention to this area highlights actions that can be taken to mitigate the problem. Progress is being made, and while great challenges persist, so too do opportunities to take action to develop and sustain the health workforce in Europe.

Challenges faced in the Region are mirrored across the world: external forces that exacerbate health worker migration out of the Region and movement within will remain for some time to come. There is a significant risk to all health systems if the health workforce is insufficient in number and poorly distributed, or if workers are not educated to the right level to ensure they can deliver safe care. Particular challenges remain in sustaining the health workforce in remote and rural areas, although recent attention to this issue highlights actions that can be taken to mitigate the problem. Great opportunities exist to take action to develop and sustain the health workforce in Europe.

## **7. POLICY ACTION**

In support of this policy action, WHO is collaborating with partners to:

- **improve the evidence base on health workforce trends, effectiveness and sustainability** by improving health workforce data, facilitating policy dialogue and supporting the development of HRH observatories: these actions contribute to more effective policies to identify and target priority health workforce issues and provide evidence to support the case for more investment in the health workforce;
- **facilitate collaboration between countries and support networking and the process of advocacy, communication, monitoring and information exchange** within the Region to maintain Member States' commitments, track progress and identify good practice and effective policy: this is driven by recognition of the importance of having a common regional vision on health workforce sustainability; and
- **build technical capacity in countries** by supporting improved workforce planning and policy, developing relevant tools, processes and protocols, and targeting training and development on health workforce planning and data analysis: this will include an emphasis on identification of, and focused support for, countries with critical health workforce shortages.

The Tallinn Charter (3) and Health 2020 (4) make specific reference to the need to deal with the challenges raised by health workforce migration. The WHO Secretariat (at global, regional and country levels) will continue to work with stakeholders to raise awareness, provide technical support and promote effective implementation and reporting of the Code. Member States in the Region have already made good progress, but the work to develop, strengthen and maintain implementation should be viewed as a continuing process for all Member States and relevant stakeholders. Full realization of the objectives of the Code requires that Member States, working with stakeholders, expand awareness and implementation of the legal instrument to its fullest potential.

## REFERENCES

1. The world health report 2006 – working together for health. Geneva: World Health Organization; 2006 (<http://www.who.int/whr/2006/en/>, accessed 24 July 2015).
2. World Health Assembly resolution WHA63.16 on WHO global code of practice on the international recruitment of health personnel. Geneva: World Health Organization; 2010 ([http://www.who.int/hrh/migration/code/code\\_en.pdf](http://www.who.int/hrh/migration/code/code_en.pdf), accessed 24 July 2015).
3. WHO European Ministerial Conference on Health Systems: “Health Systems, Health and Wealth”. Tallinn, Estonia, 25–27 June 2008: report. Copenhagen: WHO Regional Office for Europe; 2009 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/78918/E92150.pdf](http://www.euro.who.int/_data/assets/pdf_file/0006/78918/E92150.pdf), accessed 24 July 2015).
4. Health 2020: a European policy framework supporting action across government and society for health and well-being. Copenhagen: WHO Regional Office for Europe; 2012 (EUR/RC62/9; <http://www.euro.who.int/en/health-topics/health-policy/health-2020-the-european-policy-for-health-and-well-being/publications/2013/health-2020-a-european-policy-framework-supporting-action-across-government-and-society-for-health-and-well-being>, accessed 24 July 2015).
5. Buchan J, editor. Nursing workforce sustainability: the international connection. Philadelphia (PA): International Center on Nurse Migration; 2015.
6. Toolkit for country health workforce strengthening. Copenhagen; WHO Regional Office for Europe; 2012 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0018/172413/Toolkit-for-Country-Health-Workforce-Strengthening-FINAL2014.pdf](http://www.euro.who.int/_data/assets/pdf_file/0018/172413/Toolkit-for-Country-Health-Workforce-Strengthening-FINAL2014.pdf), accessed 24 July 2015).
7. Commission staff working document on an action plan for the EU health workforce. Strasbourg: European Commission; 2012 (18.4.2012.SWD(2012) 93 Final; [http://ec.europa.eu/health/workforce/docs/staff\\_working\\_doc\\_healthcare\\_workforce\\_en.pdf](http://ec.europa.eu/health/workforce/docs/staff_working_doc_healthcare_workforce_en.pdf), accessed 24 July 2015).
8. Guiding principles for national health workforce strategies. Geneva, Health Workforce Advocacy Initiative; 2008 (<http://www.who.int/workforcealliance/knowledge/toolkit/7/en/>, accessed 07 September 2015).
9. Ono T, Lafortune g, Schoenstein M. Health workforce planning in OECD countries: a review of 26 projection models from 18 countries. Paris: OECD Publishing; 2012 (OECD Health Working Papers, No. 62; <http://dx.doi.org/10.1787/5k44t787zcnw-en>, accessed 24 July 2015).
10. Technical discussion. Action towards achieving a sustainable health workforce and strengthening health systems. Copenhagen: WHO Regional Office for Europe (EUR/RC62/TD/2; [http://www.euro.who.int/\\_data/assets/pdf\\_file/0003/172380/RC62td2-Eng.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0003/172380/RC62td2-Eng.pdf?ua=1), accessed 24 July 2015).
11. Helsedirektoratet, WHO, Global Health Workforce Alliance. Consultation on human resources for health for high income countries. Preparatory meeting for the Third Global Forum on HRH. Oslo: Helsedirektoratet; 2013 ([http://www.who.int/workforcealliance/knowledge/resources/oslo\\_consultation\\_report/en/](http://www.who.int/workforcealliance/knowledge/resources/oslo_consultation_report/en/), accessed 24 July 2015).
12. WHO, Global Health Workforce Alliance. The Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage. Geneva: World Health Organization; 2013 ([http://www.who.int/workforcealliance/knowledge/resources/3gf\\_finaldeclaration/en/](http://www.who.int/workforcealliance/knowledge/resources/3gf_finaldeclaration/en/), accessed 24 July 2015).

13. World Health Assembly resolution WHA67.24 on follow-up of the Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage. Geneva: World Health Organization; 2014 (Agenda Item 15.8; [http://apps.who.int/gb/ebwha/pdf\\_files/WHA67/A67\\_R24-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_R24-en.pdf), accessed 24 July 2015).
14. Global strategy on human resources for health: workforce 2030. Draft for consultation. Geneva: World Health Organization; 2015 ([http://www.who.int/hrh/resources/glob-strat-hrh\\_workforce2030.pdf?ua=1](http://www.who.int/hrh/resources/glob-strat-hrh_workforce2030.pdf?ua=1), accessed 24 July 2015).
15. Action towards achieving a sustainable health workforce and strengthening health systems. Implementing the WHO global code of practice in the European Region. Copenhagen: WHO Regional Office for Europe; 2012 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0013/172201/Action-towards-achieving-a-sustainable-health-workforce-and-strengthening-health-systems.pdf/](http://www.euro.who.int/_data/assets/pdf_file/0013/172201/Action-towards-achieving-a-sustainable-health-workforce-and-strengthening-health-systems.pdf/), accessed 24 July 2015).
16. Siyam A, Zurn P, Gedik G, Ronquillo K, Co CJ, Vaillancourt-Laflamme C et al. Monitoring the implementation of the WHO global code of practice on the international recruitment of health personnel. Bulletin World Health Organization; 2013; 91(11):816–23.
17. Siyam A, Dal Poz M, editors. Migration of health workers: WHO code of practice and the global economic crisis. Geneva: World Health Organization; 2014 ([http://www.who.int/hrh/migration/14075\\_MigrationofHealth\\_Workers.pdf](http://www.who.int/hrh/migration/14075_MigrationofHealth_Workers.pdf), accessed 24 July 2015).
18. Migración de profesionales de salud: oportunidades para el desarrollo compartido [Migration of health professionals: opportunities for shared development] [website]. Granada: Red Iberoamericana de Migraciones Profesionales de Salud [Latin American Network on Migration of Health Professionals]; 2013 ([http://www.mpdc.es/index.php?option=com\\_content&task=view&id=58&Itemid=1](http://www.mpdc.es/index.php?option=com_content&task=view&id=58&Itemid=1), accessed 24 July 2015).
19. WHO global code of practice on the international recruitment of health personnel. Report of the Expert Advisory Group on the relevance and effectiveness of the WHO global code of practice on the international recruitment of health personnel (2010). Report by the Director-General. Geneva: World Health Organization; 2015 (Sixty-eighth World Health Assembly, Agenda Item 17.2; [http://www.who.int/hrh/migration/Item23-A68\\_32Add1-en20-05-2015.pdf](http://www.who.int/hrh/migration/Item23-A68_32Add1-en20-05-2015.pdf), accessed 24 July 2015).
20. Kovács R, Aszalós Z, Eke E, Kovács E, Cserhádi Z, Girasek E et al. WP4 report. The applicability of the WHO global code of practice on the international recruitment of health personnel within the European Union. Brussels: Joint Action, Semmelweis University, Health Services Management Training Centre, Hungary; 2015 ([http://euhwforce.weebly.com/uploads/2/3/0/5/23054358/150609\\_wp4\\_who\\_applicability\\_report.pdf](http://euhwforce.weebly.com/uploads/2/3/0/5/23054358/150609_wp4_who_applicability_report.pdf), accessed 24 July 2015).
21. Buchan J, Wismar M, Glinos I, Bremner J, editors. Health professional mobility in a changing Europe. New dynamics, mobile individuals and diverse responses. Vol. II. Copenhagen: WHO Regional Office for Europe; 2014 (Observatory Studies Series 32; [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1), accessed 24 July 2015).
22. Maier C, Buchan J, Wismar M, Ognyanova D, Girasek E, Kovacs E et al. Monitoring health professional mobility in Europe. In: Buchan J, Wismar M, Glinos I, Bremner J, editors. Health professional mobility in a changing Europe. New dynamics, mobile individuals and diverse responses. Vol. II. Copenhagen: WHO Regional Office for Europe; 2014:95–128 (Observatory Studies Series 32; [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1), accessed 24 July 2015).

23. Dussault G, Buchan J. The economic crisis in the EU: impact on health workforce mobility. In: Buchan J, Wismar M, Glinos I, Bremner J, editors. Health professional mobility in a changing Europe. New dynamics, mobile individuals and diverse responses. Vol. II. Copenhagen: WHO Regional Office for Europe; 2014:35–64 (Observatory Studies Series 32; [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1), accessed 24 July 2015).
24. Gesundheitsberuferegister NAREG [website] Bern: Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen – und Direktoren; 2011–2015 (<http://www.gdk-cds.ch/index.php?id=1013>, accessed 24 July 2015).
25. Human resources for health information system: minimum data set for health workforce registry. Geneva: World Health Organization; 2015 ([http://www.who.int/hrh/statistics/minimun\\_data\\_set.pdf?ua=1](http://www.who.int/hrh/statistics/minimun_data_set.pdf?ua=1), accessed 24 July 2015).
26. Study on Moldovan health workers in Romania highlights factors leading to emigration [online news report]. Copenhagen: WHO Regional Office for Europe; 2014 (<http://www.euro.who.int/en/health-topics/Health-systems/health-workforce/news/news/2014/07/study-on-moldovan-health-workers-in-romania-highlights-factors-leading-to-emigration>, accessed 24 July 2015).
27. Dussault G, Buchan J, Sermeus W, Padaiga Z. Assessing future health workforce needs. Copenhagen: WHO Regional Office for Europe; 2010 (Policy Summary 2; <http://www.euro.who.int/en/data-and-evidence/evidence-informed-policy-making/publications/2010/assessing-future-health-workforce-needs>, accessed 24 July 2015).
28. Transforming and scaling up health professionals' education and training. World Health Organization guidelines 2013. Geneva: World Health Organization; 2013 ([http://apps.who.int/iris/bitstream/10665/93635/1/9789241506502\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/93635/1/9789241506502_eng.pdf), accessed 24 July 2015).
29. Framework for action on interprofessional education & collaborative practice. Geneva: World Health Organization; 2010 ([http://whqlibdoc.who.int/hq/2010/WHO\\_HRH\\_HPN\\_10.3\\_eng.pdf](http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf), accessed 24 July 2015).
30. European strategic directions for strengthening nursing and midwifery towards Health 2020 goals. Copenhagen: WHO Regional Office for Europe; 2015 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0004/274306/European-strategic-directions-strengthening-nursing-midwifery-Health2020\\_en-REV1.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0004/274306/European-strategic-directions-strengthening-nursing-midwifery-Health2020_en-REV1.pdf?ua=1), accessed 10 September 2015).
31. Compendium of good nursing and midwifery practice. Copenhagen: WHO Regional Office for Europe; 2015 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0004/287356/NURSES-AND-MIDWIVES-A-Vital-Resource-for-Health-Compendium.pdf](http://www.euro.who.int/_data/assets/pdf_file/0004/287356/NURSES-AND-MIDWIVES-A-Vital-Resource-for-Health-Compendium.pdf), accessed 10 September 2015).
32. Skill mismatch. Identifying priorities for future research. Cedefop research arena (Cedra). Salonika: European Centre for the Development of Vocational Training (Cedefop); 2009 (Cedefop Working Paper, No 3; [www.cedefop.europa.eu/files/6103\\_en.pdf](http://www.cedefop.europa.eu/files/6103_en.pdf), accessed 24 July 2015).
33. Концепция развития кадровых ресурсов здравоохранения на 2012-2020 годы [The concept of human resources for health for 2012–2020] [website]. Almaty: Meddoc.kz; 2015 (<http://www.meddoc.kz/meddoc/text?about=conceptdoc>, accessed 24 July 2015).
34. Models and tools for health workforce planning and projections. Geneva: World Health Organization; 2010 (Human Resources for Health Observer Issue No. 3; <http://www.who.int/hrh/resources/observer3/en/>, accessed 24 July 2015).

35. European Union Joint Action on Health Workforce Planning and Forecasting [website]. Brussels: Federal Public Service (FPS) Health, Food Chain Safety and Environment; 2014 (<http://euhwforce.weebly.com>, accessed 10 September 2015).
36. Minimum planning data requirements for health workforce planning. WP deliverable D.051. Brussels: Joint Action Health Workforce Planning and Forecasting; 2014 (D.051 Release 1; [http://euhwforce.weebly.com/uploads/2/3/0/5/23054358/140414\\_wp5\\_d051\\_minimum\\_planning\\_data\\_requirements\\_final.pdf](http://euhwforce.weebly.com/uploads/2/3/0/5/23054358/140414_wp5_d051_minimum_planning_data_requirements_final.pdf), accessed 24 July 2015).
37. Joint action user guidelines on qualitative methods in health workforce planning and forecasting. Brussels: Joint Action Health Workforce Planning and Forecasting; 2014 (<http://www.horizonsscanning.org.uk/publications/eu-joint-action-user-guidelines-on-qualitative-methods-in-health-workforce-planning-and-forecasting/>, accessed 24 July 2015).
38. Increasing access to health workers in remote and rural areas through improved retention. Global policy recommendations. Geneva: World Health Organization; 2010 ([http://www.searo.who.int/nepal/media-centre/2010\\_increasing\\_access\\_to\\_health\\_workers\\_in\\_remote\\_and\\_rural\\_areas.pdf](http://www.searo.who.int/nepal/media-centre/2010_increasing_access_to_health_workers_in_remote_and_rural_areas.pdf), accessed 24 July 2015).
39. Attracting and retaining health workers in the Member States of the South-eastern Europe Health Network. Copenhagen: WHO Regional Office for Europe; 2011 ([http://www.euro.who.int/\\_data/assets/pdf\\_file/0013/152203/e95774.pdf](http://www.euro.who.int/_data/assets/pdf_file/0013/152203/e95774.pdf), accessed 24 July 2015).
40. WHO policy dialogue on international health workforce mobility and recruitment challenges: technical report. Amsterdam 2–3 May 2013. Copenhagen: WHO Regional Office for Europe; 2013 (<http://www.euro.who.int/en/health-topics/Health-systems/health-workforce/publications2/2013/who-policy-dialogue-on-international-health-workforce-mobility-and-recruitment-challenges-technical-report>, accessed 24 July 2015).
41. Recruit and retain solutions. Copenhagen: Northern Periphery and Arctic Programme; 2014 (<http://www.recruitandretain.eu/uploads123/RR-Solutions-Booklet.pdf>, accessed 24 July 2015).
42. Recruitment and retention of the health workforce in Europe. Brussels: European Health Management Association; 2015 ([http://ec.europa.eu/health/workforce/key\\_documents/recruitment\\_retention/index\\_en.htm](http://ec.europa.eu/health/workforce/key_documents/recruitment_retention/index_en.htm), accessed 24 July 2015).
43. Ono T, Schoenstein M, Buchan J. Geographic imbalances in doctor supply and policy responses. Paris: OECD; 2014 (OECD Health Working Papers, No. 69; <http://dx.doi.org/10.1787/5jz5sq5ls1wl-en>, accessed 24 July 2015).
44. Braichet J. “Le pacte territoire santé”: a French program for recruitment and retention of health workers in underserved areas. Meeting of the Expert group on European Health Workforce, Brussels, June 17th 2015. Paris: Ministère des Affaires Sociales et de la Santé; 2015 ([http://ec.europa.eu/health/workforce/docs/ev\\_20150617\\_co06\\_en.pdf](http://ec.europa.eu/health/workforce/docs/ev_20150617_co06_en.pdf), accessed 24 July 2015).
45. В России увеличен до 45 лет предельный возраст врачей, получающих «сельские подъемные» [Russia increases the age limit for doctors receiving “rural lifting” to 45 years] [online news report]. Moscow: medportal.ru; 2014 (<http://medportal.ru/mednovosti/news/2014/12/02/039village/>, accessed 24 July 2015).
46. Ireland takes action to build international partnerships and strengthen health workforce development [online news report]. Geneva: World Health Organization; 2015 ([http://www.who.int/workforcealliance/media/news/2015/ireland\\_strengthen\\_dev/en/](http://www.who.int/workforcealliance/media/news/2015/ireland_strengthen_dev/en/), accessed 24 July 2015).

47. Nelson S, Turnbull J, Bainbridge L, Caulfield T, Hudon G, Kendel D et al. Optimizing scopes of practice: new models for a new health care system. Ottawa: Canadian Academy of Health Sciences; 2014 ([http://www.caahs-acss.ca/wp-content/uploads/2014/05/Optimizing-Scopes-of-Practice\\_-\\_Executive-Summary\\_E.pdf](http://www.caahs-acss.ca/wp-content/uploads/2014/05/Optimizing-Scopes-of-Practice_-_Executive-Summary_E.pdf), accessed 24 July 2015).
48. Bruyneel L, Baoyue L, Aiken L, Lesaffre E, Van den Heede K, Sermeus W. A multi-country perspective on nurses' tasks below their skill level: reports from domestically trained nurses and foreign-trained nurses from developing countries. In: Buchan J, Wismar M, Glinos I, Bremner J, editors. Health professional mobility in a changing Europe. New dynamics, mobile individuals and diverse responses. Vol. II. Copenhagen: WHO Regional Office for Europe; 2014:251–66 (Observatory Studies Series 32; [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1), accessed 24 July 2015).
49. Hukkanen E, Vallimies-Patomäki M. Cooperation and division of labour in securing access to care. A survey of the pilot projects on labour division carried out within the National Care project. Helsinki: Ministry of Social Affairs and Health; 2005.
50. Delamaire M, Lafortune G. Nurses in advanced roles: a description and evaluation of experiences in 12 developed countries. Paris: OECD; 2010 (OECD Health Working Papers, No. 54; [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=delsa/hea/wd/hwp\(2010\)5&doclanguage=en](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=delsa/hea/wd/hwp(2010)5&doclanguage=en), accessed 24 July 2015).
51. Nurses: a force for change. Care effective, cost effective. Geneva: International Council of Nurses; 2015 (<http://www.icn.ch/publications/2015-nurses-a-force-for-change-care-effective-cost-effective/>, accessed 24 July 2015).
52. Solé M, Panteli D, Risso-Gill I, Döring N, Busse R, McKee M et al. How do medical doctors in the European Union demonstrate that they continue to meet criteria for registration and licencing? *Clin Med* 2014;14(6):633–9.
53. Charter proposed by Belgian development cooperation actors on the recruitment of and support for the development of human resources for health (HRH) in partner countries. Final version, 25 July 2012. Brussels: Be-cause Health; 2012 ([http://www.be-causehealth.be/media/37374/RHCharter%20English\\_FINAL%20revised%20accepted.pdf](http://www.be-causehealth.be/media/37374/RHCharter%20English_FINAL%20revised%20accepted.pdf), accessed 24 July 2015).
54. Health workforce shortages and international mobility in the EU. An overview of three cross-cutting trends from the perspective of the WHO code of practice and its implementation in the region. Brussels: HealthWorkers4all; 2014 (<https://interact.healthworkers4all.eu/display/PUB/HW4All%3A+Key+documents#>, accessed 24 July 2015).
55. Collection of case studies. Practices of WHO code implementation in Europe: the role of non-governmental actors. Brussels: HealthWorkers4all; 2015 (<https://interact.healthworkers4all.eu/display/PUB/HW4All%3A+Key+documents#>, accessed 24 July 2015).
56. Health workers for all and all for health workers. Brussels: HealthWorkers4all; 2013 (<http://www.medicusmundi.org/en/contributions/campaigns/2013/health-workers-for-all-and-all-for-health-workers>, accessed 24 July 2015).
57. HW4All collaboration platform: open section [website]. Brussels: HealthWorkers4all; 2015 (<https://interact.healthworkers4all.eu/display/PUB>, accessed 24 July 2015).
58. European call to action: a health worker for everyone, everywhere! [website]. Basel: Medicus Mundi International Network; 2014 (<http://www.medicusmundi.org/en/contributions/news/2014/european-call-to-action-launched-a-health-worker-for-everyone-everywhere>, accessed 24 July 2015).

## 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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