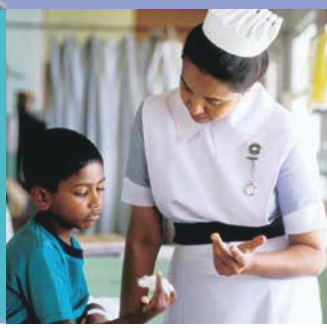
High-Level Commission on
Health Employment
and Economic Growth

WORKING FOR HEALTH AND GROWTH

Investing in the health workforce





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Acknowledgements

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Finally, the Commission is grateful to the ILO, OECD and WHO secretariat for efficiently supporting its proceedings.

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Acronyms and abbreviations

GDP	gross domestic product
ICT	information and communications technology
ILO	International Labour Organization
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization

FOREWORD

We are pleased to express our commitment to achieving the 2030 Agenda for Sustainable Development through the contribution of this High-Level Commission on Health Employment and Economic Growth.

There is a unique opportunity that we collectively need to seize; despite the economic downturn, the demands on the global health labour market keep on increasing. As the world's population grows, people need better access to safe, quality health care, as well as long-term employment. These aspirations to a longer life in better health are reinforced by rising living standards, longer lifespans and new technologies. The social and health sectors will have to play a greater role in our economies, and we will need collectively to increase health employment.

With the Ebola outbreak in West Africa, we have seen how inaction and chronic underinvestment can compromise human health, and also lead to serious economic and social setbacks. Investing in health workers is one part of the broader objective of strengthening health systems and social protection and essentially constitutes the first line of defence against international health crises. Complementing monitoring and crisis response mechanisms, health workers are the cornerstone of a resilient health system. We need these "Everyday Heroes" to meet these needs and expectations.

This is precisely what this report is about and why it is so very timely. By encouraging the creation of new jobs in the health sector globally, we strongly believe there is a unique opportunity both to respond to the growing global demand for health workers and to address the projected shortages. This is the only way to achieve universal health coverage. Beyond the benefits for

public health, the social and health sectors will generate decent, inclusive and sustainable jobs, with substantial gains in social protection, human security, equity and human rights, as well as for women and youth's economic empowerment. It is an important aspect of social cohesion in our countries and we care deeply about it.

As co-chairs of this Commission, we commit to convincing our fellow Heads of State of the pressing need for strong mobilization in favour of enhancing the health workforce as well as health employment in order to contribute to the 2030 Agenda, universal health coverage and inclusive economic growth.

We invite all stakeholders to join us in implementing our ten recommendations and to integrate these in their national, regional and international plans. We need to align our efforts with other related plans if we are to achieve the Sustainable Development Goals.

We thank each and every Commissioner for their outstanding contribution to this work.

Finally we also thank you, our reader. You are now part of a global movement, and we are looking forward to our future collaboration.

François Hollande
President of France

Jacob Zuma
President of South Africa

FOREWORD

This Commission proposes ambitious solutions to ensure that the world has the right number of jobs for health workers with the right skills and in the right places to deliver universal health coverage.

These solutions are not only essential to improving health, they provide a unique opportunity to amplify gains across the 2030 Agenda for Sustainable Development—in poverty reduction, quality education, decent work, inclusive economic growth and gender equality. Achieving universal health coverage requires more workers in decent jobs, which can create many new opportunities especially for women and youth.

We need to change the way we invest in and achieve equity and prosperity for all. Business as usual is untenable. To address deepening mismatches and inequities in the health workforce, the solutions proposed by this Commission carry the potential for once-in-a-generation investments in the health sector as a key sector for our economies, our societies and the international community.

No single agency and no single sector can implement the changes required to achieve a fit-for-purpose health workforce in the context of persistently high unemployment and under-employment in many countries, and amid the major demographic, technological and socioeconomic changes occurring across all countries. Political will, leadership, intersectoral action and international partnerships will be critical to success. We acknowledge the United Nations Secretary-General's leadership in establishing this Commission. In doing so, the United Nations has set the stage for discussions and proposed actions to go beyond the boundaries of a traditional health agenda, towards an integrated agenda for health, employment and inclusive economic growth.

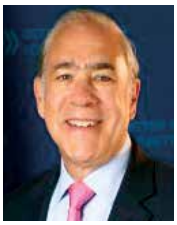
Working together on this Commission has deepened the collaboration between the International Labour Organization, the Organisation for Economic Co-operation and Development and the World Health Organization, creating a platform for even more effective new ways of cooperating to intensify support for national, regional and international investments and intersectoral reforms. This Commission also

recognizes, and has actively sought and benefited from alignment with, the work of other high-level panels and commissions established by the UN Secretary-General.

We appreciate the work of all those who have contributed to the evidence-based, intersectoral and consultative process of the Commission, including the Expert Group who summarized effectively the evidence and proposed policy options, the authors of 17 policy briefs that informed the work of the Expert Group, the authors of 149 public submissions to the Call for Contributions, consultation participants and the staff of our agencies.

We are committed to doing our utmost to promote the implementation of the recommendations put forward by the Commission, including by contributing to the development of the implementation plan. We look forward to working with UN agencies, financing institutions, governments, health professional associations, trade unions, civil society, academia, the private sector and other stakeholders to charter a bold shift in vision, policy and action, one that reflects and seizes the scale of opportunities for transformation that this Commission proposes.

Mr Guy Ryder
Director-General
International Labour Organization



Mr Angel Gurría
Secretary-General
Organisation for Economic Co-operation and Development

Dr Margaret Chan
Director-General
World Health Organization

EXECUTIVE SUMMARY

The High-Level Commission on Health Employment and Economic Growth was established by United Nations Secretary-General Ban Ki-moon in March 2016. Its task: to make recommendations to stimulate and guide the creation of at least 40 million new jobs in the health and social sectors, and to reduce the projected shortfall of 18 million health workers, primarily in low- and lower-middle-income countries, by 2030.

The Commission sees a major opportunity to foster political commitments and to make gains across several Sustainable Development Goals, including SDG 1 (poverty elimination), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 5 (gender equality) and SDG 8 (decent work and economic growth). The Commission aims to inspire action by drawing the attention of the international community to the social and economic benefits of investing in the health workforce, locally and globally.

Six months of intensive work and productive discussions, first among the Expert Group and then among the Commissioners, facilitated by ILO, OECD and WHO, have led to this report, which presents our case for more and better investment in the health workforce.

The health workforce: a good investment

The health sector is a key economic sector and a job generator. The aggregate size of the world's health sector is over US$ 5.8 trillion per year. Across the OECD countries, employment in health and social work grew by 48% between 2000 and 2014, while jobs in industry and agriculture declined. Demand for health services will continue to increase, creating millions of new jobs. Available estimates suggest that globally each worker trained in a health occupation is supported by one to two other workers.

Economic growth and development depends on a healthy population. Around one quarter of economic growth between 2000 and 2011 in low- and middle-income countries is estimated to result from the value of improvements to health. The returns on investment in health are estimated to be 9 to 1. One

extra year of life expectancy has been shown to raise GDP per capita by about 4%. In countries with high fertility rates, a reduced likelihood of child mortality can also positively influence household decisions on family planning. This contributes to a faster demographic transition and its associated economic benefits, often called the demographic dividend.

Investments in the health system also have multiplier effects that enhance inclusive economic growth, including via the creation of decent jobs. Targeted investment in health systems, including in the health workforce, promotes economic growth along other pathways: economic output, social protection and cohesion, innovation and health security.

But the world faces a global shortage of health workers. Lack of skilled labour constrains job creation in the health sector. With the right policies in place, investment in education and job creation in the health sector will contribute to promoting inclusive economic growth.

The Commission makes ten recommendations that should be read in the context of efforts to strengthen health and social protection systems as well as broader initiatives to implement the 2030 Agenda for Sustainable Development and to meet the targets of the SDGs. All recommendations require the upholding of rights, good governance, political commitment and intersectoral and multistakeholder cooperation.

Recommendations to transform the health workforce for the SDGs

Six recommendations relate to what needs to be changed in health employment, health education and health service delivery to maximize future returns on investments.

1 JOB CREATION

Stimulate investments in creating decent health sector jobs, particularly for women and youth, with the right skills, in the right numbers and in the right places.

The Commission calls for urgent action to develop labour market policies to foster the demand for a sustainable health workforce. Government policies are needed to address the systemic issues that result in significant health labour market and public failures.

2 GENDER AND WOMEN'S RIGHTS

Maximize women's economic participation and foster their empowerment through institutionalizing their leadership, addressing gender biases and inequities in education and the health labour market, and tackling gender concerns in health reform processes.

As the health sector is a growing employer of women, it can greatly contribute to gender equality. Today women are the main providers of care, including in humanitarian crises and conflict settings. Yet gender biases, physical and sexual violence and harassment remain important challenges for health workers.

3 EDUCATION, TRAINING AND SKILLS

Scale up transformative, high-quality education and lifelong learning so that all health workers have skills that match the health needs of populations and can work to their full potential.

All countries can do more to prioritize investments in education. Education models should shift away from narrow specializations to focus on lifelong building of locally relevant competencies. Generally, there is a need to relax unnecessary barriers to entry. Addressing geographical inequities is a priority and demographic transitions present opportunities to strengthen youth education for employment in the health sector. Evidence reinforces the effectiveness of community-based health workers, including health professionals as well as other cadres.

4 HEALTH SERVICE DELIVERY AND ORGANIZATION

Reform service models concentrated on hospital care and focus instead on prevention and on the efficient provision of high-quality, affordable, integrated, community-based, people-centred primary and ambulatory care, paying special attention to underserved areas.

Health systems organized around clinical specialities and hospitals will need to shift towards prevention and primary care. There is no prescription for a perfect mix of public and private health-care provision. Governments should adopt policies that cover the performance of the whole sector. Social business models are emerging as a private-sector, socially oriented solution to serve the unserved. Public policies and regulatory bodies must protect the interests of the public and ensure that professional interests do not dominate.

5 TECHNOLOGY

Harness the power of cost-effective information and communication technologies to enhance health education, people-centred health services and health information systems.

Rapidly changing technologies are already changing the nature of health services. New cadres of health workers are emerging, enabled by information and communication technologies. Digital technologies also provide opportunities to enhance people's access to health services, improve the responsiveness of health systems to the needs of individuals and communities, and improve the delivery of a wide range of health services.

6 CRISES AND HUMANITARIAN SETTINGS

Ensure investment in the International Health Regulations core capacities, including skills development of national and international health workers in humanitarian settings and public health emergencies, both acute and protracted. Ensure the protection and security of all health workers and health facilities in all settings.

Each country should build the capacity of its health workforce and health systems to detect and respond to public health risks and emergencies. In fragile and conflict settings, public health crises also exacerbate countries' existing shortcomings for providing basic health and social care to their citizens. Furthermore, health workers and facilities have become deliberate targets in conflict settings.

Recommendations to enable change

Our second set of recommendations focuses on how to enable the necessary changes.

7 FINANCING AND FISCAL SPACE

Raise adequate funding from domestic and international sources, public and private where appropriate, and consider broad-based health financing reform where needed, to invest in the right skills, decent working conditions and an appropriate number of health workers.

Most countries can secure sustainable health financing, assuming continuing growth in public revenue, with necessary priority to the health workforce. Societal dialogue and political commitment are critical to drive appropriate macroeconomic reforms and health financing policies. Public policies can also attract co-investments by the private sector. But there is likely to be insufficient market demand to create jobs to achieve the SDGs in low-income and fragile countries. The Commission believes collective action on financing should be taken in those countries.

8 PARTNERSHIP AND COOPERATION

Promote intersectoral collaboration at national, regional and international levels; engage civil society, unions and other health workers' organizations and the private sector; and align international cooperation to support investments in the health workforce, as part of national health and education strategies and plans.

Achieving a fit-for-purpose health workforce requires actions across all sectors involved with the health labour market. These intersectoral processes must engage public and private sectors, civil society, trade unions, health worker associations, nongovernmental organizations, regulatory bodies and training institutions. The Commission believes the role of official development assistance can help operationalize the SDGs and supports national and international accountability mechanisms.

9 INTERNATIONAL MIGRATION

Advance international recognition of health workers' qualifications to optimize skills use, increase the benefits from and reduce the negative effects of health worker migration, and safeguard migrants' rights.

Demand in high- and middle-income countries is likely to continue to drive health worker migration in the years ahead. The Commission recognizes that the international mobility of health workers may bring numerous benefits to source and destination nations and health workers themselves. However, the adverse effects of migration must be mitigated. An updated broader international agreement on health workforce migration should include provisions to maximize mutuality of benefit.

10 DATA, INFORMATION AND ACCOUNTABILITY

Undertake robust research and analysis of health labour markets, using harmonized metrics and methodologies, to strengthen evidence, accountability and action.

Institutional capacity to analyse data is needed for labour market analysis and research. The strength of the data architecture depends on the active engagement of communities, health workers, employers, training institutions, and professional and regulatory bodies. ILO, OECD and WHO have a key role to play in establishing a set of harmonized metrics to transparently monitor trends of the health labour market.

IMMEDIATE ACTIONS

Implementing the Commission's ten recommendations will require game-changing interventions to challenge the status quo and alter the current trajectory. There is no time to lose. While the work of the Commission concludes with this report, we will do all we can to ensure implementation begins without delay. To that end we advocate the following actions are undertaken between October 2016 and March 2018.

Political leaders take this report into national, regional and international decision-making forums and all stakeholders make clear commitments towards implementing the recommendations.

The **UN Secretary-General** considers establishing an appropriate global framework for independent accountability across the SDGs, and ensures that it includes our recommendations.

National governments, led by ministries of health, education, employment and finance:

- develop intersectoral action plans for and commit budgetary resources to transformative education, skills and job creation;
- accelerate the progressive implementation and reporting of National Health Workforce Accounts.

The **international community** supports and makes financial commitments to the massive scaling up of professional, technical and vocational education and training that is required in low-income countries.

ILO, OECD, WHO and relevant partners:

- develop a five-year implementation plan for the ten recommendations;
- take further action on national, regional and international commitments and advocacy;
- establish an interagency global data exchange on the health labour market hosted by the Global Health Observatory;
- develop an international platform on health worker mobility.

The Commission's vision is for an expanded, transformed and sustainable health workforce to improve health outcomes, well-being, equity and social cohesion, and foster inclusive economic growth. Addressing 21st century health challenges related to demographic, epidemiological and technological changes will require a health workforce geared towards health promotion, disease prevention, and people-centred, community-based health services.

Heads of state and governments are urged to lead the reform of the health workforce, taking actions for the benefit of all citizens and engaging all stakeholder groups towards the achievement of universal health coverage. This report is presented to contribute to that reform.

CHAPTER 1

INTRODUCTION

The Sustainable Development Goals (SDGs), born in a period of new worldwide threats and instabilities, offer an ambitious agenda for revitalizing political commitments to human well-being for future generations as well as our own. With its pledge to leave no one behind and its commitment to inclusivity, the 2030 Agenda for Sustainable Development (2030 Agenda) is designed to ensure that development is not only sustainable but also equitable, enabling access to its dividends, including health, education and employment, for everyone.

Recent macroeconomic thinking converges with the 2030 Agenda. In response to the current economic climate, the United Nations (UN), the International Monetary Fund, the G20, the G7 and many other international bodies are urging governments to relax austerity measures in favour of fiscal expansion policies, prioritizing investment in job creation as a means to generate inclusive economic growth.[1] This should resonate with politicians: jobs are a high priority for most voters, and job creation contributes significantly to poverty reduction, economic empowerment, gender equality, social justice and human security. The health and social sectors are large and growing sources of jobs.

Health employment is, therefore, a key pathway not only to better health (SDG 3), but also to decent work[2] and economic growth (SDG 8), and a major opportunity to progress towards several other SDGs. This is the starting point for the High-Level Commission on Health Employment and Economic Growth, established by UN Secretary-General Ban Ki-moon in March 2016. The Commission's goal is to stimulate and guide the creation of at least 40 million new jobs in the health and social sectors, and to reduce the projected shortfall of 18 million health workers, primarily in low- and lower-middle-income countries, by 2030 (see Annex 1 for the terms of reference).

Health workers are the backbone of strong, resilient health systems. Universal health coverage[3] and guaranteed global health security are only possible with adequate investment in the health workforce. Health workforce shortages are increasing the inequities in access to health services, causing preventable illness, disability and death, and threatening public health, economic growth and development, as starkly demonstrated by the Ebola outbreak in West Africa.

The global health workforce crisis came to the world's attention in 2004 in the Joint Learning Initiative's landmark report[4] and it was the subject of the *World health report 2006*.[5] In 2007 the Oslo Ministerial Declaration and agenda for action[6] included human resources for health; this was the first report from the Global Health and Foreign Policy initiative, which requested the UN

Secretary-General to set up this Commission.[7] Despite progress from more than a decade of work on human resources for health (Annex 2), global demand for health workers still far outstrips supply, and the gap is growing every year.

The Commission aims to make health employment and education top priorities of political leaders around the world and inspire action by framing health as an economy as well as a system. We show how a dynamic health labour market fosters education and jobs, especially for women and young people. We produce new evidence and highlight the potential political, social and economic benefits of creating decent jobs in the health and social sectors. And we take a broad intersectoral approach to health workforce issues, involving the finance, labour, education, health and social care sectors. Thus our recommendations add value to ongoing efforts, including the implementation of the *Global strategy on human resources for health: workforce 2030*.[8] They also complement those of other high-level panels and commissions set up by the UN Secretary-General to explore the financing of education, women's economic empowerment and the private sector's contribution to the SDGs, among other initiatives to implement the 2030 Agenda.

By positioning the health economy as a force for inclusive economic growth the Commission hopes to tackle two major challenges. The first is changing the mindset of those political leaders, policymakers and economists who still view health employment as a burden on the economy: inefficient, resistant to gains in productivity and an expense to be stringently controlled. Health employment is often misconstrued as "consumption" as opposed to "investment", thus creating an unhelpful dichotomy. The second is convincing governments and relevant stakeholders that the current situation is untenable, and that greater investment in relaxing health workforce demand and supply constraints and engaging structural reforms to health employment, education and service delivery are urgently required. Reforms include government intervention to remedy the public and market failures that are root causes of the shortage of health workers, and the reason why, where workers are present, many lack the skills required to meet the needs of the people and communities they serve. Insecure jobs, bad working conditions and inequitable geographic distribution of health workers contribute to ineffective health services and poor health outcomes.

Six months of intensive work and productive discussions, first among the Expert Group and then among the Commissioners, facilitated by the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD) and the World Health Organization (WHO), have led to this report. The main input was the final report of the Expert Group,[9] which summarized the evidence, including 17 policy briefs and 149 public submissions to the Call for Contributions, and proposed policy options. Chapter 2 makes the case for investing in the health workforce. Chapter 3 describes what needs to be changed in health employment, health education and health service delivery to maximize future returns on investments, and why. Chapter 4 focuses on how to enable those changes. The final chapter sets out actions to begin implementing the Commission's recommendations.

CHAPTER 2

THE HEALTH WORKFORCE: A GOOD INVESTMENT

The health sector is a key economic sector, a job generator and a driver of inclusive economic growth. Growing evidence suggests that adequate investment in the health system and its workforce can offer high economic returns.

Investments that increase the overall productivity of the health sector and produce better health outcomes are a cornerstone for building strong health systems and stronger economies. This chapter elaborates on three points. First, good health contributes to economic growth. Second, there are important additional pathways by which investments in the health system have spill-over effects that enhance inclusive economic growth, including job creation. Third, new evidence suggests that expenditures on health are not dead-weight drags on the economy, but rather can be associated with productivity gains in other sectors.

Good health: a key pathway to economic growth and development

Economic growth and development depend on a healthy population. The Lancet Commission on Investing in Health, led by former United States Treasury Secretary and Chief Economist of the World Bank, Lawrence Summers, reported that around one quarter of economic growth between 2000 and 2011 in low- and middle-income countries resulted from the value of improvements to health. The return on investment in health was estimated to be nine to one.[10]

Poor health in early life can hinder cognitive development and worsen educational outcomes. Malnourished and stunted children tend to score lower on tests of cognitive function, and have poorer motor skills and psychomotor development. Children and adolescents with poor health have worse educational outcomes because they are more often absent from school, and are more likely to drop out of school altogether. Studies have estimated that iron deficiency in young infants reduced income by 2% of GDP in Honduras and 7.9% of GDP in Bangladesh.[11] A 1% loss in adult height due to childhood stunting is associated with a 1.4% loss in economic productivity[12] and stunted children earn 20% less as adults than non-stunted individuals.[13]

Adults in poor health are more likely to be unemployed, are less productive when they do work and earn less. For instance, people with illness or disability in the

United Kingdom are twice as likely to be unemployed, often due to stigma or lack of appropriate employment conditions.[14] In addition, many employees are less productive at work than they could be (presenteeism) because of poor health. Presenteeism at work is estimated to cost the United States economy US$ 150 billion a year.[15] Globally, depression and anxiety lead to 15 billion lost days of work every year, at an estimated annual cost of US$ 1.15 trillion.[16] People in poor health have lower wages at all ages, with the wage gap expanding over the life-course. In 21 European countries the gap in hourly earnings reached almost US$ 10 (purchasing power parity) for older male workers.[17]

Good health has economic benefits that go beyond the individual. Better population health can encourage greater domestic savings and foreign investment and can improve social stability. In countries with high fertility rates, a reduced likelihood of child mortality can also positively influence household decisions on family planning. This contributes to a faster demographic transition and its associated economic benefits, often called the demographic dividend.[18] Taken together, better health can have substantial impacts on economic growth. One study found that one extra year of life expectancy raised steady-state GDP per capita by about 4%.[19]

How health systems and the health workforce contribute to economic growth

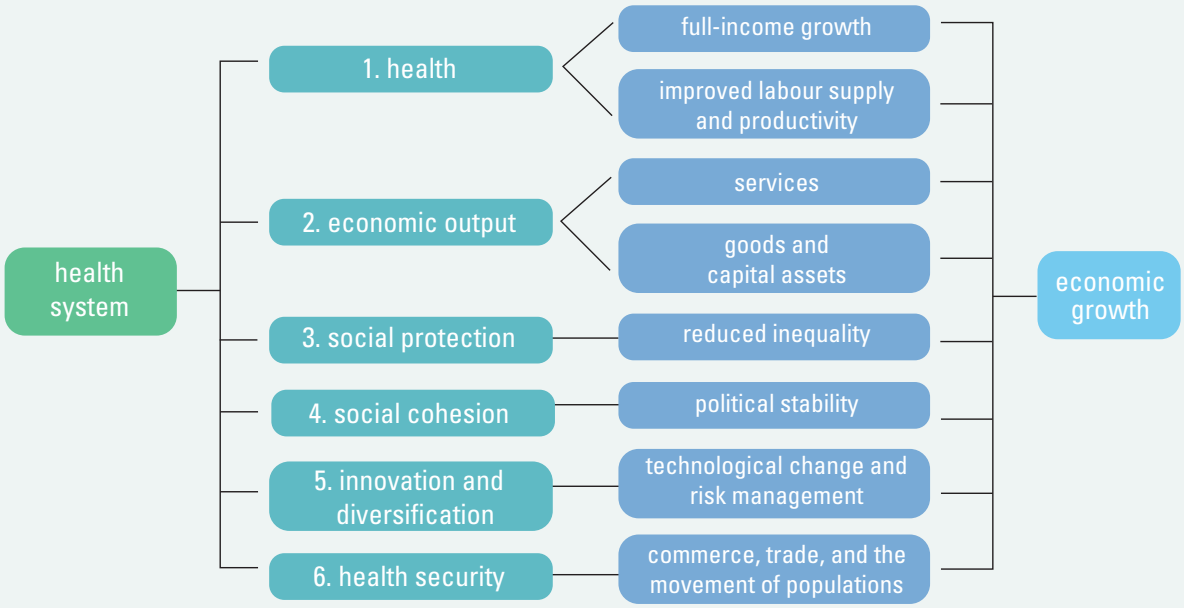
In addition to playing a fundamental role in achieving improvements in health outcomes and population well-being, targeted investment in health systems, including in the health workforce, can promote economic growth along other pathways. A background paper for the Commission analysed six pathways leading to economic growth (Figure 1): health, economic output, social protection, social cohesion, innovation and diversification and health security.[20]

The economic output pathway reflects the fact that the health sector delivers direct economic value through its multiplier effects on the wider economy: establishing infrastructure and facilities, purchasing equipment, supplies (particularly pharmaceuticals) and technologies, and building skills through education and training. This translates into direct manufacturing and services outputs and more jobs.[20] Estimates in developed economies suggest that each dollar spent in the health sector results in an additional US$ 0.77 contribution to economic growth as a result of indirect and induced effects.[21] The health sector as the "health economy" plays an increasingly important role in inclusive economic growth, and therefore in sustainable development (Box 1).

The social protection pathway shows the route by which investing in decent jobs in the health sector can contribute to enhancing social protection systems.[24,21] These include, for instance, social protection in case of sickness, disability, unemployment and old age, and financial protection against loss of income, out-of-pocket payments and catastrophic health expenditures, whether through social insurance or through publicly funded systems. In practical terms, social

Figure 1.

Pathways to economic growth



Note: For simplicity feedback loops have been omitted; the pathways are neither linear nor unidirectional.
Source: Lauer et al.[20]

Box 1.

The health economy

How large is the world's health sector, in economic terms? The answer to this question is an important starting point for understanding the size of the health economy. Calculated using OECD estimates[22] of the share of health expenditure in GDP, along with recent World Bank estimates of economic output,[23] the aggregate size of the world's health sector is substantial. For example, at over US$ 5.8 trillion per year, the combined health sector of the OECD's 34 member countries is larger, in terms of economic output, than that of any country in the world, except the United States and China. However, these country-specific figures account only for goods and services *billed* in the health sector, and therefore do not include goods and services related to the nutritional, sports and fitness industries, pharmaceuticals, medical devices and equipment for export, receipts from over-the-counter medicines, expenditures on home care services, and induced demand in other sectors, all of which are important parts of the broader health economy. The expanded health economy in Germany, for example, is estimated to contribute nearly 11% of gross value added (an estimate comparable to the above figures) and an *additional* 8% in terms of indirect and induced effects.[21]

protection means principles (e.g. equity) and rules (e.g. legislation) that guarantee access to, among other benefits, health services. These social protection benefits reduce key drivers of impoverishment and economic vulnerability and foster consumption and saving, thereby promoting both economic growth and its sustainability.[25–28]

The social cohesion pathway reflects the fact that reducing inequality in societies contributes to greater political stability, which is an important condition for economic growth.[29,30] The provision of health services to all is a vital element in delivering greater equity in society, together with decent jobs for women, young people and the poorest.

The innovation and diversification pathway illustrates how some countries have invested in their health sector specifically to promote economic growth. The health sector has been driving technological innovations in many areas, including genetics, biochemistry, engineering and information technology. Exports of pharmaceuticals, equipment and medical services have also been an important driver of growth in many countries.[31]

Finally, the health security pathway shows that investments in the health workforce can create the resilient health systems that are essential to protect a country's economy from epidemic threats and from instability due to conflicts.[20] Increasing health worker numbers and improving their skills will ultimately support emerging economies by insulating them from health- or socially generated shocks, which lead to disruptions in trade, commerce and

Box 2.

The cost of inaction

Failure to invest in and reform the global supply of qualified health workers to meet both current and projected needs will result in the continuation of inefficiencies in health care, such as the avoidable annual cost to health care of US$ 500 billion caused by the lack of responsible use of medicines.[37] Inequities in health and access to health care will also persist, undermining economic growth. Moreover, social protection benefits deriving from employment, which reduce impoverishment and economic vulnerability, will be denied to large portions of the population. Inequalities will rise, and social cohesion will be adversely, even catastrophically, affected. For example, out-of-pocket health expenditures have been estimated to drive 150 million people into poverty worldwide every year.[38] In addition, inequality has a direct negative effect on growth, and very small reductions in income inequality have been found to lead to increases in long-term growth of around 0.1% of GDP per year.[27] Finally, health security will suffer. For example, the overall fiscal impact of the Ebola pandemic has been high, leading to declining revenues, increasing Ebola-related and health expenditures, and exacerbating fiscal deficits. The deficits in 2015 are estimated at 9.4% of GDP in Guinea, 8.5% in Liberia and 4.8% in Sierra Leone.[39] In this avoidable dystopia, the cumulative costs, economic and otherwise, borne by societies will be tremendous.

food production and population movements.[32–36] The cost of inaction can be understood by reference to each of the pathways in Figure 1 (Box 2).

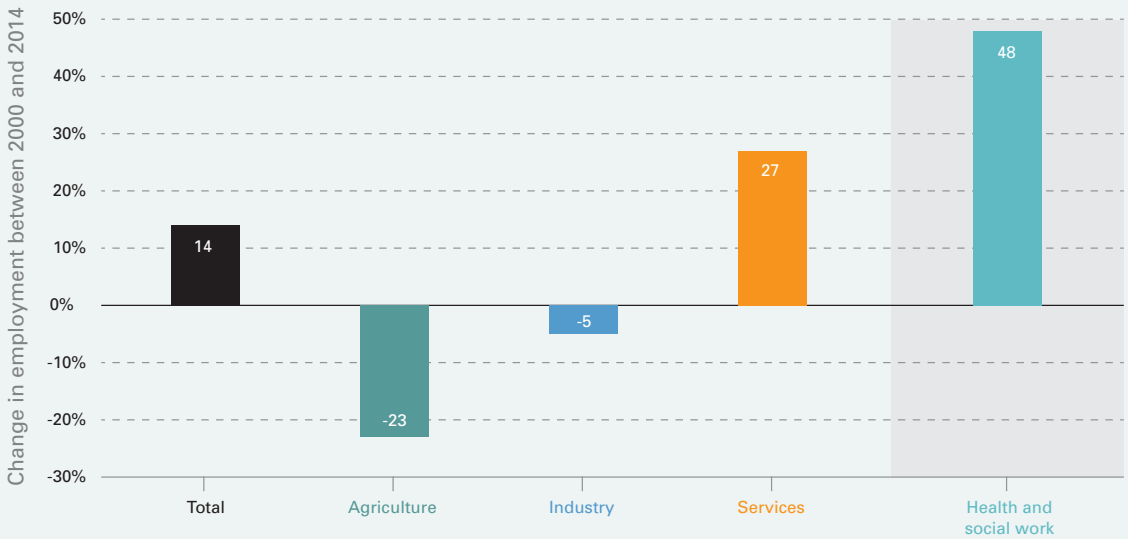
The health sector: a key economic sector and a major source of decent jobs

The health economy is a major and growing source of employment. Following the economic crisis of 2008 and subsequent worldwide economic slowdown, the rapid employment growth in the health and social sectors contrasts markedly with other sectors. Across OECD countries, employment in health and social work grew on average by 48% between 2000 and 2014 (Figure 2). In the same period most countries saw a decline in the number of jobs in agriculture and industry.

Generally, employment in the health and social sectors is substantial and continues to grow. Health and social workers constituted around 11% of total employment for OECD countries in 2014, rising from approximately 9% in 2000.[40] Estimates by Statistics Norway suggest that up to 38% of Norway's workforce might work within the health sector by 2060.[41] China, with a current health workforce of nearly 10 million, shows shortages and slow growth according to global and income-group norms.[42] A 2016 report suggests that health care will generate 7.5 million direct job opportunities in India by 2022.[43] The traditional and complementary medicine workforce may form a substantial component of the health workforce in many countries. For example, in India there are over 736 000 Ayurveda, yoga, Unani, Siddha and homeopathy (AYUSH)

Figure 2.

Employment growth by sector between 2000 and 2014 (or latest year), OECD average



Source: James.[40]

practitioners.[44] Available estimates suggest that globally each worker trained in a health occupation is supported by one to two other workers (in administration, insurance, finance, cleaning and food services, information technology and transportation, for example).[45]

Estimates of the global health workforce vary according to the occupations or workers that are counted (Box 3). In OECD countries 58.5 million people were working in the health and social sectors in 2013.[40] A total of 43.5 million health workers were directly engaged in the provision of health services in 2013,[46] with over 200 million workers estimated to be contributing to the health and social sectors globally (including unpaid personal care workers, private sector providers, cleaners and caterers).[47] In this report the terms "health employment" and "jobs in the health sector" cover the public, private not-for-profit and private for-profit sectors.

The demand for health workers is expected to increase in the coming years, with around 40 million new health worker jobs created by 2030, particularly in high- and middle-income countries.[48] This reflects several factors. The world population will continue to increase, fuelling the need for women's and children's health services; Africa's population is expected to double over the next two decades. Over time, rising incomes, health expenditure and new technologies will increase expectations of the quality and scope of care, with consequent impacts on staffing requirements in the health sector. Epidemiological profiles are likely to evolve with the rise of lifestyle-related conditions and noncommunicable diseases, and the emergence of new disease threats and conditions linked to climate and other environmental changes.

Ageing populations will also change the pattern of demand for health and social services. This has multiple consequences. Meeting greater demand for

Box 3.

Defining health employment

International standards guide the categorization of the occupations and industries in which people work. The International Standard Classification of Occupations and the International Standard Industrial Classifications enable the counting of jobs using either an occupation approach or a sector approach. Labour Force Surveys limit the definition of employment to those working for "pay or profit". To understand the magnitude of "health employment" it is important to count not only those with specific health-related skills, but also the wider group of workers employed in the health and social sectors and in those industries that support them.

ILO defines health workers broadly, to include those working both within and outside of the health and social sectors, whether paid or unpaid. OECD's definition and data capture all people working in specific health occupations in the health and social sectors. This is narrower than the ILO definition in that it does not include unpaid workers. WHO defines health workers as all those engaged in action whose primary intent is health.

long-term care services, which are particularly labour-intensive, will require optimizing the skill-mix and scopes of practice of existing types of health workers and exploring new types of health workers to promote healthy ageing and manage a growing number of people living with chronic conditions. Both are likely to result in increased job opportunities.

Jobs in the health and social sectors tend to be inclusive of women, and the demographic and epidemiological transitions are likely to further increase demand for women's contributions to health and social care. Women drive wealth creation through their employment in the health economy. In a sample of 123 countries, women make up 67% of employment in the health and social sectors compared with 41% of total employment.[49] However, women's employment, especially in health-care related work, is often not measured and not valued appropriately.

An additional 2% GDP investment into education and health and social services could increase overall employment rates by between 2.4 and 6.1 percentage points.[50] It is estimated that women will take between 59% and 70% of the jobs created by such investment, increasing the rate of women's employment by 3.3% to 8.2%.[50] Similar investments in other industries, such as construction, would create only half as many jobs and would probably increase rather than decrease gender gaps.

Young people, too, can benefit from the creation of decent jobs in the health sector. Sub-Saharan Africa has the largest proportion of young people in the world: over 70% of its population were aged below 30 in 2012.[51] Global youth unemployment stood at 13% between 2012 and 2014; two in five economically active young people are either underemployed or working but living in poverty.[52] Indeed, poverty among young people is increasing relative to other age groups in many countries. Growing youth vulnerability and marginalization not only undermines their potential but could also fuel social instability. Increasing young people's access to decent jobs and social protection is vital for social cohesion.

In addition to providing jobs for women and young people, investment in the health sector has at least two other significant employment-related benefits. First, health and social services are important sources of jobs in rural and remote locations, unlike many other sectors where work opportunities are concentrated in large cities and commercial centres. Second, investment in strengthening health systems creates jobs in many other sectors and public services. For example, the health sector is one of many that are water-dependent. Improving water and sanitation infrastructure in hospitals, health facilities and educational institutions and fulfilling the human right to water and sanitation are prerequisites for the creation of decent work and ensuring the occupational health, safety and well-being of health workers. And by default, investments in infrastructure and operations of water-related services can provide additional high returns for economic growth through direct and indirect job creation.[53] Transportation, electricity, construction and information and communication technology are other examples.

Maximizing economic returns from investments in the health workforce

The social returns of investments in health and social services are especially high in situations of underemployment. Today the world is facing a twin crisis of high youth unemployment rates and a global shortage of health workforce skills. Most countries, including some high-income countries, do not currently produce the numbers of health workers they need. With high demand and insufficient supply, health worker migration has been increasing. There are skills mismatches and inequities with populations in rural and remote areas typically underserved. In many low- and middle-income countries unqualified health workers deliver a significant percentage of health services. In India, for example, half of all patients are treated by providers without appropriate clinical skills.[54]

Investments in the health sector can be productive. Healthier workers are more productive—so an improvement in health has a supply side benefit to the economy. When the economy is not at full employment, public expenditures have a demand side benefit, with a multiplier effect on the economy. The overall social benefits from increased investments in the health workforce are likely to be particularly large, larger than in many other areas of public expenditure, as social collective returns to investments in health are larger than private returns.

The labour-intensive nature of the health sector implies however that productivity growth may lag, as labour cannot easily be replaced by capital inputs, known as the Baumol, or cost-disease effect (Box 4). In 2008 and 2011, studies in a group of OECD countries found some evidence in support of this argument.[55,56] However, the strength of this effect varies between countries, with some evidence suggesting that its effect may be less pronounced in low- and middle-income countries. For example, a 2016 World Bank report[57] found evidence that (1) health expenditures are not driven by increases in wages in excess of productivity growth, a finding that contradicts Baumol and conventional thinking, and (2) productivity gains in sectors such as manufacturing, derived from larger health employment, can be significant (i.e. health sector development has a greater effect on manufacturing than financial services development).[58] These findings suggest the potential high value of investment in the health workforce. In addition, investment in health research has a major impact by improving the productivity of the health sector and of the whole economy.

Box 4.

William Baumol's cost-disease theory

Economic growth is achieved mainly by increasing the quantity and quality of labour, capital stock and technology. Some industries will succeed in increasing their productivity (known as progressive sectors). They will accrue the resources to increase the wages of their employees. For those sectors of the economy where productivity gains are difficult to achieve (e.g. where human interaction is important in labour-intensive sectors, such as health care, or because those sectors are not making efficient use of human resources or technologies) wages will rise, but not because of productivity gains. Wages will rise to ensure that workers do not leave less productive sectors for higher productivity industries where wages are higher. The economist William Baumol hypothesized that the costs of health care rise because of this failure to improve productivity at the same pace as occurs in other parts of the economy.

However, increased health spending, including on the health workforce, is only a productive investment if it effectively and efficiently leads to better social outcomes. There is still insufficient evidence on how best to enhance this productivity. For example, while a higher proportion of nurses in the health workforce is associated with better health outcomes,[59] there is a deficit of studies on the relationship between skill-mix, scope of practice, and the resulting economic outcomes.

Based on an extensive review of the available evidence, the Commission concludes that, to the extent that resources are wisely spent and the right policies and enablers are put in place, investment in education and job creation in the health and social sectors will make a critical positive contribution to inclusive economic growth.

CHAPTER 3

TRANSFORMING THE HEALTH WORKFORCE

The Commission's vision is for an expanded, transformed and sustainable health workforce to improve health outcomes, well-being, equity and social cohesion and foster inclusive economic growth. Our ten recommendations for realizing this vision are presented in this chapter and the next. They should be read in the context of efforts to strengthen health and social protection systems as well as broader initiatives to implement the 2030 Agenda and to meet the targets of the SDGs. All the recommendations require the upholding of rights, strong regulation, good governance, political commitment, and intersectoral and multistakeholder cooperation.

Health workforce data, labour market analyses and social dialogue involving all key stakeholders are vital for guiding public policy. These should lead to effective responses to 21st century challenges, providing the right jobs for the right number of health workers with the right competencies.[60] Public policies should take account of demographic changes in the population and the health

workforce, shifting disease burdens, technological changes, inequities in access to health services[61] and socioeconomic transitions. The health workforce should be geared towards the social determinants of health, health promotion, disease prevention, primary care and people-centred, community-based services.

This chapter presents the Commission's transformative agenda. It has been specifically designed to optimize health outcomes, serve the underserved leaving no one behind, while improving working conditions, increasing efficiency and strengthening the conditions for inclusive economic growth.

Stimulating demand for the right number of decent jobs

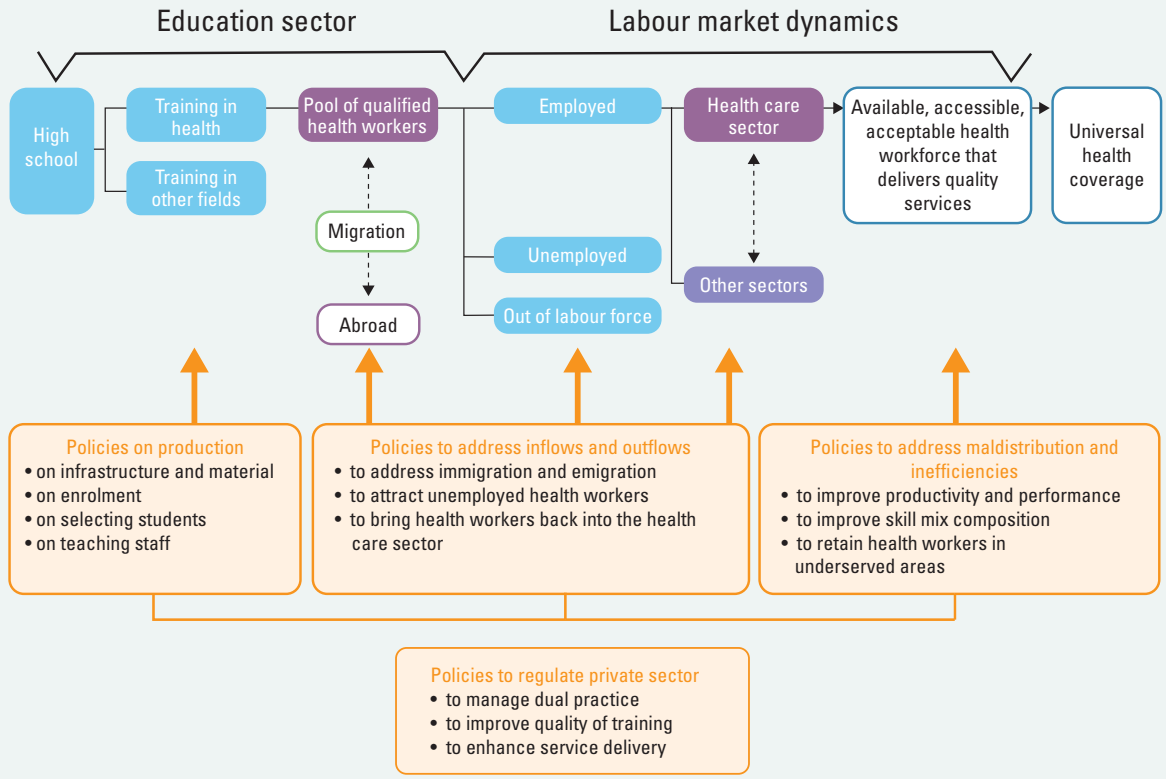
Coherent public action is urgently required to develop labour market policies conducive to stimulating demand for a sustainable health workforce.[62] The health-care sector in many countries is government dominated; and even when it is not dominated by the government, the government plays a central role. There are large distortions in the sector: gender discrimination where pay is

low in relation to skills; neglect of poor, rural and remote populations; under provision of public goods (including promotive and preventative interventions); monopolies and high prices for innovative medicines; and poorly functioning health insurance markets. Because of information asymmetries, expenditures are to a large extent driven by health-care professionals rather than by individuals themselves. Governments can institute policies to address the distortions that result in significant health labour market and public failures (Figure 3).

Where demand for health sector jobs is insufficient, particularly in low- and middle-income countries and humanitarian settings, domestic and international investments across the health labour market are essential to upgrade existing jobs, ensure decent working conditions and stimulate the creation of new

Figure 3.

Public policy levers to shape health labour markets



Source: Sousa et al.[63]

jobs. Targeted strategies, consistent with the UN Secretary-General's report on human resource development,[64] are needed to encourage more young people from underserved communities to pursue careers in the health sector, including targeted transfers and promoting the sector as a source of well-paid jobs with decent working conditions.

Poor working conditions and occupational hazards (Box 5) are detrimental to the quality of the services provided and a major disincentive for attracting health workers. Proper attention must be paid to decent working conditions, job security and occupational health and safety. This will require setting and enforcing regulatory norms and standards in terms of safe working environments, working hours, and minimum staffing levels for public and private service providers, as well as decent and attractive levels of pay. The returns on investment from the provision of decent work can be substantial: reduced costs associated with staff turnover and better health outcomes.

For health sector investments to activate intergenerational benefits and economic pathways to inclusive growth, the implementation of a suite of appropriate policies, regulatory frameworks and incentives is required. This package of labour market interventions should be coherent across the education, health, labour, international relations, immigration and trade sectors to create the conditions for decent health sector jobs.

Long-term commitments can also help to prioritize health sector investments and job creation in government policies and budgets, in accordance with applicable laws. Policy action implemented at sufficient scale should address specific public failures, such as artificial barriers to entry, and lack of regulation of the private sector. Another priority is to build capacity to develop and regulate or preserve—depending on the context—the health workforce across the public and private sectors.

Box 5.

Decent working conditions—key issues

In seeking to promote decent work for all women and men working in the health economy, several issues need to be addressed.[65] These include poor wages and benefits, the absence of social protection and unsafe working conditions. Inadequate salaries may oblige workers to take on multiple jobs, which can damage both health services and workers' welfare. Career planning and development opportunities are particularly important, not least to combat gender inequality. Achieving a decent quality of living requires a focus on issues such as accommodation, transport, the availability of necessary equipment and treatments, and the risk of professional and personal isolation and burnout. Rural and other allowances can be important incentives. A vital feature of decent work is respect for workers' rights, including their ability to influence working conditions through dialogue with health workers' organizations, and the prevention of all forms of discrimination.

Health and well-being rely heavily on unpaid and informal work, a burden which falls disproportionately on women and girls. For example, in Spain 88% of all health-related work is unpaid.[66] Investments and policy action to guide and stimulate job creation, when necessary, should include strategies to convert informal and unpaid work into decent jobs and prevent decent jobs transitioning into informal jobs. These are opportunities to maximize women's economic contributions and address disproportionately high youth unemployment.

Recognizing and fulfilling the rights of all health workers is of primary importance. ILO's Fundamental Principles and Rights at Work include: freedom of association and effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.[67] Other ILO standards are particularly relevant for workers in the health economy, including those concerning migrant health workers, nursing personnel, safe working conditions and social protection. Not only are these rights valuable in themselves, they are also inextricably tied to ensuring that health facilities, goods and services are universally available, accessible, acceptable and of good quality. The Commission therefore highlights the central role that social dialogue must play in fulfilling the vision of decent work for all workers in the health economy.

Recommendation: *Stimulate investments in creating decent health sector jobs, particularly for women and youth, with the right skills, in the right numbers and in the right places.*

Gender equality and rights

The proportion of women among all those employed in the health sector is, on average, higher than in any other sector. Women are the main providers of care, including in humanitarian crises and conflict settings. Thus, the socioeconomic opportunities that can be realized from health workforce investments depend upon making gender equality and women's empowerment a top priority. If countries matched the historical progress towards gender parity achieved in all sectors of employment by their best-in-region country then US$ 12 trillion could be added to global GDP by 2025—an increase in GDP of 11% above current trajectories.[68]

Gender biases in the health sector are rife, characterized by a pay penalty, which pays women less than men with similar qualifications. Women are under-represented in positions of leadership and decision-making relative to their share of employment in health care. In addition, physical and sexual violence and harassment, and increasingly targeted attacks, pose important risks to health workers, to which women are especially vulnerable.

Gender biases thus undermine inclusive economic growth, full employment, decent work and the achievement of gender equality. They also create inefficiencies in health systems by limiting the productivity, distribution, motivation and retention of female workers, who constitute the majority of the health workforce.

The Commission encourages the UN Secretary-General's High-Level Panel on Women's Economic Empowerment to take specific account of the health and social sectors in their work and follow-up. The Commission recognizes that women's employment in the health and social sectors could make a significantly larger contribution across the 2030 Agenda by addressing persistent gender biases, ensuring equal pay for work of equal value, recognizing and valuing women's unpaid work, ensuring decent working conditions, and expanding leadership roles for women. Education, labour, wage and social protection policies and strong labour rights, in particular, can help redress persistent gender inequalities in the health and social sectors.

Recommendation: *Maximize women's economic participation and foster their empowerment through institutionalizing their leadership, addressing gender biases and inequities in education and the health labour market, and tackling gender concerns in health reform processes.*

Addressing the supply gap: education, training and skills

Training 58 million health workers for the health systems of the 21st century is an ambitious endeavour. The time has come for lifelong learning systems to focus less on narrow specializations and more on locally relevant competencies to meet health and social needs. Structural reforms, which address the relevance of the workforce, are urgently needed to increase the health workforce's ability to deliver people-centred services. All countries can do more to prioritize public investments in education in order to increase the pool of qualified health workers, and improve their performance and productivity. This can be achieved by scaling up socially accountable professional, technical and vocational education. Socially accountable education includes learning about interdisciplinary team work, ethical practice, respect for rights, cultural- and gender-sensitive communication, and patient empowerment.

In addition, education and training must be focused on practice and tailored to health system needs. Countries that already have a strong primary health-care system tend to have more nurses per doctor, creating additional jobs and capacity in the health system. Priorities for specialized training include lifestyle diseases, geriatrics and mental health. Evidence shows that optimizing the skill-mix by reorganizing scopes of practice (often referred to as "task-shifting", "task-sharing", "delegation" or "substitution") can improve access to services and reduce waiting times, producing a high patient satisfaction rate. From 2007 to 2012, at least one third of OECD countries expanded the scopes of practice of non-physicians, including advanced practice nurses.[69] In South Africa, the implementation of nurse-initiated antiretroviral therapy from 2009 to 2014 was one of the contributing factors to the successful expansion of access to antiretroviral therapy.

Addressing geographical inequities in the density of health workers is a priority for most countries. Fostering and institutionalizing socially accountable education is a proven strategy to encourage more young people from underserved areas to take up careers in health.[70] Similarly, there is increasing evidence of the benefits of expanding rural and community-based health education and training. In many countries this can link to promoting jobs for young people (Box 6). The potential returns on investment are significant: a community-based midwifery diploma programme in Bangladesh identified a potential 16-fold return on investment following a targeted strategy.[71]

Evidence reinforces the importance and effectiveness of community-based service providers including community doctors and nurses, associate health professionals, and a range of less-skilled health workers.[74] A supportive network of lay volunteers who engage, empower and mobilize the community, such as the Female Community Health Volunteers in Nepal, can add value. In some countries traditional and complementary health-care providers play a crucial role in delivering health services, and their contribution should be recognized and valued.

The Commission welcomes WHO's development of a new guideline to optimize community-based health worker programmes. This guideline will inform skill-mix strategies and enable more effective investment in education and training.

There is an imbalance in the production of health workers. Three quarters of the current capacity to educate new health workers is concentrated in high- and upper-middle-income countries. Sub-Saharan Africa accounts for a 4% share of the global health workforce but shoulders 24% of the global disease burden, a situation that has remained virtually unchanged for a decade.[75] Similarly, large deficits of health workers are projected in low-income countries in South East Asia by 2030.[46] In the SDG era, with a shared commitment to leave no one behind, this must not continue.

The capacity, financing and economics of education systems to meet this demand require coordinated action in countries with the highest unmet need. Enhanced international cooperation in foreign training could also help expand workforce supply for universal health coverage. For example, Cuba has trained over 33 000 health professionals from 134 countries, including 26 000 graduates

Box 6.

Opportunities for youth engagement, education and employment in the health sector

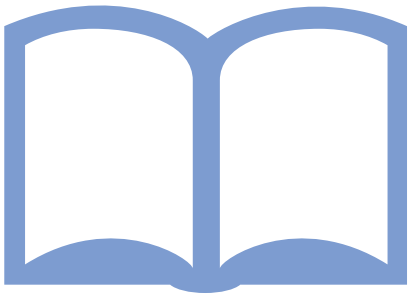
Demographic transitions present timely opportunities to strengthen youth engagement, education and employment in the health sector. Country efforts to promote the various health professions among young people should be bolstered now that promoting youth employment features high on the agenda of the UN Secretary-General and various UN entities. The Commission urges countries to engage with the Special Envoy on Youth, the new Special Envoy on Youth Employment and the UN Global Initiative on Decent Jobs for Youth. The Commission also notes that investing in youth and skills for youth employment take prominence in the 2016 UN World Youth Report,[72] the G20 training strategy,[73] the Skills for Employment Knowledge Sharing Platform hosted by ILO, and UNESCO's Technical and Vocational Education and Training Strategy 2016–2021, among others.

Several countries have long used targeted strategies to attract young people from rural and underserved areas to careers in the health sector. For example, in 1976 the Manila School of Health Sciences in the Philippines partnered with marginalized communities and health authorities to develop a socially accountable "stepladder" programme to educate students from their communities to train as midwives with a certificate in community health work, nurses with a bachelor of science degree in nursing, and doctors of medicine, in one continuous community-based curriculum. This innovative programme has not only produced health workers more likely to practise in underserved areas, thereby increasing the workforce density in these areas, but also created a career path that enables progression within and across professions. A similar programme, the Umthombo Youth Development Foundation, operates in South Africa.

from the Latin American School of Medicine; Cuba's bilateral cooperation with 68 countries has supported education, training and health system strengthening.[76]

Increasing access to primary and secondary education will enlarge the future pool of students available for health education and training. Investments in education infrastructure and expanding teaching faculty are essential. Regulation[77] of public and private education and learning institutions to ensure standards, quality and alignment with public goals is a prerequisite. In some countries, the costs of health worker education are prohibitive for some potential students, particularly those from underserved areas. Education and training fees need to be affordable. Generally, there is a need to relax unnecessary barriers to entry *(numerus clausus*). Examples include placing a legal limit on the number of students who can enrol in medical school or progress from first to second year. Continuous professional development, lifelong learning models and leadership development throughout workers' careers are also necessary.

Investments are required to build the skills of key stakeholder groups, including from the public and private sectors and social partners, to engage in workforce analysis, planning and monitoring. Several countries have established dedicated institutions that include representatives from high schools, professional, technical and vocational education and training schools, universities and the public and private sectors to support the scale-up of education, training and skills. This practice could be further used to catalyse the expansion of health workforce supply.[78]



Recommendation: *Scale up transformative, high-quality education and lifelong learning so that all health workers have skills that match the health needs of populations and can work to their full potential.*

Reforming health service delivery and organization

Radical reforms are also needed in service delivery. Demographic and epidemiological transitions are putting health systems around the world under huge financial strain. There is a growing demand for integrated, people-centred, community-based health services and personalized long-term care. Shifting away from health systems organized around clinical professional specialities and treatment in hospitals towards systems designed for prevention and primary care can help meet these challenges and address inefficiencies. This is true for all countries, regardless of where they are on the path towards universal health coverage.

There are four major components of this shift: (1) prioritizing health workers with competencies in health promotion and disease prevention, and generalists like nurses and midwives and other advanced practice roles, (2) optimizing the scopes of practice of health workers at all levels so that they can use their skills fully (and are neither underskilled nor overskilled) and developing multidisciplinary and complementary teams of health workers, (3) building stronger linkages between health and social sectors in order to meet the often complex health and social care needs of an older population and people living with chronic conditions and disabilities, and (4) empowering people and communities to play a greater role in designing health systems and to participate in their own health care.

1 prioritizing health promotion & disease prevention

2 optimizing scopes of practice

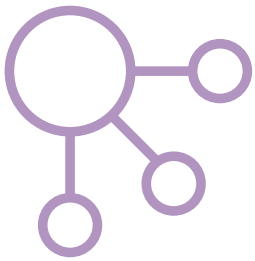
3 building stronger linkages between health and social sectors

4 empowering people and communities

In many countries a considerable percentage of health-care providers work in the private sector. Where private providers deliver services under the same rules and standards that apply to public providers, they help to achieve universal health coverage. In many OECD countries ambulatory care doctors and nurses are private self-employed individuals, delivering services under universal health systems and paid from public funds. In other countries, social business models are emerging as a private-sector, socially oriented solution to serve the unserved (Box 7). There is no prescription for a perfect mix of public and private health-care provision. Governments should adopt policies governing the development of standards and guidelines that cover the performance of the whole sector, not its individual parts, for both the education and practice of health professionals.

Effective regulation is required to ensure compliance by both public and private providers with health-care standards. Public policy and regulatory bodies need to protect the interests of the public and ensure that professional interests do not dominate. Governments should identify financial, legal and professional incentives to encourage private and public health providers to deliver on public goals, making equity, access and quality the important measures of success.

Private companies should be encouraged to engage beyond the most profitable services, so they contribute to the provision of universal health coverage. At the same time governments and regulators should implement quality assurance schemes (including regulating health professionals throughout their careers) to maximize the capacity of public and private sectors to deliver high-quality health services aligned with population health needs.



Recommendation: *Reform service models concentrated on hospital care and focus instead on prevention and the efficient provision of high-quality, affordable, integrated, community-based, people-centred primary and ambulatory care, paying special attention to underserved areas.*

Box 7.

Social business models for health service delivery

For the most part, health service delivery in any country has been the work of three players with varying degrees of participation: government, profit-seeking private sector and charities. Despite the efforts of these three, billions of people remain unreached. Thus, I have been promoting a fourth approach – social business – because I believe that the application of the concept of social business can lead to the redesigning of the entire health-care sector.

Existing limitations

Few would argue against the position that the current way of doing the business of delivering health care has serious limitations. In many countries, government health-care programmes run into bureaucracies rife with inefficiency, lack of innovation and initiative, corruption and wastage. Because of these problems, the people at the bottom of society suffer the most. The profit-seeking private sector is concerned with the upper segment of the market where they make their profit; they do not focus on the bottom half of the population, on those who are in greatest need of their services. And although charity programmes do reach the poor and the poorest, they are unsustainable. As a result, they can provide service only to a limited number of people and only for a limited time.

What is social business?

The concept of social business stands between the profit-seeking private sector and charity. It has the same goal as charity but is powered by the engine of business. It is sustainable while at the same time it reaches out to the poorest. It is driven by technology to make health service universal, cheaper and affordable. It can be run by anyone – industry, business, government, individuals, foundations, nongovernmental organizations.

continued on page 39

We have created many practical examples of social business by applying this concept in Bangladesh and other countries. Believing that health care should be technology based and oriented primarily towards prevention, we have set up a chain of eye-care hospitals, clinics, nursing colleges and joint ventures with multinational companies who deliver the basic essentials for health such as nutrition, water, mosquito nets and food.

The Grameen clinics' experience proves that a medical system "for the poor" can be almost entirely self-supporting, and can reach self-sufficiency. For example, the Grameen GC Eye Care Hospital in Bangladesh, and the Aravind hospital in India can do cataract surgery for US$ 25. We are in the process of setting up hospitals and medical colleges. We are encouraging technology companies to provide all diagnostic services through smart phones to make them almost costless. We emphasize prevention, to keep people healthy and avoid costly cure procedures. We insist that the goal of health care should be to keep people away from diseases, rather than wait for the point when they have to show up at doctor chambers or hospitals for treatment.

We see health care as an excellent area for entrepreneurship, bringing out the creative power of citizens expressing themselves to solve health problems through social business. We encourage young people to become entrepreneurs, job-creators rather than job-seekers, tackling the health concerns of those who are left out.

Contributed by Professor Muhammad Yunus, Commissioner and Nobel Peace Prize Laureate

The following example of social franchising highlights efforts in the Philippines to encourage private sector participation in the setting up of health-care facilities while affording health professionals with employment or entrepreneurship opportunities. In 2008, Population Services Philippines, Incorporated started Blue Star Pilipinas, a "franchise run by private midwives in order to increase access to family planning services among Filipino women". Aside from addressing the need for health-care facilities in the country, Blue Star Pilipinas also encourages entrepreneurship among women and targets the indigent community which has the least access to medical services in the country.

Blue Star Pilipinas has 159 franchisees who are "female practicing midwives located in urban, peri-urban and rural areas". Franchisees pay an annual fee of PhP 1000 (US$ 22). To set up the clinic, franchisees receive a subsidy amounting to PhP 50 000 (US$ 1095) to cover costs including a table, lamp, maternity bed, speculum and forceps. The total amount can be repaid by instalments of PhP 300 (US$ 6.60) per week for three years. To meet the franchisee criteria, a midwife must (1) be licensed by the Professional Regulation Commission for private practice, (2) possess a business permit from the municipal government, (3) have a waste disposal permit, (4) have a professional tax receipt, (5) be willing to promote and provide modern family planning methods, (6) have no existing agreements/contracts with organizations providing similar assistance as Population Services Philippines, Incorporated, (7) not be employed in a government or private health facility, (8) have no plans to work abroad, (9) have a good reputation in the community, (10) be willing to complete all the required trainings, and (11) be registered with the Integrated Midwives Association of the Philippines. For the franchisees, the benefits are increased income, increased client numbers (up to 70%), increased knowledge of family planning, training, clinic refurbishments, and increased skills to treat more clients.[79]

Contributed by Ms Rosalinda Baldoz, Commissioner, Department of Labour and Employment, The Philippines

Information technology

Rapidly changing technologies, particularly digital innovations, have the potential to change health services. They have been shown to enhance people's access to health services, improve health systems' responsiveness to the needs of individuals and communities, and increase the quality and efficiency of health services. Digital technologies have also been shown to improve job satisfaction and retention of health workers (especially in remote and rural areas), accelerate the transformation and scaling up of education and training, and enable lifelong learning.

Technology has an important role in the shift from hospital care to community settings and in making fuller use of the skills of providers at all levels. For example, when supported with information and communication technologies (ICT), relevant infrastructure and clear protocols about what to do when symptoms are not within a prescribed range, less-skilled cadres of health workers can be trained to ensure treatments are followed correctly, leaving more highly qualified health professionals to attend to more problematic cases.

Technologies can be transformative if the digital divide can be traversed and if they are properly resourced, regulated and in line with country ethics, principles and values. Opportunities include: telemedicine, e-learning (Box 8), electronic health (e-health) and mobile health (m-health), social media, massive open online courses, webcasts, podcasts, high-fidelity simulation,

Box 8.

The transformative potential of e-learning

The transformative potential of e-learning enables education and training to become more learner-centred, interprofessional, outcome- and practice-focused, workplace-based, equitable, collaborative across education and training providers, and scalable at greater efficiency without compromising effectiveness. E-learning can accelerate the development of the right skills at the required scale to achieve universal health coverage and respond to emerging disease threats.

A review of e-learning studies found that computer- and web-based e-learning methods are as effective for building health worker knowledge and skills as traditional learning methods.[80] A global consortium of over 50 researchers and experts is conducting 12 systematic reviews. Preliminary findings suggest that e-learning is at least as effective as traditional forms of education for health professionals; and that, for example, serious gaming or gamification interventions and virtual reality environments have significant potential advantages over traditional methods in knowledge and skills acquisition. Further studies with more robust methodologies are required to determine the impact of e-learning on learning outcomes.

decision-support tools, electronic medical records, electronic systems for disease surveillance, civil registration and vital statistics, and laboratory and pharmacy information systems. These technologies can substantially broaden the reach of health systems, even in the face of health worker shortages in remote and inaccessible areas. They can also strengthen collaborative teamwork and accountability and facilitate people-centred approaches to care.

The obstacles compromising technology's full potential to remedy the health workforce gap and improve health services include: lack of proper evaluation of what works and what does not (an obstacle to moving from pilots to full-scale implementation), lack of internet access and ICT infrastructure, costs of connectivity, lack of electricity supply, data insecurity and restrictive regulatory frameworks. Other challenges include lack of ICT and digital technology knowledge and resistance to change among educators, health system managers and health workers. Reaping the benefits of rapidly changing technologies will require internet/ICT infrastructure investments, especially in low- and middle-income countries.

Health technology itself could create new job opportunities, with recruitment of new categories of personnel into the sector. Over 7 million jobs are projected to become redundant by 2020 with technological advances and, while this will invariably shape the skills requirements in the health workforce, health worker jobs are least likely to be replaced in the fourth industrial revolution.[81,82] Further analysis and health technology assessments are required to determine the utility and workforce implications of advanced technologies. As the role of ICT and data analytics grows with the use of digital technology, so will the necessity for professionals specializing in bioinformatics as key members of care teams.

Recommendation: *Harness the power of cost-effective information and communication technologies to enhance health education, people-centred health services, and health information systems.*

Public health and protracted emergencies, and humanitarian settings

The number of political conflicts has doubled over the past decade. The number of people displaced due to conflict during this period also increased, from 37 million to 60 million, mostly in low- and middle-income countries.[83] Moreover, between 2008 and 2014, 184 million people were displaced due to natural disasters.[84] Around a billion people today live in fragile settings, and more people are displaced now than at any time since the Second World War. In these settings countries often lack the capacity, not only for preparedness and response, but also for providing basic health and social care to their citizens: almost two thirds of maternal deaths and over half of under-5 deaths take place in settings of humanitarian crises.[85]

The interconnectedness of global health and international affairs has become increasingly apparent, as shown by the international health crises caused by SARS, Ebola virus disease, MERS, Zika virus associated disorders and yellow fever. All countries are at risk of disease outbreaks. With more people moving around the world than ever before, the threat of a rapidly spreading pandemic is very real. Each country should build the capacity of its health workforce and health system to detect, assess, notify and report events. Countries must be able to respond to public health risks and emergencies of national and international concern, as described in the International Health Regulations 2005 (IHR core capacities). Many developing countries have weak capacity, but the biggest capacity gaps are in areas of ongoing conflicts, post-conflict reconstruction and current or recent natural disasters (such as floods, famines and earthquakes).

Global health security begins with individual health security, and individual health security depends on universal health coverage. Weak health systems with too few health workers perform poorly in surveillance, prevention and control of infectious disease outbreaks. Outbreaks can threaten the lives of many people in affected countries. They can also greatly damage their economies, adversely affecting economic output, trade, travel and investment. Universal health coverage based on primary health care offers the best protection against public health emergencies, and enhances stability in fragile settings.

Despite well-established international humanitarian law, for the first time since the first Geneva Convention was adopted in 1864, health workers and health facilities have become deliberate targets in conflicts. From January 2014 to December 2015, of the 594 reported attacks on health care in 19 countries with emergencies, 380 (62%) were intentional.[86] The Syrian Arab Republic is now the most dangerous country in the world for health workers, with increasing attacks on health facilities and health workers. In May 2016 the UN Security Council condemned attacks on health workers and health facilities in conflict settings, and demanded protection for health workers.[87] The Commission asserts that health workers' safety and protection must be ensured, as reaffirmed by the UN

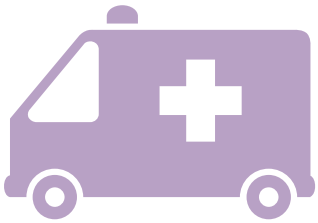
General Assembly resolution (A/69/132) in December 2014[88], and Security Council resolutions 2175 adopted in August 2014[89] and 2286 adopted in May 2016.[87]

Many health and emergency aid workers in complex emergency settings have had little or no training before their deployment. During the Ebola outbreak, shortages in human, medical and material resources led to major breaches in medical protocols. Fatality rates among health workers were markedly higher than for the general population in all three countries: 1.45% in Guinea, 8.07% in Liberia and 6.85% in Sierra Leone.[90]

With respect to international health workers in emergency situations and the international community's capacity for crisis response, the Ebola crisis revealed the shortcomings of preparedness, deployment and support mechanisms for international personnel. "Best practices" in countries that have found effective solutions should be widely disseminated.

The Commission notes efforts to strengthen global preparedness and capacity to respond to crises and urges greater investments, particularly with official development assistance and technical cooperation from the international community, to meet the health workforce challenges in humanitarian settings and public health emergencies. The UN Secretary-General's report on strengthening the global health architecture responds to the recommendations of the High-level Panel on the Global Response to Health Crises and the recommendations of the International Health Regulations review committee, which chart how communities, nations and the international system can better prepare for and respond to health crises in the future. Also relevant are WHO's new Health Emergencies Programme, the International Health Regulations (2005) and the ILO guidelines on social dialogue in public emergency services in a changing environment (under revision). The ILO Recommendation 71 (under revision) on employment in the transition from war to peace will highlight the importance of employment and decent work in fragile and crisis-affected situations.

Recommendation: *Ensure investment in the International Health Regulations core capacities, including skills development of national and international health workers in humanitarian settings and public health emergencies, both acute and protracted. Ensure the protection and security of all health workers and health facilities in all settings.*



CHAPTER 4

ENABLING CHANGE

The social and economic potential of health sector employment will never be realized unless heads of state and governments lead the reform and expansion of their health workforce, making decisions and taking actions for the benefit of all citizens.

Only strong political commitment and leadership at the highest level of government can mobilize the level of investment, achieve the intersectoral policy coherence, catalyse transformative action and foster the international collaboration required to create the conditions for a sustainable, fit-for-purpose and adequately distributed health workforce. Political leadership is also needed to ensure that all stakeholder groups, including civil society, are actively engaged throughout the process of reshaping health and education systems and health labour markets towards the achievement of people- and community-centred universal health coverage.

This chapter highlights four important issues that are necessary to achieve the Commission's vision. The first is how countries can put in place the conditions required to finance human capital and skills development. The second is how the international community can better support low- and lower-middle-income countries to "substantially increase health financing

and the recruitment, development, training and retention of the health workforce", which all Member States have agreed is necessary to achieve SDG 3 (good health and well-being). The third issue concerns the increasing international migration of health workers and the need for more responsible recruitment practices. Finally, the Commission draws attention to the need to secure timely and reliable data on the health workforce for monitoring, planning and accountability purposes—despite repeated calls for action on this front, progress remains insufficient.

Financing and fiscal space

Creating a strong health workforce requires governments to invest in more and better health worker education, lifelong learning and the creation of decent jobs.

Such investments, mostly from domestic sources, are achievable in many different country contexts.[91] However, structural reforms including progressive fiscal policies may be needed (Box 9). For example, energy financing reforms could free up US$ 5.3 trillion spent in 2015 on energy subsidies.[92] Taxation and governance reforms could potentially stem over US$ 50 billion lost annually from countries in Africa through illicit financial outflows.[93] Societal dialogue and political commitment are critical to create the essential political conditions.

Box 9.

Structural reforms for the health workforce of the 21st century

Structural reforms should focus on reducing monopoly distortions, particularly in pharmaceuticals and health insurance markets, which contribute to the low productivity of the health sector. This would free up resources to be spent more productively, with greater multiplier effect on the economy. Structural reforms should also address distortions in the labour market, which is marked by gender and other discrimination patterns that are observed in other service sectors more generally, where pay is low relative to the skills. Finally reforms should drive the development of more efficient delivery systems, with more accountability.

Contributed by Professor Joseph Stiglitz, Commissioner and Nobel Prize winner

The exact combination of domestic revenue sources (e.g. tax revenues, social contributions, private insurance premiums and out-of-pocket payments) will differ from country to country. What is essential is that such funding is based mainly on prepayment and is pooled, rather than relying too much on private out-of-pocket payments.[94] Consideration might be given to levy-based training funds, currently used in about 70 countries[95] to provide resources for health workforce skills development.[96]

Assuming continuing growth in public revenue and economic development, with necessary priority to the health sector, as well as past experience, many countries will have the financial space (meaning both public and private financing) to support and sustain their health workforce. World Bank 2016 estimates on global labour market projections to 2030[48] point to the encouraging trend towards availability of financing for health-worker education and investments in health sector jobs in high- and middle-income countries.

Many countries achieved a first level of universal health coverage—and the health workers needed for this—when they had low-middle-income status. Some countries, such as China and Viet Nam, reached high levels of equity of service delivery and financial protection while they were low-income countries. In Japan, GDP per capita was the equivalent (measured in constant 2010 US dollars) of US$ 9100 in 1961 when the country achieved universal affiliation to its national health insurance programme; the Republic of Korea achieved this milestone in 1989 with a GDP per capita of US$ 8100.[97] Thailand achieved universal affiliation to one of its three coverage schemes in 2002 with a GDP per capita equivalent to US$ 3700.[97]

However, based on current trends, there will be likely insufficient market demand and fiscal space to create jobs to achieve the SDGs in low-income and fragile countries. This is where the Commission believes collective action on financing can make a difference. An analysis of estimates of financial and fiscal space to 2030[91] suggests that, should the necessary conditions underpinning appropriate

health financing be put into place, all but a small number of countries could meet the recurrent cost of sustaining their health workforce. Domestic investments in the health workforce should be a priority in all countries. But external financing, including private and philanthropic financing, can be instrumental in supporting public policy. Technical cooperation and international financing can be used to support catalytic investments in developing human capital and skills for the health economy of the poorest countries, which in turn can contribute to increased demand and economic activity.[91]

There is now an opportunity to change the paradigm of future affordability from a negative to a positive one, supporting all countries on their unique pathways towards achieving the SDGs and providing specific support to those that require additional levels of international solidarity up to and beyond 2030. To this end, public investments must be complemented by aligning incentives, policies and reforms to attract and amplify co-investments by the private for-profit, private not-for-profit and social enterprise sectors. Foreign investments can expand services and stimulate job creation and technology transfer in areas of growing demand. One example is the establishment of a geriatric training course for nurses and a private residential nursing home by a German company in the Philippines. This model, a close collaboration involving Philippine and German public and private sectors, will generate job opportunities and promote skills development in elderly care for Filipino health workers and support workers.

The Commission recognizes the range of policy options described in the UN Conference on Trade and Development's 2015 report on the Action Plan for Private Investment in the SDGs[98] to overcome policy dilemmas and address the challenges and constraints in mobilizing and channelling private sector funds. We also look forward to the report of the Global Commission on Business & Sustainable Development and its recommendations on where investments in the health and social sectors can add further value. We therefore encourage action to increase absorptive capacity in the health sector, improve efficiency of resource use, establish effective regulatory frameworks and standards, and ensure good governance, strong institutions and stakeholder engagement. These underpin the essential conditions for success and will attract financing from other sources.

Recommendation: *Raise adequate funding from domestic and international sources, public and private where appropriate, and consider broad-based health financing reform where needed, to invest in the right skills, decent working conditions and an appropriate number of health workers.*

Partnerships and cooperation

Achieving a fit-for-purpose health workforce is an intersectoral pursuit. It requires interventions across the health labour market. Coherent and effective policy actions are best orchestrated across the finance, education, health, social welfare, labour and foreign affairs arms of the government through interministerial structures, coordination mechanisms and policy dialogues. These intersectoral structures and processes must engage the public and private sectors, civil society, trade unions, health worker associations, nongovernmental organizations, regulatory bodies and education and training institutions.

Such partnerships can address commonly encountered policy challenges. For example, coordinating efforts to scale up education and training of health workers requires parallel investments into secondary education completion rates, particularly for girls. Similarly, adherence to the 2010 WHO Global Code of Practice on the International Recruitment of Health Personnel (the WHO Global Code) requires alignment between the health, foreign affairs and labour sectors. The rights of health workers, including their right to freedom of association and collective bargaining, must be developed and aligned with international labour standards, policies and social protection mechanisms. As these examples demonstrate, successful implementation of the Commission's recommendations will depend in great part on the strength of the intersectoral engagement and actions of stakeholders—including civil society and health workers' organizations—at national and global levels.

As highlighted above, the Commission believes that the role of official development assistance has great potential to help operationalize the SDG vision and fully supports existing work to improve national accountability, institutional strength, fiduciary arrangements and donor coordination and alignment with national priorities (e.g. the Paris Declaration on Aid Effectiveness, the Accra Agenda for Action, the International Health Partnership (IHP+), the Busan Partnership for Effective Development Co-operation and the Global Partnership for Effective Development Co-operation).

In addition, we welcome the announcement by the OECD's Development Assistance Committee of the setting up of a high-level panel to elaborate proposals and recommendations to enhance its inclusiveness and representativeness and maximize its relevance and impact so as to better support sustainable development efforts as set forth by the UN and its Member States. Building on these foundations, it is necessary to go beyond the narrow perspective of "official development assistance for health" and instead to adopt an integrated approach to education, job creation, economic participation and gender paradigm in the health sectors, which is at the core of this Commission's work.

The Commission notes and welcomes the decisions generated at the 69th World Health Assembly to develop improved mechanisms for bilateral, multilateral and development partners to assess the health workforce implications of their official development assistance programmes. We encourage WHO and all development partners to take this work forward urgently and to engage their counterparts in education, finance, gender and labour, among others, to achieve a new generation of coordinated official development assistance investments in human capital development and job creation in the health sector.

Recommendation: *Promote intersectoral collaboration at national, regional and international levels; engage civil society, unions and other health workers' organizations and the private sector; and align international cooperation to support investments in the health workforce, as part of national health and education strategies and plans.*

International health worker migration

Over the past decade the number of migrant doctors and nurses working in OECD countries has increased by 60%; this figure rises to 84% for doctors and nurses who have departed countries with serious health workforce shortages.[47] Although many countries have stepped up their education and training of doctors and nurses since 2000, intensifying economic demand in high- and middle-income countries is likely to continue to drive health worker migration in the years ahead. Patterns of health worker migration are also growing more complex, with significant intraregional movement. Better data and information, particularly from source and transit countries, is crucial for better understanding and managing the international migration of health workers.

As highlighted in several of its recommendations, the Commission urges those countries losing health workers to do more to retain their health workforce, and destination countries to do more to achieve greater self-sufficiency and sustainability in their domestic supply. However, the Commission recognizes that the international mobility of health workers may also bring numerous benefits to

source nations, destination nations and health workers themselves if it is based on ethical norms and standards. The adverse effects of migration must be mitigated. Migrant health workers' rights must be safeguarded and unnecessary barriers to mobility and practice removed. The convergence of competencies and quality standards at the international level must be improved, and targeted support provided to source countries and their health systems. There is considerable potential to explore the development of "transnational standards" for select occupations in the health sector.

Bilateral, multilateral, regional and international agreements on the ethical international recruitment of health personnel are increasingly important to ensure mutuality of benefits and mitigate negative effects. Such agreements must strengthen the accountability of source and destination countries and consider mechanisms for technical cooperation and investments. Box 10 includes two country examples.

Government-to-government agreements, where appropriate, should be implemented to facilitate collaboration around strengthening the health workforce. Countries that have an "oversupply" could assist those with a short supply of health workers and also contribute to building the local health workforce in the recipient countries. This should be done ethically, and with due consideration to the rights of the health workforce. The Government of South Africa has such agreements with the Governments of Cuba and the Islamic Republic of Iran.

At the global level, the WHO Global Code and the ILO Conventions and Recommendations on migrant workers are key instruments for the global governance of health worker migration. The 2015 review of the WHO Global Code found that it is maturing and gaining in legitimacy. In 2016, there was a significant increase in the number of countries participating in national reporting to WHO. However, many countries with critical health workforce shortages still need support to implement the WHO Global Code and its national reporting processes. These instruments could be made more effective by an updated broader international agreement on the health workforce, including provisions to maximize mutuality of benefit from socially responsible health worker migration.

Lessons can be learned from the Paris Agreement on Climate Change. Its principles of "enhanced transparency framework" and "intended nationally determined contributions" could provide a similar foundation for new dialogues between States on the investments that are inherent within, or arise from, international mobility of health professionals, including resource transfers, migrant remittances and other investments. Resource transfers and investments into health worker education and training are critical to ensure the sustainability of health systems in source countries. As part of the continuing review process for the WHO Global Code, ILO, OECD and WHO should explore and advance the evidence on the resource transfers inherent in health

workforce migration. Further, strengthening of the WHO Global Code should align with broader discourse on the global governance of migration, particularly the UN Secretary-General's proposal for a Global Compact for Safe, Regular and Orderly Migration.

The Commission thus urges further study of existing models for managing health workforce migration as well as good or promising practices in source and destination countries that have contributed or have the potential to contribute to the ethical international mobility of health professionals.

Box 10.

Maximizing the mutuality of benefit from socially responsible health worker migration, country examples

Germany and the Philippines have a bilateral agreement called the Triple Win Programme. All involved benefit: migrating health workers have an opportunity to work and upgrade their skills; pressures on the domestic labour market in the Philippines are relieved; and Germany, which adheres strictly to the WHO Global Code and is committed to negotiating only with countries with a surplus of qualified personnel, obtains qualified health workers.

Japan is promoting the Asia Health and Human Well-Being Initiative. Based on the concept of reciprocity, Japan will contribute to the creation of a new Asian community that is shaped by the rapid ageing underway in the region, securing in return the human resources and broad markets it needs to create a better ageing society. The Initiative's central tenets are the development of human resources, the creation of a seamless environment for workers' activities in the Asian region, and a "circulation" policy that enables workers to come and go between countries. Giving health workers the option to return to their own country is essential because demand for health-care services for the elderly will eventually increase in middle- and low-income countries.

Recommendation: *Advance international recognition of health workers' qualifications to optimize better skills use, increase the benefits from and reduce the negative effects of health worker migration, and safeguard migrants' rights.*

Data, information and accountability

Strategies and interventions to invest in the health workforce should be guided by analyses of the health labour market, the health economy and population health needs. Labour market analysis offers diagnostics of market strengths, inefficiencies and risks, and identifies determinants of labour market demand, supply and need. Such evidence guides understanding of the implications of current and future trends in education supply and across the labour market.

Reliable, up-to-date data and institutional capacity to manage and analyse data are needed to support labour market analysis and undertake research that addresses gaps in the evidence base to inform policies and investments. Strategies to achieve and sustain an equitable density of health workers within a country must be based on an understanding of current imbalances. Sex-disaggregated data collection and gender analysis are necessary to inform better policies to address structural gender biases and inequities.

The strength of the data architecture and the evidence base depend on the active engagement of communities, health workers, employers, education and training institutions, professional and regulatory bodies, and on the interoperability of data across the education, health and labour sectors. The multiplicity of health labour market data definitions, variation in data sources, and parallel information systems and reporting requirements within and across countries create barriers to achieving a minimum data set that is comprehensive, comparable and reliable.

ILO, OECD, WHO and other international agencies have a key role to play in establishing a set of harmonized metrics, which is necessary to monitor trends in the health labour market and to strengthen intersectoral collaboration, governance and accountability in implementing interventions. Improved and openly available data at national level aggregated across countries will provide enormous opportunities to deepen analysis and increase the evidence base on the global health labour market. In this respect, the Commission welcomes the 69th World Health Assembly's decision to adopt and progressively implement National Health Workforce Accounts in all countries.

National accountability processes, linked to reliable data that enable citizens to hold their governments to account, can be a powerful means to galvanize political support and action. ILO, OECD, WHO and other international agencies can support national efforts through open data, analysis, technical assistance and advocacy. However, the right number, skill-mix and distribution of workers will only produce gains if the workforce performs well. Accountability at all levels is key to ensuring that human capital investments are aligned to labour

market needs, that the jobs created are decent, and that health workforce investments yield greater productivity and performance for improved health and human security outcomes.

Finally, the Commission recognizes that the success of global movements and initiatives is often influenced by the strength of mechanisms to hold key actors accountable in the development and implementation process; we particularly note the important roles that non-state actors will play, including unions, professional bodies, civil society and academics, among others.

Recommendation: *Undertake robust research and analysis of health labour markets, using harmonized metrics and methodologies, to strengthen evidence, accountability and action.*

CHAPTER 5

IMPLEMENTATION: IMMEDIATE ACTIONS AND MEASURES OF SUCCESS

Implementing the Commission's ten recommendations will require game-changing interventions to fundamentally challenge the status quo and alter the current trajectory. There is no time to lose. In this chapter we propose five strategic actions to be undertaken between October 2016 and March 2018 to begin implementing the Commission's recommendations.

The actions must be carried out in the spirit of: collaboration with all partners, spanning different sectors; innovation in transforming the current models; and integration with national and regional priorities and related agendas on health, employment and economic growth. All actions should reinforce the implementation of the *Global strategy on human resources for health: workforce 2030*. We also propose a subset of SDG targets and indicators to track progress, to ensure alignment with the implementation of the 2030 Agenda and, ultimately, to measure success in 2030.

Immediate actions, October 2016 – March 2018

A SECURE COMMITMENTS, FOSTER INTERSECTORAL ENGAGEMENT AND DEVELOP AN IMPLEMENTATION PLAN

We urge political leaders to take this report into national, regional and international decision-making forums and we call on all stakeholders to make commitments towards implementing the Commission's recommendations. The Commission emphasizes the importance of political leadership and the need for clear commitments from all stakeholders. Leaders across education, health, finance and labour sectors must be engaged as soon as possible through existing regional and international governance and cooperation mechanisms.

The Vice-Chairs of the Commission from ILO, OECD and WHO will before the end of 2016 convene all relevant stakeholders to develop a five-year implementation plan for the ten recommendations. The implementation plan will set out strategies and activities, responsibilities of agencies and key stakeholders, resource requirements and operational indicators for the period 2017–2021. The process for developing the plan and the plan itself should align with the work of the UN Secretary-General's High-Level Panels on Women's Economic Empowerment and on Humanitarian Financing, the International Commission

on Financing Global Education Opportunity, the Global Commission on Business & Sustainable Development, the UN Global Initiative on Decent Jobs for Youth, and the work of the Special Envoy on Youth Employment, among others. The plan should include a coordination mechanism to convene intersectoral expertise to steward and monitor progress and inform the global framework for accountability (see action B).

B GALVANIZE ACCOUNTABILITY, COMMITMENT AND ADVOCACY

The Commission invites the UN Secretary-General to consider establishing an appropriate global framework for independent accountability across the SDGs and to ensure that it includes our recommendations. Effective independent accountability can be a powerful means to galvanize political support for the work of this Commission. As demonstrated by the Commission on Information and Accountability for Women's and Children's Health, accountability at all levels will be essential for tracking commitments and progress in implementing our recommendations, but global mechanisms should be part of a wider SDG framework in order to reduce the reporting burden on countries. Accountability involves three activities: monitoring, based on a set of indicators and supported by reliable data; review, involving all relevant stakeholder groups; and action, remedying practices, programmes and policies that are not working and further enabling those that are.

The Commission invites ILO, OECD, WHO and relevant partners to take further action on national, regional and international commitments and advocacy. The three global forums on the health workforce, held in Uganda, Thailand and Brazil, proved successful in maintaining and strengthening commitment and advocacy. The Third Global Forum on Human Resources for Health in 2013 led to an actionable set of commitments and the adoption of the Recife Political Declaration, subsequently endorsed by the World Health Assembly. Follow-up analysis of the Recife commitments demonstrates encouraging progress across all regions. Preparations for the fourth global forum in the last quarter of 2017 should be advanced, engaging relevant partners from health, education, employment and other sectors in a coherent advocacy platform.

C ADVANCE HEALTH LABOUR MARKET DATA, ANALYSIS AND TRACKING IN ALL COUNTRIES

The Commission urges national governments, led by ministries of health, education and employment, to accelerate the progressive implementation and reporting of National Health Workforce Accounts. This should be facilitated by investments in developing individual and institutional skills and capacities in health workforce governance, science and research. Building institutional and individual capacity to perform robust analyses of health labour market dynamics will ensure the availability of the reliable and up-to-date data needed to quantify and qualify the active health workforce within countries, including in public health and protracted emergencies, and humanitarian settings. Good subnational data are also needed to assess progress on implementing the Commission's recommendations including those related to gender equality and rights and health workforce skills.

We request ILO, OECD, WHO and other relevant partners to establish an interagency global data exchange on the health labour market hosted by the Global Health Observatory. The first step is to develop global harmonized interagency definitions and methodologies for the collection and analysis of health labour market metrics, which will enable analysis and visualization of changes and trends in health labour markets. ILO, OECD and WHO should also develop and advance methodologies and undertake research to evaluate the socioeconomic returns on health workforce investments, especially on SDGs 8 (decent work and economic growth), 1 (ending poverty), 4 (quality education), 5 (gender equality), 10 (reducing inequalities) and 17 (cross-sectoral partnerships).

D ACCELERATE INVESTMENT IN TRANSFORMATIVE EDUCATION, SKILLS AND JOB CREATION

The Commission urges national governments, led by ministries of health, education and employment, to develop intersectoral action plans that identify and commit budgetary resources. Building a sustainable health workforce will require large-scale expansion of investments in transformative education, skills and job creation. Priority investments in education include infrastructure, institutional capacity, programmes and accreditation. These must be coupled with investment in job creation, particularly where there is insufficient economic demand to employ the health workers needed to achieve universal health coverage. Urgent investment is also required in secondary education, particularly in low-income countries, to accelerate completion rates and enlarge the pool of students eligible for health worker education programmes.

The Commission urges the international community to support the massive scaling up of professional, technical and vocational education and training that is required in low-income countries. We recommend that the international community prioritize the 15–20 countries where universal health coverage and our recommendations are least likely to be attained. This partnership should support institutional, faculty and programmatic capacity for socially accountable education and training. It will require additional financial commitments from multilateral agencies, global health initiatives and other sources.

E ESTABLISH AN INTERNATIONAL PLATFORM ON HEALTH WORKER MOBILITY

The Commission requests that ILO, OECD and WHO work with all relevant partners to develop an international platform on health worker mobility. We believe that such a platform is necessary to maximize the mutual benefits of health worker mobility without exacerbating or creating vulnerabilities in developing countries due to international migration. The platform should initiate dialogue, expand the evidence, consider new options and solutions, and enhance the effectiveness of existing instruments such as the ILO Recommendations and Conventions and the WHO Global Code of Practice. The platform should take into account global trends towards enhanced mobility, including the UN Secretary-General's proposal for a Global Compact for Safe, Regular and Orderly Migration, UNESCO's preparation of a global convention on the recognition of higher education qualifications, the development of the African Union passport and ASEAN Mutual Recognition Agreements, and other regional, bilateral and multilateral agreements on freedom of movement.

Box 11.

Targets and indicators aligned with the Sustainable Development Goals

SDG 3: Good health and well-being

Target 3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small-island developing States.

Indicator 3.c.1: Health worker density and distribution

SDG 4: Quality education

Target 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

Indicator 4.3.1: Participation rate of youth and adults in formal and non-formal education and training in the last 12 months, by sex (for health and social sector related programmes)

Target 4.b: By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small-island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.

Indicator 4.b.1: Volume of official development assistance flows for scholarships by sector and type of study (for health and social sectors)

SDG 5: Gender equality

SDG target 5.1: End all forms of discrimination against all women and girls everywhere.

Indicator 5.1.1: Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

SDG target 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.

Indicator 5.4.1: Percentage of time spent on unpaid domestic and care work, by sex, age and location

SDG 8: Decent work and economic growth

SDG target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

Indicator 8.5.1: Average hourly earnings of female and male employees, by occupation, age and persons with disabilities (for health workers)

SDG target 8.b: By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization.

Indicator 8.b.1: Total government spending in social protection and employment programmes as a proportion of the national budgets and GDP

Source: United Nations Statistics Division.[99]

Measuring success

The success of the Commission's recommendations and strategic actions will be measurable by the extent to which progress is achieved on SDGs 3, 4, 5 and 8. An indicative list of the SDG targets and indicators most relevant to the Commission's recommendations appears in Box 11. Their measurement, and disaggregated reporting against the respective indicators, will therefore be aligned with the work of the UN High-Level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development. The World Forum on Sustainable Development Data in January 2017, to be hosted by the South African government, will provide an opportunity to ensure this alignment.

In addition to reducing disparities between countries, success will depend on reducing inequities in access to health workers within countries (between urban and rural areas and between public and private sectors). Given the importance of placing sustained focus on achieving intracountry equity, countries should disaggregate data to inform SDG 3c on the density and distribution of the health workforce. Disaggregation should be aligned with WHO's standardized definitions and reporting requirements on the density of health workers per 1000 population by subnational (district) level and the distribution of health workers by facility/institution ownership. This will ensure harmonized reporting within and across countries.

Conclusion

While the work of the Commission concludes with this report, we are committed to ensuring that the report's evidence-based recommendations are carried forward with urgency. This is a once-in-a-generation opportunity to build a sustainable health workforce in all countries by 2030, shaping the unprecedented demand for 40 million health workers, and addressing the needs-based shortfall of 18 million health workers. Maximizing the socioeconomic returns on investment in the health workforce will contribute to the attainment of decent work, inclusive economic growth, human security and universal health coverage.

Given that the establishment of this Commission was requested by the UN General Assembly in December 2015, we look forward to seeing it endorse our report, recognizing that investing in new jobs in the health and social sectors is a key lever for implementing the 2030 Agenda.

Business as usual is not a tenable option for any country. Addressing 21st century health challenges related to demographic, epidemiological and technological changes will require a health workforce geared towards health promotion, disease prevention, and people-centred, community-based services. If left unchecked even the wealthiest countries will face challenges that could undermine social cohesion and prosperity. This is an opportunity to redefine conventional responses and spur new collective action. Countries and stakeholders need to act boldly, together.

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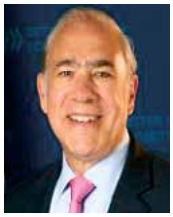

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References and notes

1. Inclusive economic growth is economic growth that creates opportunity for all segments of the population and distributes the dividends of increased prosperity, both monetary and nonmonetary, fairly across society.
2. Decent work means work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives, and equality of opportunity and treatment for all.
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ANNEX 1: Terms of reference

Context

1. **The Sustainable Development Goals (SDGs) adopted by the United Nations Member States in September 2015 set an ambitious agenda, particularly with respect to ensuring healthy lives for all, in a context where the recent outbreak of Ebola in West Africa has confirmed the urgency of building resilient health systems and strengthening global health security.** This includes decisively implementing the International Health Regulations, and the UN roadmap for strengthening health systems and healthy lives, involving an investment in the health workforce.

2. **The related health workforce needs are enormous:** By 2030, the global economy is projected to create around 40 million new health sector jobs, mostly in middle- and high-income countries. This demand is unequal however, and despite the growth in jobs there will be a projected shortage of 18 million health workers to achieve the Sustainable Development Goals in low- and lower middle-income countries. This shortage would be exacerbated due to increasing trends in the migration of health personnel, especially from countries with fragile health systems.

3. **This mismatch poses a threat to the stability of health systems and global health security.** A global strategy, implemented at national and local level, is therefore essential to support the determined development of decent jobs, in line with the wider goals set by the United Nations, the G7 and the G20 .

4. **The development of employment in the health and social sector is not only an imperative of international public health. It constitutes a major economic and social opportunity to promote inclusive economic growth and creation of decent jobs, especially for women and youth.** Despite the global financial crisis, the percentage growth in health and social sectors has outpaced most other sectors and contributes to global economic growth. It now represents 10.3% of global wealth.

5. **The promotion of investment in health workforce should be based on the following clear principles:**

   - the opportunity for individuals to receive training in their country of origin, which requires the development of teaching capacities in low-income countries, in particular through the strengthening of scientific research, vocational training and university partnerships;
   - the need to invest in the area of health personnel, particularly in underserved geographical areas and to extend health care coverage to the whole populations;
   - the right to freedom of movement, in an environment where skills are acquired and developed as a result of the exchange and circulation of knowledge, and hence the hosting of foreign students;
   - the need to better manage supply and demand in national, regional and global labour markets, and to anticipate migration flows, so as not to discourage investment in the health workforce in low- and middle-income countries, and to break the vicious circle of loss of expertise.

6. **Investing in health means that financing is secured and guarantees universal access to affordable and quality essential health services.**

   On the supply side, the creation of major funds in the early 2000s (the Global Fund to Fight AIDS, Tuberculosis and Malaria, the GAVI Alliance and UNITAID) enabled reduction in the cost of treatments and vaccines thereby ensuring their availability to populations that previously had no access to them. This action must be continued, particularly at global level, with a view to strengthening health systems and ensuring integrated, people-centred health services.

   In parallel, the demand for services in countries must be viable to ensure maximum utility and return on health investments (including social benefits). Beyond official development assistance and private sector investments, strengthening of domestic funding is crucial, whether this involves:

   - increasing the share of public resources allocated to health (i.e. the commitment of African leaders to allocate 15% of their public budget to health – Abuja Declaration 2001); or
   - generating new public revenue: e.g. taxes on alcohol and tobacco, innovative funding through the use of new technologies such as mobile phones, and taxes on financial transactions or extractive industries.

7. **In December 2015, by its resolution 70/183, the United Nations General Assembly** recognized that investing in new health workforce employment opportunities may also add broader socio-economic value to the economy and contribute to the implementation of the 2030 Agenda for Sustainable Development, and requested the United Nations Secretary-General to explore steps to meet the global shortfall of trained health workers. This initiative is a response to the request of Member States.

Scope of the Commission

8. **The objective of the Commission on Health Employment and Economic Growth ("the Commission") is to propose actions in support of the creation of around 40 million new jobs in the health and social sector by 2030, paying specific attention to addressing the projected shortage of 18 million health workers by 2030, primarily in low- and lower middle-income countries. These actions will need to contribute to global inclusive economic growth, creation of decent jobs and achieving Universal Health Coverage, and also to complement the various global development efforts set by the international community.**

9. The Commission is a strategic political initiative designed to complement broader initiatives developed by other international agencies and global health partners.

10. More specifically, the tasks of the Commission are:

    a. *to determine (i) the conditions needed for investment in employment in the health and social sector* to produce inclusive economic growth (particularly for women and young people) as the result of a local and sustainable source of new decent jobs (ii) how the sector contributes more broadly to the global and local economy and employment, and estimate social and economic costs of inaction (particularly with regard to global health security and a loss of economic growth);

    b. *identify obstacles in the development of health human resources capacity for achieving SDGs and progress towards Universal Health Coverage (UHC)*, taking account of assessments over the next 15 years in terms of demand and production (at global level and by main area of specialization);

    c. *to analyse the risks of global and regional imbalances and unequal distribution of health workers,* and assess the potential disparities between needs and the availability of human resources, in light of the specific health challenges faced by different regions in the world;

    d. *to study the potential beneficial and adverse effects of international mobility* (financial transfers, innovation, movement of qualified staff, obstacles to the deployment and retention of workers, discrimination and stereotypes in access to employment), and recommend innovative alternatives;

    e. *to make recommendations on the revision of education and training models and the development of the range of skills in the health and social sector*, to facilitate the production of qualified health personnel, especially in the poorest countries and in disadvantaged geographical areas (rural physicians, community nurses, etc.), and to ensure that health worker competencies are in line with priority health services and the health needs of populations;

    f. *to identify sources of funding,* including innovative financing, to initiate action, as well as identify means to maximize future return on investment by 2030;

    g. *to make recommendations on the institutional reforms required,* such as combating corruption, effecting international and national governance mechanisms, in order to achieve the objectives set;

    h. *to make recommendations for a multisectoral response that extends beyond the health sector and includes economic, social and other relevant sectors.* The development, protection and security of health workers require commitment across sectors and of partners beyond government;

    i. *to generate the political commitment* from governments and key partners necessary to support the implementation of the Commission's recommendations.

Results

11. The Commission will submit its report to the Secretary-General of the United Nations at the margins of the 71st session of the UN General Assembly (13-26 September 2016). The technical and analytical work carried out will be made available to decision-makers and the public. The final report (around twenty pages long) will be available in the six official languages of the United Nations.

Modus operandi

12. The Commission will be co-chaired by two Heads of State. It will be composed of about 25 senior officials in government, representatives from international organizations, development actors, executives from private-sector commercial and non-profit organizations, academics and figures from civil society.

13. Commission members will have the opportunity to meet twice in 2016, and the designated collaborators will be able to interact continuously via a virtual collaboration platform ("contact group").

14. An *ad hoc* secretariat will be composed of agency members from WHO, OECD and ILO.

15. A group of independent experts (approx. 12 members) will be appointed by the Secretariat to consider evidence and inform the Commission's deliberations.

ANNEX 2: Health workforce milestones

2006

The 2006 World Health Report establishes the human resources for health crisis on the global health agenda.

The Global Health Workforce Alliance (GHWA) established as the only independent platform at a global level with the mandate and capacity to bring together all stakeholders.

2008

The first Global Forum on Human Resources for Health is held in Kampala, Uganda to galvanize collective action and catalyse knowledge exchange.

Adoption of the Kampala Declaration and the Agenda for Global Action to respond to the health workforce crisis.

2008 – 2009

G8 nations recognize the health workforce as being fundamental to developing robust health systems, and note the importance of the Kampala Declaration and the Agenda for Global Action.

2010

Second Global Forum on Human Resources for Health in Bangkok, Thailand.

Adoption of the *WHO Global Code of Practice on the International Recruitment of Health Personnel* at the 63rd World Health Assembly.

2006 — 2007 — 2008 — 2009 — 2010 — 2011

2013

Third Global Forum on Human Resources for Health in Recife, Brazil.

Commitments made by 56 countries to improve the availability, accessibility, acceptability and quality of the health workforce

2014

Adoption of the *Recife Political Declaration* by the 67th World Health Assembly recognizing the centrality of the health workforce in the drive towards universal health coverage.

2015

Adoption of the United Nations General Assembly Resolution (A/RES/70/183) requesting the UN Secretary-General to explore steps to meet the global shortfall of trained health workers, including the possibility of establishing a high-level commission on future health employment and economic growth.

2016

UN Secretary-General launches the High Level Commission on Health Employment and Economic Growth New York, USA.

First meeting of the Commission, Lyon, France.

2016

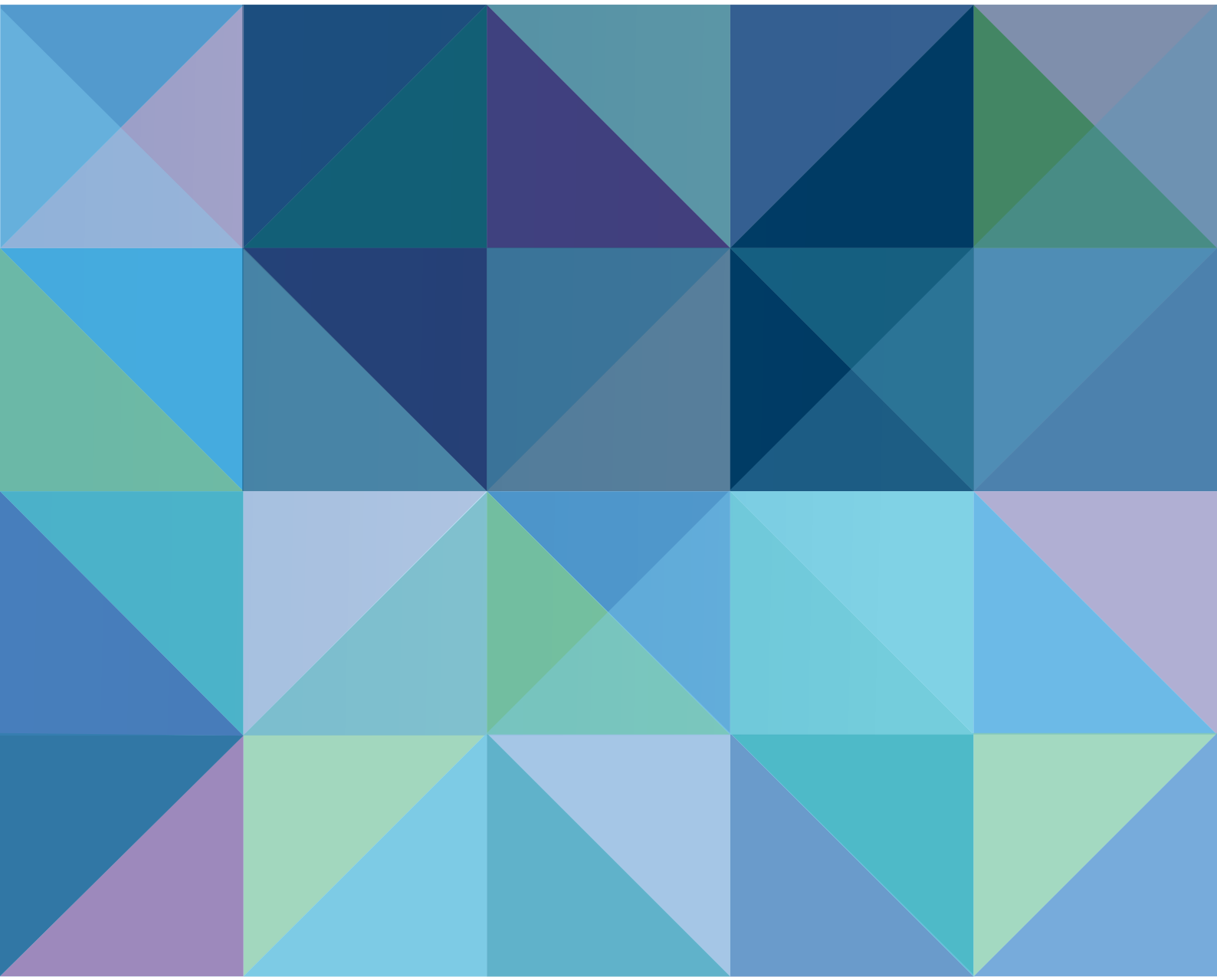
The adoption of the 69th World Health Assembly resolution A69/38 for the *Global Strategy on Human Resources for Health: Workforce 2030* following two years of consultation.

2012 — 2013 — 2014 — 2015 — 2016

September 2016

Second meeting of the Commission/ handover and launch of the Commission report, New York, USA.

This publication contains the report of the High-Level Commission on Health Employment and Economic Growth. The Commission was established by the United Nations Secretary-General in March 2016, recognizing that investing in new jobs in the health and social workforce may generate economic growth and contribute to the implementation of the 2030 Agenda for Sustainable Development. The Commision has been tasked with proposing actions to stimulate the creation of around 40 million new jobs in the health and social sector by 2030, paying specific attention to addressing the projected shortage of 18 million health workers by 2030, primarily in low- and lower middle-income countries.



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