# A VISION FOR PRIMARY HEALTH CARE IN THE 21ST CENTURY

Towards universal health coverage and the Sustainable Development Goals

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# Contents

# Foreword

In 1978 world leaders, international organizations and health authorities gathered in Alma-Ata (now Almaty), Kazakhstan, and released the Declaration of Alma-Ata on Primary Health Care, which remains a landmark document in the history of global health. The Alma-Ata Declaration established a standard of public commitment to making community-driven, quality health care accessible, both physically and financially, for all. This was the forerunner of the Global Strategy for Health for All by the Year 2000 that was pursued by the World Health Organization (WHO) and its partners for the rest of the 20th century, and of Sustainable Development Goal (SDG) 3: "Ensure healthy lives and promote well-being for all at all ages" by 2030.

The world has made excellent progress on global health, with changes so great that life expectancy is now around 10 years more than in 1978, and the risk of dying before the age of 5 years has fallen by around two thirds. Indeed, the spectrum of disease is now very different from 40 years ago, due to the demographic and epidemiologic transitions that have occurred. While the unfinished agenda of preventable child and maternal mortality remains, chronic noncommunicable diseases and injuries have replaced acute infections as the major causes of morbidity and mortality, necessitating a change in the profile of health services needed. A number of factors and trends have made the world a very different place in 2018 compared to 1978 – changes in population distribution (more urban, older, but with a heavy burden of young people in some global regions), increasingly sophisticated health and non-health technologies, improving health literacy, engagement and expectations, and growing food security and environmental risks that negatively influence health. Put simply, now is a good time to both review and adapt the Alma-Ata Declaration and develop a new vision of primary health care (PHC) as a foundation of universal health coverage, for the SDG era and beyond.

In October 2018, world health leaders, international organizations, civil society and other stakeholders meet in Astana, Kazakhstan, to commemorate the 40th anniversary of the 1978 Declaration. A new document – the Declaration of Astana on Primary Health Care – has been developed after global public consultation involving experts and civil society, and detailed negotiations between the WHO Member States. It will be officially launched at the Astana Global Conference on Primary Health Care, where a call will be made for governments to give high priority to PHC, including in non-health sectors, in partnership with their own public and private sector organizations, development partners and other stakeholders.

*A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals* provides the rationale for and foundation of the Declaration of Astana, with its continued political focus on the right to integrated, quality, personal and population-level primary care; on health as a multisectoral social and economic construct, dependent on many sectors; and on community engagement in health, and empowerment with respect to health services. It reviews evidence gathered over the last 40 years, and explains why progress on PHC, as originally envisioned, has been mixed. It provides a detailed description of how the components of PHC might evolve, and ends with an appealing and achievable vision for PHC in the 21st century.

In 2008, 30 years after the Alma-Ata Conference, The *world health report 2008 – primary health care: now more than ever* created a new opportunity for the reinvigoration of PHC. However, in the following years, health development assistance became more disease-focused, and an opportunity to work across sectors, across programmes and for community involvement in health care decision-making was lost. As a result, the accountability and reach of the primary care system – a core component of PHC – remains weak in many countries, along with poor quality of care and inadequate staffing.

We are still in the early years of the SDG era, and the promises offered by the digital age are exciting and revolutionary. This Vision document outlines how PHC can benefit from new technologies, new resources, new partnerships and new opportunities. Our organizations will continue to promote PHC as a foundation of health and health care services, imperative for the achievement of universal health coverage. Together we can achieve healthy lives and well-being for all at all ages, leaving no one behind.

Tedros A. Ghebreyesus, Director-General,
World Health Organization (WHO)

Henrietta H. Fore, Executive Director,
United Nations Children's Fund (UNICEF)

# Preface

This document is the result of collaborative work led by WHO and UNICEF. The work was in response to a request from the Minister of Health of Kazakhstan, Dr Yelzhan Birtanov, to the Director-General of WHO, Dr Tedros Ghebreyesus, and the Director of the WHO Regional Office for Europe, Dr Zsuzsanna Jakab, proposing to capitalize on the fortieth anniversary of the landmark International Conference on Primary Health Care in Alma-Ata by updating its declaration on primary health care.

This document is one of a technical series that supports the Global Conference on Primary Health Care, convened to renew commitment to Primary Health Care in light of UHC and the 2030 Agenda on Sustainable Development. This background document, the Operational Framework, and the associated technical documents are informed by reviews of the literature, 2018 WHO regional reports on PHC, country case studies on PHC, a literature reviews on and synthesis of lessons learned in PHC implementation over the last 40 years, a number of workshops with key stakeholders that agreed on a global roadmap, input from the International Advisory Group on Primary Health Care, public consultations, expert review, and thematic reports on key issues relevant to PHC.

This document series builds on WHO's reports on PHC over the past 40 years, notably the *global strategy for health for all by the year 2000 (1)*, *Primary health care 21: "everybody's business"(2)*, *the final report of the commission on social determinants of health (3)*, *The world health report 2008: primary health care - now more than ever (4)*, and the WHO *framework on integrated, people-centred health services (5)*.

# Acknowledgements

# List of abbreviations

| | |
|---|---|
| CHW | community health worker |
| DCP3 | Disease Control Priorities project |
| GDP | Gross Domestic Product |
| HiAP | Health in All Policies |
| ICT | information and communications technologies |
| NCD | noncommunicable disease |
| NHPSPs | national health sector policies, strategies and plans |
| PHC | primary health care |
| SDG | Sustainable Development Goal |
| UHC | universal health coverage |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |

# Technical series on primary health care

## Declaration of Astana

### A vision for primary health care in the 21st century

#### Making the case for PHC

- The economic case
- Health outcomes case
- Responsiveness case

### Operational framework

#### From vision to action

- Health in All Policies / Multisectoral Action
- Empowering individuals, families & communities
- PHC Health workforce
- Strategic purchasing
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- Quality in PHC
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- Integrating health services
- Integrating public health & primary care
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- Antimicrobial resistance
- PHC and health emergencies
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#### Meeting health needs through PHC

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- Older people
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#### Regional reports on PHC

- Africa
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#### Country case studies

- Progressing Primary Health Care
- Australia*
- Brazil
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- China
- Egypt
- El Salvador
- Estonia
- Finland*
- Primary Health Care Systems (PRIMASYS)
- Ghana
- Jamaica
- Kazakhstan
- Samoa
- Sri Lanka
- Sudan*
- Suriname*
- Thailand
- Turkey
- Viet Nam

* = Health in all policies cases

# Executive summary

The Declaration of Alma-Ata in 1978 was a landmark in the history of global health. Forty years later, the Global Conference on Primary Health Care and its associated Declaration renew a commitment to PHC in pursuit of health and well-being for all, leaving no one behind.

The focus on PHC is critical at this moment for three reasons:

1. The features of PHC allow the health system to adapt and respond to a complex and rapidly changing world.

2. With its emphasis on promotion and prevention, addressing determinants, and a people-centred approach, PHC has proven to be a highly effective and efficient way to address the main causes of, and risk factors for, poor health, as well as for handling the emerging challenges that may threaten health in the future.

3. UHC and the health-related SDGs can only be sustainably achieved with a stronger emphasis on PHC.

The concept of PHC has been repeatedly reinterpreted and redefined in the years since 1978, leading to confusion about the term. This document elaborates a modern concept of PHC, including how it is aligned with and contributes to the SDGs and UHC.

PHC is a whole-of-society approach to health that aims equitably to maximize the level and distribution of health and well-being by focusing on people's needs and preferences (both as individuals and communities) as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care, and as close as feasible to people's everyday environment.

PHC has three inter-related and synergistic components:

1. Meeting people's health needs through comprehensive promotive, protective, preventive, curative, rehabilitative, and palliative care throughout the life course, strategically prioritizing key health care services aimed at individuals and families through primary care and the population through public health functions as the central elements of integrated health services;

2. Systematically addressing the broader determinants of health (including social, economic and environmental factors, as well as individual characteristics and behaviour) through evidence-informed policies and actions across all sectors; and

3. Empowering individuals, families, and communities to optimize their health, as advocates for policies that promote and protect health and well-being, as co-developers of health and social services, and as self-carers and caregivers.

This vision places people, as individuals and communities, as the central focus of all efforts towards PHC. People's fundamental right to the highest attainable standard of health and well-being, and the world's renewed commitment to social justice, are expressed through adequate social protection and concerted efforts to address the needs of those who are most disadvantaged.

People are protected from adverse health outcomes through population-based

measures, planned and delivered with consideration for the needs of those served. These include prevention and control of locally endemic diseases and disease outbreaks, prevention of noncommunicable diseases, and information and education concerning prevailing health problems, including major risks, and how to prevent and control them.

In the context of individual care, a trusted multidisciplinary primary care team supports patients in prioritizing and identifying care goals. Teams approach individual patient care, taking into consideration the patient's cultural preferences and stage of life, across a wide range of problems (mental and physical, chronic and acute, communicable and noncommunicable). Teams are responsible for assessing the health needs of the patient, providing safe, evidence-based, cost-efficient management through appropriate use of health technologies and information technology, and coordinating additional or specialized services for patients who need them through wider PHC networks.

The broad determinants of health, including social, economic, environmental determinants, and associated commercial factors are addressed through action involving multiple sectors of government, civil society, and the private sector, which sustain societies and environments that foster health and well-being. Close collaboration among sectors, such as social protection, housing, education, agriculture, finance, and industry, enables people to live in health-promoting neighbourhoods that combine clean air, walkability and accessibility, green spaces, road safety and effective public transit options.

Efforts to advance health and well-being are anchored in and informed by the community. People have access to the knowledge, skills and resources needed to care for themselves and their loved ones, leveraging the full potential of health technologies as well as information and communications technologies (ICT).

To achieve this ambitious vision of PHC in the 21st century, transformational action is required. The specifics of this action will vary considerably from country to country; for example, the types of activities required in a fragile setting still grappling with the unfinished Millennium Development Goals agenda will differ significantly from what a middle-income country confronted with a rising prevalence of noncommunicable diseases needs to do. Therefore, a flexible set of thirteen "levers" has been identified that countries can employ as they move towards PHC.

The choice of specific actions should be informed by evidence, both local (e.g. the social, economic, and environmental situation and trends in the country, the disease burden, and the strengths and weaknesses of the health system) and global (e.g. what has been shown to work in improving PHC and what does not). To assist with this, lessons learned from the past four decades of research into PHC are summarized here.

Through the SDGs, the world has committed to an ambitious development agenda aimed at improving the health and well-being of all people. Forty years after the Declaration of Alma-Ata, equipped with evidence and inspired by the renewed global commitment, it is time for the global community to take humanity closer to health and well-being for all through bold steps. A bold new approach to primary health care is central to achieving the SDGs and UHC. Progress will require courage and determination. Clearly the time is now. The world has never been better positioned for success.

# 1. Introduction

The Declaration of Alma-Ata in 1978 was a landmark in the history of global health. Forty years later, the Global Conference on Primary Health Care renews a commitment to PHC in pursuit of health and well-being for all, leaving no one behind.
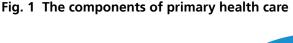
This vision document defines the modern concept of PHC, describes the components of PHC and outlines how they promote health, equity, and efficiency, by and for people. It explains how PHC aligns with and contributes to the SDGs and UHC. It highlights some of the lessons learned over the past 40 years with regard to successful implementation of PHC and describes the challenges faced. Finally, it outlines a vision of PHC for this century and proposes key levers to achieve the vision.

In sum, this document offers an approach that will ensure healthy lives and promote well-being for all at all ages, in the words of SDG3.

# 2. What is primary health care?

The concept of PHC has been repeatedly reinterpreted and redefined since 1978. In some contexts, PHC refers to the provision of ambulatory or first-contact personal health care services. In other contexts, it is understood as a set of priority health interventions for low-income populations (also called selective PHC). Some understand PHC as an essential component of human development, focusing on the economic, social and political aspects rather than simply health service provision. Each of these interpretations is a simplification of the broader definition set out in the Declaration of Alma-Ata, and their implementation carries the risk of missing out on the benefits of a comprehensive PHC approach. A clear and simple definition of PHC is needed to facilitate the coordination of future PHC efforts at the global, national, and local levels and to guide their implementation.

PHC is a whole-of-society approach to health that aims to ensure the highest possible level of health and well-being and their equitable distribution by focusing on people's needs and preferences (as individuals, families, and communities) as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care, and as close as feasible to people's everyday environment.

**Fig. 1  The components of primary health care**



The experience accumulated over the past 40 years supports a comprehensive definition of PHC, which incorporates three inter-related and synergistic components (Fig. 1).

1. Meeting people's health needs through comprehensive promotive, protective, preventive, curative, rehabilitative, and palliative care throughout the life course, strategically prioritizing key health care services aimed at individuals and families through primary care and the population through public health functions as the central elements of integrated health services;

2. Systematically addressing the broader determinants of health (including social, economic and environmental factors, as well as individual characteristics and behaviour) through evidence-informed policies and actions across all sectors; and

3. Empowering individuals, families, and communities to optimize their health, as advocates for policies that promote and protect health and well-being, as co-developers of health and social services, and as self-carers and caregivers.

PHC is rooted in a commitment to social justice, equity and participation. It is based on the recognition that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction, as stated in the Constitution of the World Health Organization *(6)* and reinforced in article 25 of the Universal Declaration on Human Rights: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services"*(7)*. This underlines the responsibility of governments for making quality essential health services available and accessible and for implementing policies that promote and protect health and well-being. Numerous comparative analyses of health systems have demonstrated that PHC is the most equitable, efficient and effective strategy to enhance the health of populations.

While the delivery of high quality and safe primary care is critical to a PHC approach, it is not sufficient. Multisectoral policies and action, empowered people and communities, and essential public health functions are also required. Together these components provide the mechanism to achieve the highest attainable standard of health and well-being for all. They are described in more detail in Section 5.

# 3. Why focus on primary health care now?

Renewing PHC and placing it at the centre of efforts to improve health and well-being are critical for three reasons.

1. The features of PHC allow the health system to adapt and respond to a complex and rapidly changing world.
2. With its emphasis on promotion and prevention, addressing determinants, and a people-centred approach, PHC has proven to be a highly effective and efficient way to address the main causes of, and risk factors for, poor health, as well as for handling the emerging challenges that may threaten health in the future.
3. UHC and the health-related SDGs can only be sustainably achieved with a stronger emphasis on PHC.
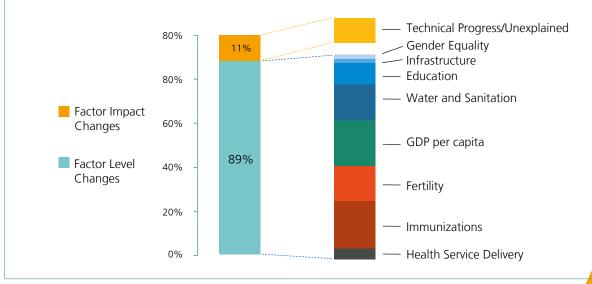
These are grounded in an evidence-based understanding of what leads to better health and well-being (Box 1).

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**Box 1. The complex interplay of factors that lead to improved health**

The 40 years since the Declaration of Alma-Ata have seen an explosion of research into the complex interactions of multiple factors that affect health and well-being. While some of these factors are directly related to the health system and access to health services, it is abundantly clear that a broad range of factors beyond health services play a critical role in shaping health and well-being; these include social exclusion, food systems, education, and environmental factors.

For example, a recent analysis found that approximately half of the reduction in child mortality between 1990 and 2010 was due to factors outside the health sector. The figure below shows the reduction in under-five mortality attributable to each of a number of different factors (such as better gender equality, improved water and sanitation, and economic growth), and highlights the significant contributions of non-health factors.  Note:  Factor Impact changes refers to a change in the impact of that factor over time (i.e. the same degree of technical progress was associated with a lower under-five mortality rate in 2010 as in 1990).  Factor level changes refers to a change in the level of that target being associated with under-five mortality (i.e. increasing access to water and sanitation was responsible for a change in Under-five mortality).

Contributory factors to changes to under-five mortality rate, 1990-2010



Source *(8)*

## 3.1 A changing world

The world is experiencing rapid economic, environmental, technological, and demographic changes, all of which affect health and well-being. These effects are not always beneficial and a number of key trends pose significant challenges.

Economic growth is directly related to improved health and well-being (as both a cause and an effect) but has been unevenly distributed; in particular, sub-Saharan Africa has lagged behind in recent decades. Within-country inequality has increased in many countries and a series of economic shocks and crises have occurred at both global and regional levels, with negative implications for health and well-being. Moreover, a number of countries have been persistently affected by conflict and fragility, with significant implications for the health status of their populations. An estimated 68.5 million people have been forcibly displaced from their homes, the highest level on record *(9)*. Hundreds of millions more have migrated internally to urban areas with the result that more than 55% of the world's population now lives in cities;*(10)* the effects of this on health and well-being can be either positive or negative. Climate change may result in considerable increases in the number of people living in extreme poverty *(11)* and has been called "the biggest global health threat of the 21st century"*(12)*.

PHC allows society and health systems to respond to these challenges. The multisectoral approach draws in a wide range of stakeholders at national and subnational levels to examine and devise policies to address the social, economic, and environmental determinants of health and wellbeing. Treating people and communities as key actors in the production of their own health and well-being is critical for understanding and responding to the complexities of the changing context.

## 3.2 Today's and tomorrow's health challenges

Considerable progress has been made in improving health and well-being over the past 40 years, with dramatic reductions in maternal, neonatal, and child deaths, and in deaths from causes such as HIV/AIDS, malaria, tuberculosis, and vaccine-preventable diseases. PHC has contributed to these advances, and there is now a wealth of evidence about the effectiveness of this approach, particularly with regard to some of the leading causes of morbidity and mortality *(13,14,15)*. PHC has also been shown to reduce total health care costs and increase efficiency by improving access to preventive and promotive services, providing early diagnosis and treatment for myriad conditions, and people-centred care that focuses on the needs of the whole person, and reducing avoidable hospital admissions and readmissions *(16,17,18,19)*.

Many countries are still grappling with what has been described as the unfinished agenda of the Millennium Development Goals, addressing the burden of communicable, maternal, neonatal, and childhood disease, and malnutrition. However, globally there has been a dramatic shift in the patterns of disease, as a result of population ageing and unhealthy environments contributing to unhealthy lifestyles (including unhealthy food, lack of physical activity, use of tobacco, etc.). Across all countries, the proportion of disability-adjusted life years lost to noncommunicable diseases (NCDs) grew from 44% to 61% between 1990 and 2016, with the fastest rises in low- and middle-income countries (*20).* The coexistence of multiple (often chronic) conditions in a single individual (multimorbidity) presents a particular challenge, not only because of the significant burden it imposes on the individual concerned but also because of the relative lack of evidence available to guide their complex management *(21,22)*. The burden of disease related to mental health has also been growing in recent decades and is increasingly recognized as a major and largely untreated epidemic. Addressing these increasingly complex health needs calls for a multisectoral approach that integrates health-promoting and disease-preventing policies, solutions that are responsive to communities, and health services that are people-centred – in short, PHC.

Another key challenge is the spread of novel pathogens and pathogens that are resistant to current forms of treatment. The Ebola epidemics of the past decade have demonstrated the vulnerability caused by weak local health systems. At the same time, the increasing prevalence of antimicrobial resistance represents a major threat to current therapeutic options. PHC includes the key elements needed to address these issues and improve health security, including community engagement and education, a focus on the availability of good quality medicines, rational prescribing, and a core set of essential public health functions, including surveillance and early response. Additionally, by strengthening the community and peripheral health facility level, PHC contributes to building resilience, which is critical for withstanding shocks to the health system and ensuring the continued delivery of essential health services.
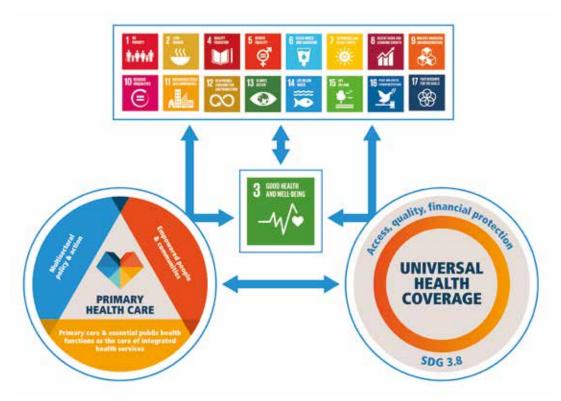
## 3.3 A necessary foundation for the health-related SDGs and UHC

The *2030 Agenda for Sustainable Development* and the 17 Sustainable Development Goals present an ambitious agenda for building a better world. Health and well-being are specifically addressed through SDG3, which calls for efforts to ensure healthy lives and promote well-being for all at all ages *(23)*. In line with the integrated vision of the SDGs, the targets under SDG3 relate directly to health and well-being, while being influenced by and influencing the other development goals.

Achieving the SDG3 targets, while leaving no one behind, can only be done through PHC. Targets such as reducing maternal, neonatal, and child mortality, ensuring universal access to sexual and reproductive health services, strengthening the prevention and treatment of substance abuse, and preventing and treating NCDs rely on multisectoral policies and actions that promote health and well-being, integrated health services that prioritize primary care and public health functions, and empowered people and communities. Even for targets such as ending the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases, which have so far largely been addressed through vertical initiatives, it is increasingly recognized that a more integrated approach is essential to sustain and continue to make gains. For example, poor quality housing and neglected peri-domestic environments are risk factors for the transmission of malaria, arboviral diseases (e.g. dengue, yellow fever, chikungunya, Zika virus disease), Chagas disease and leishmaniasis. The role of the housing sector in health needs to be clearly understood and supported across government and service delivery organizations. Equally, the implications of other public policies and actions for health and health services need to be fully appreciated *(24)*.

The fact that multisectoral policies and action are key components of PHC is in keeping with the integrated vision of the SDGs and means that PHC-related efforts can both draw on and strengthen a number of other sectors. As a result, PHC can contribute to the attainment of targets for a number of goals other than SDG3, including those related to poverty, hunger, education, gender equality, clean water and sanitation, work and economic growth, reducing inequality, and climate action (Fig. 2).

**Fig. 2. Linking PHC, UHC and the SDGs**



Currently, one of the major areas of focus of the global community is achieving UHC, and PHC is a necessary foundation for these efforts. UHC has several dimensions, including improving financial protection (thereby reducing household expenditure on health) and increasing access to quality services, medicines and vaccines. Reaching all people, including the most disadvantaged, is a key element of UHC. PHC is critical for addressing each aspect of UHC (Table 1).

- PHC plays a key role in reducing household expenditure on health by addressing the underlying determinants of health and by emphasizing population-level services that prevent illness and promote well-being. This both reduces the need for individual care and can avoid the escalation of health issues to more complex and costly conditions. Empowered people and communities are key advocates for increasing financial protection for health services.

- PHC is a cost-effective way of delivering services, so focusing on PHC is the best-value way for countries to move towards universal access. The involvement of empowered people and communities as co-developers of services improves cultural sensitivity and increases patient satisfaction, ultimately increasing use and improving health outcomes. In addition, there is considerable evidence that health systems based on primary care services that are first-contact, continuous, comprehensive, coordinated, and people-centred have better health outcomes.

- In many countries, the majority of people who do not currently have access to care are disadvantaged. PHC is optimally placed to address this, because of its emphasis on tackling the determinants of health, which underpin vulnerability. Additionally, in most countries, the PHC focus on community-based services is the only way to reach remote and disadvantaged populations.

**Table 1. How PHC supports the achievement of UHC**

| | | How PHC components enable UHC | | |
|---|---|---|---|---|
| | | Financial protection/reducing household expenditure on health | Quality services, medicines and vaccines | Equitable Access |
| **Components of PHC** | Primary care and Essential public health functions | Population-level services prevent ill-health and promote well-being ➜ reduced individual care ➜ reduced expenditure<br><br>Expenditure in primary care has been shown to be cost-effective compared with delivering those same services through referral care | Health systems based on high-performing primary care that is first-contact, continuous, comprehensive, coordinated and people-centred have improved health outcomes | PHC's emphasis on community-based services is an important way to ensure access, even in rural, remote and disadvantaged populations. |
| | Multisectoral policy and action | Addressing underlying determinants prevents ill-health and promotes well-being ➜ reduced individual care ➜ reduced expenditure | Reduces burden of disease in the population thereby freeing resources for improving quality and safety of health care delivery | Addressing underlying determinants can increase appropriate access of services by reducing barriers (e.g. environmental, educational) to access |
| | Empowered people and communities | Advocacy for expanding financial protection; involvement in design of financing systems improves acceptability and increases buy-in, which is critical for scaling interventions | Advocacy for expanding access; involvement as co-developers of services ➜ increased cultural sensitivity and patient satisfaction ➜ more appropriate use and improved health literacy ⯈better outcomes<br><br>improved self-care capacity | Advocacy for not leaving anyone behind; role as informal caregivers |

# 4. Forty years of lessons learned

Over the past four decades, there has been considerable research into what works and what does not in the reorientation of health systems towards PHC. This evidence base – which informs the vision presented in this document – is summarized in this section. Additional detail can be found in the regional reports and other background documents prepared for the Global Conference on Primary Health Care.

## 4.1 Leadership and policy

Across a wide variety of settings in low-, middle-, and high-income countries, PHC-oriented health systems have consistently produced better health outcomes, enhanced equity, and improved efficiency (25,26). Political leadership that prioritizes PHC (e.g. in Costa Rica (27) and Cuba (28)), a clear vision grounded in evidence (29), and iterative cycles of improvement and adjustment based on data are necessary for sustainable PHC implementation. Conversely, without purposeful leadership and sustained efforts, health systems do not naturally gravitate towards PHC.

Implementation of PHC is hampered by the medicalization of health at the expense of a broader preventive and whole-person approach. In addition, challenges have arisen as a result of lack of political commitment to social equity and to health as a human right, difficulties working effectively across sectors, separation of health system planning and health service delivery, a shortage of adequate human resources and volatile macroeconomics (30). With regard to primary care specifically, insufficient human and financial resources, the absence of regulation and accountability, the introduction of user fees and privatization have threatened access and equity in some settings (31) and at times have reversed previous progress.

Progress has also been hindered by the reluctance of leaders to align policies and financing to support reorientation of services from a focus on hospital-based and curative care to a focus on community-based and preventive care (32). Successful reorientation of health systems towards PHC depends on the recognition of the role of hospitals in the process. Hospitals must be an essential part of the solution rather than being considered as part of the problem. A substantial proportion of a country's health workforce, technology and financial resources is concentrated in hospitals; they are responsible for training many health service professionals and have the political, economic and social power to facilitate or hinder transformation of the system. Numerous examples demonstrate how hospitals can support PHC by reorienting patients to primary care for follow-up or to avoid unnecessary admissions, and by collaborating with primary care workers to develop their capacity and reduce referrals, through staff rotation initiatives. With new work arrangements constantly emerging, and with fast-evolving modalities of health service provision enabled by portable and mobile technologies, hospitals can take on a broad spectrum of roles that strengthen public health approaches and primary care services.

## 4.2  Funding and resource allocation

The availability and reliability of data on expenditure related to all three components of PHC are generally poor, both as a result of underinvestment in resource tracking systems and because of the complexity of defining and tracking expenditure on PHC, partly because of its multisectoral nature. This dearth of reliable and consistent measurement has hindered accountability for PHC financing and implementation. The available data point to significant underfinancing as a result of insufficient fiscal space for health, and allocation schemes that favour curative, subspecialist and hospital care. For example, only eight of the 30 countries for which data are available spend at least US$40 per capita on PHC per year *(33,34)*.[1] With regard to health services specifically, prevention and promotion activities are generally underfunded. Subspecialist care and hospitals receive a larger share of both public and private spending than health centres and primary care providers *(35)*. In many countries there is a need to increase allocation of public funds to health, prioritizing new resources to PHC, thus ensuring the availability of core services and access for marginalized communities and people in vulnerable situations. In the African Region, access to health facilities remains limited, with 85% of countries having fewer than 10 health centres per 100 000 population, and 82% fewer than one district hospital per 100 000 population *(36)*.

Despite remarkable contributions to health outcomes, the approach and governance of vertical programmes focused on a small number of diseases – such as HIV infection, tuberculosis, malaria, and vaccine-preventable diseases – have presented challenges for PHC implementation. At the community level, the delivery of predefined service packages focused on specific diseases has left large gaps in coverage, depriving the population of the significant benefits of comprehensive integrated community-informed and person-centred health services *(37)*. In some cases, efforts to direct attention to the priorities of a particular programme (e.g. incentive schemes for medical professionals) has pulled resources away from comprehensive primary care. A number of these programmes are now investing considerable resources in health system strengthening, which has the potential to contribute to PHC, but the different governance structures used by each programme make it difficult for governments to ensure both a coherent approach that efficiently contributes to PHC *(38)* and accountability to the communities, which should be engaged in setting priorities.

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[1]  These data come from the System of Health Accounts 2011 (SHA2011), which identifies the subset of expenditure that is allocated to PHC. However, as health accounts were not originally designed for this purpose, the categorization has several limitations, e.g. difficulties in recording expenditures on policy interventions and public health functions, and in disaggregating expenditure on medical products to primary and referral care.

## 4.3  Health workforce

PHC requires the involvement of a workforce with a wide range of skills and expertise, both across the health system and in other sectors and segments of the community. Policy-makers, economists, managers, educators, hospital administrators, community agents, communicators, academics and public health experts need to be equipped to work together across sectors to respond to the needs of the people.

The delivery of effective population-based services requires a public health workforce that is purposefully trained, through dedicated preservice public health training programmes and adequate in-service training that demonstrates the application of evidence-based knowledge with locally relevant expertise. The public health workforce must have the necessary competence to carry out essential public health functions, such as surveillance, monitoring, preparedness and response, as well as deliver population-based services in health protection and promotion (e.g. education campaigns) and disease prevention (e.g. food safety assurance and vaccination campaigns). The ability to collaborate across sectors, with communities and with health workers is particularly important as the public health workforce plays a crucial role at the intersection of many components of the health system *(39)*.

Primary care personal health services are best delivered by effective and coordinated teams with a range of skills and the competence to address the majority of the health needs of the population, close to where they live *(12,40,41,42)*. Primary care teams are ideally multidisciplinary and may include family doctors, nurses, community health workers, physician assistants, rehabilitation workers, nutritionists, care managers, social workers, pharmacists, dentists, traditional healers and support staff.

Capacity for primary care can be expanded by ensuring an appropriate mix of skills in the team and providing training and clear role definitions in support of individuals' responsibilities *(43,44)*. Appropriately recruited, compensated, trained and integrated community health workers (CHWs) can contribute to improved access, responsiveness, satisfaction and outcomes *(45,46,47)*.

Nurses and midwives also form a critical group of health professionals. They spend extensive time in direct contact with people and have a central role to play in primary care teams *(48)*. They can also provide important support and supervision to CHWs. Improved higher-level training, a clear role definition and support are essential if nurses are to be able to fulfil their potential in a primary care setting *(49)*. However, relatively few countries currently provide advanced nursing training specifically focused on the delivery of primary care.

Comprehensive generalist physicians (commonly called family physicians or family doctors) play a central role in PHC-oriented health systems with effective primary care. The family physician, a trained specialist in comprehensive, generalized, whole-person care, can support the primary care team in addressing a range of health issues. This permits early intervention in the community and maximizes cost-efficiency, as well as providing benefits to populations who would otherwise need to seek care away from their communities *(12,50)*.

Too often, the primary care workforce has lower levels of training, remuneration, recognition and access to clinical resources than their hospital-based and subspecialist colleagues. This can compromise quality and contribute to a high level of burnout among primary care health workers *(51)*, as well as hampering the recruitment and retention of health workers in primary care. As a result, there have been calls for Improved employment conditions for health workers in primary care.

## 4.4 Quality of care

PHC includes the delivery of safe, effective, people-centred care for everyone. It is not "poor care for the poor", as it is unfortunately perceived in some places as a result of a history of inadequate resourcing and limited implementation. Where PHC is implemented as an ad hoc set of minimal and inexpensive services, or by a workforce with limited training and competence, it will fail to deliver the expected results and public confidence will be undermined *(52)*. Quality is linked to both equity and accountability.

Strategies that have been shown to support quality in the delivery of primary care include supply-side options, such as the adoption of best practices at the national and subnational level *(53)*, formal administrative mechanisms, such as accreditation and regulation, the establishment of quality improvement organizations and programmes integrated with health service planning, delivery, and training, and various health workforce incentives *(54)*, both financial (pay-for-performance) *(55)* and non-financial (recognition, continuous professional development and clinical decision support tools) *(56)*.

Engaging the community in assessing the quality of health care has resulted in increased patient safety and reduced risk *(57,58)*. In Brazil, for example, enrolment in the family health strategy has been linked to a higher likelihood of regular care, better access to medication, and improved patient satisfaction *(22)*. In addition to these supply-side efforts, there are demand-side options, such as patient-experience surveys and community engagement on risk-reduction efforts *(56)*. More knowledge is required about the ways in which patient involvement leads to better outcomes *(59)*.

# 5. The components of primary health care

## 5.1 Primary care and essential public health functions as the core of integrated health services

The delivery of quality health services that respond to the needs and preferences of people, at both the population and individual level, is the first component of PHC. Services cover the full continuum from health promotion and disease prevention to treatment, rehabilitation, and palliative care and are delivered at individual or population level, as appropriate. Population-based and individual services are inherently complementary, the impact of each being augmented through integration and coordination with each other *(60,61)*. Indeed, in many health systems, key population-based functions are delivered by the same primary care teams that are responsible for individual services (e.g. screening and reporting of sexually transmitted diseases, cancer screening, health education, health promotion, and behaviour change communication).

### A. Personal services

Primary care is the entry point to personal health services for the vast majority of health problems. An essential component of the health system, it also provides services with a family and community orientation, linking public health and personal health. Good quality primary care has been linked to increased access to services, better problem recognition and diagnostic accuracy, a reduction in avoidable hospitalization, better health outcomes (particularly in case-fatality rates and responsiveness of services), attenuation of wealth-based disparities in mortality, lower suicide rates, and a higher life expectancy *(34,62,63,64)* Quality primary care is evidence-informed, community-delivered and person-centred, provides the point of first contact, and ensures continuity, comprehensiveness, and coordination *(65)*.

### *First contact*

Primary care should be the first point of contact for the large majority of disease prevention activities, as well as for acute and chronic health problems. The availability of quality primary care, particularly at the community level, contributes to the development of a committed therapeutic relationship *(66),* increasing the likelihood of timely consultation, improving continuity of care, and leading to better outcomes over time[67].

For primary care to effectively provide first-contact coordinated care, a comprehensive array of services needs to be readily available. This critical characteristic of effective primary care is strengthened when access to other levels of care and services is always arranged through referral from primary care (gate-keeping), or when there are financial incentives for seeking care at the primary level (e.g. little or no out-of-pocket payment). Such arrangements can also improve continuity and ensure that subspecialized services are able to maximize their function in the health system, rather than being overused for health needs that can be appropriately managed in primary care, thus enhancing efficacy *(67,68)*.

### *Comprehensiveness*

Comprehensiveness refers to the scope, breadth, and depth of primary care, including the competence to address health issues throughout the life course. Comprehensive primary care can respond to any health care need the individual may have, either through direct provision of care (for the vast majority of problems) or through referral to other levels of care or services.

Comprehensiveness decreases unnecessary referrals, thereby supporting efficient allocation of resources and responsibilities within the health system and facilitating continuity and integration of care. Selective PHC (a limited number of high-impact services to address some of the most prevalent health challenges in developing countries *(33))* is not consistent with the need for comprehensiveness and is at odds with people-centred care and demand-driven services in the context of a life-course approach.

## Continuity

Continuity of care results from the delivery of seamless coherent person-focused care over time across different care encounters and transitions of care *(69)*. Primary care is based on a commitment by health professionals and individuals to a long-term relationship based on mutual trust that facilitates continuity (relational continuity) and is further supported by evidence-based pathways of care (management continuity) and integrated information systems (informational continuity). Continuity has been linked to lower mortality, fewer emergency department visits and admissions, shorter hospital stays, lower health care costs, and improved patient satisfaction; it can also enhance accountability *(70,71)*. Access and continuity should both be promoted. Achieving both will require more effective use of resources as demand for health services increases.

## Coordination

One of the essential functions of primary care is to coordinate service delivery across the whole spectrum of health and social care services, including mental health services, long-term and social care, through integrated, functional, and mutually supportive arrangements (including referral systems) for transitions and information-sharing along evidence-based care pathways. Coordination decreases the well-known risks at transition points (from home to clinic and from hospital to clinic) *(72)*. It should also ensure seamless transitions between the public and private sectors – both profit and non-profit – as necessary.

## Person-centredness

Effective primary care is centred on the whole person, in health and in sickness, taking into consideration the full physical, mental, and social circumstances rather than focusing on a specific organ, stage of life, or subpopulation. The person-centred nature of effective primary care aligns with the central role of people in PHC and supports the use of patient-centred measures in its evaluation *(62,73)*. Because primary care is comprehensive, coordinated and person-centred, it is ideally suited to respond to the challenges of multimorbidity.

For many people, herbal medicine, traditional treatments, and traditional practitioners are the main sources of health care. Appropriate integration of evidence-based, safe and effective traditional medicine as part of primary care can lead to better health outcomes and economic advantages *(74,75)*. Traditional medicine draws on and enhances societal knowledge of health preservation and management, supporting the vision of a knowledge-based healthy society equipped for self-care *(76,77)*. In many countries, traditional medicine has been effectively integrated with allopathic interventions. Traditional medicine has been shown to be effective in areas such as NCD management, palliative care, rehabilitation, several neglected tropical diseases, mental health and the care of the elderly *(78,79,80,81)*.

## B. Population-based services

Population-based services employ a public health approach to improve health and well-being on a large scale. The public health functions specifically relevant to a PHC approach and closely linked to primary care are health protection, health promotion, and disease prevention (service delivery), surveillance and response, and emergency preparedness (intelligence) *(82)*.

### Health protection

Health protection includes risk assessment, and supervision of enforcement and control of activities for minimizing exposure to health hazards in order to protect the population, by ensuring environmental, toxicological, road and food safety. It overlaps with health care delivery through patient safety, and with self-care through consumer safety. Health protection shapes the physical and social environment to allow people to live healthy lives.

### Health promotion

While health protection guards against potential threats to good health, health promotion enables people to have more control over their own health, through better health literacy and improved ability to provide self-care and care for others. In addition, health promotion aims to create health-enhancing physical and social environments through a wide range of social and environmental interventions. As discussed in section 5.2, a wide array of multisectoral policies are important for this.

### Disease prevention

Disease prevention is delivered at both the individual and the population level and in many settings is linked to health promotion and health care delivery. Disease prevention has been shown to be an essential stepping stone to achieve health and well-being, responding to clearly established and universal health needs; as such it is an integral part of UHC and should be planned, coordinated and resourced as such.

### Surveillance and response

Surveillance and response combine monitoring and prevention, and highlight the importance of readily usable health information at the population and community level, including through engagement of primary care workers.

## Emergency preparedness

Emergency preparedness aims to address unforeseen and catastrophic circumstances that create a surge of demand for health services and strain resources and infrastructure. This function is important in both well-established systems and those that are precarious or known to be at risk of disruption, for example by environmental disasters or conflict. A strong and well trained PHC workforce is needed during emergencies to ensure that the health system is responsive and adaptable, and to help with planning, thus helping to avoid the rapid and uncontrolled depletion of health resources.

In PHC-oriented systems, public health functions may be delivered as separate national or subnational programmes (e.g. disease prevention may include a school-based immunization programme) or through primary care services (such as cervical cancer screening in some countries), according to what is most appropriate in the particular setting. In both cases, public health functions should be coordinated and integrated with each other and with primary care, in a coherent PHC approach with integrated policies, adequate resources, aligned leadership, and effective communication. Better integration of public health and primary care has been associated with improvements in health behaviour, a range of health outcomes including reduced rates of chronic disease and maternal and child health, improved access to health services and health literacy *(83, 84).*

## 5.2  Multisectoral policies and action

The health and well-being of people and populations result primarily from the interaction of social, economic, environmental, and determinants, and increasingly by commercial factors, which generally lie outside the immediate influence of the health sector *(85)*. For example, in 2016 more than 6 million deaths were attributable to air pollution, nearly 3 million to maternal and child malnutrition, and more than 7 million to smoking; inadequate water, sanitation and hygiene contributed to an estimated 829 000 deaths from diarrhoeal disease *(21)*. These and other risks to health and well-being are in turn strongly compounded by poverty and social inequity. It is impossible to achieve health for all without addressing these broader determinants, which is why multisectoral policies and action [2] are essential components of PHC.

As outlined by the Commission on Social Determinants of Health *(86)* and reaffirmed in the Rio Declaration on Social Determinants of Health in 2011 *(87)*, the achievement of social and health equity requires coordinated and collaborative multisectoral policy action including for example, through Health in All Policies. Building on this work, the Disease Control Priorities project (DCP3) has identified 71 key multisectoral interventions for health, which it groups into four categories by the mechanism of action *(88)*:

1.  Fiscal measures, such as taxes and subsidies;

2.  Laws and regulations;

3.  Changes in the built environment;

4.  Information, education, and communication campaigns.

Among these, DCP3 has identified 29 priority interventions, such as access to clean water and sanitation, halting the use of unprocessed coal and kerosene as a household fuel (to address indoor air pollution), imposing large excise taxes on tobacco, alcohol, and other dependence-producing substances, and fortifying food (with iron and folic acid) and salt (with iodine). The majority of these interventions (17) are regulatory, while seven are fiscal. These steps, together with other measures, such as public finance (government financing of interventions for the entire population *(89)* and cash transfers *(90),* would have significant benefits not only for health and well-being but also for a number of the other SDGs. Many of these require policy changes and action from entities outside the health sector *(91)*. At the highest level, leadership by heads of government and other key societal change agents is important for tackling structural forces that drive economic disparities and societal and gender norms that create inequities, both of which are major contributors to ill health. Addressing this typically requires policy changes through broader national (and in some case subnational) development plans, in which it is important to recognize the relationship between areas such as economic growth and health outcomes.

The policy choices and actions taken directly by other sectors in carrying out their own duties often have significant impacts on health outcomes, even if this is not the primary intent, for example the extent to which a ministry of education is successful in educating girls plays a key role in their health outcomes over the course of their lives. A PHC approach needs to recognize the roles that these other sectors – from finance and industry to education, agriculture, and urban planning – play in contributing to health outcomes, and ensure that these other sectors are aware of the impact of their decisions on health outcomes and factor this into their decision-making.

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[2]  The terms "multisectoral" and "intersectoral" technically have slightly different definitions in the literature but are frequently used interchangeably. For the sake of simplicity this document uses "multisectoral" to encompass policies and actions that are made by a non-health sector (e.g. education, transport, agriculture) regardless of whether or not these policies and actions are made in conjunction with the health sector or independently.

In order to bring about policy changes in other sectors, the health community needs to advocate for change and to generate evidence on the health impacts of multisectoral determinants. This has been demonstrated in areas such as tobacco control and road traffic safety, and is increasingly happening in arguments around climate change, air pollution, urban planning, and transport. This is particularly important because a number of the policy changes that are most important for improving health and well-being involve vested commercial interests, which often have significant influence over policy-makers.

Health in All Policies (HiAP) is a whole-of-government approach to multisectoral policy and action at the national, subnational and regional levels: "an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity" (WHA67.12) (92). HiAP underscores the alignment of interests across policies to serve all people's basic right to a healthy, productive life. It provides a framework for addressing determinants by developing the needed leadership and governance and providing an umbrella for multiple sets of actions across sectors. In a HiAP approach, the health sector is seen as the champion for health, keeping health on the agenda but aware of the need for policy action with mutual benefit with other sectors, seeking overall societal gains. National health assemblies can bring together key stakeholders, including those from other sectors, to shape policy-making (93).

Additionally, the health sector itself must address challenges related to determinants that are at work within the sector (e.g. inadequate sanitation in health facilities). In view of its size and economic importance, the health sector should be aware of the ways in which it can contribute to broader determinants (e.g. climate change) and take steps to address them (e.g. "greening" of the health system to increase use of renewables and reduce carbon emissions).

In PHC, empowered people and communities are inextricably linked to multisectoral policy and action, with people engaged in setting policy priorities that address the structural determinants that affect their lives (from local norms and policies to national economic and development policies to global systems for consumption and production) and in their implementation. Health agencies, the health workforce, and communities need to be equipped to partner closely with relevant sectors to address particular issues of common concern.  Such sectors include finance, industry, education, or water, sanitation, agriculture to impact nutrition and food security or agriculture, environment and health to help stop zoonotic spread of disease.

## 5.3  Empowered people and communities

Increasingly, people want and expect to have a say in the planning of health priorities and in how these priorities are implemented in their community. Better informed and better connected thanks to social media and new modes of communication, they more readily assert their right to health, demonstrating an awareness of governance and demanding accountability. In the PHC approach, the health system (along with other sectors) contributes to empowering people through improved education and health information. Particular attention should be given to populations in situations of vulnerability, seeking to meet their information needs and provide guidance towards improved health.

This component highlights the essential roles of people and communities as active participants in the creation of health and well-being, through three broad and necessary expressions of empowerment and engagement: as advocates for multisectoral policies and action for health; as co-developers of health and social services; and as self-carers and caregivers.

# A. People and communities as advocates

To achieve health and well-being for all, people should contribute to the formulation, planning and implementation of policies that promote and protect health and that respond to their needs and preferences. The recent history of health, particularly with regard to HIV/AIDS *(94,95,96),* has shown that advocacy has a critical role, for example in increasing funding, getting new medicines approved, lowering the price of medicines, combating discrimination, overturning punitive laws, persuading governments to adopt evidence-based approaches, and mobilizing leadership *(97,98)*.

Effective advocacy can be done at national, regional, and local levels. It requires the meaningful engagement of people in the economic and political arenas, as well as specific forums and processes to record the stated needs and preferences of the people and translate them into policy. Governance and accountability mechanisms that permit meaningful and broad input by all people, especially those most affected by adverse determinants of health, are essential at all levels.

Decentralization can allow policies to be developed that respond to the specific needs and characteristics of a community and can increase equity across regions *(99)*. However, mechanisms should be in place to ensure consistency with the national vision, so that the benefits of a coherent national policy are combined with responsiveness to the needs of the community *(100)*.

# B. People and communities as co-developers of health and social services

Beyond the policy level, empowered people should actively engage in the organization, regulation, and delivery of health services in their community, regardless of whether these actions are done through the public or private sector. This allows services to respond to the social and cultural circumstances of the people, which in turn increases access, effectiveness, and responsiveness. Community engagement and mobilization increase patient satisfaction, improve outcomes (as demonstrated among newborn, children and mothers) and enhance cost-effectiveness *(101,102)*.

The benefits of engaging people and communities are particularly pronounced with marginalized and vulnerable groups, including women and children, whose needs may not be adequately met by approaches to service delivery that do not foster engagement and co-production. Involvement of the members of disadvantaged groups in the planning and delivery of services can improve responsiveness and enhance use by marginalized individuals. Indigenous communities in Australia, Canada and Chile have successfully engaged in the planning and delivery of a range of culturally acceptable, quality, and integrated social and health services, finding ways to address their disproportionate burden of disease and the complex political, cultural, and economic determinants *(31,103,104,105,106)*.

Many strategies and processes have been used around the world to empower people and communities as architects of their health and social services, including community advisory panels and health councils, community-based participatory research, user consultations, citizens' scorecards, patient groups, cultural groups, women's groups, and the formation of civil society organizations representing various interests and needs. In the context of medical education, a framework for the engagement of communities with policy-makers, academics, managers and professionals (also known as the Pentagram partners) has been developed to support the accountability of medical schools and other institutions responsible for training health workers *(107)*.

Community empowerment brings about a shift from limited consultation to the involvement of people in decision-making, ensures legitimate and meaningful representation in the context of diversity and engages the most disadvantaged segments of the community *(101)*. Bottom-up approaches to community engagement, generated by and through the community, are generally more effective than top-down approaches where modes of engagement are mandated by external funding initiatives *(33)*.

The involvement of CHWs in delivering a range of health and social services in a wide variety of settings and jurisdictions around the world stands out as a key strategy for building a bridge between the community, households, and the health care system. They extend the reach of health services into the community, enhancing access while allowing members of the community to guide and inform health service delivery.

## C. People as self-carers and caregivers

Individuals – as the people experiencing the impact of their health and as decision-makers – have a central role to play in co-creating their own health and well-being and in providing informal care to their peers and loved ones.

The possibilities for this have been revolutionized over the past 40 years as a result of technological changes, in particular the rapid expansion of new health technologies and information and communication technologies. At the time of the International Conference on Primary Health Care in Alma-Ata in 1978, access to health information was often quite limited and typically required access to a health professional. Today, in contrast, the first thing that many people across the world do when faced with a health problem is to use their mobile phone to seek more information, from the Internet or another source of information that previously would not necessarily have been accessible. Even newer technologies, such as point of care diagnostics that can be used by health care workers as well as patients, artificial intelligence and low-cost genetic testing, are also starting to create new possibilities for self-care, the potential of which is only beginning to emerge. Measures will be needed to ensure equitable access as well as reliable information and support for the interpretation of complex information.

The nature of caregiving is also shifting significantly in response to broader societal trends. The rapid ageing of the global population means that there is a smaller working-age population to take care of the elderly and others in need of care: the potential support ratio (the ratio of the population aged 20–64 years to those aged 65 years and older) dropped from 10.1 in 1950 to 6.9 in 2015, and is projected to fall to 3.5 in 2050 *(108)*. A number of countries that already have low potential support ratios (in particular in East Asia and Europe) are pioneering new models for caregiving to cope with this challenge. Urbanization is also having an important impact, making the traditional family-based networks of caregiving that predominate in many rural areas less feasible. In some cases, these are replaced by new care arrangements that are facilitated by the larger pools of informal workers in urban settings.

A PHC approach treats self-care and caregiving as integral components of efforts to improve health and well-being. For this to happen, individuals and communities must have access to the knowledge, skills, and resources required to meet their specific needs and sociocultural circumstances. These include financial resources, reliable information and technology, and – when needed – trusted experts and allies to help them analyse information and navigate complex decisions, and to advocate for them. The ability of individuals to make evidence-informed decisions and take effective action is directly and indirectly affected by social, economic, environmental determinants, as well as associated commercial factors, that can be positively shaped by policy and action at the national, regional and community levels, linking self-care to multisectoral policy and action. Poverty, low literacy, and social exclusion have all been shown to decrease people's ability to engage in effective self-care *(109)*.

# 6. A vision for primary health care in the 21st century

This section proposes a vision for a renewed PHC, to support the achievement of UHC and the health-related SDGs. This vision brings together the experiences and lessons learned over the past forty years and acknowledges the demands of societies today.

Individuals and communities are the central focus of all efforts to move towards PHC in the 21st century. People's fundamental right to the best achievable state of health and well-being, and the world's renewed commitment to social justice, are expressed through adequate social protection and concerted efforts to address the needs of those who are most disadvantaged.

The broad determinants of health are addressed through actions that involve multiple sectors of government, civil society, and the private sector, and that sustain societies and environments that foster health and well-being. Close collaboration among sectors such as social protection, housing, education, agriculture, finance, environment, transport, energy, and urban planning, and industry allows people to live in health-promoting neighbourhoods that combine clean air, walkability and accessibility, green spaces, road safety and effective public transport. Priority consideration is given to those most in need, to ensure equitable access for all to healthy food choices, quality education, water and sanitation, waste management, adequate and affordable housing, and safe and meaningful work with appropriate remuneration.

Efforts to advance health and well-being are anchored in and informed by the community. People have access to the knowledge, skills and resources needed to care for themselves and their loved ones, making use of the full potential of information and communications technologies. Self-care and informal care are directly and explicitly linked to the formal service delivery sector through mechanisms that are effective and appropriate for the particular setting. The community effectively advocates for policies that respond to its specific health needs. Its members, including the most disadvantaged, are engaged as co-developers of the services they need to achieve health and well-being. The community's needs and its social and cultural identity are reflected at all levels of policy and action and in the delivery of population and individual services.

People are protected from adverse health outcomes through population-based measures, planned and delivered in consultation with those served. The measures include prevention and control of locally endemic diseases and disease outbreaks, prevention of noncommunicable diseases, and information and education on prevailing health problems, including major risks, and the methods to prevent and control them. At the community level, population-based and individual services are well integrated and coordinated and are explicitly accountable to the people, enabled by purposefully designed health information systems.

People do not experience financial hardship because of spending on the health services they need. They benefit from interventions that are delivered at the right point along a continuum, where effectiveness and equity are maximized and cost is minimized. In practical terms, this implies prioritizing the delivery of interventions upstream, earlier in the pathophysiological pathway and, where possible, outside the health care setting. When clinical care is needed, it is delivered to combine the best outcome with optimal use of resources and patient satisfaction (the triple aim) *(110)*, addressing the integrality of people's health needs.

The interventions needed to attain the highest standard of health are delivered along the continuum of care, taking into consideration a life-course approach. Whereas previously the notion of levels of care has been useful in shaping health systems, in the 21st century the notion of a continuum of care is more consistent with the coordinating centers and care pathways, and with a system centred on people rather than on services. This continuum ranges from actions delivered exclusively through a multisectoral approach, to public health services delivered to the population, to individual primary care, to coordination with highly specialized consultation services for rare and complex health problems.

People expect the health system to lead to the best possible standard of health through optimally coordinated and streamlined quality services. This can be achieved through: early action along the continuum of health actions of proven effectiveness (i.e. promotion and prevention over treatment and rehabilitation when possible), proximity to people's everyday life (i.e. community-oriented and locally delivered services oriented to supporting self-management over care delivered in highly centralized centres), and efficiency in the use of resources (i.e. appropriate referral and integration of services along evidence based pathways of care to reduce duplication of services, improve communication to facilitate early diagnosis, and improve safety).

In the context of primary care, people are supported to express their needs, preferences, and values. A trusted multidisciplinary primary care team supports patients in prioritizing and identifying care goals. In individual patient care, the team takes into consideration the patient's cultural preferences and stage of life, across a wide range of problems (mental and physical, chronic and acute, communicable and noncommunicable, from immunization and prevention to treatment, rehabilitation and palliative care). Teams are responsible for assessing the medical needs of the patient, providing safe evidence-based, cost-efficient management through extensive use of health technologies and information technology, and coordinating additional or specialized services for patients who need them through wider PHC networks. They facilitate the provision of care at the right level along the pathway of care and across diseases, and act as the focal point for all medical services delivered to the patient, thereby leading the response to multimorbidity through a whole-person approach and a life-course perspective. People are familiar with the members of their primary care team and know how to access them. There are no significant financial barriers to access. In return, members of the primary care team not only are but feel accountable to those in their care, demonstrating this through access, compassion, and responsiveness. Teams vary in size and composition depending on the local context and availability of expertise, and may include family physicians, nurses, midwifes, social workers, nutritionists, community health workers, health promoters, registered or regulated traditional medicine practitioners, dentists, pharmacists, rehabilitation workers, counsellors and opticians. There are many other potential members, including some taking on new roles in evolving systems, such as patient navigators and life coaches.

As health systems evolve, in line with each country's technical and financial resources, packages of services aimed at dealing with specific health problems are progressively replaced by fully integrated, comprehensive, people-centred primary care. Primary care becomes the natural place of delivery for most health care processes (diagnosis, treatment, rehabilitation, and palliative care) with the highest levels of quality and safety. This transition permits the delivery of health services that are required to maintain or restore health and not those selected primarily by third parties on the basis of cost savings or other objectives.

The performance of the health system is measured and publicly reported in terms of quality of life, functioning, longevity, and incidence of disease, as well as patient experience.

In weaving together multisectoral policy and action, empowered people and communities, and health services at both the population-based and individual levels, PHC in the 21st century ensures healthy lives and well-being for all at all ages.

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**Box 2:. The vision in practice: the example of hypertension**

As an example of how this vision of PHC can be applied in a concrete case, consider hypertension. This would be addressed through multiple interlinked actions, e.g. the regulation of salt in food, the promotion of physical activity through public health campaigns, and the development of enabling environments through urban planning. People at risk for hypertension or actively dealing with it would have information readily available to them as a result both of their own actions and through public health campaigns. They would feel supported by community networks that included empowered advocates who regularly engaged with the health system to articulate their needs.

For the vast majority of the population with established hypertension, clinical management would be provided through primary care, while individuals with highly complex hypertension would be referred on to specialized care following evidence-based pathways.

# 7. Health system levers for action

To achieve this ambitious vision of PHC in the 21st century, transformational action is required. The specifics of this action will vary considerably from country to country. For example, the actions required in a fragile setting still grappling with the unfinished agenda of the Millennium Development Goals will differ significantly from those in a middle-income country confronted with a rising prevalence of NCDs. This section sets out a range of possible health system levers that countries can employ as they consider how to achieve progress on PHC (Table 2).

The choice of specific actions should be informed by evidence, both local (e.g. the social, economic, and environmental situation and trends in the country, the disease burden, and the strengths and weaknesses of the health system) and global (e.g. what has been shown to work in improving PHC and what does not). Dedicated analytical work may be needed or information may be readily available in existing documents, but this evidence is critical to determining which levers will be most effective in transforming a country's health system and should provide the foundation for consultative processes to determine the appropriate prioritization and sequencing of reform efforts. In some countries, action may occur simultaneously across many or even all of the levers, but more commonly it will be important to direct scarce resources to the actions that will prove most transformational.

These levers can be applied at different levels, including community, subnational, and national; there is also a role for many of them at the global level. They are divided into levers in the broader system environment (policy, governance, financing) and operational levers, which address implementation.

**Table 2: Overview of primary health care levers and their relationship to the components of primary health care**

| Short title | Long title | Primary care and essential public health functions as core of integrated health services | Multisectoral policy and action | Empowered people and communities |
|---|---|:---:|:---:|:---:|
| **Governance, policy and finance levers** | | | | |
| Political commitment and leadership | Political commitment and leadership that place PHC at the heart of efforts to attain universal health coverage and that recognize the broad contribution of PHC to the SDGs | • | • | |
| Governance and policy frameworks | Governance structures and policy frameworks in support of PHC that build partnerships within and across sectors, and promote community leadership and mutual accountability | • | • | • |
| Adequate funding and equitable allocation of resources | Adequate financing for PHC that is mobilized and allocated in ways that minimize financial hardship and promote equity | • | • | |
| **Operational levers** | | | | |
| Engagement of community and other stakeholders to jointly define problems and solutions and prioritize actions | Use of engagement approaches to define problems and solutions and prioritize actions by involving a wide range of actors, including across sectors | • | • | • |
| Models of care that prioritize primary care and public health functions | Models of care that promote primary care and essential public health functions as the core of integrated health services | • | | • |
| Ensuring the delivery of high-quality and safe health care services | Systems at the local, subnational and national levels to continuously assess and improve the quality of PHC services | • | | • |
| Engagement with private sector providers | Partnership between public and private sector for provision of PHC services | • | • | |
| The PHC workforce | Adequate quantity, competency levels, and distribution of a multidisciplinary PHC health workforce that includes facility-, outreach- and community-based health workers | • | | • |
| Physical infrastructure and appropriate medicines, products and technologies | Availability of the physical infrastructure and appropriate medicines, products and technologies that are needed to deliver quality PHC services | • | | |
| Digital technologies | Use of modern health information and communication technology (ICT) in ways that improve effectiveness and efficiency and promote accountability | • | • | • |
| Purchasing and payment systems | Purchasing and payment systems that promote PHC and integration across the health system and create incentives to improve access, quality, equity and efficiency of care | • | | |
| PHC-oriented research | PHC-oriented research and knowledge management, including dissemination of lessons learned, as well as the use of the knowledge to accelerate scale-up of successful approaches | • | • | • |
| Monitoring and evaluation | Monitoring and evaluation through well functioning health information systems that generate reliable data and support their use for improved decision-making from local to global level | • | • | • |

# 7.1  Governance, policy, and finance levers

## A. Political commitment and leadership

Leadership at the highest levels is essential to make bold political choices and to mobilize partners and stakeholders, both public and private, towards ensuring healthy lives and well-being for all at all ages. Heads of state, other senior government representatives, and ministries of health will be called upon to deliver on this commitment, presenting consistent priorities and demonstrating the courage to do things differently, accepting the risk of transformation and giving themselves the financial and strategic tools to succeed. Sustained non-partisan leadership at the most senior levels is particularly important for finding new ways to engage sectors other than health in the quest to improve health and well-being.

At the global level, continuous efforts will be needed to recruit more people, countries and organizations to expand and support this movement. These efforts should be organized according to the principle of effective aid, with a view to evolving towards a global architecture that leads to health and equity. Coordination by WHO and UNICEF will facilitate the engagement of leaders and governments, other United Nations agencies, bilateral and multilateral funds, alliances, donors, academia, professional organizations, youth organizations, civil society and the private sector. The Global Conference on Primary Health Care is expected to give impetus to this movement. Similar high-level initiatives at regional and country level, ensuring broad engagement of all relevant stakeholders, will provide additional opportunities to demonstrate commitment and leadership and keep up the momentum.

## B. Governance and policy frameworks

Appropriate frameworks will be needed to direct efforts through policies that emphasize greater equity, quality and efficiency. They should reflect the broad definition of PHC, taking into consideration the three components described in section 5, and should ensure that PHC is integrated within the broader health system, identifying innovative ways to integrate across sectors (such as by adopting the HiAP approach). Ideally, these policy frameworks should align international partner support with national policies, strategies, and plans and should have been developed through a participatory process that includes meaningful engagement from a broad range of stakeholders, including the general public, civil society, health providers' associations, managers and others.

National health sector policies, strategies and plans (NHPSPs) should be designed in line with the goals and objectives of PHC, through an inclusive, pluralistic process in which both service providers and the population participate with the government in debates and the decision-making process, as well as in the follow-up, monitoring and evaluation. People should also be engaged in designing, planning and managing their health systems and should have the power to hold decision-makers accountable for results *(111)*. Making the social determinants of ill-health visible to communities and users of services can catalyse action. At the national level, people and communities need to be allowed to express their needs and preferences, and policies need to be developed to address those needs, particularly those of the most disadvantaged. At the community level, it is critically important to make use of proven and new ways to involve people effectively in the full spectrum of engagement, from consultation to decision-making.

Governance structures will be needed to build partnerships beyond the health sector, to drive action across sectors, and to promote local and community leadership and accountability to communities. The identification of national PHC champions will facilitate these processes.
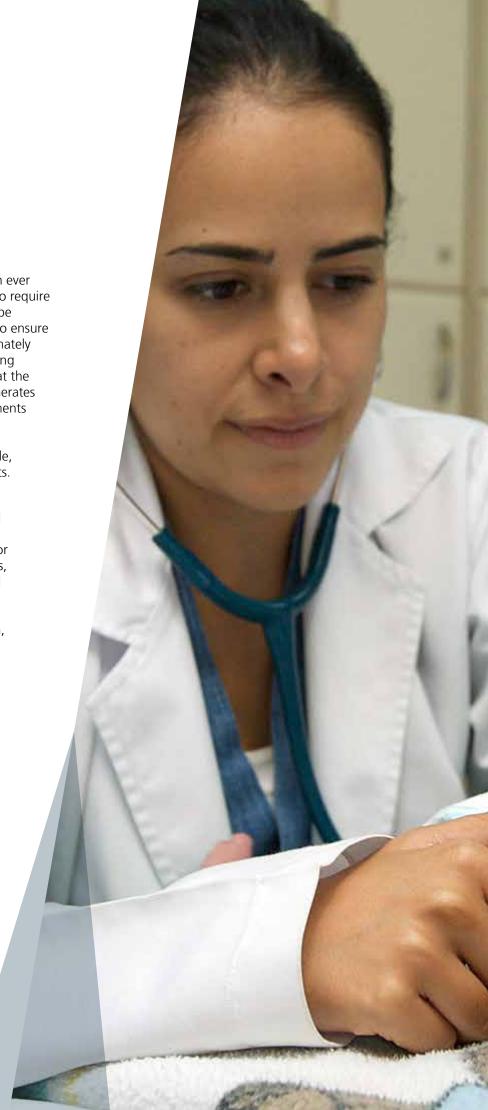
## C. Adequate funding and equitable allocation of resources

Although more financial resources than ever are devoted to health, PHC continues to require additional funding. Resources need to be mobilized and allocated appropriately to ensure Adequate funding is available and ultimately supports PHC services. adequate funding for PHC. It should be borne in mind that the PHC approach is cost-effective and generates efficiencies, delivering health improvements using fewer resources than alternative arrangements. Efforts should be made to use resources as efficiently as possible, particularly given fiscal space constraints.

Progressively increasing the share of health expenditure devoted to PHC will support its continuous development. In most countries, the bulk of financing for PHC will come from domestic resources, but international support will be critical in a number of countries, and can act as a catalyst for additional domestic resource allocation for PHC. In addition, international programmes that focus on disease-specific areas should take steps to support PHC and improve efficiency, e.g. by supporting efforts to align financing to national priorities, by supporting governance efforts that strengthen national ownership and allow resources to be used to strengthen health systems, and by ensuring that their financing is included in national budgets. Mobilizing funding for PHC is one important step; however, those resources then need to allocated and used in to effectively deliver services to patients.

# 7.2 Operational levers

## A. Engaging community and other stakeholders to jointly define problems and solutions and prioritize actions

Identifying problems and solution, then prioritizing the responses, is a critical part of improving PHC and ultimately of achieving better health and well-being, but too often this is approached in a technocratic manner. PHC promotes engagement with the people and communities most directly affected as collaborators in defining problems, finding solutions, and prioritizing actions. . A wide range of tactics is available to do this (see section 5.3), and should be adapted to local settings.

## B. Models of care that prioritize primary care and public health functions

Central to efforts to strengthen PHC is the development of models of care that promote a comprehensive vision of PHC. This includes ensuring that population-based services are adequately prioritized and that there is good coordination between public health and primary care. At the level of individual health care services, health systems need to be reoriented to ensure that primary care is both the first point of contact and the core of the health system, linked to all other levels of care and services. The delivery of primary care that is continuous, comprehensive, coordinated, and people-centred will be facilitated by entrusting the health of defined geographical communities to specific teams through the process of empanelment. Strategies should be developed to ensure that primary care is involved in addressing both existing and new health problems and has an oversight role for patients progressing along the pathways. To ensure comprehensiveness, where feasible the first level of care needs to take responsibility for managing chronic and noncommunicable diseases (including mental health) and associated factors across the continuum of care, including prevention, promotion, treatment, rehabilitation and palliation. This includes the extension of primary care, through programmes that support home health care and self-care.

## C. Ensuring the delivery of high quality and safe health care services

Quality care guarantees that the efforts and resources invested in facilitating access to care and in delivering it lead to actual improvements in people's health while minimizing waste. A high quality of care is essential for building trust in the community and for ensuring the sustainability of the health system. The local, subnational, and national levels should be equipped to continuously assess and improve the quality of PHC, selecting and tailoring evidence-based quality improvement strategies to suit their needs. In recent years, emphasis has been placed on incentive schemes, particularly financial ones, (e.g. through specific payment methods), while other types of incentives relate to promoting a culture of professionalism, increasing resources, promoting teamwork and providing information tools.

The WHO Technical Series on Safer Primary Care provides guidance on designing and delivering safer primary care. Patient engagement for quality and safety is also a promising approach, in terms of both alignment with the wider scope of PHC and effectiveness, accountability, and sustainability of the quality improvement efforts.

## D. Engaging with private sector providers

The private sector covers a wide array of actors and services, and plays multiple roles in PHC, including as a source of financing (e.g. voluntary health insurance, private investors), a developer of new technologies and products, a manager of supply chains, an advocate, and a service provider. Public and private sectors are often connected: individual health professionals may practise in both, and a significant proportion of patients seek services from both.  This may have implications for resourcing as revenues are shifted to the private sector. The development of partnerships between private and public sectors with regard to PHC should be based on two key foundations: a participatory approach and adequate information about the scope and nature of private provision.

Different types of legal arrangements can be explored, including public ownership with private management, joint ventures with shared ownership, transfer of ownership over time (e.g. build-operate-transfer models), using public financing to support private activities (e.g. guarantees or grants), using private financing to support public activities (e.g. impact bonds) and full-scale privatization of health services. Typically multiple simultaneous approaches are needed to address different aspects of the engagement with the private sector, and ensure that private resources are directed toward public health objective, including equity. It is important that the same standards and regulations apply to private partners as to the public sector. Conflicts of interest (such as physicians referring patients to their private clinics, or lack of transparency in awards of public contracts) should be identified and mitigated. Finally, it is also important to ensure the engagement of private providers in national monitoring and evaluation efforts, ideally including through health management information systems.

Health workers in the private sector (both for-profit and not-for-profit) play an important role in all health systems and in some countries provide the majority of care. Mechanisms need to be developed to coordinate health care services in the public and private sectors and to regulate the private sector to ensure adherence to appropriate standards of care. Engagement and integration of private sector health workers around quality care is important. Approaches that deepen participation of the for-profit and not-for-profit private sector in planning, training, and monitoring and that improve service delivery and accountability to the population at the primary level are key to the strengthening of PHC in many settings.

## E. The PHC workforce

Human resources are at the heart of delivering effective PHC. The number, distribution and competencies of the PHC workforce will need to be addressed in many countries. In some settings, this will entail a focus on the recruitment, training and retention of adequate numbers of health workers, while in others emphasis will need to be given to ensuring competence and quality through approaches such as accreditation, supportive supervision, clinical mentoring, and in-service training. Elsewhere, the major issue will be ensuring an appropriate distribution of the workforce, so that all communities have access to health professionals. This may require strategies such as recruitment of students from underserved areas who then return to work in their communities, incentive schemes to encourage workers to relocate to underserved areas and programmes that proactively balance workforce distribution.

These efforts should apply to the different cadres of health professionals, as there is considerable evidence of the benefits of multidisciplinary primary care teams that include both facility- and community-based members. Family practice teams, in particular, offer an approach to primary care that has shown clear benefits in a wide range of settings *(112)*.

## F. Physical infrastructure, and appropriate medicines, products, and technologies

Adequate resourcing of an appropriate physical infrastructure is important to ensuring quality PHC and is a particularly crucial investment in the early stages of its development and implementation. A successful shift of services and health workers from hospital-based care to community settings will require adequate investments. Such investments – and the resulting facilities equipped with appropriate diagnostic and therapeutic products and technologies – will also be important to overcome any negative perceptions about the quality of care provided in these settings *(113)*. Primary care and public health should employ appropriate new health technologies to increase the effectiveness and efficiency of services, for example point-of-care diagnostics *(114)*.

Similarly, the availability of affordable, quality-assured medicines is critical to PHC. This often requires coordinated action across different parts of government and a strong management system.

# G. Digital technologies

New technologies are critical for both demand- and supply-side efforts to improve health and well-being through stronger PHC. The rapid pace of change in information and communication technologies has opened up exciting possibilities for self-care and for the engagement of people and communities, developing resources that people can draw on as part of their self-care efforts. A number of efforts are under way to develop mHealth and eHealth platforms that expand the reach of health services and support self-care (e.g. by making information available when needed or by providing reminders for appointments or medications).

Information and communications technologies are also powerful tools for improving the functioning of health systems, such as by strengthening health management information systems. Advances in information systems should be fully leveraged to support and optimize the functionality of shared electronic health records, linking them to other health facilities and services and supporting two-way referrals along clinical pathways. Use of remote consultation services or telemedicine can be used to improve information flows between patients and health workers as well as better integrate primary care with referral care. Other technologies, such as artificial intelligence and drones, are also being actively explored and may offer new avenues to improve the quality and accessibility of services. As the field is developing, ongoing research together with proper regulation and legislation, as required, is needed to manage its potential harmful effects and potential for worsening inequities. For example, the increase in mental illness in children, and suicide, associated with the digital revolution is a negative impact that needs to be managed in a PHC approach *(115)*.

# H. Purchasing and payment systems

Purchasing is one of the core functions of any health financing system and can play a critical role in improving effectiveness and efficiency. A passive approach to purchasing is characterized by providers automatically receiving funds (budget allocations) or payment independent of performance. Shifting to more active or strategic purchasing involves linking the transfer of funds to providers, at least in part, to information on aspects of their performance or the health needs of the population they serve. The objectives of strategic purchasing are to enhance equity in the distribution of resources, increase efficiency ("more health for the money"), manage expenditure growth and promote quality in health service delivery. It also serves to enhance transparency and accountability of providers and purchasers to the population.

Improving the strategic purchasing of health services – the active, evidence-based definition of the service mix and volume and the selection of the skill mix to achieve objectives – is central to promoting primary care, population health management, and integration of health services with shared incentives, and can be a key tool to address weaknesses (e.g. by pay for performance mechanisms, mixed payment models based on capitation, bundled payments) *(116)*.

# I. PHC-oriented research

Policies, strategies, and operational plans should be informed by the best available evidence of what works and what does not; operational research is key to providing this. This includes research on interventions that support all components of the PHC approach, strategies to engage people in their own care and in service design, self-management of common health problems, substitution of professionals, and transfer of care responsibilities along integrated care pathways. By its very nature, PHC research will need to consider complex interventions, involving multiple policies and services.

It is not enough simply to conduct this research; the results must be used to inform policy and operational decision-making, and a number of approaches have been developed to support countries in doing this *(117)*. Additionally, the acquisition of information and the development and dissemination of knowledge and good practices will benefit from knowledge-sharing platforms. Modern information and communications technologies offer new options for knowledge-sharing, such as wikis (collaborative web sites) and co-learning virtual models.

## J. Monitoring and evaluation

Regular tracking of the progress of implementation efforts is essential. In a rapidly changing world, health systems need to monitor their own performance in order to learn and adapt, identifying and addressing challenges and unintended consequences of large-scale initiatives. Evaluation is also critical to ensure that efforts work as intended, and to contribute to course-correction during implementation.

Reliable data and support for the use of those data will be required to improve decision-making at the local, subnational, national, and global levels. The involvement of regional and global networks that permit sharing of information and innovations will be key, as the challenges ahead will require collaboration, innovation, and mutual learning.

# 8. Conclusion

Through the SDGs, the world has committed to an ambitious development agenda aimed at improving the health and well-being of all people. Forty years after the Declaration of Alma-Ata, equipped with evidence and inspired by the renewed global commitment, it is time for the global community to take bold steps in that direction. A new approach to primary health care is central to achieving the SDGs and UHC. Progress will require courage and determination, but the time is right. The world has never been better positioned for success.

# Glossary

**Access (to health services).** The ability, or perceived ability, to reach health services or health facilities in terms of location, timeliness, and ease of approach.

**Accountability.** The obligation to report, or give account of, one's actions, for example to a governing authority through scrutiny, contract, management and regulation, or to an electorate.

**Ambulatory care sensitive conditions.** Chronic conditions for which it is possible to prevent acute exacerbations and reduce the need for hospital admission through active primary care, for example asthma, diabetes and hypertension.

**Amenable morbidity.** The incidence of illness considered avoidable by health care interventions.

**Amenable mortality.** Deaths considered avoidable by health care interventions.

**Care coordination.** A proactive approach that brings care professionals and providers together around the needs of service users to ensure that people receive integrated and person-focused care across various settings.

**Case management.** A targeted, community-based and proactive approach to care that involves case-finding, assessment, care planning and care coordination to integrate services around the needs of people with a high level of risk requiring complex care (often from multiple providers or locations), people who are vulnerable, or people who have complex social and health needs. The case manager coordinates patient care throughout the entire continuum of care.

**Change management.** An approach to transitioning individuals, teams, organizations and systems to a desired future state.

**Coherence (of a national health policy, strategy or plan).** (a) The extent to which proposed strategies are aligned with the priorities identified in the situation analysis; (b) the extent to which programme plans are aligned with the national health strategy and plan; (c) the extent to which the different programmatic strategies in the national health policy, strategy or plan are coherent with each other; or (d) the extent to which the budget, monitoring and evaluation framework and action plan introduce the proposed strategies.

**Collaborative care.** Care that brings together professionals or organizations to work in partnership with people to achieve a common purpose.

**Community.** A unit of population, defined by a shared characteristic (geography, interest, belief, social characteristic), that is the locus of basic political and social responsibility and in which everyday social interactions involving all or most of the spectrum of life activities of the people within it takes place.

**Community health worker.** Person who provides health and medical care to members of their local community, often in partnership with health professionals; alternatively known as village health worker, community health aide or promoter, health educator, lay health adviser, expert patient, community volunteer or some other term.

**Comprehensiveness of care.** The extent to which the spectrum of care and range of available resources responds to the full range of health needs of a given community. Comprehensive care encompasses health promotion and prevention interventions as well as diagnosis and treatment or referral and palliation. It includes chronic or long-term home care, and, in some models, social services.

**Continuity of care.** The degree to which a series of discrete health care events is experienced by people as coherent and interconnected over time, and consistent with their health needs and preferences.

**Co-production of health care.** Health services that are delivered in an equal and reciprocal relationship between professionals, people using care services, their families and the communities to which they belong. Co-production implies a long-term relationship between people, providers and health systems whereby information, decision-making and service delivery become shared.

**Chronic care.** Medical care that addresses the needs of people with long-term health conditions.

**Disease management.** A system of coordinated, proactive health care interventions of proven benefit and communications to populations and individuals with established health conditions, including methods to improve people's self-care efforts.

**Effectiveness.** The extent to which a specific intervention, procedure, regimen or service does what it is intended to do for a specified population when deployed in everyday circumstances.

**eHealth.** Information and communication technologies that support the remote management of people and communities with a range of health care needs through supporting self-care and enabling electronic communications among health workers and between health workers and patients.

**Empowerment.** The process of supporting people and communities to take control of their own health needs resulting, for example, in the uptake of healthier behaviours or an increase in the ability to self-manage illnesses.

**Engagement.** The process of involving people and communities in the design, planning and delivery of health services, thereby enabling them to make choices about care and treatment options or to participate in strategic decision-making on how health resources should be spent.

**Equity in health.** The absence of systematic or potentially remediable differences in health status, access to health care and health-enhancing environments, and treatment in one or more aspects of health across populations or population groups defined socially, economically, demographically or geographically within and across countries.

**Essential public health functions.** The spectrum of competencies and actions that are required to reach the central objective of public health – improving the health of populations. This document is focused on the core or vertical functions: protection, promotion, prevention, surveillance and response, and emergency preparedness.

**First level of care.** The entry point into the health care system, at the interface between services and community; where the first level of care satisfies a number of quality criteria it is called primary care. See: primary care.

**Fragmentation (of health services).** (a) Coexistence of units, facilities or programmes that are not integrated into the health network; (b) services that do not cover the entire range of promotion, prevention, diagnosis, treatment, rehabilitation and palliative care services; (c) services in different platforms of care that are not coordinated among themselves; or (d) services that do not continue over time.

**Goal-oriented care.** Care that is planned and delivered based on goals and targets as explicitly elicited from each individual for the achievement of the highest possible level of health, as defined by that individual.

**Health.** State of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity.

**Holistic care.** Care that considers the whole person, including psychological, social and environmental factors, rather than just the symptoms of disease or ill-health.

**Horizontal integration.** Coordination of the functions, activities or operating units that are at the same stage of the service production process; examples of this type of integration are consolidations, mergers and shared services within a single level of care.

**Indicator.** Explicitly defined and measurable metric that helps in the assessment of the structure, process or outcomes of an action or a set of actions.

**Integrated health services.** The management and delivery of health services such that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, through the different functions, activities and sites of care within the health system.

**Integrated health services delivery network.** A network of organizations that provides, or makes arrangements to provide, equitable, comprehensive and integrated health services to a defined population and is willing to be held accountable for its clinical and economic outcomes and for the health status of the population that it serves.

**Life course approach.** An approach suggesting that the health outcomes of individuals and the community depend on the interaction of multiple protective and risk factors throughout people's lives. This approach provides a more comprehensive vision of health and its determinants, which calls for the development of health services more centred on the needs of its users in each stage of their lives.

**Mental health.** A state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.

**Multisectoral action on health.** Policy design, policy implementation, and other actions by health and other sectors (for example, social protection, housing, education, agriculture, finance and industry), carried out collaboratively or alone, that address social, economic and environmental determinants of health and associated commercial factors, or that improve health and well-being.

**Mutual (shared) accountability.** The process by which two (or multiple) partners agree to be held responsible for the commitments that they have made to each other.

**People-centred care.** An approach to care that consciously adopts the perspectives of individuals, carers, families and communities as participants in, and beneficiaries of, trusted health systems that respond to their needs and preferences in humane and holistic ways. People-centred care also requires that people have the education and support they need to make decisions and participate in their own care.

**Personal health services.** Health services targeted at the individual, including health promotion, timely disease prevention, diagnosis and treatment, rehabilitation, palliative care, acute care and long-term care services.

**Population health.** An approach to health care that seeks to improve the health outcomes of a group of individuals, including the distribution of such outcomes within the group.

**Primary care.** A key process in the health system that supports first-contact, accessible, continued, comprehensive and coordinated patient-focused care.

**Primary health care.** A whole-of-society approach to health that aims to maximize the level and distribution of health and well-being through three components: (a) primary care and essential public health functions as the core of integrated health services; (b) multisectoral policy and action; and (c) empowered people and communities.

**Primary health care-oriented health system.** Health system organized and operated so as to make the right to the highest attainable level of health the main goal, while maximizing equity and solidarity. A primary health care-oriented health system is composed of a core set of structural and functional elements that support achieving universal coverage and access to services that are acceptable to the population and that are equity enhancing.

**Quality care.** Care that is safe, effective, people centred, timely, efficient, equitable and integrated.

**Regulation.** The imposition of constraints upon the behaviour of an individual or an organization to force a change from preferred or spontaneous behaviour.

**Resilience.** The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

**Self-care.** Individuals, families and communities are supported and empowered to appropriately manage their health and well-being when not in direct contact with health services.

**Stakeholder.** An individual, group or organization that has an interest in one or multiple aspects of the health system.

**Stewardship.** A responsibility for the effective planning and management of health resources to safeguard equity, population health and well-being.

**Universal health coverage.** Ensuring that all people have access to needed promotive, preventive, curative, rehabilitative, and palliative health services, of sufficient quality to be effective, while also ensuring that the use of these services does not expose any users to financial hardship.

**Vertical integration.** The coordination of the functions, activities or operational units that are in different phases of the service production process. This type of integration includes the links between platforms of health service delivery, for example between primary and referral care, hospitals and medical groups, or outpatient surgery centres and home-based care agencies.

**Vertical programmes.** Health programmes focused on people and populations with specific (single) health conditions.

**Well-being.** A multidimensional construct aiming at capturing a positive life experience, frequently equated to quality of life and life satisfaction. Measures of well-being typically focus on patient-reported outcomes covering a wide range of domains, such as happiness, positive emotion, engagement, meaning, purpose, vitality and calmness.

### Note: Definitions in this glossary are adapted from the following sources:

Health systems strengthening glossary. Geneva: World Health Organization (http://www.who.int/healthsystems/hss_glossary/en/).

WHO global strategy on people-centred and integrated health services: interim report. Geneva: World Health Organization; 2015 (http://www.who.int/iris/handle/10665/155002).

Essential public health functions, health systems and health security: developing conceptual clarity and a WHO roadmap for action. Geneva: World Health Organization; 2018.

Wellbeing measures in primary health care: the Depcare project. Copenhagen: WHO Regional Office for Europe; 1998.

# References

1.  World Health Organization.  (1981). Global strategy for health for all by the year 2000.  Geneva: World Health Organization.  1981.  (http://iris.wpro.who.int/bitstream/handle/10665.1/6967/WPR_RC032_GlobalStrategy_1981_en.pdf)  Accessed 14 October 2018.

2.  World Health Organization. (2000). Primary Health Care 21: "Everybody's Business" : an international meeting to celebrate 20 years after Alma-Ata, Almaty, Kazakhstan, 27-28 November 1998. Geneva : World Health Organization. (http://www.who.int/iris/handle/10665/66306) Accessed 14 October 2018.

3.  CSDH (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva, World Health Organization. (http://apps.who.int/iris/bitstream/handle/10665/43943/9789241563703_eng.pdf?sequence=1).  Accessed 14 October 2018.

4.  World Health Organization. (2008). The world health report 2008: primary health care - now more than ever. Geneva:  World Health Organization. (https://www.who.int/whr/2008/en/). Accessed 14 October 2018.

5.  World Health Organization. (2016). Framework on integrated, people-centred health services: Report by the Secretariat. Geneva: World Health Organization.   (http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua=1) Accessed 14 October 2018.

6.  Constitution of the World Health Organization. Geneva: World Health Organization (http://www.who.int/governance/eb/who_constitution_en.pdf).

7.  Universal Declaration of Human Rights. New York: United Nations; 1948 (http://www.un.org/en/universal-declaration-human-rights/; accessed 14 September 2018)

8.  Bishai DM, Cohen R, Alfonso YN, Adam T, Kuruvilla S, Schweitzer J (2016) Factors Contributing to Maternal and Child Mortality Reductions in 146 Low- and Middle-Income Countries between 1990 and 2010. PLoS ONE 11(1): e0144908. doi:10.1371/journal.pone.0144908 Editor: Niko Speybroeck, Université.

9.  Figures at a glance. Geneva: United Nations High Commissioner for Refugees (http://www.unhcr.org/en-us/figures-at-a-glance.html ; accessed 27 August 2018).

10. Population Division, Department of Economic and Social Affairs. World urbanization prospects 2018. New York: United Nations; 2018 (https://population.un.org/wup/ ; accessed 14 September 2018).

11. Hallegatte S, Bangalore M, Bonzanigo L et al. Shock waves: managing the impacts of climate change on poverty. Washington, DC: World Bank; 2016.

12. Costello A, Abbas M, Allen A et al. Managing the health effects of climate change: Lancet and University College London Institute for Global Health Commission. Lancet. 2009; 373(9676): 1693–733.

13. The World Health Report 2008. Primary health care: now more than ever. Geneva: World Health Organization; 2008 (http://www.who.int/whr/2008/en/; accessed 14 September 2018).

14. Perry HB, Rassekh BM, Gupta S, Wilhelm J, Freeman PA. Comprehensive review of the evidence regarding the effectiveness of community–based primary health care in improving maternal, neonatal and child health. 1. Rationale, methods and database description. Journal of Global Health. 2017; 7: 010901.

15. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low-and middle-income countries: a critical review of major primary care initiatives. Social Science & Medicine. 2010;70(6):904-11.

16. Starfield B. Primary care: an increasingly important contributor to effectiveness, equity, and efficiency of health services. SESPAS report 2012. Gac Sanit. 2012 Mar 1;26:20–6.

17. Weiss LJ, Blustein J. Faithful patients: the effect of long-term physician-patient relationships on the costs and use of health care by older Americans. Am J Public Health. 1996 Dec;86(12):1742–7.

18. Starfield B, Shi L, Macinko J. Contribution of Primary Care to Health Systems and Health. Milbank Q. 2005 Sep;83(3):457–502.

19. Friedberg MW, Hussey PS, Schneider EC. Primary Care: A Critical Review Of The Evidence On Quality And Costs Of Health Care. Health Aff (Millwood). 2010 May;29(5):766–72.

20. Institute for Health Metrics and Evaluation. Global Burden of Disease. Seattle, WA: University of  Washington; 2018 (http://www.healthdata.org/gbd; accessed 14 September 2018).

21. Valderas JM, Starfield B, Sibbald B et al. Defining comorbidity: implications for understanding health and health services. Ann Fam Med. 2009;7(4):357-63.

22. Violan C, Foguet-Boreu Q, Flores-Mateo G et al. Prevalence, determinants and patterns of multimorbidity in primary care: a systematic review of observational studies. PLOS One. 2014;9(7):e102149.

23. Transforming our world: the 2030 Agenda for Sustainable Development. New York: United Nations; 2015 (https://sustainabledevelopment.un.org/post2015/transformingourworld; accessed 14 September 2018).

24. Keeping the vector out: housing improvements for vector control and sustainable development. Geneva: World Health Organization; 2017.

25. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q. 2005; 83(3): 457-502

26. Macinko J, Starfield B, Erinosho T. The impact of primary healthcare on population health in low- and middle-income countries. J Ambul Care Manage. 2009; 32(2): 150-171.

27. Pesec M, Ratcliffe H, Bitton A. Building a thriving primary health care system: the story of Costa Rica. Case Study, Ariadne Labs, 2017.

28. Reed, Gail. Bulletin of the World Health Organization. 2008;86(5):321-416.

29. Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. Health Aff (Millwood). 2013;32(4):686-694.

30. Ramirez AN, Giovanella L, Vega Romero R et al. Mapping primary health care renewal in South America. Fam Pract. 2016;33(3):261-267.

31. Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low- and middle-income countries: a critical review of major primary care initiatives. Soc Sci Med. 2010;70(6):904-911.

32. Cueto M. The origins of primary health care and selective primary health care. Am J Public Health. 2004;94(11):1864-74.

33. Primary Health Care Performance Initiative. [Internet]. Per capita current primary health care expenditure ($USD) (https://phcperformanceinitiative.org/indicator/capita-current-primary-health-care-expenditure-usd; accessed 30 August 2018).

34. OECD, European Union, World Health Organization. (2011) A system of health accounts: 2011 version. (http://www.who.int/health-accounts/methodology/sha2011.pdf) Accessed 14 October 2018.

35. Castro-Leal F, Dayton J, Demery L, Mehra K. Public spending on health care in Africa: do the poor benefit? Bull of the WHO 2000; 78(1) : 66-74

36. Sambo LG, Kirigia JM. Investing in health systems for universal health coverage in Africa. BMC Int Health Hum Rights. 2014; 14:28.

37. O'Malley AS, Rich EC. Measuring comprehensiveness of primary care: challenges and opportunities. J Gen Intern Med. 2015;30(Suppl 3):S568-75.

38. Biesma RG, Brugha R, Harmer A, Walsh A, Spicer N, Walt G. The effect of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control. Health Policy Plan. 2009; 24(4): 239-52.

39. Beaglehole R, Dal Poz MR. Public health workforce: challenges and policy issues. Human Resources for Health. 2003; 1:4.

40. Freund T, Everett C, Griffiths P, Hudon C, Naccarella L, Laurant M. Skill mix, roles and remuneration in the primary care workforce: who are the healthcare professionals in the primary care teams across the world? Int J Nurs Stud. 2015;52(3):727–743.

41. China Joint Study Partnership. Deepening health reform in China: building high-quality and value-based service delivery. Washington, DC: World Bank; 2016 (https://openknowledge.worldbank.org/bitstream/handle/10986/24720/HealthReformInChina.pdf?sequence=6; accessed 26 September 2018).

42. Rodriguez HP, Rogers WH, Marshall RE, Safran DG. Multidisciplinary primary care teams: effects on the quality of the clinician-patient interactions and organizational features of care. Med Care. 2007;45(1):19–27.

43. Joshi R, Alim M, Kengne AP et al. Task shifting for non-communicable diseases management in low and middle income countries--a systematic review. PloS One. 2014;9(8):e103754.

44. Seidman G, Atun R. Do changes to supply chains and procurement processes yield cost savings and improve availability of pharmaceuticals, vaccines or health products? A systematic review of evidence from low-income and middle-income countries. BMJ Glob Health. 2017;2(2):e000243.

45. Ballard M, Schwartz R, Johnson A, Fiori K. Practitioner expertise to optimize community health systems: harnessing operational insight. Research Gate. 2017 (https://www.chwimpact.org).

46. Borda Olivas A, PalmaRuiz M, Drasbek C, Sarria Santamera A. Community health workers: a literature review in some countries of South America. Value in Health. 2012;15(4):A27-A28.

47. WHO guideline on health policy and system support to optimize community health worker programmes. Geneva: World Health Organization; 2018 (in press.).

48. Benner P, Sutphen M, Leonard V, Day L. Educating nurses: a call for radical transformation. . 2010 (http://archive.carnegiefoundation.org/elibrary/educating-nurses-highlights; accessed 14 September 2018).

49. Institute of Medicine. Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing. The future of nursing: leading change, advancing health. Washington, DC: National Academies Press; 2011.

50. Mash R, Almeida M, Wong WC, Kumar R, von Pressentin KB. The roles and training of primary care doctors: China, India, Brazil and South Africa. Hum Resour Health. 2015;13:93.

51. Dugani S, Afari H, Hirschhorn LR et al. Prevalence and factors associated with burnout among frontline primary health care providers in low- and middle-income countries: a systematic review. Gates Open Research. 2018; 2(4).

52. Bitton  A, Ratcliffe HL, Veillard JH, Kress DH, Barkley S, Kimball M, et al. Primary health care as a foundation for strengthening health systems in low- and middle-income countries. J Gen Intern Med. 2017 May; 32(5): 566-571

53. Borkan J, Eaton CB, Novillo-Ortiz D, Rivero Corte P, Jadad AR. Renewing primary care: lessons learned from the Spanish health care system. Health Aff (Millwood). 2010;29(8):1432-41.

54. Van Weel C, Kidd MR. Why strengthening primary health care is essential to achieving universal health coverage. CMAJ. 2018; 190:E463-6

55. Ricci-Cabello I, Stevens S, Dalton AR, Griffiths RI, Campbell JL, Valderas JM. Identifying primary care pathways from quality of care to outcomes and satisfaction using structural equation modeling. Health Serv Res. 2018;53(1):430-449.

56. Chauhan BF, Jeyaraman MM, Mann AS et al. Behavior change interventions and policies influencing primary health care professionals' practice – an overview of reviews. Implement Sci. 2017;12(1):3.

57. Alhassan RK, Nketiah-Amponsah E, Spieker N et al. Effect of community engagement interventions on patient safety and risk reduction efforts in primary health facilities: evidence from Ghana. PLOS One. 2015; 10(11): e0142389.

58. Patient engagement. Technical Series on Safer Primary Care. Geneva: World Health Organization; 2016.

59. Petsoulas C, Peckham S, Smiddy J, Wilson P. Primary-care led commissioning and public involvement in the English National Health Service. Lessons from the past. Prim Health Care Res Dev. 2015;16(3):289-303.

60. Landon BE, Grumbach K, Wallace PJ. Integrating public health and primary care systems: potential strategies from an IOM Report. JAMA. 2012;308(5):461–462

61. Framework on integrated people-centred health services. Geneva: World Health Organization; 2016 (http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua=1; accessed 22 Sept).

62. Starfield B. Primary care: an increasingly important contributor to effectiveness, equity and efficiency of health services. SESPAS Report 2012. Gac Sanit. 2012;26(Suppl 1:):20-6.

63. Macinko J, de Oliveira VB, Turci MA, Guanais FC, Bonolo PF, Lima-Costa MF. The influence of primary care and hospital supply on ambulatory care-sensitive hospitalizations among adults in Brazil, 1999-2007. Am J Public Health. 2011;101(10):1968-70.

64. Shi, L. The impact of primary care: a focused review. Scientifica. 2012; Article ID 432892.

65. Starfield B. Primary Health Care: balancing health needs, services and technology. 1998 New York. Oxford University Press.

66. Stange KC. The problem of fragmentation and the need for integrative solutions. Ann Fam Med. 2009;7(2):100-3.

67. Forrest CB, Starfield B. Entry into primary care and continuity: the effect of access. Am J Public Health. 1998;88(9):1330-6.

68. World Bank Group; World Health Organization; Ministry of Finance, P.R.C.; National Health and Family Planning Commission, P.R.C.; Ministry of Human Resources and Social Security, P.R.C.. 2016. Deepening Health Reform in China: Building High-Quality and Value-Based Service Delivery. Washington, DC: World Bank. License: CC BY-NC-ND 3.0 IGO.

69. Pereira Gray D, Sidaway-Lee K, White E, Thorne A, Evans P. Improving continuity: the clinical challenge. InnovAiT. 2016;9(10):635-45.

70. Cabana MD, Jee SH. Does continuity of care improve patient outcomes? J Fam Pract. 2004;53(12):974-8.

71. Gray DJ, Sidaway-Lee K, White E, Thorne A, Evans PH. Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality. BMJ Open. 2018;8(6): e021161.

72. Transitions of care. Technical Series on Safer Primary Care. Geneva: World Health Organization; 2016.

73. Valderas JM, Alonso J. Patient reported outcome measures: a model-based classification system for research and clinical practice. Qual Life Res. 2008;17(9):1125-35.

74. WHO. 2002. WHO Traditional Medicine Strategy 2002–2005. Geneva: WHO. (http://whqlibdoc.who.int/hq/2002/WHO_EDM_TRM_2002.1.pdf) Accessed 14 October 2018.

75. Pokhrel S, Sauerborn R. 2004. Household decision-making on child health care in developing countries: the case of Nepal. Health Policy and Planning 19: 218–33.

76. Rudra S, Kalra A, Kumar A, Joe W. Utilization of alternative systems of medicine as health care services in India: Evidence on AYUSH care from NSS 2014. PLoS One. 2017 May 4;12(5)

77. Use of Folk Therapy in Taiwan: A Nationwide Cross-Sectional Survey of Prevalence and Associated Factors Chun-Chuan Shih, Lu-Hsiang Huang, Hsin-Long Lane, Chin-Chuan Tsai, Jaung-Geng Lin, Ta-Liang Chen, Chun-Chieh Yeh, Chien-Chang Liao Evid Based Complement Alternat Med. 2015; 2015: 649265. Published online 2015 Jun 11.

78. Kessler CS, Pinders L, Michalsen A, Cramer H. Ayurvedic interventions for osteoarthritis: a systematic review and meta-analysis. Rheumatol Int. 2015 Feb;35(2):211-32. doi: 10.1007/s00296-014-3095-y. Epub 2014 Jul 26

79. Furst DE, Venkatraman MM, Krishna Swamy BG, McGann M, Booth-Laforce C, Ram Manohar P, Sarin R, Mahapatra A, Krishna Kumar PR. Well controlled, double-blind, placebo-controlled trials of classical Ayurvedic treatment are possible in rheumatoid arthritis. Ann Rheum Dis. 2011 Feb;70(2):392-3.

80. Thirthalli J, Zhou L, Kumar K, Gao J, Vaid H, Liu H, Hankey A, Wang G, Gangadhar BN, Nie JB, Nichter M. Traditional, complementary, and alternative medicine approaches to mental health care and psychological wellbeing in India and China. Lancet Psychiatry. 2016 Jul;3(7):660-72.

81. Narahari, S. R., Ryan, T. J., Bose, K. S., Prasanna, K. S. and Aggithaya, G. M., Integrating modern dermatology and Ayurveda in the treatment of vitiligo and lymphedema in India. International Journal of Dermatology, 2011;50: 310–334

82. Essential public health functions, health systems and health security: developing conceptual clarity and a WHO roadmap for action. Geneva: World Health Organization; 2018.

83. Martin-Misener R, Valaitis R, Wong ST et al. A scoping literature review of collaboration between primary care and public health. Prim Health Care Res Dev. 2012;13(4):327-46.

84. Pesec M, Ratcliffe HL, Karlage A, Hirschhorn LR, Gawande A, Bitton A. Primary health care that works: the Costa Rican experience. Health Aff (Millwood). 2017;36(3):531-8.

85. Blas E, Roebbel N, Rajan D, Valentine N. Intersectoral planning for health and health equity. In: Schmets G, Rajan D, Kadandale S, ed. Strategizing national health in the 21st century: a handbook. Geneva: World Health Organization; 2016.

86. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva: World Health Organization; 2008.

87. Rio Political Declaration on Social Determinants of Health. Geneva: World Health Organization; 2011 (http://www.who.int/sdhconference/declaration/en/; accessed 10 October 2018).

88. Watkins DA, Nugent R, Saxenian H et al. Intersectoral policy priorities for health. In: Jamison DT, Gelband H, Horton S, Jha P, Laxminarayan R, Mock CN, Nugent R, editors. Disease control priorities: improving health and reducing poverty. Volume 9: Disease control priorities. 3rd ed. Washington, DC: World Bank ; 2018.

89. Verguet S, Laxminarayan R, Jamison D. Universal public finance of tuberculosis treatment in India: an extended cost-effectiveness analysis. Health Economics. 2015; 24: 318-332

90. Lagarde M, Haines A, Palmer N, Conditional cash transfer for improving uptake of health interventions in low- and middle-income countries. JAMA. 2007; 298(16): 1900-1910

91. Rasanathan K, Damji N, Atsbeha T et al. Ensuring multisectoral action on the determinants of reproductive, maternal, newborn, child, and adolescent health in the post-2015 era. BMJ. 2015; 351:h4213.

92. World Health Assembly 68. Contributing to social and economic development: sustainable action across sectors to improve health and health equity (follow-up of the 8th Global Conference on Health Promotion). Report of the Secretariat. Geneva: World Health Organization.

93. Rajan D, Mathurapote N, Puttasri W et al. The triangle that moves the mountain: nine years of Thailand's National Health Assembly (2008-2016). Geneva: World Health Organization; 2017 (WHO/UHC/HGF/HGS/2017.1).

94. Shilts R. And the band played on. Politics, people, and the AIDS epidemic. New York: St Martin's Press; 1987.

95. Epstein H. The invisible cure: Africa, the West and the fight against AIDS. London: Penguin; 2008.

96. Piot P, Bartos M, Ghys P, Walker N, Schwartlander B. The global impact of HIV/AIDS. Nature. 2015:410(6831): 968-73.

97. Invest in advocacy. Community participation in accountability is key to ending the AIDS epidemic. Geneva: Joint United Nations Programme on HIV/AIDS; 2016.

98. Rohrer K, Rajan D. Chapter 2. Population consultation on needs and expectations. In: Schmets G, Rajan D, Kadandale S, editors. Strategizing national health in the 21st century: a handbook. Geneva: World Health Organization; 2016.

99. Bossert TJ, Larranaga O, Giedion U, Arbelaez JJ, Bowser DM. Decentralization and equity of resource allocation: evidence from Colombia and Chile. Bulletin of the World Health Organization. 2003; 81(2): 95-100.

100. Eboreime EA, Abimbola S, Obi FA et al. Evaluating the sub-national fidelity of national initiatives in decentralized health systems: integrated primary health care governance in Nigeria. BMC Health Serv Res. 2017;17(1): 227.

101. Cyril S, Smith BJ, Possamai-Inesedy A, Renzaho AMN. Exploring the role of community engagement in improving the health of disadvantaged populations: a systematic review. Glob Health Action. 2015; 8: 10.3402/gha.v8.29842

102. Rosato M, Laverack G, Grabman LH et al. Community participation: lessons for maternal, newborn, and child health. Lancet. 2008;372(9642):962-971.

103. Reeve C, Humphreys J, Wakerman J, Carter M, Carroll V, Reeve D. Strengthening primary health care: achieving health gains in a remote region of Australia. MJA. 2015; 9: 483-487.

104. Kelley ML, Prince H, Nadin S et al. Developing palliative care programs in indigenous communities using participatory action research: a Canadian application of the public health approach to palliative care. Ann Palliat Med. 2018; 7( Suppl 2): S52-S72.

105. Smylie J, Kirst M, McShane K, Firestone M, Wolfe S, O'Campo P. Understanding the role of indigenous community participation in indigenous prenatal and infant-toddler health promotion programs in Canada: a realist review. Soc Sci Med. 2016; 150: 128-43.

106. Torri MC. Multicultural social policy and community participation in health: new opportunities and challenges for indigenous people. Int J Health Plann Manage. 2012; 27(1): e 18-40

107. Woollard RF. Caring for a common future: medical schools' social accountability. Med Educ. 2006; 40(4):301-13.

108. Population Division, Department of Economic and Social Affairs. World Population Prospects 2017. New York: United Nations: 2018 (https://population.un.org/wpp/; accessed 14 September 2018).

109. Williams MV, Baker DW, Honig EG, Lee TM, Nowlan A. Inadequate literacy is a barrier to asthma knowledge and self-care. Chest. 1998; 114: 1008-1015.

110. IHI Triple Aim initiative. Boston, MA: Institute for Healthcare Improvement (http://www.ihi.org/engage/initiatives/ TripleAim/Pages/default.aspx; accessed 14 September 2018).

111. Strategizing national health in the 21st century: a handbook. Geneva: World Health Organization; 2016.

112. Bodenheimer T, Ghorob A, Willard-Grace R, Grumbach K. The 10 building blocks of high-performing primary care. Ann Fam Med. 2014 Mar-Apr;12(2):166-71.

113. https://www.who.int/medical_devices/innovation/health_care_facility/en/index1.html WHO medical devices by health care facility level: Health post and health center.

114. http://www.who.int/medical_devices/diagnostics/WHO_EDL_2018.pdf WHO Model list of Essential in vitro diagnostics, May 2018

115. Hoge E, Bickham D, Cantor J. Digital media, anxiety, and depression in children. Pediatrics. 2017;140(Suppl 2):S76-S80. doi: 10.1542/peds.2016-1758G.

116. Mathauer I, Dale E, Meessen B. Strategic purchasing for Universal Health Coverage: key policy issues and questions. A summary from expert and practitioners' discussions Geneva: World Health Organization; 2017.

117. Lionis C, Symvoulakis EK, Vardavas CI. Implementing family practice research in countries with limited resources: a stepwise model experienced in Crete, Greece. Fam Pract. 2010;27(1):48-54.

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