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Standing Committee
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COMCEC

Access to Health Services in the Islamic Countries

COMCEC COORDINATION OFFICE
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For further information please contact:
COMCEC Coordination Office
Necatibey Caddesi No:110/A
06100 Yücetepe
Ankara/TURKEY
Phone: 90 312 294 57 10
Fax: 90 312 294 57 77
Web: www.comcec.org
*E-book: http://ebook.comcec.org

ABBREVIATIONS

ADB	Asian Development Bank
AusAID	Australian Agency for International Development
BPJS	*Badan Penyelenggara Jaminan Sosial*
BRAC	Bangladesh Rural Advancement Committee
CAP	Common African Position
CHC	Community Health Center
DHO	District Health Office
DHS	Demographic and Health Survey
DHT	District Health Team
FCT	Field Coordination Team
GHIS	*Genel Saglik Sigortasi*
GIZ	German Corporation for International Cooperation
GoT	Government of Turkey
GoU	Government of Uganda
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information Systems
HRH	Human Resources for Health
HTP	*Health Transformation Program*
ICT	Information and Communications Technology
IFC	International Finance Corporation
ILO	International Labour Organization
JKN	*Jaminan Kesehatan Nasiona*
LIMS	Logistic Management Information System
METS	Monitoring and Evaluation Technical Support
MMR	Maternal mortality rate
MoH	Ministry of Health
NCD	Non-communicable disease
NGO	Non-governmental organization
NHIS	National Health Insurance Scheme
OECD	Office of Economic Cooperation and Development
OOP	Out-of-pocket
OPM	Office of the Prime Minister
PEPFAR	(donor Uganda
PHP	Private Health Providers

PHO	Provincial Health Office
PNFP	private-not-for-profit
RBF	Results Based Financing
RMNCAH	Uganda platform
RRH	Regional Referral Hospital
SIKNAS	*Sistem Informasi Kesehatan Nasional*
SSI	Social Security Institution
TB	Tuberculosis
TCMP	Traditional/ complementary medicine practitioners
THE	Total Healthcare Expenditure
UHC	Universal Health Coverage
UHI	Universal Health Insurance
UN	United Nations
UNICEF	United Nations Children's Fund
UNMHCP	Uganda National Minimum Health Care Package
VAT	Value Added Tax
WHO	World Health Organisation
WMS	Ware House Management System

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EXECUTIVE SUMMARY

Ill-health is one of the major challenges for human well-being. In the last century, much progresses have been made; however, profound inequalities in health remain between different regions of the world, geographical locations within countries and subpopulation groups identified different socio-economic characteristics. These differences relate to health outcomes as much as to coverage of and access of health services. Good health and economic prosperity are mutually supportive, and equitable health status forms one of the foundations of social justice. It is one of the essential parts of all development initiatives.

This report presents and analysis of the current status and trends regarding access to health services in the world and within the OIC and suggests strategies to improve the performance of and access to health services within the OIC member states with a specific emphasis on the poor.

The findings of our study show that there is a high demand for health care services in the OIC countries, more so than in non-OIC countries, and the demands are increasing. OIC countries are characterised by lower life expectancy, higher maternal mortality rate and higher under-five mortality rates than non-OIC countries for lower middle-income countries. However, OIC countries are less affected by tuberculosis and HIV than non-OIC countries for the upper middle-income group.

Physical and financial accessibility of healthcare service tends to be lower in OIC countries than in non-OIC countries. Availability of nurses and midwives is much lower in low income OIC countries than in low income non-OIC countries, whereas OIC countries invest less in health as a proportion of their GDP and expose their citizens to higher out-of-pocket expenses (OOP) than non-OIC countries. This is true for all income groups. Furthermore, physical health accessibility indicators in OIC countries have not improved as fast as in non-OIC countries.

There are high levels of variation in health indicators across OIC countries, often illustrating geographic clusters or country groups which share similar levels. In general, OIC countries of the African group are trailing behind the Arab and Asian groups throughout the 20-year period considered in the study. Great progress has been made in relation to maternal and child health, for example, maternal mortality rates have steadily declined for OIC countries and for the three groups of countries within the OIC over the 20- year period studied.

As much as service coverage differs across regions and countries, its distribution across different wealth quintiles varies substantially across the countries. Access to health by the poor is particularly limited in absolute terms and in relation to richer populations in countries of the African region.

There exist very stark differences in the level of access to health for the poor and the non-poor in many OIC countries. Generally, in countries where healthcare service coverage is high, health inequity tends to be lower than in countries where service coverage is more limited. We also find very dramatic differences between the poor and the non-poor in terms of access to safe drinking and improved sanitation in many OIC countries.

A number of learnings emerge from the case studies, showing the importance of

(1) structured learning and understanding access barriers to health by the population, and the poor in particular, in order to design programmes and initiatives where needs are matched by service provision efficiently
(2) building and supporting leadership and fostering long-term engagement throughout levels of responsibility – including the highest levels

(3) providing community-based primary healthcare in order to reach poor population groups; this will also play a major role in coming years when demographic transition continues to change the shape of health demands
(4) ensuring that the poorest access health insurance to reduce out-of-pocket expenditures which are one of the most important barriers to their access to health; particular attention to population groups that are often overlooked or not registered, such as informal workers, people without ID cards, indigenous people and people living in very remote areas
(5) the private sector to complement the offer of the public health sector and increase efficiency in health provision; however, care has to be taken through monitoring and regulation in order to ensure that these services are affordable for the poor
(6) integration information management systems in order to inform decision-making, identification of health priorities, identification of inequalities and areas of exclusion, accountability, transparency, management, planning and allocation of resources
(7) multi-sectoral investments to offer better access to health services and increase health levels across all population groups.

Based on these observations, this report recommends to:

- Carefully prepare, design and implement reforms aimed at ensuring access to quality health care by the poorest populations.

- Strengthen community-based primary health care in order to reach poor population groups across the countries.

- Carefully design health insurance schemes as a way of pooling risks and expanding health service coverage

- Engage with the Private sector to improve efficiency and quality of the health systems

- Invest in high-quality integrated information management systems in order to identify what works as well as challenges, uncover inequality in access to good quality healthcare and health outcomes

INTRODUCTION

1.1. Background

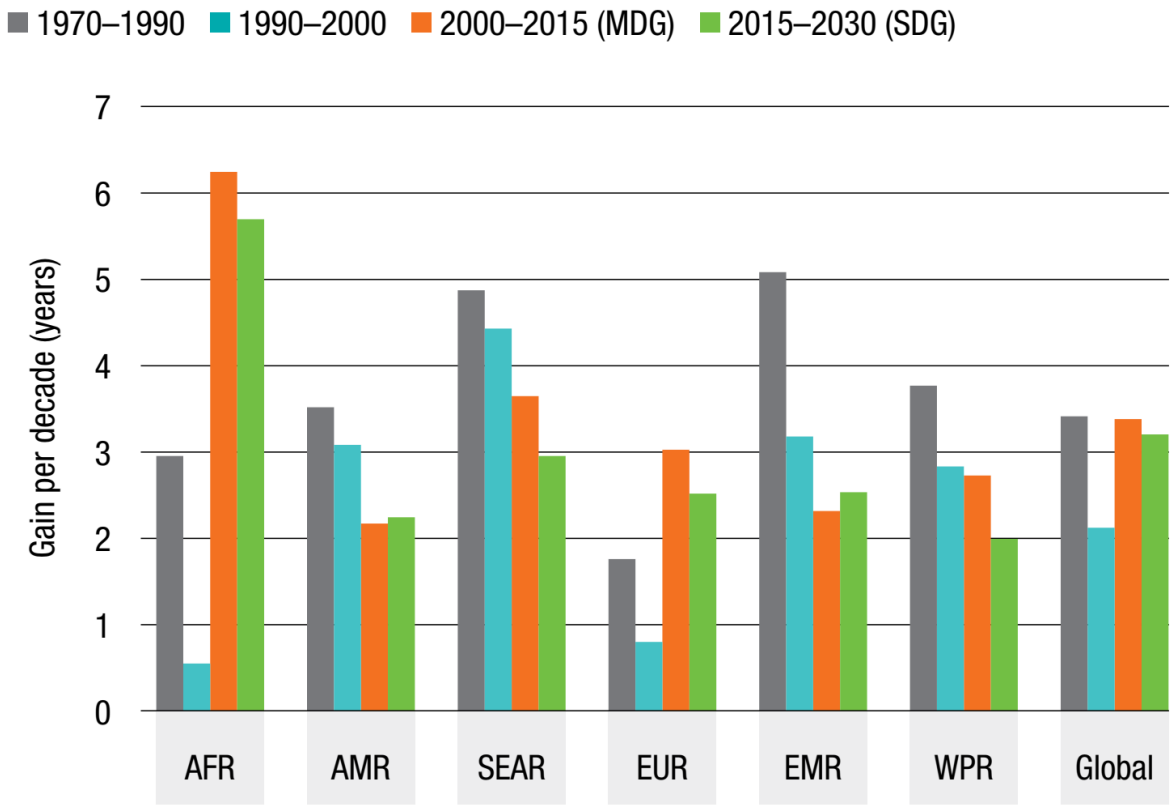
Health inequity

Ill-health is one of the major challenges for achieving human well-being, and there are stark disparities in experiences of good health across the globe and between people within countries. In 2015, 22 countries in the world (all in Europe, Americas and Western Pacific regions) had a life expectancy equal or higher than 80 years whereas 22 countries – all in Sub-Sharan Africa - had a life expectancy lower than 60 years. This is true despite 15 years of impressive progress which saw life expectancy increased by about five years in the world, and 9 years in Africa.

Every day, 16,000 children die before reaching their fifth birthday. Just by being born in a family of the poorest wealth quintile, the likelihood of dying by the age of 5 is twice as large as compared to children of the richest quintile. African children have 14 times higher under-five mortality rates compared to the rest of the world (WHO, 2017a). Developing countries carry the burden of 99 per cent of annual maternal deaths (WHO, 2011); e.g. in Afghanistan and Somalia, over 1,000 mothers per 100,000 live births die from pregnancy and child-birth related causes, compared to 21 in WHO's European region. In 2013, 98 per cent of births were attended by a skilled healthcare professional in Europe, compared to 51 per cent and 68 per cent in Africa and South-East Asia, respectively (WHO, 2015b, pp. 90–91).

Within countries, although women have a higher life-expectancy than men, women are vulnerable to suffer from disparities in access to health. Women are more prone to be sick due to socio-cultural attributes and biological vulnerability, i.e. childbearing (Song and Bian 2014). In countries where women are responsible for fetching water, they have higher risks of infections from faecal-oral diseases such as ascariasis, diarrhoea, trachoma etc. (Caruso et al. 2015). Women also have less access to healthcare compared to men. A study of 156,887 male and female patients from hospital medical record from 2003 to 2009 in China showed that male have higher duration of hospitalization ($p<0.05$), higher expenditure (both self and public) for healthcare ($p<0.05$) compared to women. The study concluded that such differences occur due to unequal positions of women in life and power, access to resources and services, risky behaviour and environmental exposure compared to men in China (Song and Bian 2014).

Figure 1: Regional and global gains in average life expectancy per decade, 1970–2015



Note: Source: World Health Statistics 2016 (WHO 2017e). Sub-regions: AFR=Africa, AMR=Americas, SEAR=South East Asia, EUR=Europe, EMR=Eastern Mediterranean, WPR=Western Pacific.

Good health and economic prosperity are mutually supportive, and equitable health status forms one of the foundations of social justice. It is one of the essential parts of all development initiatives (Sen 1999a, 1999b, 2015). Equitable health means that the improvement in health status need to happen equitably across community/groups, country and/or regions. The Commission on Social Determinants of Health (CSDH) has described health equity as the absence of unfair and avoidable or remediable differences in health among social groups (Solar 2007). A more operational way of measuring health inequity is to ascertain whether health status vary across population and whether these disparities can be understood through social determinants such as gender, socio-economic status, level of education, geographic location etc. (Bloom 2000, Braveman and Gruskin 2003, Davies et al. 2014, Evans et al. 2001). While this serves as a basis of understanding for the variation in state of health status across communities, countries and/or regions, the focus of this study is to understand the access to health services by the population groups with poor socio-economic status. The following section explains why understanding access to health services is important, globally and why is it challenging for the poor.

Ensuring access to health services for the poor

Ensuring access to health services forms the core of global health agenda. In 2015, 193 countries endorsed 17 goals for continued global development to end poverty, promote well-being and protect the planet, commonly known as Sustainable Development Goals (SDGs). The SDG 3 focuses specifically on "ensuring healthy lives and promoting well-being for all at all ages." Alike Millennium Development

Goals (MDGs), the health targets and indicators of SDGs 3 includes burden of disease; mortality and morbidity. In addition, it also includes access to health services by including targets to trace level of coverage of services, associated financial burden and broader system related indicators to address the complex nature of health system.

Table 1: Selected SDG targets and proposed indicators linked to health systems, by type of indicator

Type of indicator	SDG target	Proposed indicator
Coverage/ financial protection	3.8	UHC index: tracer indicators on service access (hospital access, health workforce density by specific cadres, access to medicines and vaccines, IHR capacities)
	3.8	UHC: financial protection (catastrophic and impoverishing out-of-pocket health spending)
System	3.b	Access to medicines and vaccines
	3.b	Research and development on health issues that primarily affect developing countries, including official development assistance (ODA)
	3.c	Health workforce density and distribution
	3.d	IHR capacity and health emergency preparedness
	17.18	Data disaggregation
	17.19	Coverage of birth and death registration, completion of regular population census

Table 1 shows the indicators that have been considered for health in SDG (Marmot and Bell 2018, WHO 2017, CIH 2018, WHO 2018). These indicators, target and goals are altogether inspired by universal health coverage (UHC), a movement which started before the endorsement of SDGs to address the growing health inequity in the world. UHC means that everyone has access to quality health services without any financial hardship. It includes needed essential and quality health services; promotive, preventive, treatment, rehabilitative and palliative care (WHO 2018b). While this is essentially a responsibility of the national health systems, the complex nature of health system organization, interaction between actors and lack of state's stewardship and pro-people policy result into restricted access to health services. The growing literature explaining the state of health equity and endorsement of UHC through SDG is a global recognition that access to health services is a major challenge to achieve sustainable development and well-being of the people.

Consequences of poor access to health services for the poor

Access to health services is particularly challenging for the poor. The disparity in organization of health system and associated service provision directly affects the poor. Indicators in box 1 includes the distribution of human resource for health (HRH). Evidence from Bangladesh shows there are approximately five physicians and two nurses per 10,000 Bangladeshi. According to the World Health Organization (WHO), the critical threshold for trained HRH is 23 (Ahmed et al. 2011,WHO 2014). Among the qualified health personnel, there are twice as many doctors as nurses and doctors are mostly clustered in urban areas. This shortage of trained state healthcare professionals and abundance of private and informal healthcare provision has led Bangladesh to; a) restricted access to quality healthcare (Iqbal et al. 2009) and b) increased healthcare expenditure. In 2012, the out of pocket (OOP) expenditure for health was 64% of total healthcare expenditure (THE) ($4.1 billion), which was 93% of total private expenditure (the figures for India and Nepal are 89.2% and Nepal 79.9%, respectively (Adams et al. 2003, BHW 2012, HEU 2012, Molla and Chi 2017, Ahmed et al. 2015)). This is just one example showing how inequitable and unjustified distribution of health system indicators can interact

together and result into restricted access to health services especially by the poor people. This further contributes to their decreased productivity and keep them in poverty.

1.2. Objectives and study methodology

The aim of the study is to analyse the current status and trends of access to health for the poor in OIC and non-OIC countries, as well as efforts aimed at enhancing access to health for the poor in OIC countries. In light of these objectives, the study aims to answer the following research questions:

(1) What is the current thinking around access to health for the poor?
(2) What is the general situation in OIC member countries and non-OIC member countries in terms of access to health services, with a special emphasis for the poor?
(3) What are the levels of trends of access to health for the poor in OIC countries?
(4) How to organise health systems to enhance access to health for the poor? What policies have the most potential to improve access to health for the poor in OIC countries?

The study pursued three strands of inquiry: First, we summarised the conceptual discussions around access to health for the poor. This allowed to answer (1) and to lay the framework to tackle the subsequent questions.

Second, we analysed the current status and trends regarding the access to health services in the world and within the OIC, with a special especially on the poor. We harnessed a range of existing data on demand for health, physical availability of healthcare, financial access to health, health risk factors and health outcomes to shed light on trends and current situations within the OIC and between OIC and non-OIC member states, at different levels of wealth and for different regions of the world.

Third, we conducted 4 in-depth case studies (Indonesia, Turkey, Uganda, Tunisia) to better understand how to (or not to) enhance access to health for the poor. The case studies have been selected to represent each OIC region and to provide a variety of situations regarding to past and present health access situations. Finally, we draw some common lessons based on the case studies and then suggest recommendations to improve the performance of access to health services within the OIC member states with a specific emphasis on the poor.

Chapter 2: Conceptual Framework

2.1 Health and development

Health was declared a human right about six decades ago. Within two years of the WHO's endorsement of *highest attainable standard of health* as a *fundamental right of every human being* in 1946 (WHO, 2017), the United Nations (UN) asserted health as a human right. The declaration of UN General Assembly in Paris on December 10, 1948 stated under article 25 (1), that, "everyone has the right to a standard of living adequate for the health of himself and of his family" (United Nations, n.d.). This right to health also entails that the state has the legal responsibility to ensure the realization of this right; and to put systems in place to allocate required resources provide quality healthcare accessible when needed, and affordable and acceptable to all (WHO, 2017). From an operational point of view, this requires a multidisciplinary system which recognises health as part of human development and acknowledges the relationship between various socio-demographic and economic factors on the one hand and health on the other. Socio-economic factors can result in acute and chronic deprivation from health-related wellbeing, causing individuals and community to be disadvantaged and marginalised.

In 2015, globally about 740 million people earned less than US dollar 1.90 per day, i.e. lived in extreme poverty. While poverty is often defined based on income status, there is a growing body of literature that explains poverty as a social deprivation which can range from lack of income to lack of basic needs, physical discomfort, bad relationship with others, etc. (Mabughi & Selim, 2006). Like other social deprivations, health and poverty are intimately related. In addition to poor people having different health outcomes compared to rich, the unequal distribution of health outcomes contributes to further constraints and opportunities in poor peoples' lives. For example, poor people have limited access to healthcare, causing them to suffer from poor health outcomes, such as malnutrition and sickness, leading to reduced productivity and lower income. This can result in what is often called a *vicious cycle*, depicted in Wagstaff (2002).

Figure 2: Health and poverty cycle

Source: Wagstaff (2002)

The poverty-health cycle demonstrates two dimensions that lead to poor health outcomes for poor people: context and access (to health). The context is related to poor living conditions, housing, sanitation and hygiene, etc. From the health perspective, context is a risk factor for the health of the poor. Access to health services is often restricted for the poor; either due to unavailability of services

or lack of purchasing power – especially if services are offered by the private, for-profit sector. Also, facilities accessed by the poor are often overcrowded and understaffed.

The poverty-health cycle leads to poor health outcome such as increased mortality and morbidity or malnutrition. The lack of access to health service for the poor results in lack of utilization of health services, and lack of knowledge of good practices, which is a direct cause of poor health. In turn, poor health leads to lack of productivity and decreased income which risk causing some people to either fall into poverty or to further reinforce their poverty status. This explains why access to health is more than just a service and is a basic component of one's wellbeing.

A recently published article explains that access to healthcare is embedded in a complex interaction between financial capability, individual knowledge and preferences and one's human and power interrelationship, a pathway triggered by making the decision of seeking care. Considering the marginal status, poverty restricts all these socio-personal agency resources and thereby limits access to required healthcare (Saini et al. 2017Considering any form of surgery as healthcare, globally 3.7 billion people are at risk of financial catastrophe and about 81 million are experiencing financial catastrophe. Among those who are incurring catastrophic expenditure, 32·8 million is from surgery related cost and 48·5 million is from non-medical but related cost (Shrime et al. 2015).

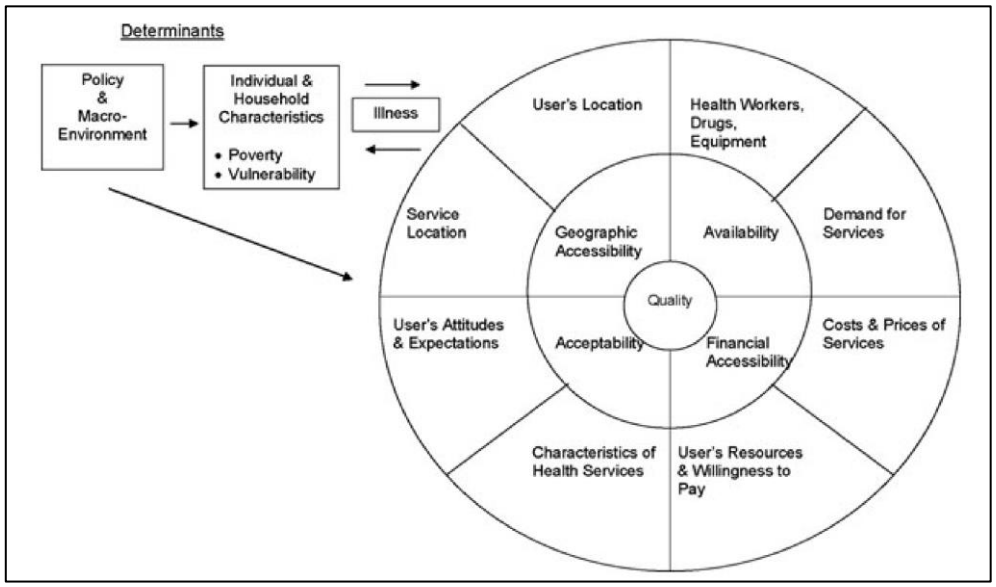
2.2 Concepts, dimensions and measurements related to access to health

Access to healthcare plays a key role in understanding health equity[1] because restricted access can result in varying levels of health outcomes among various social groups. From the health system perspective, considering opportunity to avail and actual use of health services as the basis for access, Peters et al. (2008) has presented a popular conceptual framework to understand the level of access to healthcare in a community (see *Figure 3*). According to the framework, there are certain characteristics of healthcare provision which help us to understand the level of access to health. These are:

a) availability (e.g. formal vs. informal, urban biased distribution of health workforce etc.),
b) cost (financial affordability),
c) geographical accessibility, and
d) acceptability of health services.

[1] "*Health equity* or *equity in health* implies that ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential" (https://www.who.int/topics/health_equity/en/).

Figure 3: Conceptual framework for assessing access to health services



Source: Peters et al. (2008)

The conceptual framework shows that there are structural and population determinants which influence characteristics of healthcare provision. The structural determinants are the macro environment such as policy and strategy, financial crisis, inflation, etc. in relation to health. This is evident in case of poverty; developing countries have 90 per cent of the global burden of disease but account for only 12 per cent spending on health (cf. Hart's inverse care law (Gottret & Schieber, 2006, p. 3; Peters et al., 2008)). It is also crucial that health services are of good quality to be accepted. This generally refers to the technical ability to affect people's health, such as competence of the providers (informed and effective health staff), facility infrastructure (e.g. hospitals), and materials (medicine, instruments, etc) needed to ensure provision of quality services. The population determinants relate to various sociodemographic determinates, various social groups and related household characteristics.

While the Peter et al.'s access to health framework has been very popular so far, it lacks some social and behavioural aspects (Culyer & Wagstaff, 1993; Culyer, 2001; Jacobs, Ir, Bigdeli, Annear, & Van Damme, 2012). For example, the framework does not consider providers' behaviour and interactions, such as the lack of sense of entitlement often experienced by the poor, the lack of task shifting ("a process of delegation whereby tasks are moved, where appropriate, to less-specialized health workers"), responsiveness of the providers (i.e. late referral), means of transport, dualism and absenteeism (by the service providers) and lack of awareness (Ahmed, Petzold, Kabir, & Tomson, 2006; Baine et al., 2018; Bigdeli & Annear, 2009; Fulton et al., 2911; Jacobs et al., 2012; Kiwanuka et al., 2008; WHO, 2011). Further to this, access to healthcare is complex, underlying the very fact that people can be treated unjustly even if they are treated equally. For example, a set of healthcare can be available to a community, however it may not include a specific service that can be very important for a specific group within that community, such as the elderly.

Therefore access to healthcare can be defined as "the ability to ensure a set of healthcare services, at a specified level of quality, subject to personal convenience and cost, based on specified amount of information" (Oliver & Mossialos, 2004, p. 656). This suggests two principles: horizontal or formal, and vertical or proportional equity. The first one states that all people with equal/similar needs should be treated the same, and the latter suggests that people with greater need should be treated with more urgency than those with lesser need (Culyer & Wagstaff, 1993; Culyer, 2001; Sutton, 2002).

Access to healthcare and related equity are sometimes proxied by utilization of healthcare. People with equal need may display different utilization rates of healthcare due to socio-cultural issues. For example, high use of surgical services among the higher income groups compared to the lower income groups with the same needs may be due to financial ability. Such differences in use of healthcare among people with equal need due to social or economic barriers are indicative of inequity. Sometimes, out-reach schemes are required to cater services to the people living in the periphery or to provide religiously acceptable methods for family planning for a religious community etc. (Ghosh, 2014; Oliver & Mossialos, 2004).

It is also important to discuss access to healthcare is the changing context of the country and health system with the rapid growth technology. Technology has appeared to be a major innovation in the development domain. As a result, globally policy makers and other stakeholders are showing much interest in technology to address prevailing political, financial and technical barriers to access to resources and services (Gomez Quiñonez, Walthouwer, Schulz, & de Vries, 2016; Gutierrez, Moreno, & Rebelo, 2017; Kampmeijer, Pavlova, Tambor, Golinowska, & Groot, 2016; Lewis, Synowiec, Lagomarsinoa, & Schweitzera, 2012). A growing number of studies suggests that everyday new models and techniques are being invented and tested by governments and private actors of both developed and developing countries; i.e. *M-pesa* or *Tigo Kilimo*.[2]. This has changed the conventional understanding of health markets by redefining service providers, consumers and the mode of delivery. Because of these innovations and the use of technology, seeking digital health information and services is becoming an integral part of health care seeking. As the health market is shifting towards a health knowledge economy, access to and use of technology for health is becoming a decisive factor in accessing health services. As a result, the concept of social exclusion and vulnerability is also changing. Groups with greater access to technology is becoming somewhat information rich and the rest are becoming information poor. Often, socio-economically poor groups have limited access to technology, and are thus further disadvantaged in their access to health services (Bloom, Berdou, Standing, Guo, & Labrique, 2017; Bloom, Henson, & Peters, 2014; Bloom, Standing, & Lloyd, 2008; Khatun et al., 2014).

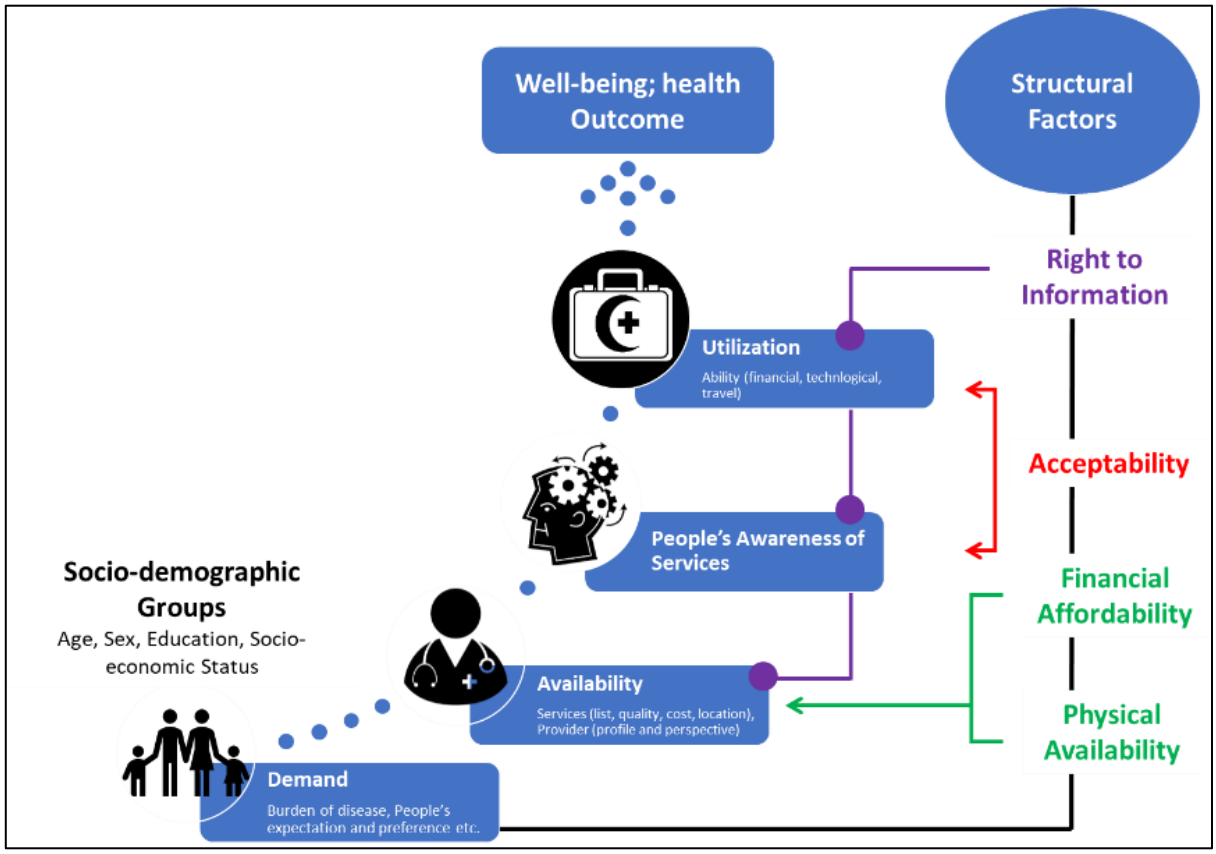
Considering the discussion on access to health, Evans, Hsu, & Boerma (2013) has presented a more indicator-based simplistic framework; including a) physical accessibility (good services are within reasonable reach of everybody), b) financial affordability (people's ability to pay without financial hardship) and c) acceptability (people's willingness to seek services). Considering the discussion on changing context and growth of technology, d) information accessibility was later added to this framework. It is the right of the people to seek, receive and contribute health related information (WHO, 2015). However, the *right to information* too needs to be contextualised by incorporating people's experience with illness, health and health care seeking.

To understand access to health by the poor, the conceptual framework should reflect the dimension of access as well as demand of healthcare by the poor which is reflected by their care seeking. Considering this, merging the access dimension and care seeking is a contextual way to understand the level of access to health by the poor (figure 4). The demand of healthcare can be explored in light of current health status of the population by using different SDG and other widely used and agreed upon indicators. An examination of access dimensions over various stages of care seeking by different social groups (e.g. by income groups or wealth asset quintiles) would then help identify barriers that affect all groups equally and those that are specific to the poor. To understand right to information, the demand of health information should be viewed by various stages of healthcare seeking with a special

[2] Examples include Tigo Kilimo by Tigo in Tanzania (launched in 2013) (GSMA Intelligence, 2015), Airtel Green SIM in India (launched in 2007) etc. (GSMA, 2015, 2018) for eAgriculture, TradeNet in Ghana (De Wulf, 2004), bKash in Bangladesh (bKash, 2017; Kamal Quadir, 2015) for eCommerce and mCommerce as mobile wallet. M-pesa by Vodafone is one of the largest mobile based financial services in the world, used by millions across Africa, Europe and Asia (Aker & Mbiti, 2010; Camner, Pulver, & Sjöblom, 2009; Vodafone Group, 2015).

emphasis on the poor and their need. Finally, various policies and strategies (structural factors) will be explored through the dimensions of access to see how they influence/facilitate access to healthcare by the poor and their demand.

Figure 4: Proposed conceptual framework to assess to health by the poor



Source: elaborated by the authors.

2.3 Disparities in access to Health and Health Outcomes

Across the world, remarkable progress in various health indicators has been made since the last century. Whereas at the beginning of the 20th century the average life expectancy at birth was about 30 years, it rose to 65 by the end of it, and today we live up to 72 years - about 2.5 times as long (WHO, 2018a). We have eradicated deadly disease like small pox, introduced public health marvels like vaccines or oral rehydration therapy (ORT), made improvements in containing health threats like Ebola or severe acute respiratory syndrome (SARS), reduced maternal mortality ratios (MMR), child mortality rates (CMR), the global annual population growth rate has decreased from 2.059 in 1965 to 1.158 in 2015 – a reduction of about 1.8 times in 50 years (World Bank, 2018).

Yet there is considerable disparity related to access to healthcare. In 2015, a joint report published by the Work Bank and the World Health Organization (WHO) stated that globally around 400 million people lack access to essential healthcare. The impact of such access-related health disparity amounts to about 6 per cent of people in low- and middle-income countries being pushed into extreme poverty (World Bank & WHO, 2015). An international group of researchers has recently published their analysis of health care access for 195 countries based on global burden of disease study 2016. Based on their findings, the global healthcare access and quality score in 2016 was 54.4 (on a scale from 0-100), a 12-point increase from 2000. This improvement is mainly based on the impressive increase in

access to healthcare among several low-and-middle-income countries in sub-Saharan Africa and Southeast Asia, including Ethiopia, Rwanda, Equatorial Guinea, Myanmar and Cambodia. However, at the same time, this progress was low or even halted in some countries, such as the USA and some Latin American countries including Puerto Rico, Panama and Mexico (GBD 2016 Healthcare Access and Quality Collaborators et al., 2018).

Globally, women are more vulnerable to suffer from health disparities. Women are not only prone to be sicker as a result of widespread gender discrimination and women-specific biological vulnerabilities, e.g. through childbearing (Rieker & Bird, 2005; Song & Bian, 2014); studies have also shown that women have higher prevalence of hypertension, chronic pain, cancer, anxiety and depression, and are more like to suffer from more days of disability compared to men (Perelman, Fernandes, & Mateus, 2012). In countries where women are primarily responsible for fetching water, they have higher risks of infections from faecal transmitted diseases such as ascariasis, diarrhoea, trachoma, etc. (Caruso, Sevilimedu, Fung, Patkar, & Baker, 2015). Gender discrimination also expresses itself in lesser access to healthcare for women, compared to men. For example, a study of 156,887 male and female patients from hospital medical records dating from 2003 to 2009 in China showed that men are hospitalized for longer and have higher expenditures (both self and public) for healthcare compared to women – likely due to unequal power relations, lower levels of access to resources and services, and riskier behaviour and environmental exposure than men in China (Song & Bian, 2014).

Apart from geographical and gender differences in health access and outcomes, health disparity is an expression of social-demographic influence over direct and indirect access to healthcare. In spite of the UN declaration in the late 40s, global health initiatives started focusing on access to healthcare only in the late 70s. By endorsing the provision of primary health care (PHC) in 1978, the Alma Ata declaration became the cornerstone of bottom-up health initiatives to address socio-demographic barriers hindering access to health. PHC was specially designed to extend the coverage of essential healthcare to the vulnerable and marginalized. In the early 90s, another movement called *Health for all* (HFA) was endorsed to further PHC. The main objective of HFA was to ensure that everyone has access to their required health services. Universal Health Coverage envisions access to quality healthcare by all people, irrespective of their financial ability. At the beginning of this century, three of the eight Millennium Development Goals (MDG) were directly related to health: reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria, and other diseases (WHO, 2018b).

The MDGs were very effective in reducing poverty, achieving equality in primary education between boys and girls, and producing some targeted health-related successes. For example, the number of people living in extreme poverty by the end of 2015 was 836 million, down from 1.9 billion in 1990. Primary school enrolment increased from 83 per cent in 2000 to 91 per cent in 2015, including the elimination of gender disparities across primary, secondary and tertiary education systems in developing region. With relation to health, an impressive global decline in under-five mortality rate was observed from 93.2 to 39.1 deaths per 1,000 live births between 1990 and 2017, the maternal mortality ratio declined by about 45 per cent since 1990, new HIV infections dropped by 40 per cent between 2000 and 2013, more than 6.3 million malaria deaths were prevented between 2000 and 2015, and an estimated 37 million lives were saved due to improvement in tuberculosis prevention, diagnosis and treatment between 2000 and 2013 with 54 per cent of cases detected and a treatment success rate of 86 per cent. Figure 5 - Figure 7 below give graphical summaries of some health indicators for which data is most frequently available. Nonetheless, considering health, the decrease in maternal mortality ratio and under-five mortality rate was not effective in ensuring *everyone's* health-related wellbeing. Especially in the case of child mortality, most of the deaths are concentrated in the poorest regions and during the first month of life. About 50 per cent of people in rural areas lack improved sanitation facilities compared to urban (18 per cent) (UN, 2015).

Most of all, MDG has been a great success in demonstrating how a) targeted international effort and coordinated partnership with stakeholders with a clear vision, b) stressing an universal and

comprehensive plan, and c) the effective use of evidence (data), can be crucial to achieve a more equitable world. Because of such international response, the official development assistance increased by 66 per cent between 2000 and 2014 (UN, 2015). The international effort continued afterwards with the endorsement of 17 Sustainable Development Goals (SDGs) for continued global development to end poverty, promote well-being and protect the planet by 193 countries in 2015. SDG 3 focuses exclusively on "ensuring healthy lives and promoting well-being for all at all ages." Another 10 goals and altogether more than 50 indicators relate to health - signposting health equity as a global priority.

Figure 5: Global mortality rates between 1990 and 2017

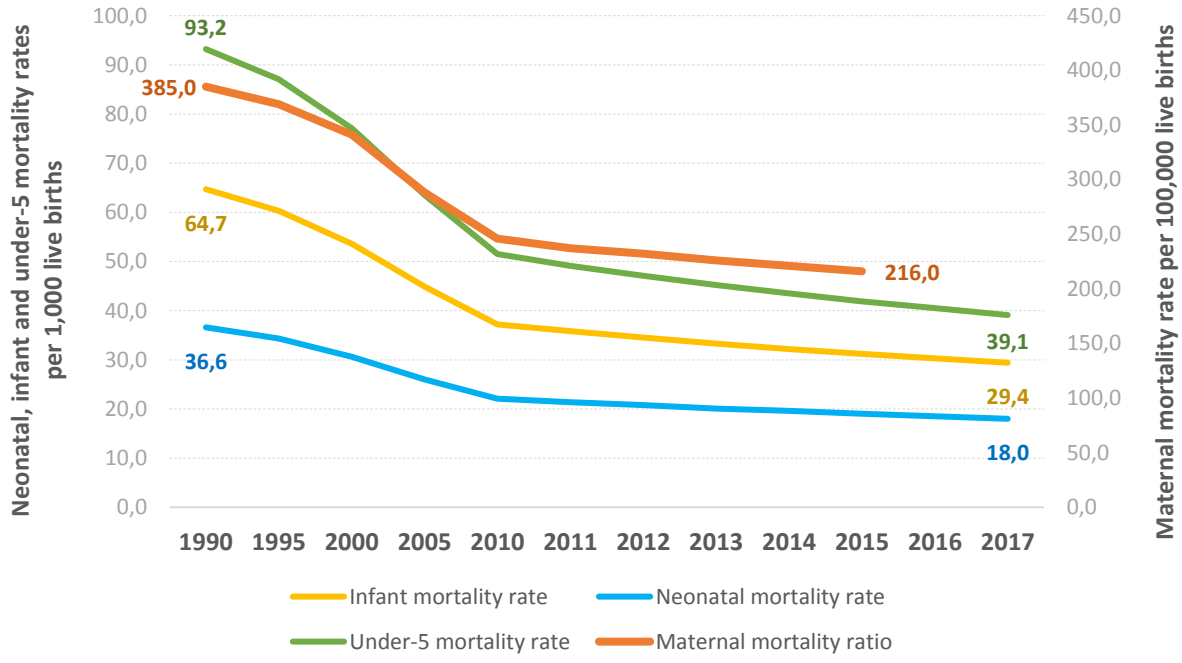


Figure 6: Global immunization rates for DPT and measles, and global life expectancy between 1990 and 2017

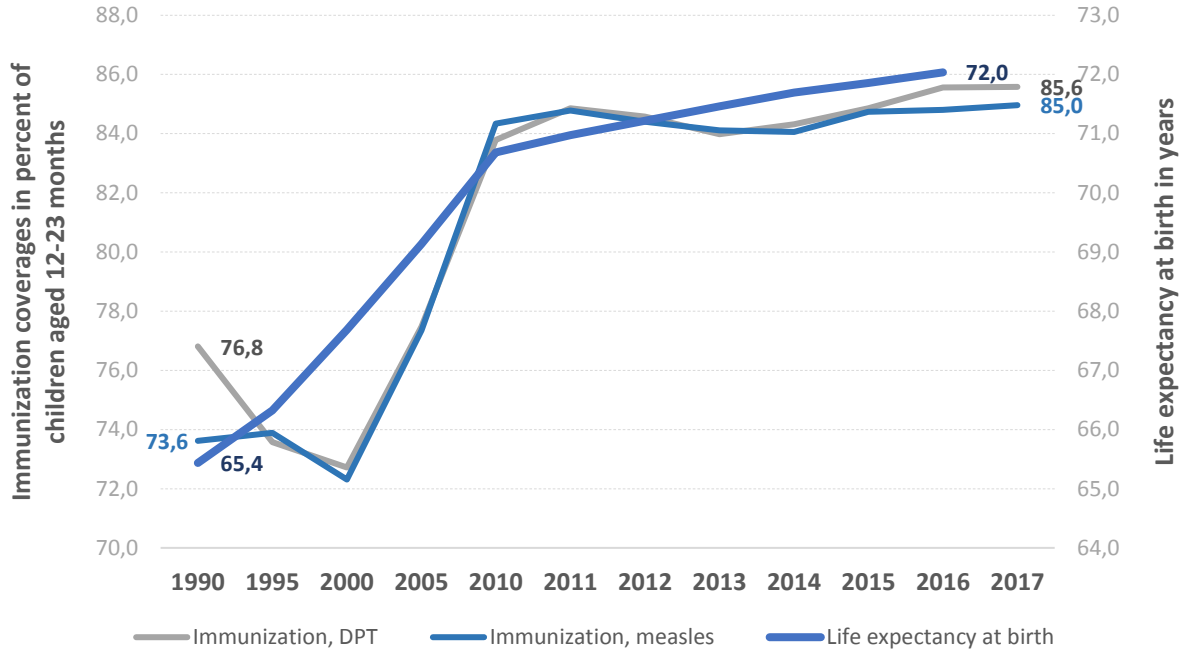
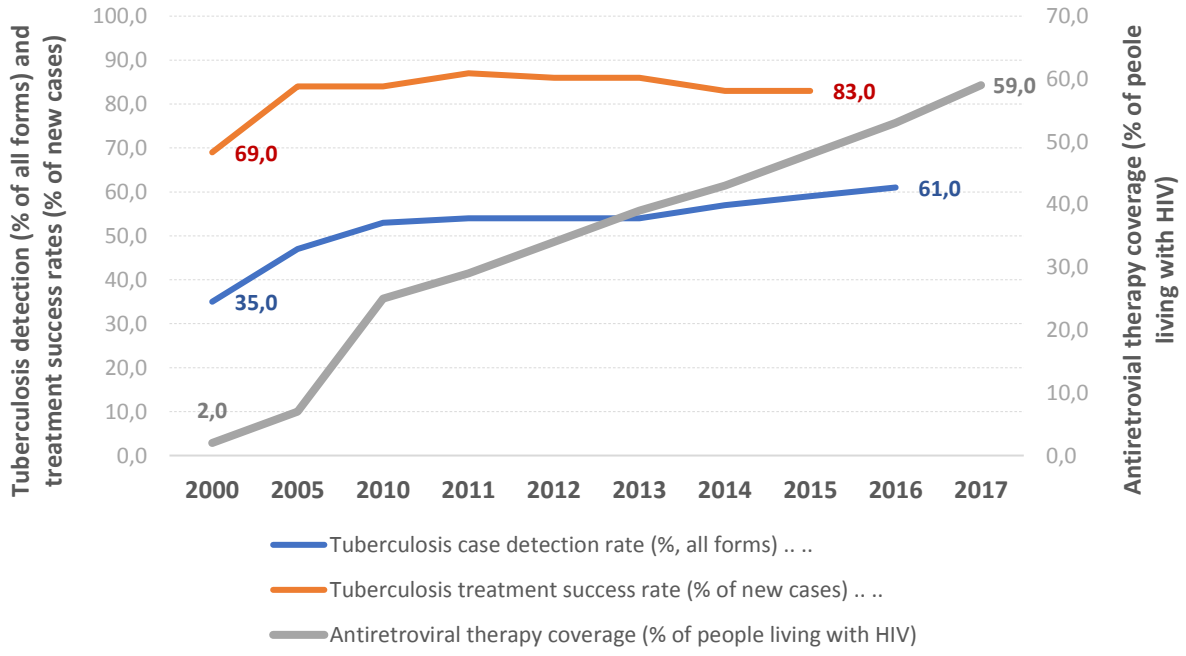


Figure 7: Tuberculosis detection and treatment success, and share of people living with HIV in ART



Source: World Development Indicators (Figure 5 - Figure 7)

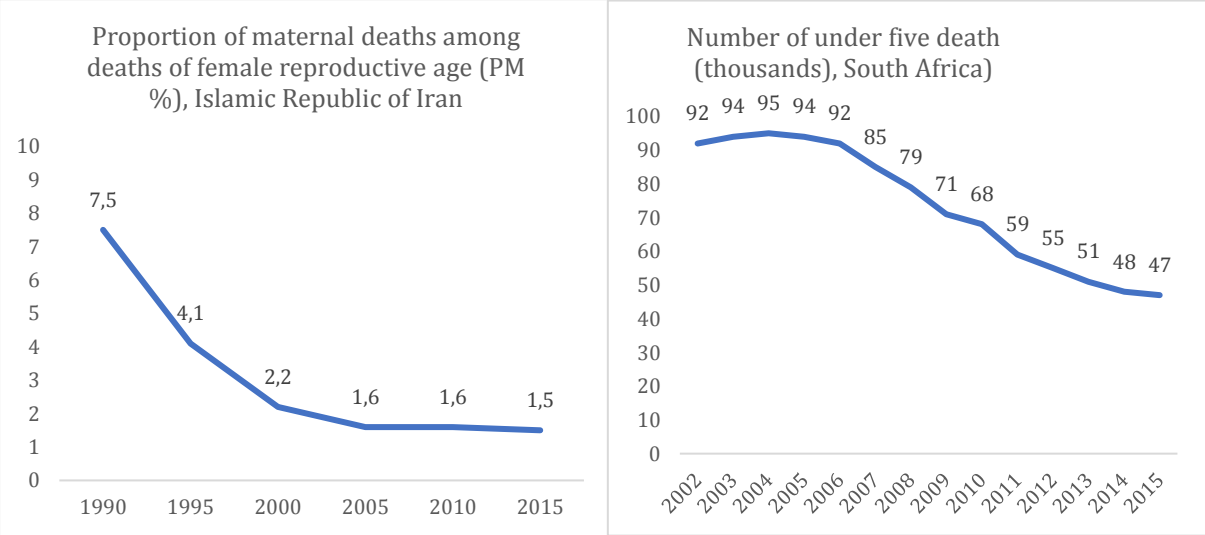
2.4 What works and what does not: Critical success factors and main risks in improving the access to health services

Discussion on what works to improve access to quality healthcare, and what does not, is probably one of the most challenging issues in current agendas. With the advent of health system research, there has been remarkable improvement in the study of health disparity and how innovation can drive positive changes. However, decades of experience in improving access to healthcare can attest that there is no 'simple recipe' for ensuring equitable access to healthcare everywhere. A recently published book has critically reviewed reform in 60 countries across the globe, covering all continents and regions. The book presents 60 case studies on reforms in different countries, with a view on policy change involving systems, economic, methodological, implementational and practice related interventions. The reforms under study range from policy, care coverage and governance, to quality, standards, accreditation and regulation, organization of care, safety, workforce and resources, technology and IT, and practical ways for stakeholders' collaborations and partnerships. Four common principles leading to success in those 60 countries (Braithwaite et al., 2017; Jeffrey et al., 2017) were identified:

1. The 'acorn-to-oak tree' principle = a small-scale initiative can lead to system-wide reforms,
2. The 'data-to-information-to-intelligence' principle = the role of IT and data are becoming more critical for delivering efficient and appropriate care, but must be converted into useful intelligence,
3. The 'many-hands' principle = intensive interaction between stakeholders is key, and
4. The 'patient-as-the-pre-eminent-player' principle = placing patients at the centre of reform designs is critical for success).

These four principles are an excellent summary of the on-going wide range of efforts that are shaping present-day health system innovations globally. For example, investing into small projects like pilots or modest innovations have helped shaping the health system environment to achieve UHC in countries like Iran (Figure 8 shows trend of improvement for maternal deaths; WHO 2017b), New Zealand, Estonia, Ecuador and Fiji. Information has a special role in ensuring access to healthcare by all. By using technology for collection, analysis and dissemination to turn information into intelligence, countries like Chile, UAE, South Africa (Figure 8 shows trend of improvement for under five deaths; WHO 2019), Ireland, China and Italy has made considerable improvement in providing high quality and safe healthcare (*Ibid.*).

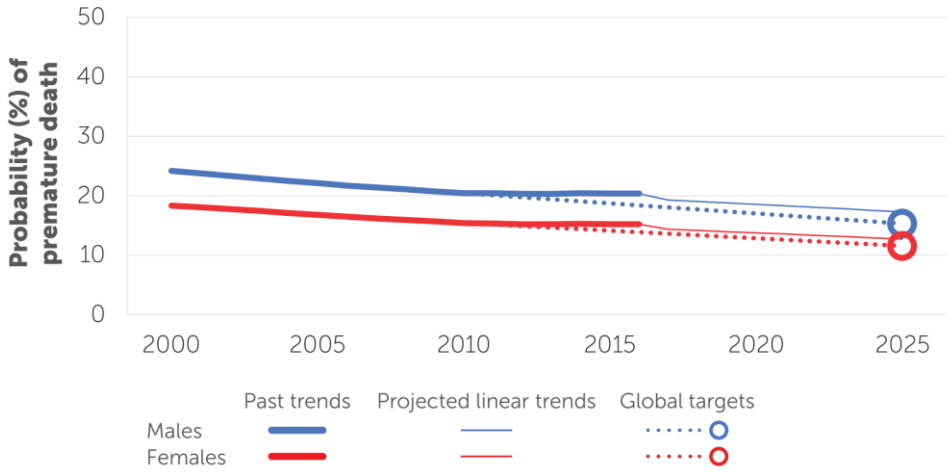
Figure 8: Proportion of maternal deaths among deaths of female reproductive age (PM %) in Islamic Republic of Iran, (Left) and number of under-five death (in thousands) in South Africa, (Right)



Source: WHO 2017b and WHO 2019

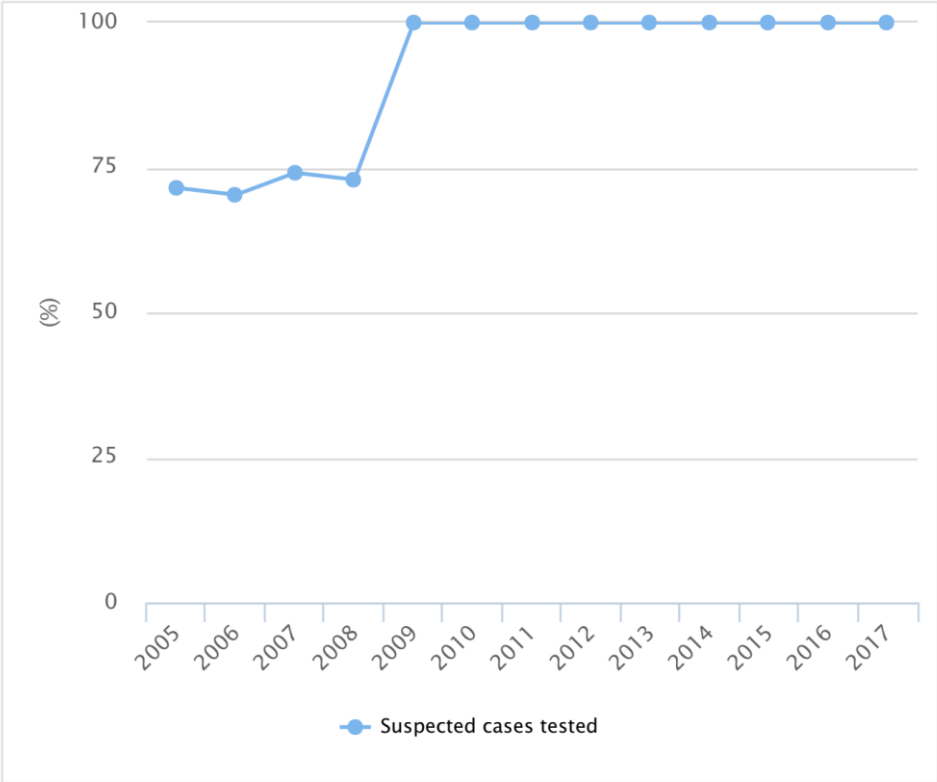
Multidisciplinary approaches and team play can be a very effective way of ensuring access to healthcare in both resource rich and poor contexts. Strengthening systems to enable key stakeholders to develop and maintain effective communication can help decision making based on evidence and help adopt relevant polices for the overall improvement in the delivery of healthcare. A number of countries in Latin America, Middle-East, Europe and Africa have already made considerable progress by fostering such relationship between the stakeholders such as Mexico, Venezuela, The Gulf States, Nigeria, Ghana, Portugal and Lebanon (Figure 9 shows trend of improvement for NCD related premature death risk; WHO 2017c). Finally, there is evidence on how putting patients first a country can ensure a responsive, just and equitable healthcare. By listening to patients' experience and focusing on their well-being, countries like Northern Ireland, Germany, Denmark, Guyana, Hong Kong and Malaysia (Figure 10 shows trend of improvement for malaria; WHO 2017d) have made remarkable progress in their health systems (*Ibid.)*.

Figure 9: Trend in risk of premature mortality due to NCD (%) by male and female in Lebanon



Source: WHO 2017c.

Figure 10: Trend in suspected malaria cases tested (%) in Malaysia



Source: WHO 2017d.

However, not every country has been able to achieve reforms that ensure access to healthcare for all. This indicates that, while these principles have worked, they are also dependant on certain structural factors. Alike other development issues, health is influenced by macro issues like the socio-political system of the country. The socio-political nature of the health system can affect health systems primarily in two ways, philosophically and organically. Philosophical impact of a system is reflected in the recognition of people and their health right. One of the examples of how system's willingness can overcome resource constraints is Thailand. In spite of their reliance on out-of-pocket expenditure for health and related resource scarcity, the country has been successful in securing the health-related interest of the marginalized and vulnerable by devising a system of community-based risk pooling, health insurance.

Organic barriers are very much related to the supply side. It is the much-discussed accountability factor that often determines the effective implementation of any health system innovation. Examples include shortage of healthcare staff due to absenteeism or informal pay to avail healthcare etc. The good news is, if the socio-political philosophy is pro-poor, the reform principles can address such organic issues. However, that also depends on proper stewardship and leadership by the government and other development partners. Based on the global experience what works to enable a political system towards a pro-poor approach is to invest in a critical platform constituted by civil society, development partners and government to ensure evidence-based policy formulation and implementation. This also contributes to foster effective governance by making all the stakeholders accountable towards ensuring access to healthcare especially by the vulnerable groups.

Chapter 3: Current Level of Access to Health Services and its trends in the OIC Member Countries

This chapter presents the current status and trend of access to health indicators in the OIC countries over the last 20 years. To do that, health data published by the World Bank in their updated version of November 2018, is used.[3] The data in this database is sourced from UNICEF, various UN agencies, DHS/MICS, and may include World Bank staff estimates based on other sources.

Not all countries are covered in the same years within the World Bank's health database. As a result, the composition of countries for each given year can vary dramatically. This becomes a serious problem when comparing annual averages for various indicators through time. So, we calculated five-year (instead of annual) weighted averages to ensure that comparisons of averages over time are made on the same underlying set of countries. To do this, first we selected the latest available observation for every country within each of the 5-year periods, then used those observations to calculate the average for that period. For example, the average for a given indicator for the period 2011-2015 would include data from 2015, from 2014, etc. for different countries depending on the latest available data for each country within the period. We used population estimates as weights when calculating the 5-year weighted averages. This approach was used to calculate weighted averages across multiple groups of countries: OIC member countries, non-OIC countries, countries belonging to three World Bank income groups, and countries in the three geographic groupings within the OIC, namely the African group, the Arab group and the Asian group.

We use several widely monitored indicators to map out the current status (as reflected in latest available data) and historical trends in access to health services in the OIC countries. Thematic maps outline the current status and its geographic dispersion while tables tabulate 5-yearly weighted averages which are used to trace trends within the last 20 years.

3.1. Trends of health outcomes in the OIC Member Countries vis-à-vis the rest of the world

This section presents the trends in and outside of the OIC over the last 20 years. OIC and non-OIC countries within the World Bank health dataset are distributed across various income groups as shown in **Table *2***. The trend analysis and OIC vs. non-OIC comparison in this section will primarily focus on low-income and middle-income countries. This means that seven high-income OIC countries and 73 other high-income non-OIC countries are not covered here.

Table 2: Number of OIC and non-OIC countries in World Bank Health Dataset

	World Bank income groups				
	High	**Upper middle**	**Lower middle**	**Low**	**Total**
OIC	7	16	15	19	57
non-OIC	73	40	32	15	160

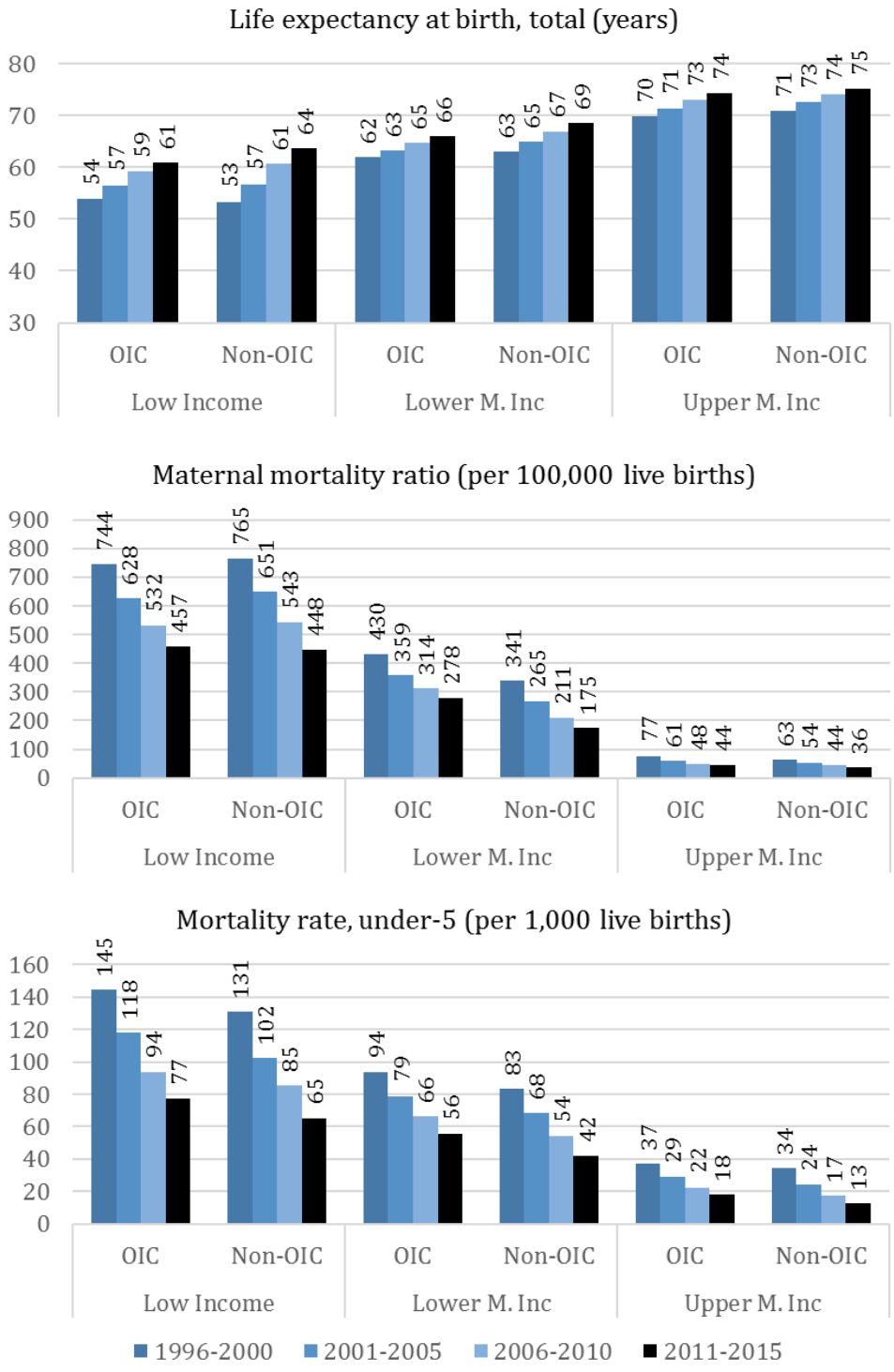
Source: authors' calculations.

Figure 11 uses bar graphs to examine trends of demand for health services using six selected indicators, which are (i) life expectancy at birth, (ii) maternal mortality rate, (iii) under five mortality rate, (iv) mortality from non-communicable diseases, (v) incidence of tuberculosis, and (vi) incidence of HIV. The graph plots the weighted average of the selected indicators for six sub-groups of countries: low income OIC countries, low income non-OIC countries, lower middle income OIC countries, lower middle income non-OIC countries, upper middle income OIC countries, and upper middle income non-OIC countries. For each of the income-OIC subgroups weighted average of the relevant indicator was

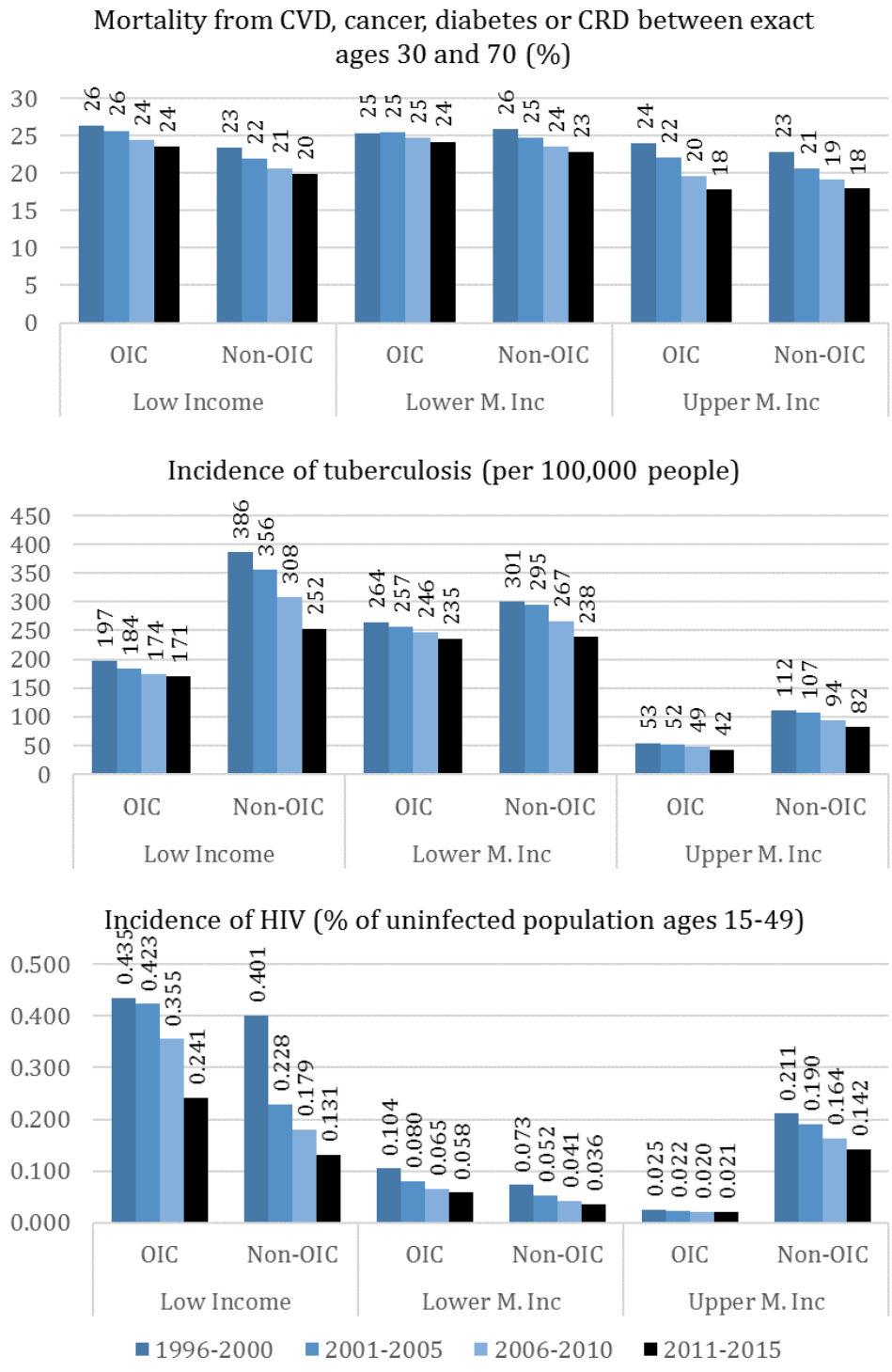
[3] https://data.worldbank.org/topic/health

calculated. As explained before the averages were for 5-year periods. The height of each vertical bar represents one of these weighted averages.

Figure 11: Trends in demand for health services and health outcomes: OIC vs. non-OIC comparison over the period 1996 to 2015



Source: https://data.worldbank.org/topic/health



Source: https://data.worldbank.org/topic/health

The life expectancy graph in Figure 11 clearly shows that all income-OIC subgroups have, over the years, improved life expectancy. In addition, to state the expected, the population living in countries in richer groups lives longer compared to those in poorer countries. Underneath this overall picture, there are some lessons that may be relevant for OIC countries. **The comparison of OIC vs. non-OIC**

groups in most cases suggests that the OIC group fares less well than countries of the non-OIC group. The only exception to this pattern is with regards the low-income group in the 1996-2000 period for which the life expectancy among the OIC group (53.9 years) was marginally higher than that of the non-OIC group (53.4). However, even though the OIC group was ahead of the non-OIC group in the period 1996-2000, by the end of the 20-year period the non-OIC group (63.7) had not only overtaken the OIC group (60.9) but had also registered a respectable lead.

A similar trend pattern is seen with regard to the analysis of maternal mortality ratio (MMR) in Figure 11. The low-income non-OIC group had a higher baseline MMR (765) figure compared to the corresponding OIC group (744) in 1996-2000. Over the next 20 years its MMR value improved (to 448) to reach a higher level than in the OIC group (457). The MMR statistics also support the earlier assertion that the OIC group irrespective of their income has historically had worse health outcomes than the non-OIC group. In addition to the life expectancy and the MMR analysis, Figure 11 also presents an analysis of the under 5 mortality which shows a broadly similar pattern.

The remaining indicators in *Figure 11* display a different trend pattern. The indicator on mortality from cardiovascular disease (CVD), cancer, diabetes or chronic respiratory disease (CRD) is the percent of 30-year-old-people who would die before their 70th birthday from any of CVD, cancer, diabetes, or CVD, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause of death (e.g., injuries or HIV/AIDS). The weighted averages plotted in the graph suggest a moderate, yet consistent, improvement over the 20-year period for all income-OIC groups. However, the "income effect", where high-income countries report better health outcomes than the low-income counterparts, is perhaps less pronounced in this particular graph. This is primarily because the low-income group has done better than the lower-middle income group for non-OIC countries.

Incidence of tuberculosis in *Figure 11* is the estimated number of new and relapse tuberculosis (TB) cases arising in a given year, expressed as the rate per 100,000 population. Trends within each of the six income-IOC groups captured in the relevant graph suggest that **incidence of TB had indeed fallen over the years**. For example, in the low income OIC group the incidence of TB had dropped from 197 in 1006-2000 to 171 in 2011-2015. **Similar trends are visible across all six groups with non-OIC groups reporting a much sharper drop in the incidence of TB than the OIC group**. For example, over the 20-year period the incidence of TB in the OIC countries within the low-income group had dropped by a mere 26 cases per 100,000 population (197 - 171). Concurrently, the incidence had dropped by 134 cases (386 - 252) in the non-IOC group in the same income group. Middle-income non-OIC countries have low levels of incidence compared to their low-income counterparts. On the other hand, the income effect is not as clear for the OIC countries; low income OIC countries do better than lower-middle-income OIC countries. Clearly this result reflects the fact that some OIC countries such as Bangladesh (3.7% of global total TB cases), Indonesia (10.3% of the total), Nigeria (5.9% of the total) and Pakistan (5.2% of the total) are affected by large caseloads of TB despite being in the lower-middle income category (WHO, 2015). In fact, all of these OIC countries are in the 22 TB high burden country (HBC) list used by the WHO (*ibid*).

The last graph in *Figure 11* captures the incidence of HIV, which is the number of new HIV infections among uninfected populations aged 15-49 expressed as a per cent of the uninfected population in the year before. In non-OIC countries, the incidence of HIV is lowest in middle income countries whereas in OIC countries, the incidence of HIV steadily decreases with income level. **The difference in incidence of HIV in high income countries is very stark with OIC countries achieving a considerably lower level of exposure to HIV. In low and lower middle-income countries, however, OIC countries tend to do less well than non-OIC countries**.

The above analysis of health outcomes hints that the need for and demand for health care services is higher in the OIC countries at all levels of wealth. This finding provides the background for a detailed

discussion on trends in access to health in the OIC member countries as a group vis-à-vis the rest of the world around the four dimensions of access to health discussed in Chapter 2: (1) physical accessibility (good services are within reasonable reach of everybody), (2) financial affordability (people's ability to pay without financial hardship), (3) acceptability (people's willingness to seek services and or utilization of condolences) and (4) people's right to seek, receive and contribute health related information.

3.2. Trends of access to health in OIC vs. non-OIC countries

In this section we look into historical trends of access to health in OIC countries and compare those against trends of non-OIC countries. We will use selected indicators for each of the four dimensions to keep the document manageable.

Physical accessibility:

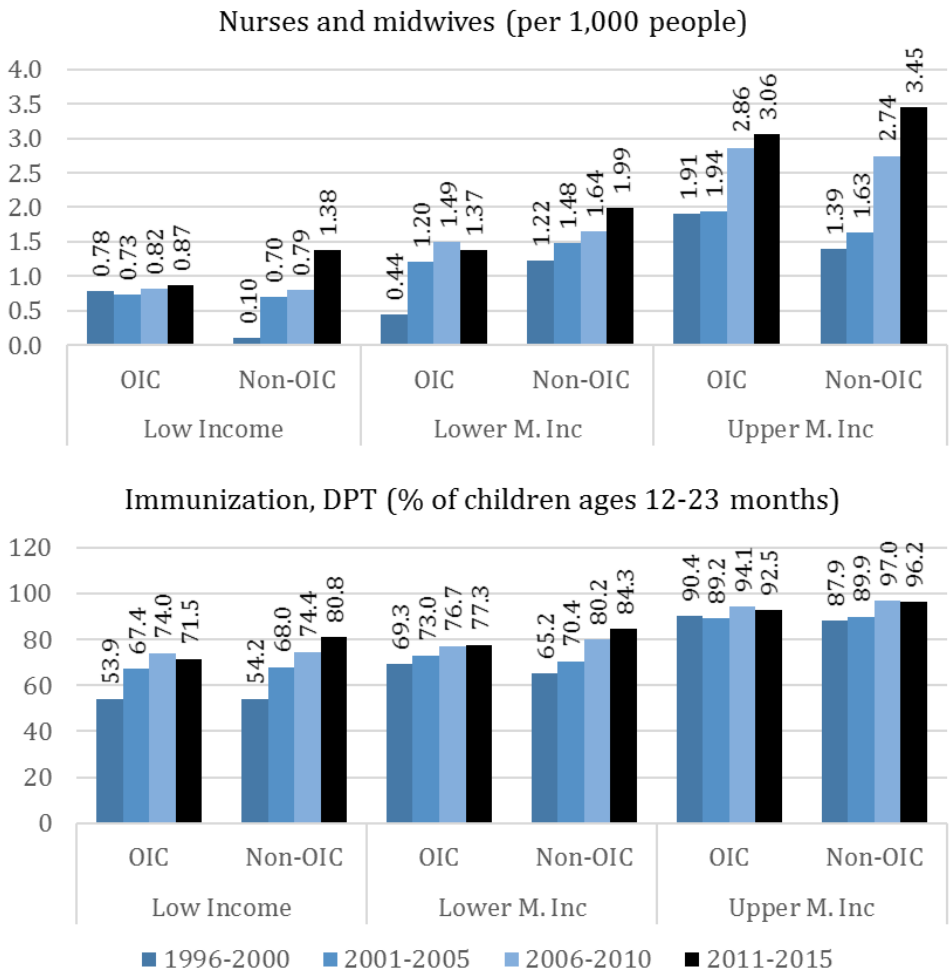
We look at availability of nurses and midwifes and immunisation (DTP) coverage as indicators of physical accessibility to health services. Figure 12 graphs group wise weighted averages of these two indicators.

We can see that for some income-OIC groups these accessibility indicators have not consistently increased throughout the 20-year period. This is especially worrisome as we have seen that outcome indicators of demand for health increased over the same period. If the physical accessibility to health services does not keep up with the pattern of demand for health, that is cause for concern. In fact, some indicators of physical accessibility even deteriorated over the period. There are five instances where the indicators in **Figure *11*** and **Figure *12*** receded between two consecutive periods for the OIC group. For example, the number of nurses and midwives in low-income OIC countries went from 0.78 per 1,000 people in 1996-2000 period to 0.73 per 1,000 people in 2001-2005. In lower-middle income OIC countries, this number went from 1.49 per 1,000 people in 2006-2010 period to 1.37 per 1,000 people in 2011-2015. In contrast, only a single such case of period-to-period reduction is seen in **Figure *12*** for the non-OIC group. This is in relation to DPT coverage between 2006-2010 to 2011-2015.

These deteriorations experienced in OIC countries may be explained by substantial and catastrophic decline in specific OIC countries, which drag the group average down. For example, DPT coverage in low-income OIC group can be linked to dramatic decrease observed in conflict affected OIC countries such as Syria (80% in 2010 to 41% in 2015), Guinea (64% in 2010 to 45% in 2015) and Yemen (76% in 2010 to 69% in 2015). Regarding the indicator of coverage of nurses and midwives for lower-middle-income OIC countries, the deterioration is driven by the decline in Egypt (3.5 per 1,000 people in 2010 to 1.4 per 1,000 people in 2014).

Figure *12* also shows a noticeable increase (from a base figure of 0.1 in 1996-2000 to 1.38 in 2011-2015) in the availability of nurses and midwifes in low income non-OIC countries. It is indeed a phenomenal achievement because the value of 1.38 means that these low income non-OIC countries have in fact done better than the lower middle-income OIC group (1.37 in 2011-2015). In contrast the low-income OIC group had only marginally improved the availability of nurses and midwives over the same period.

Figure 12: Trends of physical accessibility of health care (1996-2015)



Source: https://data.worldbank.org/topic/health

Financial Accessibility:

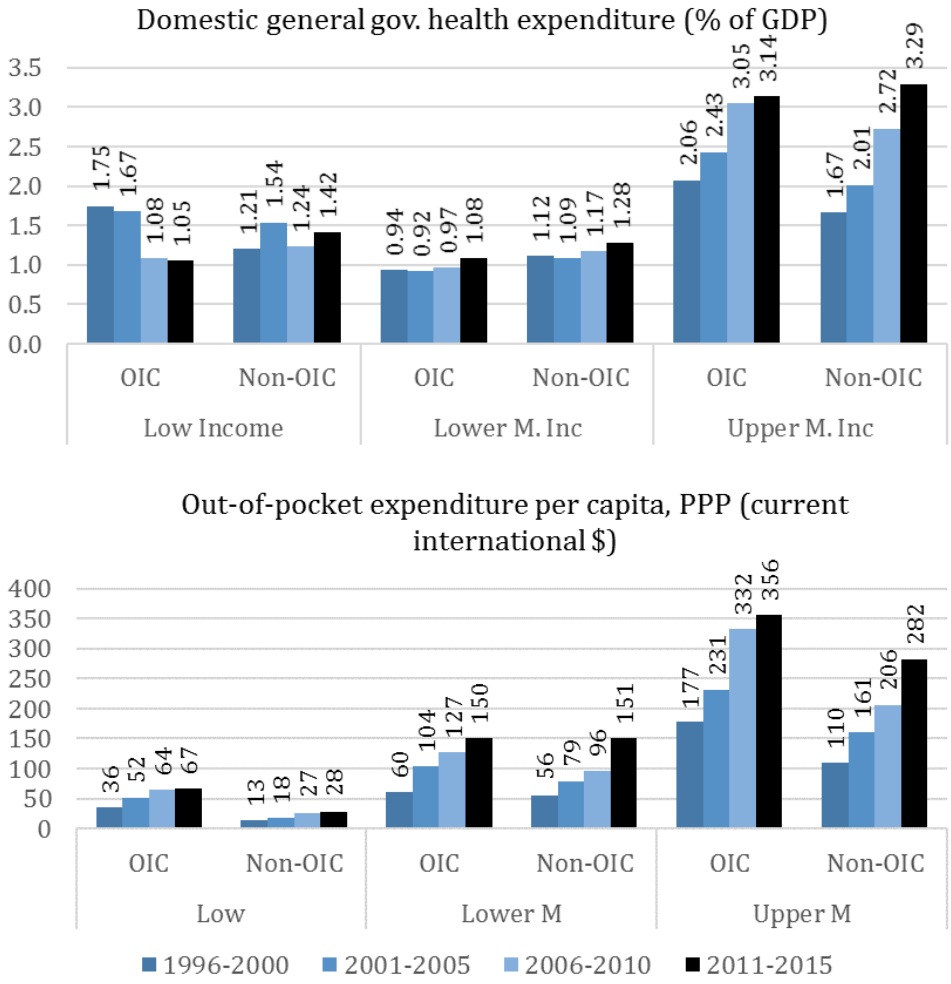
We use public spending on health (as a proportion of GDP) and out of pocket spending on health as proxies on financial accessibility to health services. Figure 13 plots weighted averages of these two indicators to examine status and historical trends in financial accessibility to health services.

Trends of public spending suggests that over the last 20 years only the upper-middle-income countries had been able to set aside an incrementally increasing proportion on public health expenditure. Financial investment in health as a proportion of expenditures has either stagnated or, in the case of low-income OIC group, declined over the same period. The fact that low income OIC countries had drastically cut (from 1.75 per cent in 1996-2000 to 1.05 per cent in 2011-2015) the relative public spending on health underscores the challenges faced by the poor in these country in accessing health services. Even if public health spending as a fraction of GDP is stable (similar to the case for lower-middle-income countries in Figure 13), it still cannot prevent resource pressures in health provision because demand for health in these countries is on a strong upward trend.

Insufficient public spending on health invariably leads to higher levels of out-of-pocket expenditure on health, which is the second indicator examined in Figure 13. Irrespective of the income group, OIC countries expend much higher levels out-of-pocket spending compared to non-OIC countries. The only

exception is the 2011-2015 period for lower-middle-income group for which both OIC and non-OIC countries spend the same in out-of-pocket health spending. Higher level of out-of-pocket spending on health can create financial hurdles against accessing health care, especially to the poor and the vulnerable in these countries.

Figure 13: Trends of financial accessibility of health services (1996-2015).



Source: https://data.worldbank.org/topic/health

Service acceptability:

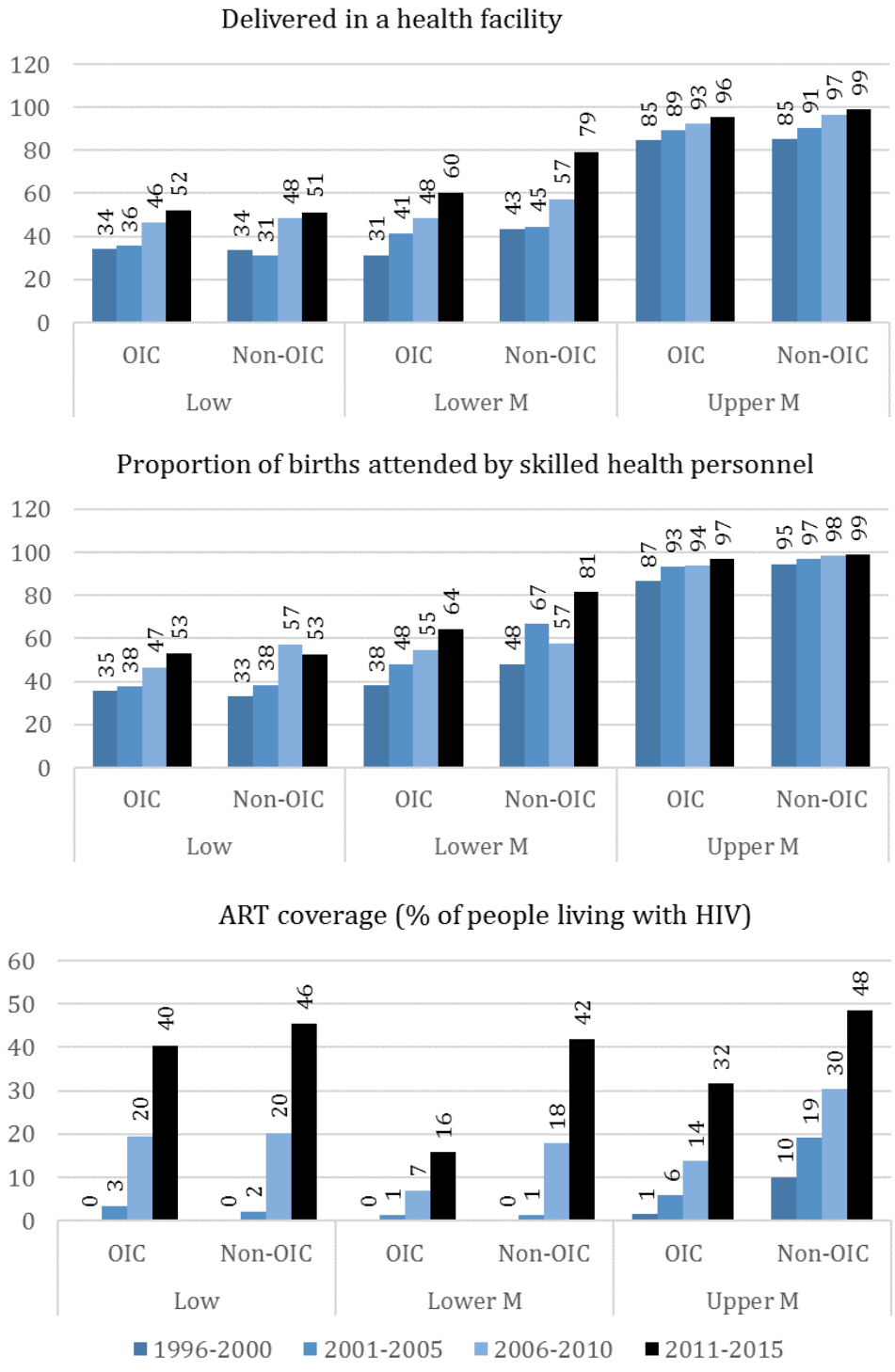
Acceptability of health services are discussed here using utilization of services as a proxy. **Figure *14*** presents information on trends in three indicators of service utilization. The first is the percentage of births delivered in a health facility. The indicator refers to women who had a live birth recently (two years for MICS and five years for DHS). The delivery data suggests that excepting in the low-income category, in both the other income categories the non-OIC countries tend to do better in terms of getting more babies delivered in health facilities. Here we interpret this evidence of poorer levels of service acceptability among middle income OIC countries compared to non-OIC counterparts. This is despite the OIC countries across all income groups having reported consistent improvements in delivery statistics over the 20-year period.

The second graph in **Figure *14*** summarizes the proportion of births attended by skilled health personnel. The numerator here is number of women age 15-49 years with a live birth in the last 2

years who were attended by skilled health personnel during their most recent live birth. The patterns and trends in this graph broadly confirm the conclusions derived from delivery statics: that outlook for the non-OIC group is better compared to the OIC group even though the latter had consistently improved over the last 20 years.

The third graph covers weighted averages of antiretroviral treatment (ARV) coverage, which indicates the percentage of all people living with HIV who are receiving antiretroviral therapy. The ARV coverage has increased in big strides over the 20-year period; and we hypothesise that service acceptability must have played a substantial role in that result (along with the cost reductions achieved over the period). Focussing on 2011-2015 period it seems that in each income group OIC countries have not managed to achieve the same level of coverage as the non-OIC countries. The gap is substantial in the lower-middle-income groups with non-OICs recording 42 per cent coverage rate in 2011-2015 period and OICs managing only 16 per cent coverage rate in the same period.

Figure 14: Trends of service accessibility of health services (1996-2015)



Source:https://data.worldbank.org/topic/health
https://data.unicef.org/topic/maternal-health/newborn-care/#data

The discussion above, on trends within as well as outside of OIC membership, tried to connect with all four dimensions of access to health, albeit using selected indicators. The main purpose was to examine

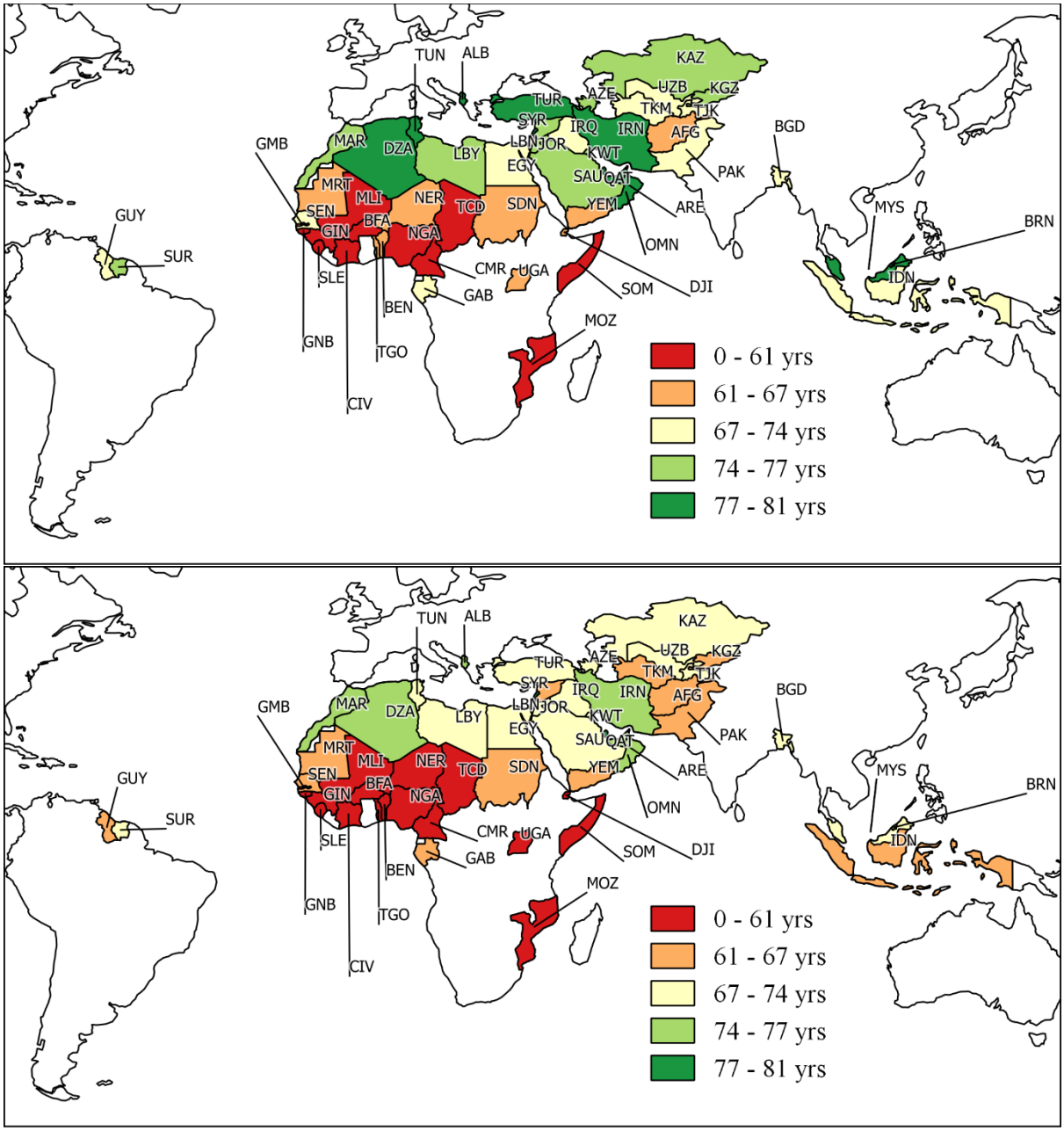
trends of access to health in OIC countries by contrasting those with the corresponding trends outside of OIC. In the next section we use this information as a backdrop to examine in more details the story of access to health in OIC member countries.

3.3. Demand for health services and health outcomes in OIC member countries

As outlined in the conceptual model used in this work, an appreciation and assessment of the demand for health care by OIC countries provides essential background information for a detailed discussion on universal health coverage in these countries. Widely/routinely monitored indicators capture information on demand for essential health-care services and health outcome. We selected life expectancy at birth, under-5 mortality rate, and maternal mortality as indicators of demand for health services.

Life expectancy at birth signifies how well a country's health system is working in the provision of preventive, curative, rehabilitative and palliative care. Figure 15 maps most recent life expectancy data for OIC countries. The map is clearly an illustration of the high level of observed variation in life expectancy among the OIC countries; but it also illustrates that there may be geographic clusters or country groups which share similar life expectancy levels. Dire levels of life expectancy in Sub-Saharan Africa and favourable female life expectancy in the MENA region stands out. Figure 15 also illustrates an overall pattern where life expectancy of males in a country is always lower than that of females in the same country. For example, while there are 11 OIC countries with female life expectancy less than 61 years there are 17 OIC countries with male life expectancy less than 61 years. In the other extreme 14 OIC countries have female life expectancy greater than 77 years while only 2 have male life expectancy that high.

Figure 15: Female (top figure) and male (bottom) life expectancy at birth for OIC member countries. The latest available data.



Source: https://data.worldbank.org/topic/health

Table *3* summarizes the trends in life expectancy and other selected indicators of demand for primary health care in OIC member countries. Life expectancy at birth, has steadily increased for OIC countries over the period reported in *Table 3*. While life expectancy for females has been consistently higher vis-à-vis corresponding figures for males in OIC countries, trends within each group suggest that both female and male life expectancy has indeed improved over the years. The current status in OIC countries as reflected in the figures for 2011-2015 compare well with those for low income countries (average of 64.3 years for females and 60.7 for males in 2015) and are on par with lower middle-income countries (average of 69.5 years for females and 65.8 for males in 2015).

Table 3 also reports on the intra-OIC differences in life expectancy using two approaches: by identifying the best and worst performing OIC member in 2011-2015 period and by highlighting differences across the three OIC groups. The difference between the best performer, Lebanon (male 78 years and female 81), and the worst performer, Sierra Leone (male 51 years and female 52), underscores the extreme discrepancy in life expectancy achievements among the OIC member countries. The intra-group averages in Table 2 further underscore that these differences in fact persist at the regional level (we made the same point earlier using thematic maps in Figure 15). In other words, the African group of OIC countries had trailed behind the Arab and Asian groups throughout the 20-year period considered here.

Table 3: Life expectancy trends in in OIC member countries.

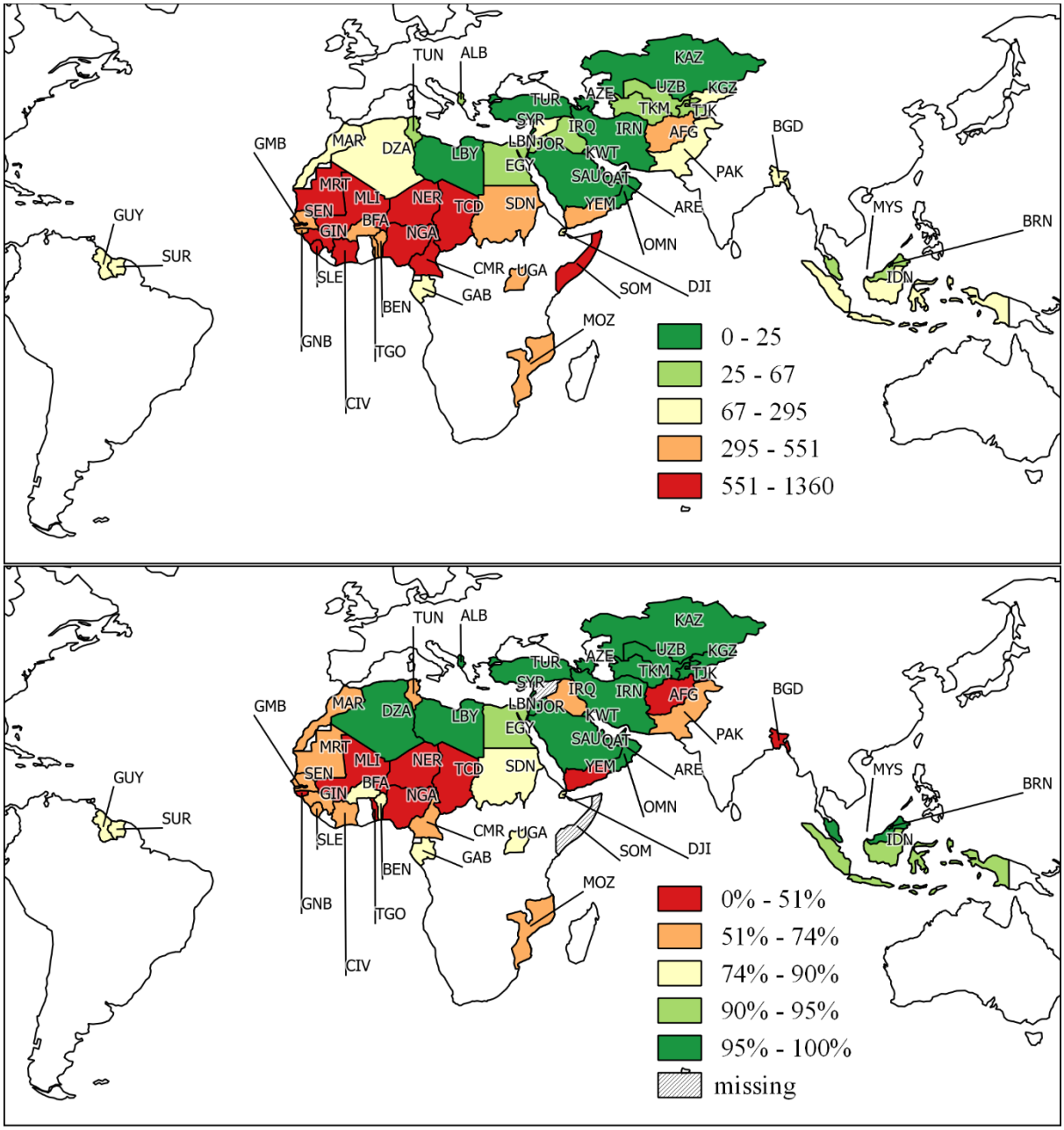
Life expectancy at birth, female (years)	Low	OIC average	High	African group	Arab group	Asian group
2011-2015	**52.4** (Sierra Leone)	**68.8**	**81.4** (Lebanon)	**57.2**	**73.0**	**72.3**
2006-2010		67.4		54.6	72.1	71.0
2001-2005		65.7		51.6	70.9	69.4
1996-2000		64.1		49.2	69.6	67.7

Life expectancy at birth, male (years)	Low	OIC average	High	African group	Arab group	Asian group
2011-2015	**51.3** (Sierra Leone)	**65.4**	**78.0** (Lebanon)	**54.9**	**69.1**	**68.5**
2006-2010		64.0		52.6	68.2	67.2
2001-2005		62.5		49.6	67.1	65.8
1996-2000		61.0		47.0	65.9	64.5

Maternal mortality rate (MMR) is defined as the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births. MMR is a routinely monitored indicator for demand for health services needed by the women in a country. Figure 16 maps most recent MMR data for OIC countries which range from a low of 4 in Kuwait in 2015 to a high of 1360 in Sierra Leone also in 2015. The map highlights a geographic clustering of OIC member countries in Sub-Saharan Africa with alarmingly high MMR statistics. Overall, there are 11 OIC countries with MMR greater than 551 and 13 with MMR lower than 25.

Figure 16, in its bottom panel, maps skilled birth attendance in OIC countries. The indicator on skilled birth attendance measures the percentage of births attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labour, and the postpartum period; to conduct deliveries on their own; and to care for newborns. It provides important information regarding whether a woman of reproductive age was able to access safe pregnancy care. Note how similar the top (MMR) and bottom (skilled attendance) panels are in Figure 2. Making sure that a trained health worker oversees all births is the single most important means of preventing maternal (and newborn) deaths.

Figure 16: Maternal mortality ratio (per 100,000 live births) in the top and the proportion of births attended by skilled health staff (% of total) in the bottom figure, OIC countries, latest data available



Source: https://data.worldbank.org/topic/health

Table 4 outlines the historical trends in MMR and skilled birth attendance in OIC countries. MMR has steadily declined for OIC countries and for the three groups of countries within the OIC over the 20-year period reported in *Table 4*. The current MMR status in OIC countries as reflected in the average for the 2011-2015 period compares well with those for low income countries (average of 479 in 2015) and it is on par with the average MMR in lower middle-income countries (average of 257 in 2015). The intra-OIC differences in MMR reflected in *Table 4* is interesting. The difference between the best performer, Kuwait (MMR of 4), and the worst performer, Sierra Leone (MMR of 1360), paints a picture of strikingly different maternal health situations with the OIC membership. The intra-group averages in *Table 4* further establishes that the African group is indeed the worst performer; and that also by a

large margin. The group wise MMRs also suggest an interesting story of catching up: the Asian group, which had worse MMR statistics than the Arab group two decades ago had consistently narrowed this gap and finally surpassed the Arab group in the 2011-2015 period.

The trends in skilled birth attendance in *Table 4* sheds more light on the challenge faced by the African OIC countries: two decades of work/investment had seen only marginal if not insignificant increase of 4pp in skilled attendance (from 42 per cent in 1996-2000 to 46 per cent in 2011-2015). In contrast during the same period Arab OIC countries have improved their skilled attendance levels by 17pp and Asians by 21pp.

The table also include information on under-5 mortality, which provides a snapshot of how well a country is performing in terms of addressing health related challenges at the early life. With access to appropriate child health services, survival rate increases which in turns improves life expectancy at birth. The trend analysis of under-5 mortality rate and maternal mortality rate are in *Table 4*. These results corroborate the findings so far.

Table 4: Trends in maternal care in OIC countries

Maternal mortality rate (modelled estimate, per 100,000 live births)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**4.0** (Kuwait)	**256.5**	**1360** (Sierra Leone)	**653.2**	**134.7**	**126.2**
2006-2010		291.4		726.5	148.9	162.8
2001-2005		335.7		810.9	171.8	208.8
1996-2000		397.5		964.5	197.9	258.1

Births attended by skilled health staff (% of total)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**20.2** Chad	**69.3**	**100.0** Brunei Darussalam	**46.3**	**84.0**	**73.9**
2006-2010		64.2		42.4	79.3	66.7
2001-2005		57.5		41.1	75.8	57.7
1996-2000		52.9		41.7	66.8	52.7

Mortality rate, under-5 (per 1,000 live births)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**7.6** (Bahrain; Malaysia)	**50.9**	**135.6** (Somalia)	**95.2**	**32.7**	**38.3**
2006-2010		60.9		117.1	37.5	46.4
2001-2005		73.8		145.0	45.0	56.5
1996-2000		88.5		175.1	53.8	68.9

The above analysis of demand for health care by OIC countries provides the background for a detailed discussion on universal health coverage, including financial risk protection and access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines

and vaccines for all. For this, access to health will be conceptualized as four dimensions: (1) physical accessibility (good services are within reasonable reach of everybody), (2) financial affordability (people's ability to pay without financial hardship), (3) acceptability (people's willingness to seek services and or utilization of condolences) and (4) people's right to seek, receive and contribute health related information.

3.4. Access to healthcare services in OIC countries

Physical access to healthcare

Physical accessibility to healthcare crucially depends on the types and distribution of services and related coverage by population and the location (rural/urban). Specific services in relation to maternal and child health, family planning and communicable and non-communicable diseases which focuses on increasing/improving access as well as better population targeting are of relevance here. How these interventions/programs accessed by the people from low income groups in the OIC is an important dimension of physical access. In what follows, we engage with a few of these indicators to examine the physical dimension of healthcare access in OIC countries.

Figure 17: Hospital beds (per 1,000 people)

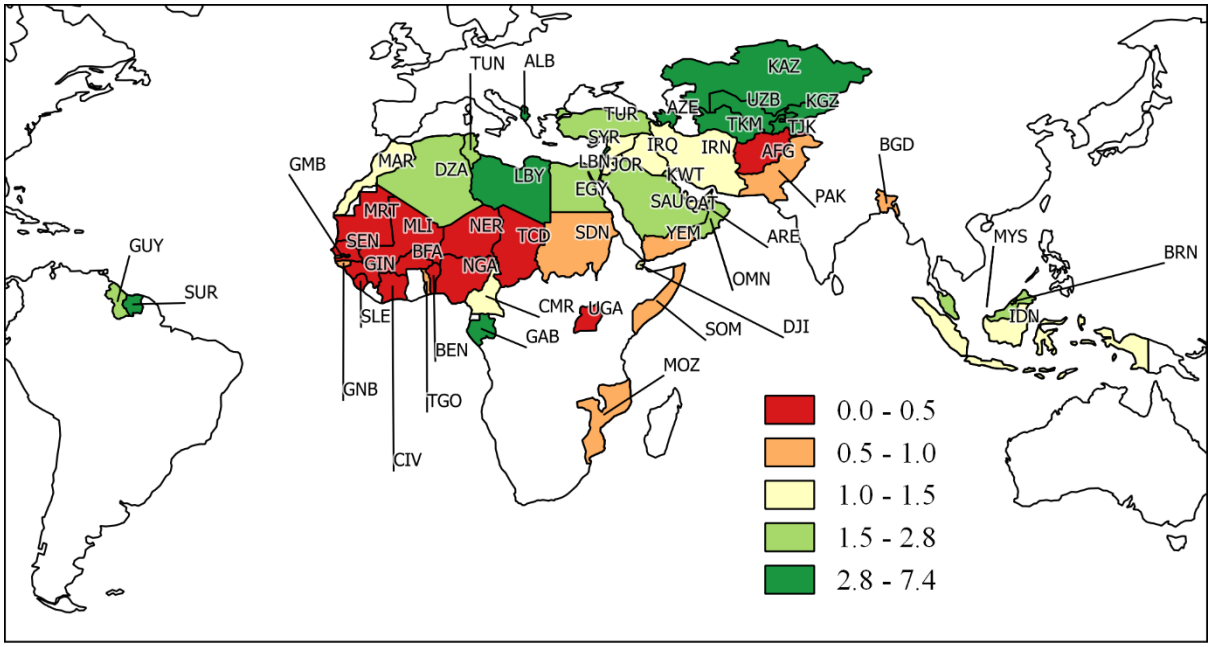


Figure 17 maps the physical availability of hospital beds per 1000 people in OIC countries. Here the hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. Availability and use of health services, such as hospital beds per 1,000 people, reflect both demand and supply-side factors. Here we use it as a proxy indicator of the extent of physical, barriers to health care. Figure 8 maps most recent hospital bed data for OIC countries (the most recent data is dated 2015). The high level of variation in hospital beds among the OIC countries is brought out by the large gap that exist between Kazakhstan (KAZ) with 6.7 beds in 2013 and Mali (MLI) with 0.1 beds in 2010. Geographic clusters or country groups which share similar levels of hospital bed provisions is also visible with very poor provisions in Sub-Saharan Africa and higher levels seen in a cluster of central Asian OIC countries.

Figure 18: Physicians (per 1,000 people)

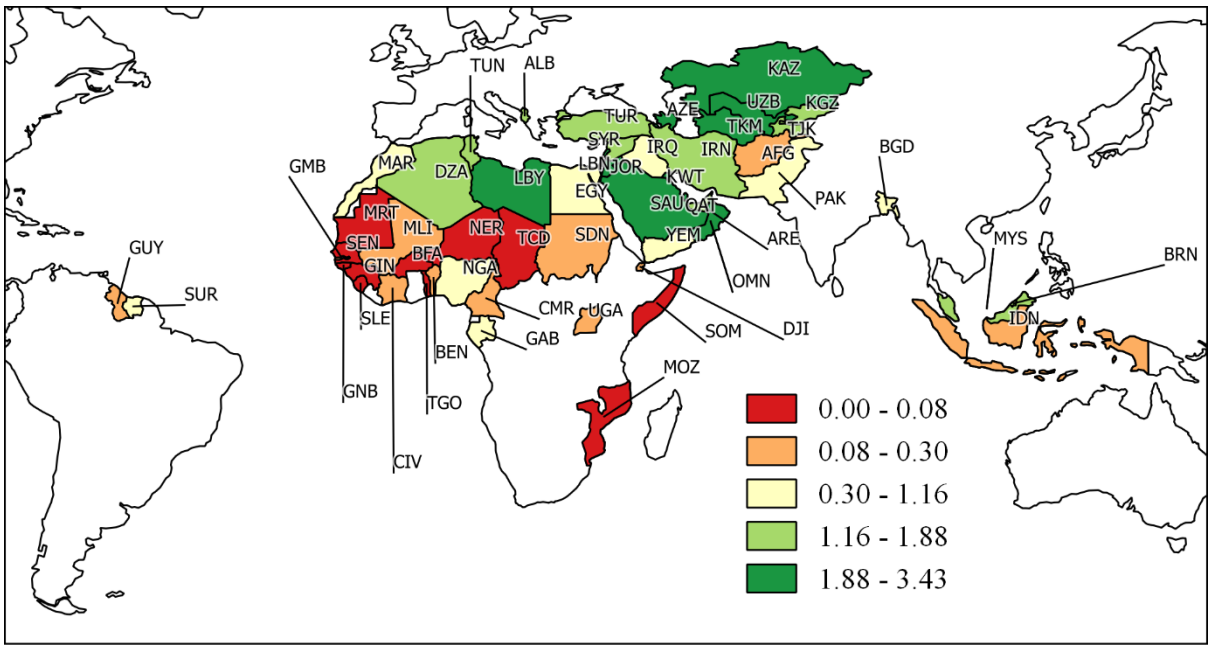


Figure 18 maps the availability of physicians per 1000 people in OIC countries. The WHO estimates that at least 2.5 medical staff (physicians, nurses and midwives) per 1,000 people are needed to provide adequate coverage with primary care interventions (WHO, World Health Report 2006). It must be emphasised that data comparability across countries is limited by differences in definitions and training of medical personnel in different countries. In addition, human resources tend to be concentrated in urban areas, so that average densities do not provide a full picture of health personnel available to the entire population. Bearing these limitations in mind we use physicians per 1,000 people as a proxy indicator for the ease of physical access to health care. Figure 9 maps most recent physician data for the OIC countries (the latest data in the figure are dated 2016). The high level of variation in physician numbers among the OIC countries is brought out by the large gap that exist between the best performer Maldives (MDV) with 3.6 physicians in 2015 (not visible at the scale in the map) followed by Jordan (JOR) with 3.4 physicians in 2015 and Niger (NER) with 0.01 2010. Geographic clusters is visible in Figure 18 but perhaps not as strong for the Sub-Saharan cluster observed in Figure 17 in relation to hospital beds.

Table 5 outlines the historical trends in hospital bed and physician data for OIC countries. Hospital beds per 1,000 people has consistently declined in OIC countries and in the three OIC subgroups over the 20-year period. The current level of hospital beds in OIC countries as reflected in the average for the 2011-2015 period compares well with those for lower middle-income countries (average of 0.98 in 2011). The hospital bed statistics for OIC subgroups reported in Table 3 suggest that the fall in this statistic over the last 20-years is the joint result of what had ensued in all three subgroups individually. Even the best performer, Arab group, which had a figure of 1.8 in 1996-2000 had collapsed to 1.1 by 2011-2015. The intra-group averages in Table 2 further establishes that the African group is indeed the worst performer.

The trends in physicians per 1000 people in Table 5 sheds more light on the physical access related challenges faced by the African OIC countries in particular but also by OIC countries as a group. Over the two decades covered physician stats have halved for the African group and remained constant (when considering base and periods) for the Arab group. Only the Asian group of OIC countries had seen a consistent improvement (from 0.7 in 1996-2000 to 0.9 in 2011-2015) in this statistic.

Table 5 also include information on nurses and midwifes per 1000, which is also a useful indicator of physical access. When considering baseline (1996-2000) and endline (2011-2015) periods all three subgroups had improved their status. But behind this positive picture lies a bleaker reality that both Arab and African OIC groups had in fact been in a better position (in 2006-2010 for example) with regard to nurses and midwifes and had receded the current level. The Asian group in contrast had nearly double the nurses and midwifes statistic and had done so by consistently improving it over all sub periods of the 20-years window examined in Table 5. As a result, the OIC average had also improved over the same period. Crudely adding the physician statistics with nurses and midwife statistics reveals that except for the Arab and Asian groups indeed satisfies the 2.5 medical staff per 1,000 people threshold mentioned earlier.

Table 5: Trends in physical access to care in OIC countries

Hospital beds (per 1,000 people)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**0.1** (Mali)	**1.1**	**7.2** (Kazakhstan)	**0.6**	**1.1**	**1.1**
2006-2010		1.4		0.6	1.5	1.5
2001-2005		1.3		0.5	1.6	1.5
1996-2000		1.6		1.0	1.8	1.6

Physicians (per 1,000 people)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**0.01** (Niger)	**0.9**	**3.6** (Maldives)	**0.1**	**1.1**	**0.9**
2006-2010		0.8		0.2	1.5	0.8
2001-2005		0.7		0.2	1.3	0.8
1996-2000		0.7		0.2	1.1	0.7

Nurses and midwives (per 1,000 people)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**0.08** (Somalia)	**1.8**	**12.5** (Uzbekistan)	**0.6**	**2.0**	**1.8**
2006-2010		1.7		1.0	2.3	1.8
2001-2005		1.3		1.0	1.9	1.2
1996-2000		1.1		0.3	1.7	0.9

Financial accessibility

This subsection will document finance and expenditure aspects of access to healthcare.

Figure 19: Current health expenditure per capita, PPP (current USD) in top panel and Out-of-pocket expenditure per capita (current USD) in bottom panel

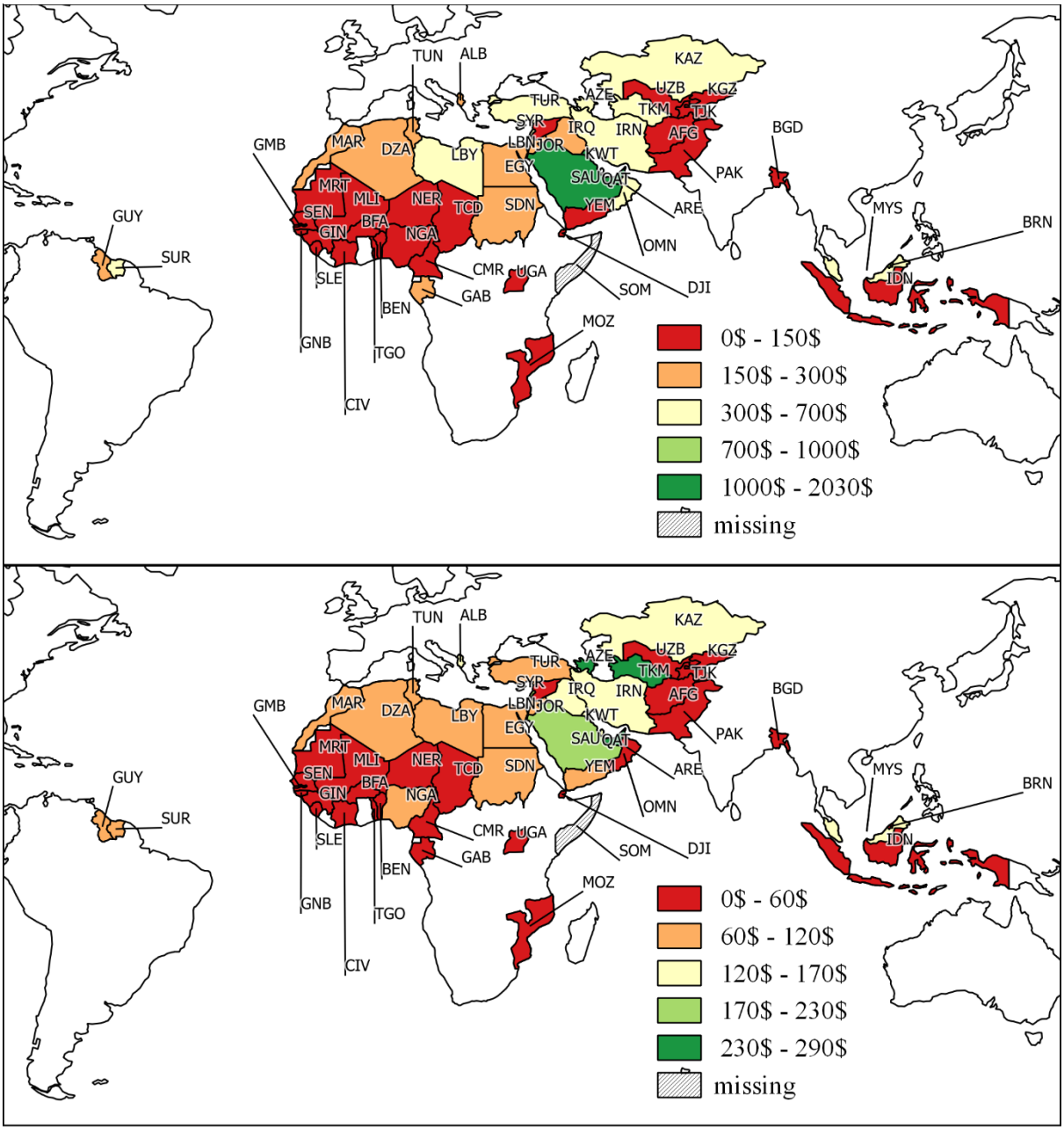
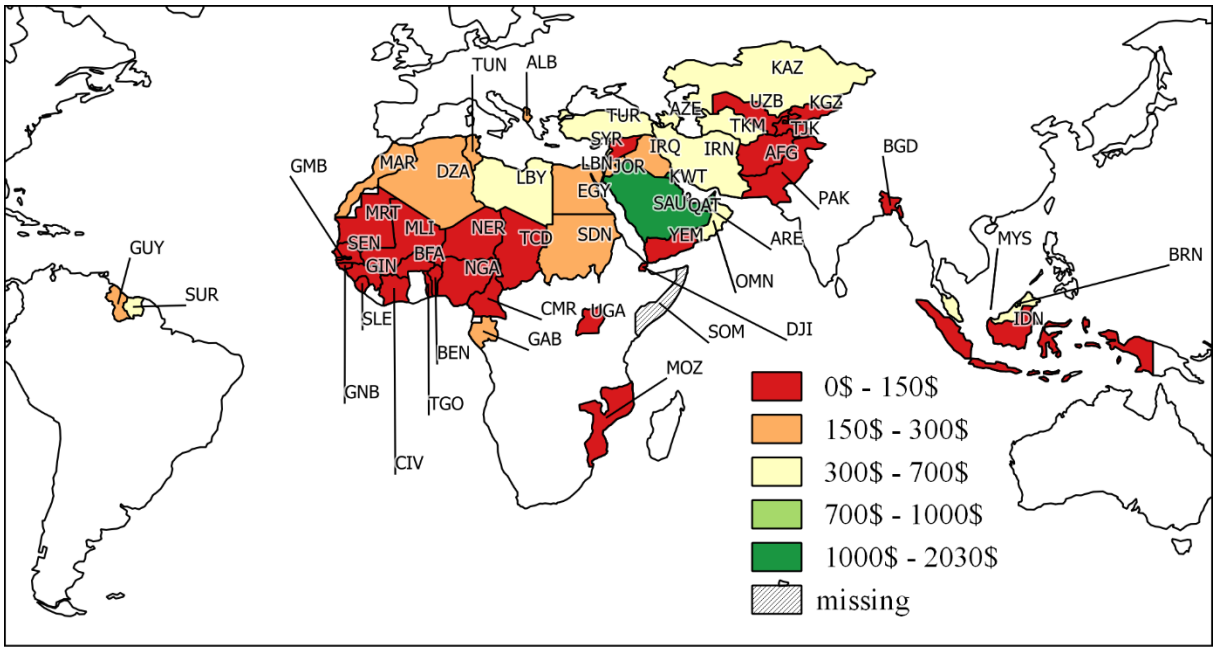


Figure 20 maps current expenditures on health per capita measured in current US dollars. Estimates of current health expenditures include healthcare goods and services consumed during each year. The expenditure remains a key variable of access to health; and it is determined to a large part by the wealth of the country. For example, the top spenders in Figure 20 are oil rich Gulf countries. Qatar (QAT) leads with 2029$ followed by United Arab Emirates (ARE) with 1401$. Saudi Arabia (SAU) takes the third spot with 1194$ spending. At the very bottom is Guinea (GIN) which spends only

25$ per capita. Of course, this data must be interpreted carefully as the per capita data is notorious for ignoring underlying spending inequalities, which is especially relevant for the Gulf countries.

Figure 20: Health expenditure per capita in current USD



The out-of-pocket spending map in Figure 21 looks at spending on health directly out of pocket by households in each country. When individuals continue to rely on out-of-pocket (OOP) payments when accessing health care, they are not shielded from economic hardship due to huge health care expenditures. Having to paying for health care through OOP and the associated economic constraints may prevent patients from seeking health care when needed. This is particularly common for people with lower incomes as they risk going into debt due to OOP for health care.

Figure ***21*** suggests that OOP for health care is low in OIC member countries in Sub-Saharan African and South Asia. This on its own is good news from health access point of view, as low OOP encourages people to access health care when needed. Yet, from Figure 20 we know that these same countries spend the least amount per capita on health, which implies that even though little or no OOP is required to access health in these countries they may not have enough health infrastructure/services to go around. In the other extreme countries like Saudi Arabia (SAU) has a very high OOP spending for health which can make accessing health very difficult for the poor even though Figure 20 suggests that the country has well-funded health infrastructure. Therefore, to determine health access in OIC countries health spending and OOP should be considered jointly.

Figure 21: Out of pocket (OOP) expenditure per capita in current USD

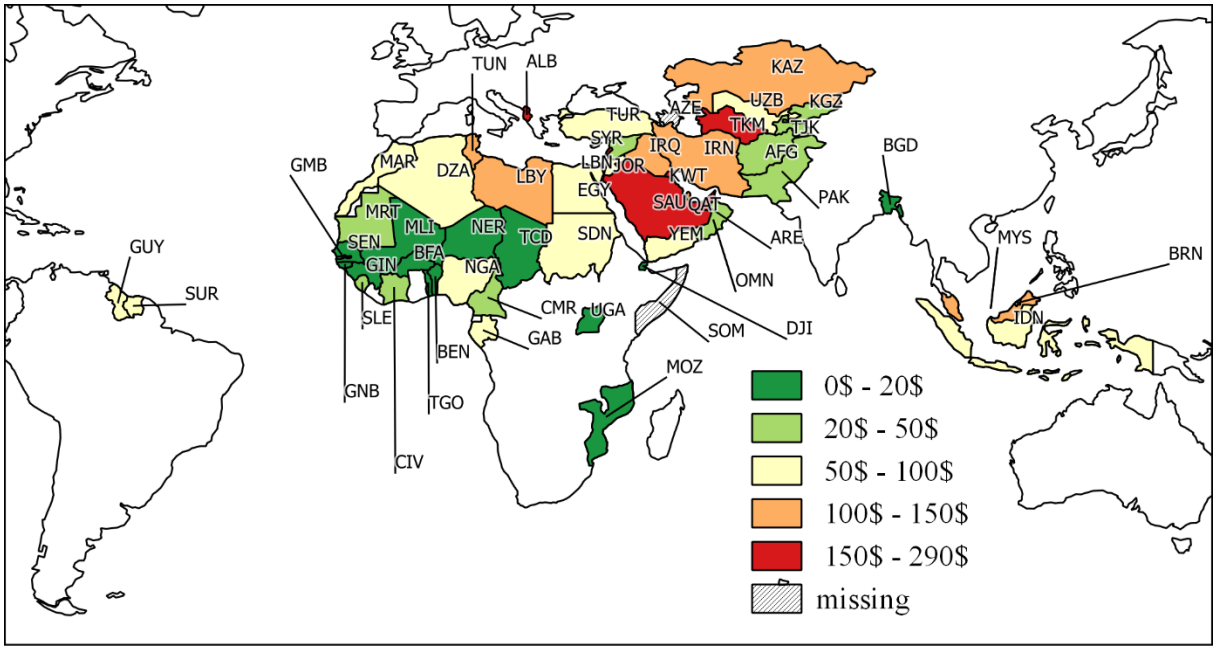
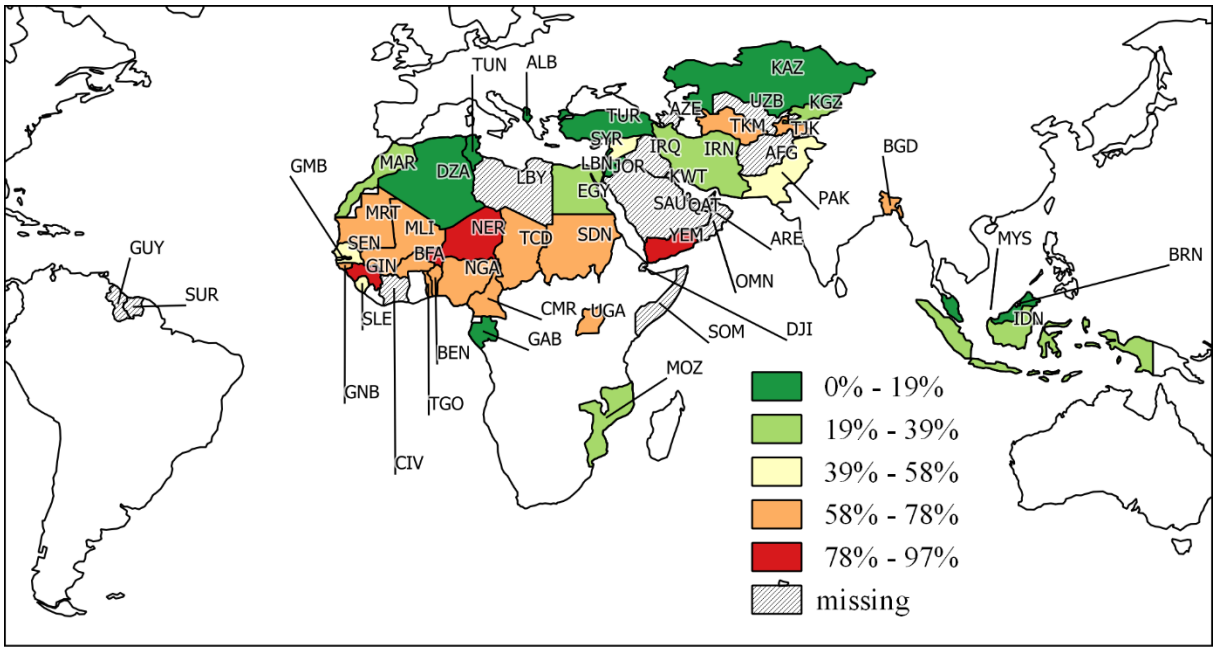


Figure 22 maps the proportion of population at risk of catastrophic expenditure when surgical care is required. Here, the catastrophic expenditure is defined as direct out of pocket payments for surgical and anaesthesia care exceeding 10% of total income. The indicator underscores the risk implications of accessing health care and in a very practical way combines information about income, health expenses and non-health expenses. The indicator does not have data for all OIC member countries.

Figure 22: Risk of catastrophic expenditure for surgical care in percent of population



One can see that most of the African group of OIC countries display high or very high risk of catastrophic expenditure for surgical care. Only in Gabon, the Gambia and Mozambique less than 58% of the population is at risk of catastrophic expenditures. In contrast, in Asia, no country has more than 39% of the population at risk of catastrophic expenditures.

Table 6 outlines the historical trends in indicators related to financial accessibility of health services in OIC countries. The data confirms that current health expenditure per capita had consistently increased in OIC countries and in the three OIC subgroups over the 20-year period. The out-of-pocket spending data for OIC subgroups reported in **Table *6*** show a phenomenal increase in such spending over the same period.

Table 6: Trends in financial access to care in OIC countries

UHC service coverage index	Low	OIC average	High	African group	Arab group	Asian group
2015	**29** (Chad)	**49.2**	**72** (Oman)	**39.4**	**62.5**	**51.0**

Out-of-pocket expenditure per capita, PPP (current internat. $)	Low	OIC average	High	African group	Arab group	Asian group
2011-2015	**4.4** (Mozambique)	**183.6**	**936.7** (Azerbaijan)	**96.1**	**273.4**	**186.6**
2006-2011		161.3		83.1	211.5	175.0
2001-2005		124.6		96.2	167.3	119.6
1996-2000		83.5		47.7	143.8	76.4

Risk of catastrophic expenditure for surgical care (% of people at risk)	Low	OIC average	High	African group	Arab group	Asian group
2011-2015	**1.4** (Turkey)	**44.7**	**91.6** (Niger)	**62.4**	**36.9**	**38.9**
2006-2011		54.1		66.4	38.2	54.1
2001-2005		56.6		59.8	45.2	59.4
1996-2000		-		-	-	-

Proportion of population spending > 10% of household consumption or income on OOP (%)	Low	OIC average	High	African group	Arab group	Asian group
2011-2015	**1.8**	**8.9**	**26.2**	**6.8**	**26.2**	**5.7**

	(Kazakhstan)		(Egypt, Arab Rep.)			
2006-2011		9.5		16.7	14.8	6.1
2001-2005		7.7		11.7	13.5	5.9
1996-2000		12.2		17.7	9.2	12.2

Proportion of population spending > 25% of household consumption or income on OOP (%)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**0.1** (Kazakhstan)	**1.5**	**4.9** (Albania)	**1.4**	**3.9**	**1.0**
2006-2011		2.5		5.4	1.4	1.6
2001-2005		1.7		2.5	1.9	1.4
1996-2000		3.0		3.6	1.3	3.9

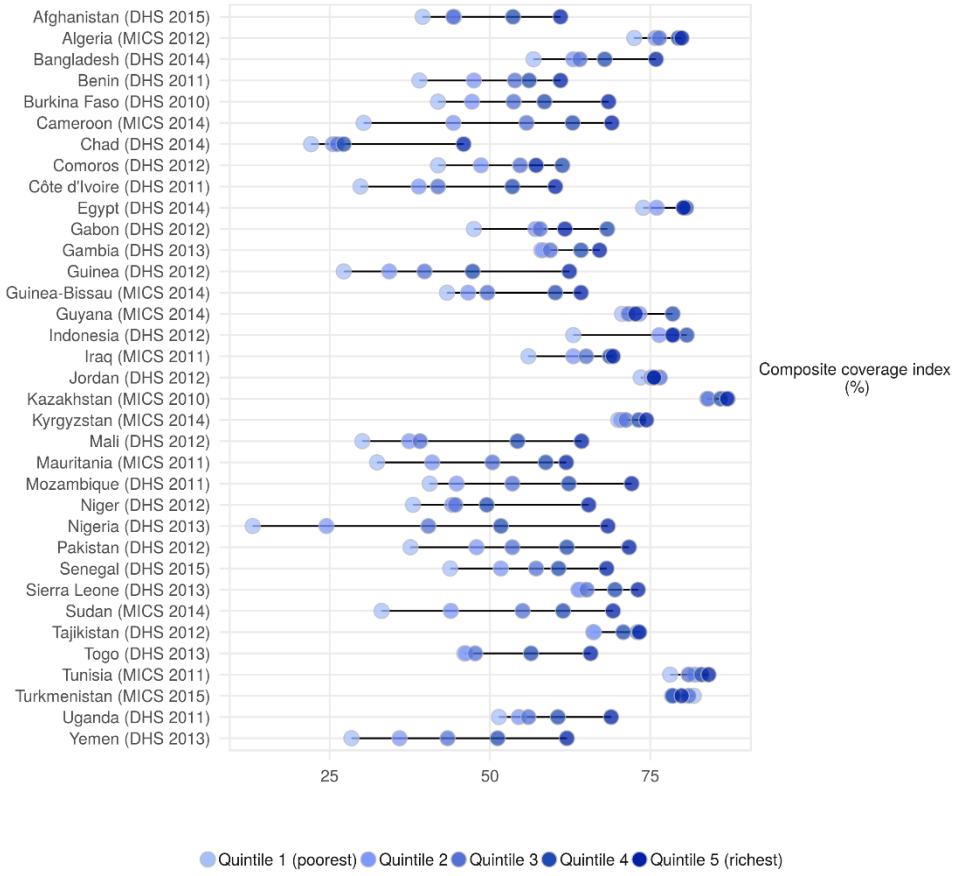
Health expenditure per capita, PPP (current intern. $)	**Low**	**OIC average**	**High**	**African group**	**Arab group**	**Asian group**
2011-2015	**57.2** (Guinea)	**458.6**	**3900.3** (Qatar)	**160.7**	**827.0**	**442.7**
2006-2011		357.6		129.8	587.6	363.8
2001-2005		259.3		140.7	431.3	241.1
1996-2000		184.8		73.8	375.7	161.2

3.5. Wealth-disaggregated access to health and health outcomes across OIC countries

This subsection gives an overview on some indicators related to access to health across different socio-economic groups in OIC countries. Standardized, disaggregated health indicators for a wide range of health issues are still sparse and often not collected on a regular basis which would allow measuring progress. As identified in WHO's (2016) report on Monitoring Health for the SDGs, "comparable estimates of service coverage across key inequality dimensions are dominated by reproductive, maternal, newborn and child health indicators in countries that have conducted DHS or MICS surveys"[4] (p. 21), which a) leaves large gaps on other health issues and/or b) does not allow for disaggregation where other health or health related indicators are available.

In light of these challenges, we use information from the data repository of the Health Equity Monitor (HEM)[5] - one component theme of the Global Health Observatory, the main statistics repository of the World Health Organization. This data repository contains re-analysed data pertaining to RMNCH from Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). Launched in 2013, HEM covers nearly 250 household health surveys from 94 countries across the world between

Figure 23: Composite coverage index (%) by economic status in 35 OIC countries



Source: Health Equity Assessment Toolkit (HEAT): Software for exploring and comparing health inequalities in countries. Built-in database edition. Version 3.0. Geneva, World Health Organization, 2018

[4] These are the two largest global household survey programmes that collect data about RMNCH, as well as socio-demographic information. They are nationally representative household surveys, collected at the household level from women aged 15–49 years.
[5] https://academic.oup.com/ije/article/45/5/1404/2450924; Data online at https://whoequity.shinyapps.io/HEAT/

1993–2013, including some of the OIC countries, allowing for comparisons between countries and over time. This data allows us to look at the composite coverage index (see below), at physical accessibility and financial access, risk factors and health outcomes.

Above, we show the distribution of the composite coverage index by economic status in 35 OIC countries for which data is available (Figure 23). Given its composition, the index gives a good 'overview' on the continuum of care in RMNCH, including indicators for demand, accessibility of services and medicine from before birth until the age of five.[6] As can be seen, service coverage and its distribution across different wealth quintiles varies substantially across the countries. In some countries, e.g. Algeria, Egypt, Jordan, Kazakhstan, Kyrgyzstan, Tunisia and Turkmenistan, the coverage for poorer population groups is not much different from those better off. On average, these are also the countries where service coverage is generally higher than in countries where the difference in coverage for the poor and richer are more pronounced. Access to health by the poor is particularly small in absolute terms and relation to richer populations in countries of the African region, mirroring other health indicators discussed before.

Below, we discuss in some more detail four health indicators from the HEM data repository, which were discussed in the previous section: information on skilled birth attendance - which has been shown to be the single most important means of preventing maternal (and newborn) deaths - as an indicator for accessing health services; and mortality rates of newborns, infants and under-5 year old children across wealth quintiles for countries for which data is available as indicators of health outcomes.

We complement this data with information on the share of children with symptoms of ARI taken to a health facility as another indicator for accessing health services. Furthermore, we look at the share of women and men not covered by health insurance – as indication for financial barriers to access to health services across socio-economic groups; and the distribution of two of the major risk factors to health: access to improved water sources and access to improved, non-shared sanitation. All this information was retrieved directly from the DHS online STATcompiler.[7]

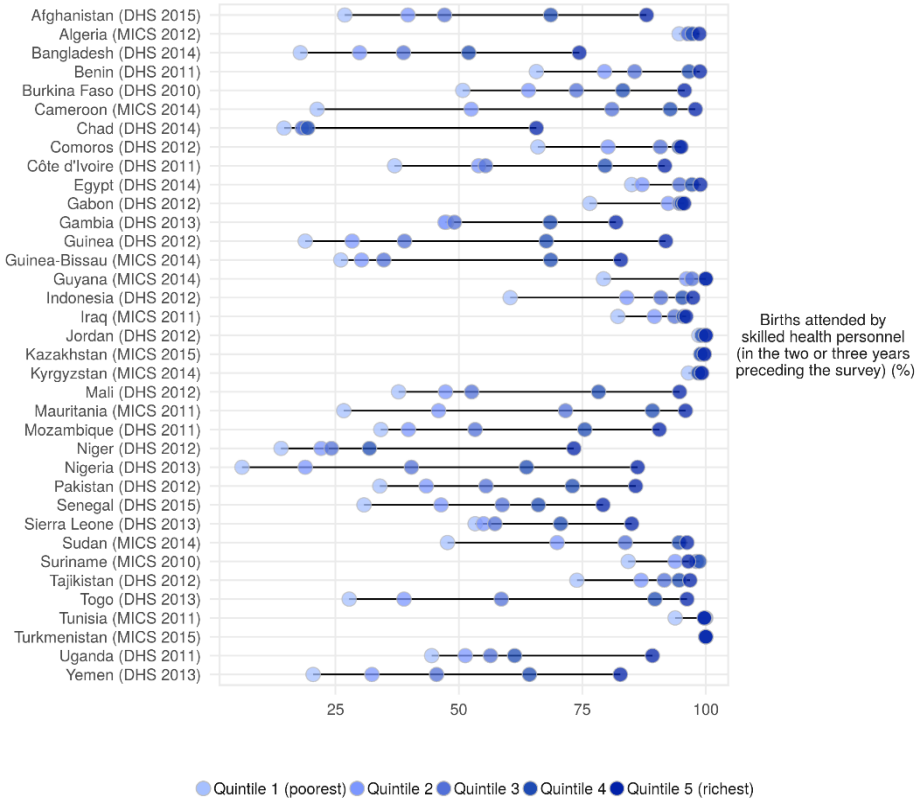
Physical access to healthcare amongst the poor in OIC countries

Figure 24 below shows access to skilled birth attendance across OIC countries and different wealth groups. As can be seen, access to skilled birth attendance can vary substantially between different wealth groups and countries. For example, women in Algeria, Jordan, Kazakhstan, Kyrgyzstan and Turkmenistan are well-covered in terms of access to health care across all economic groups, including the poor. In some countries, e.g. Chad or Guinea-Bissau, only the (two) richest quintile benefits from 'enhanced' access. However, in most countries, we observe very large differences and a relatively 'steady' increase in access to health services with increasing wealth. The most extreme example is Nigeria where only 6.1 per cent of the women in the poorest quintile were supported by a skilled health personnel, compared to 86.2 per cent of those in the highest quintile.

We also present information on the distribution of access to health service for children with symptoms of ARI, highlighting the differences between the poorest and richest wealth quintiles (Figure 25). Similar to the access to skilled birth attendance, the differences vary widely across and within countries. Particularly low levels of access for the poor are observed in Cameroon, Mauritania, Chad, Morocco, Benin and Cote d'Ivoire – and these low levels of access in those countries are also observed for children from richer households when compared with other countries.

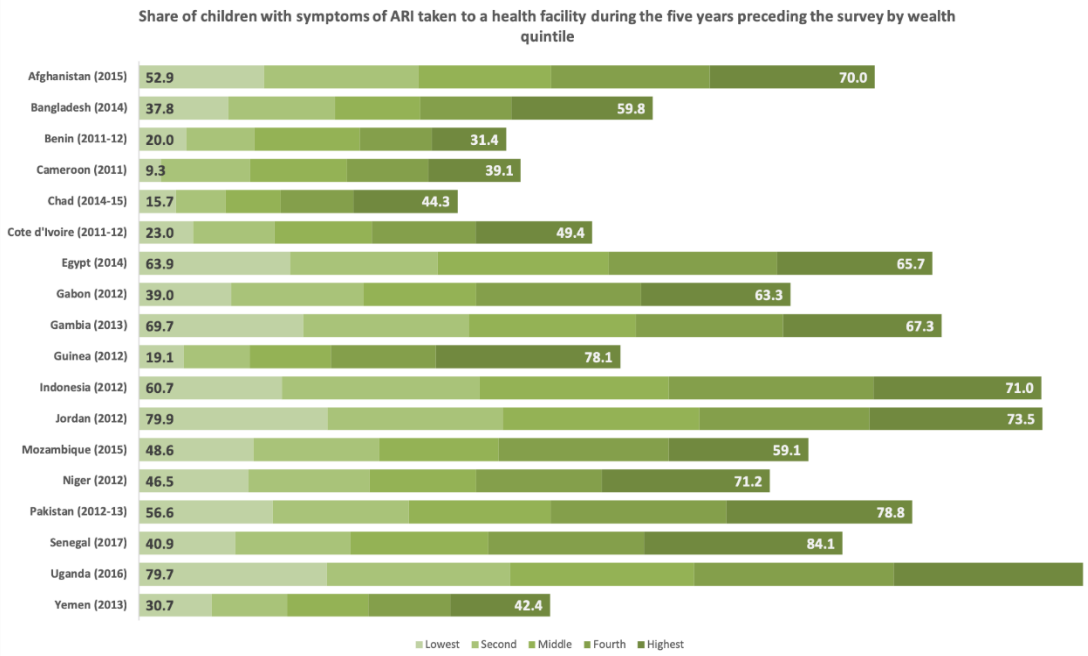
[6] The composite coverage index is a weighted score reflecting coverage of eight RMNCH interventions along the continuum of care: demand for family planning satisfied – modern methods; antenatal care coverage (at least four visits); births attended by skilled health personnel; BCG immunization coverage among one-year-olds; measles immunization coverage among one-year-olds; DTP3 immunization coverage among one-year-olds; children aged less than five years with diarrhoea receiving oral rehydration therapy and continued feeding; and children aged less than five years with pneumonia symptoms taken to a health facility.
[7] http://www.statcompiler.com. Last accessed on January 31, 2019.

Figure 24: Share of births attended by skilled health personnel in the 2-3 years preceding the survey by economic status



Source: Health Equity Assessment Toolkit (HEAT): Software for exploring and comparing health inequalities in countries. Built-in database edition. Version 3.0. Geneva, World Health Organization, 2018

Figure 25: Share of children with symptoms of ARI taken to a health facility during the 5 years preceding the survey, by wealth quintile since 2010



ICF, 2015. The DHS Program STATcompiler. Funded by USAID. http://www.statcompiler.com. January 31 2019

Financial accessibility

Figure 26 and Figure 27 below gives an overview on different levels of access to health insurance by women and men in different OIC countries, where data was available. Having access to health insurance greatly increases access as it reduces out-of-pocket expenditures which pose a major barrier to access – especially for the poor. Similarly as to what we observed with access indicators above (Figure 23 and Figure 24), and even though sometimes large differences exist between poor and rich population groups, the poor are more likely to have access in countries where larger parts of rich population groups have health insurance. It is striking to see in how few countries larger parts of the population are insured, indicating the long way to go to enhance financial access to health in many OIC countries.

Risk factors

A large pool of wealth disaggregated data available relates to two major risk factors to health. Below in Figure 28 and *Figure 29* we show the share of the population living in households using an improved water source and of the share of the population living in households with improved, non-shared toilet facilities as an indicator for reduced risk to health for 35 and 33 countries, respectively.

The figures reveal stark differences in infrastructure access within and between countries. It is encouraging to see that the access to safe drinking water has improved generally for many parts of the population – however, there are still very large differences between the poorest and richer population groups. Furthermore, the observation on the indicators above – that higher levels of access for richer groups makes higher levels of access for poorer generally more likely – does not seem to be true in this case. Whereas in almost all countries in Figure 28 the richest quintile has almost universal access to safe drinking water (the smallest level of coverage is 83.0 per cent), access to safe water by the poorest populations differ widely between 24.4 per cent in Mauritania and 25.5 per cent in Kazakhstan to 95.3 per cent in Egypt and 96.7 per cent in Jordan.

The picture of access to improved non-shared toilet facilities is also quite mixed. In some countries, both the poorest and richest have high levels of safe sanitation facilities, e.g. in Jordan, Kyrgyz Republic, the Maldives, Tajikistan and Albania. In other countries, access to safe sanitation for the poorest is almost nil (Mauritania, Niger, Chad and Benin), and as low as 1.4 in Cote D'Ivoire or 1.5 in Sierra Leone. In some countries with very low level of safe sanitation for the poorest, the level for the richest populations is also relatively low, but others, e.g. Indonesia, Mozambique, Senegal, Pakistan and Yemen, the differences between rich and poor are very large.

Figure 26: Share of women without health insurance, by wealth quintile since 2010

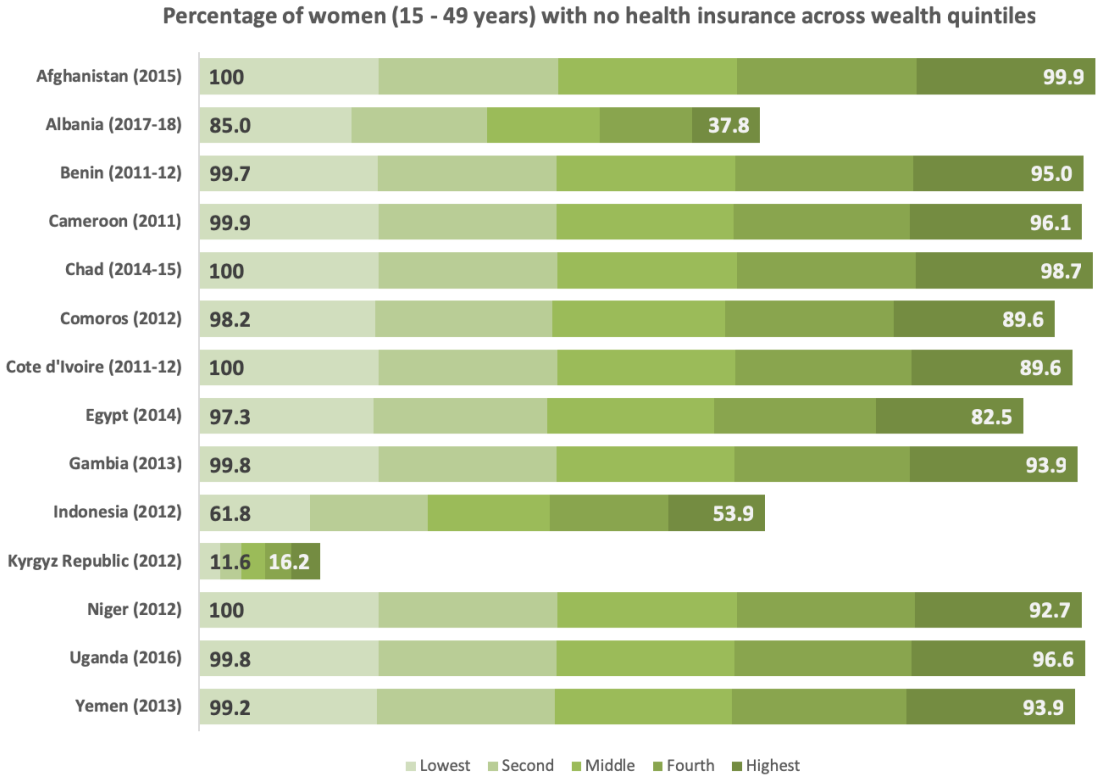
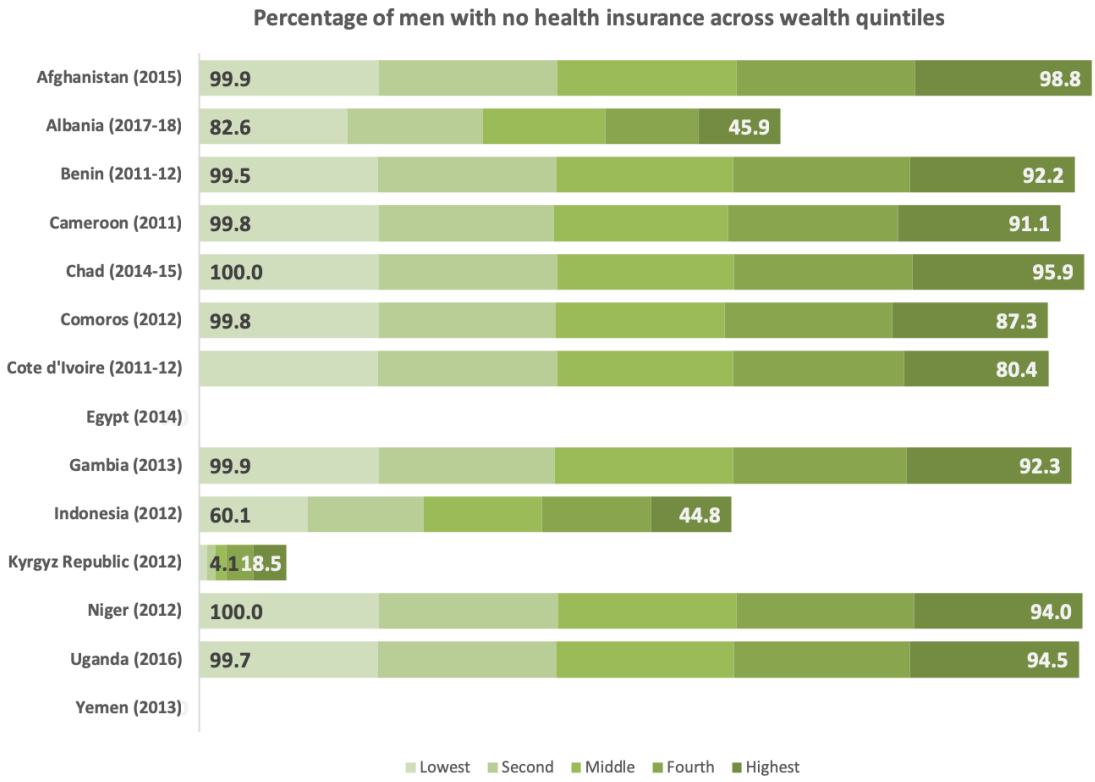
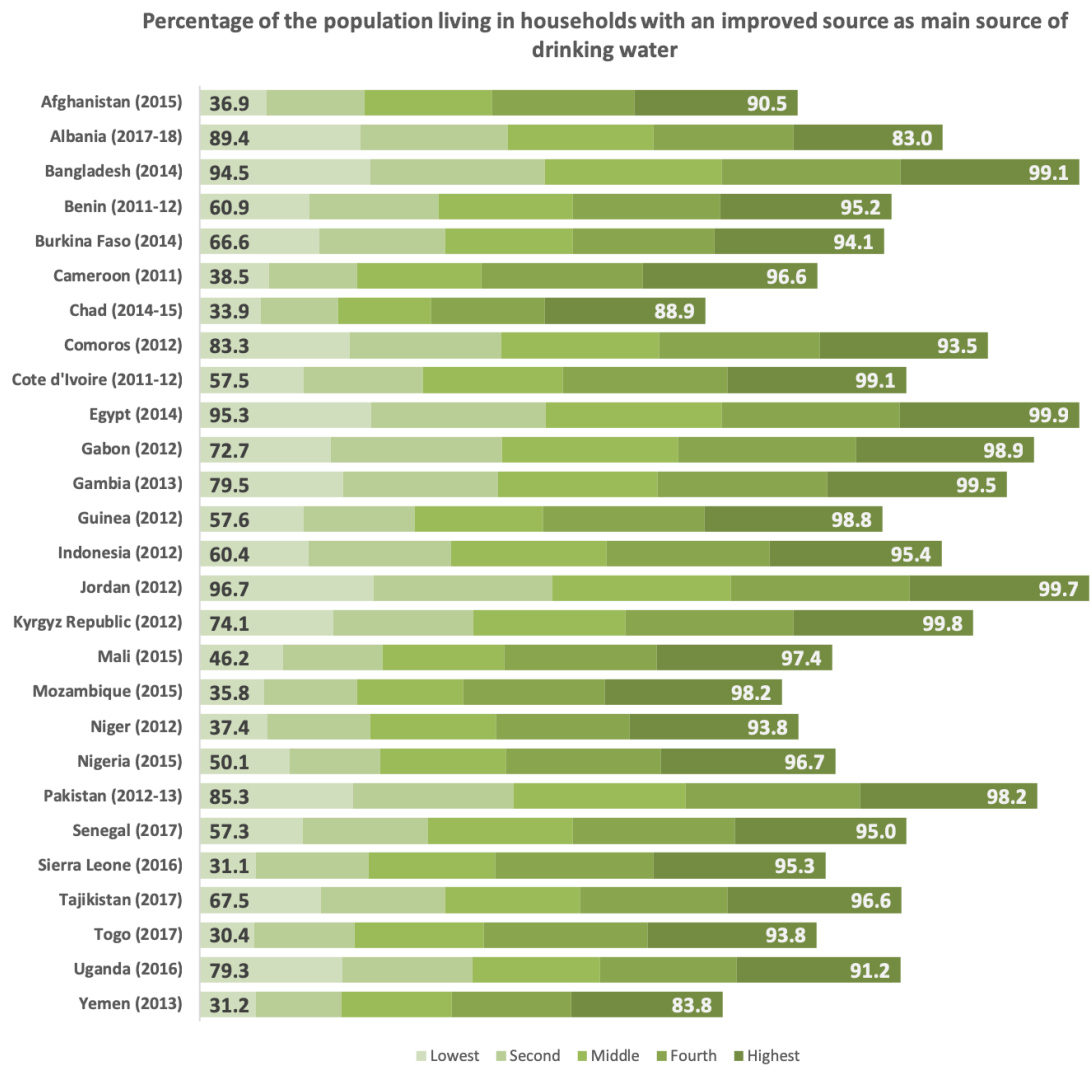


Figure 27: Share of men without health insurance, by wealth quintile since 2010



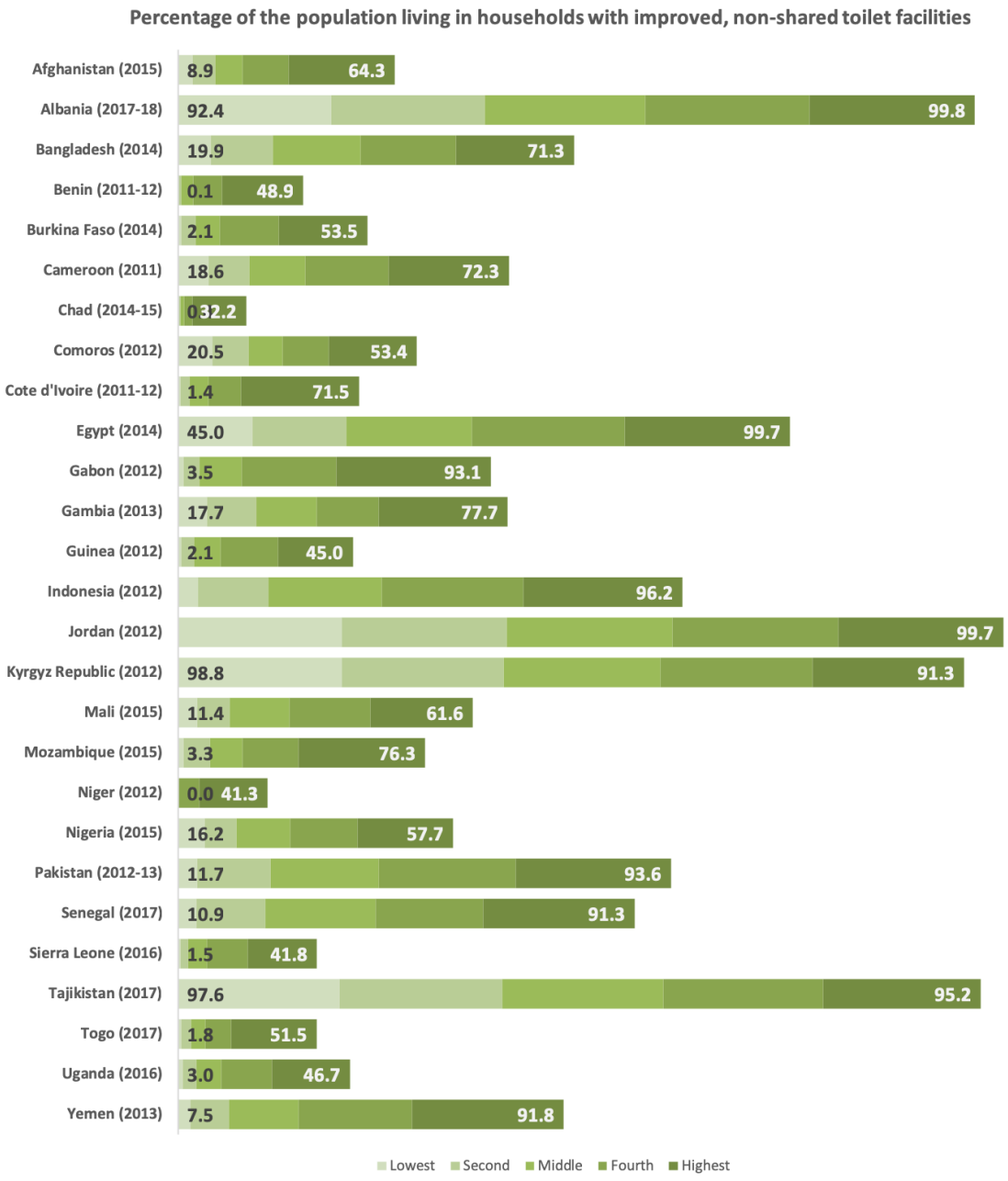
ICF, 2015. The DHS Program STATcompiler. Funded by USAID. http://www.statcompiler.com. January 31 2019

Figure 28: Percentage of the population living in households with an improved source as main source of drinking water since 2010



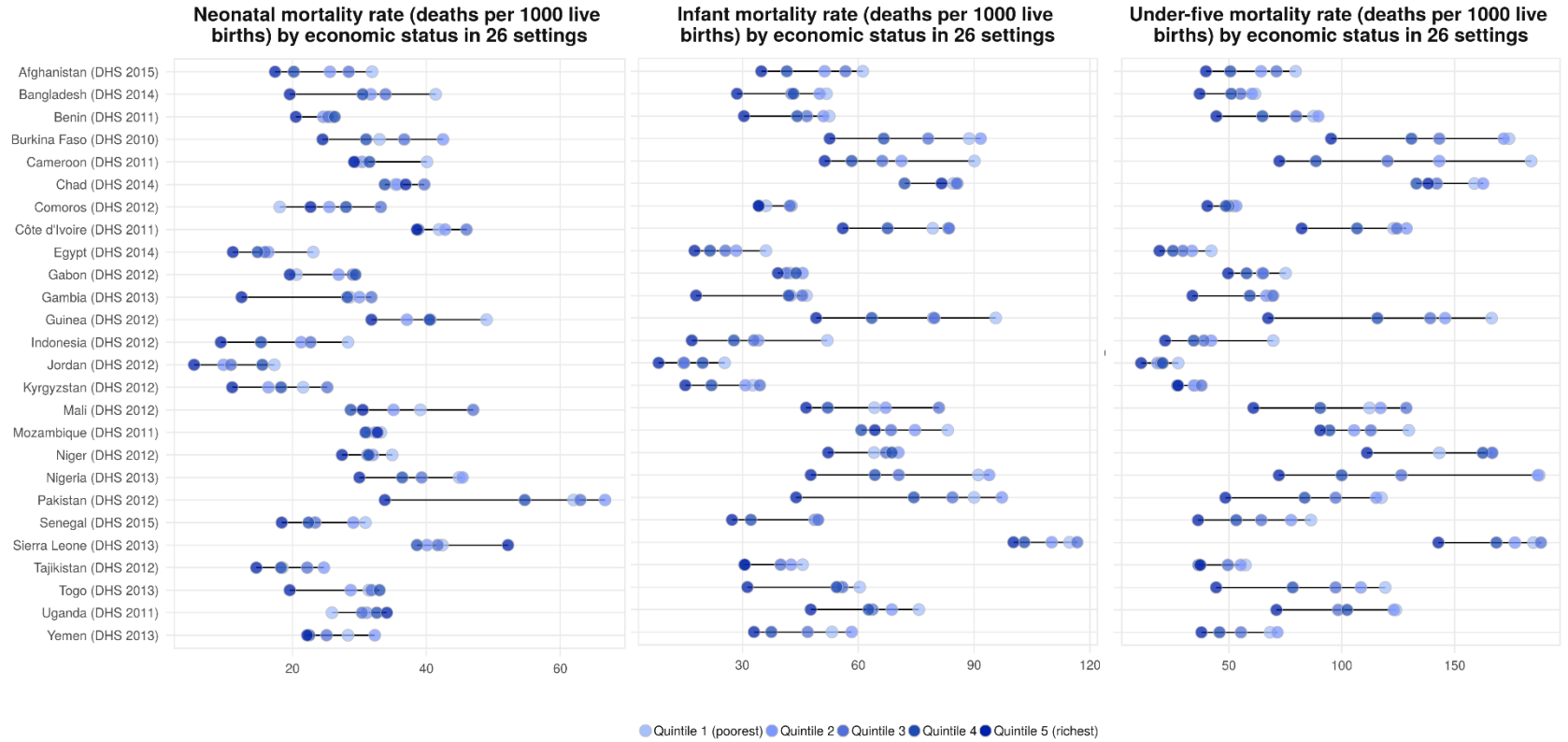
ICF, 2015. The DHS Program STATcompiler. Funded by USAID. http://www.statcompiler.com. January 31 2019

Figure 29: Percentage of the population living in households with improved, non-shared toilet facilities since 2010



ICF, 2015. The DHS Program STATcompiler. Funded by USAID. http://www.statcompiler.com. January 31 2019

Figure 30: Neonatal, infant and under-5 mortality rates across OIC by wealth quintiles



Source: Health Equity Assessment Toolkit (HEAT): Software for exploring and comparing health inequalities in countries. Built-in database edition. Version 3.0. Geneva, World Health Organization, 2018

3.6. Regional policies related to access to health services within OIC region

In the recent years the OIC has made a great effort to improve access to health services for all with the collaboration of national governments of the member states, as well international organisations such as WHO. The most recent policies that are implemented in the OIC region are part of the OIC Strategic Health Programme of Action (OIC-SHPA) which is carried out in the period 2014-2023. The Programme provides the framework for collaboration and action at the national, OIC and international level in order to tackle the most pressing issues regarding the health status of the region. The OIC-SHPA is divided in 6 thematic areas:

- Health system strengthening
- Disease prevention and control
- Maternal, new-born and child health and nutrition
- Medicines, vaccines & medical technologies
- Emergency health response and intervention
- Information, research, education and advocacy

Among others, WHO, UNISEF, UNFPA, and the Global Fund to fight HIV/AIDS, Tuberculosis and Malaria have shown interest to collaborate with the OIC on the implementation of this strategic plan.

The first thematic area of the OIC-SHPA addresses the main issues of healthcare coverage that many members state still face. The status of access to health services is still poor in many countries of the OIC region, mainly due to the low quality of health infrastructure, low financial resources, and a lack of sufficiently trained workforce (OIC, 2017). The OIC-SHPA supports the member states with policy analyses, advice on designing new health policies as well as financial advice in order to achieve universal health care coverage (UHC) in the long run. Among others, the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), the Islamic Development Bank (IDB), WHO and the World Bank are the international partners that are supporting the implementation of the plan in these specific areas (OIC-SHPA, 2013).

The plan also covers improvements on the access to the existing health services that each country provides. The goal is to facilitate intra-OIC cooperation in exchanging knowledge and medical practices through capacity building programmes, to encourage the evaluation of health programmes, as well as to support with funding and technical assistance the creation of new national health institutes or the improvement of existing ones in each country of the OIC. The OIC-SHPA also seeks to promote the trading of medicine, vaccines, medical equipment and technology among members of the OIC region, as well as intra-OIC investment in the health sector (OIC-SHPA, 2013). The exchange of medical resources and knowledge within the OIC region and the strengthening of the health financing system, along with the collaboration of international partners, is essential for the progress of the whole region towards wider access to health services and eventually achieving universal health care coverage.

Apart from OIC-level policies, we also see strong initiative in terms of improving health care coverage in specific regions of the OIC, especially in the Middle-Eastern and North-African region (MENA). Some of the newest policies in MENA countries are part of The World Bank Health Nutrition and Population Sector Strategy for MENA (2013-2018), which are built on the basis of fairness, equity and accountability to promote sustainable health systems that provide with universal health care coverage (UHC). The goal is to promote equitable distribution of health services, financial protection and equitable responsiveness in terms of emerging diseases and health-related emergencies. Targeting is given a special emphasis throughout these policies, as well-targeted mechanisms are essential in order to reach the most vulnerable and remote parts of the population. The problem of out-of-pocket expenses is also addressed, as this is an issue that many MENA and OIC countries face and is affecting a large part of the population, even those who are “covered” by health insurance.

Lastly, as part of this health strategy, the World Bank is providing the countries of the MENA region with a number of technical and financial products for the expansion of access to health services for all citizens. Two assessment tools are provided, the universal coverage assessment tool (UNICO) and the universal coverage capacity assessment tool (UNICAT), which provide with useful insight about necessary reforms that MENA countries might need to make, and global comparisons between countries and their successful experiences in the process of achieving UHC.

3.7. What is the role of data and information management systems in terms of improving access to health services in OIC?

Efficient health information systems and data management are essential for improving access to health services in general and the health status of each member state of the OIC in particular. Valid information and data about the existing health systems can be used for a precise analysis, evaluation and eventually recommendation on policy designs that improve the health status of people within the OIC region.

According to WHO (2011), health information systems among the countries of the OIC region, especially among the least developing ones, are outdated and insufficient to report the true status of health services. One of the main problems that appear in some OIC countries is that the registration of births and deaths is not reliable, which is also linked to inaccurate registered causes of death in many cases. Low quality of information and data is also apparent in measures of timeliness and quality of health services, health risks, mortality and intervention coverage. The reasons behind most of these problems are outdated data collection systems, lack of trained personnel and the appropriate technological equipment, as well as the lack of a legislative and regulatory framework that facilitates the efficient use of health information systems. Furthermore, surveys that could provide useful information are conducted in many OIC countries, but usually carried out with irregular planning and in many cases without standardised methodologies -which means that data extracted from these surveys is not comparable. Duplication of data is also not uncommon as a result of poor coordination among the parties involved in carrying out each survey. As a result, many of these issues lead to unreliable evaluations of policies and create an even bigger problem in the process of designing new policies as well (SESRIC, 2013).

As it was mentioned above, the Strategic Health Programme for Action (SHPA) addresses many of the current health problems of the OIC region, and the condition of health information systems is no exception. The plan facilitates national governments to establish health information systems in order to monitor diseases and health programmes, manage current patients, register morbidity and mortality rates, evaluate health interventions and establish standards for global public health informatics. Assistance is also provided to the ministries of health with the process of translating data into knowledge and knowledge into guidelines to build new and more efficient health programmes (OIC-SHPA, 2013). Overall, strengthening the current health information systems of the member states and improving the credibility of data and data management plays a vital role in the process of improving access to health care services for all citizens of the OIC region.

Chapter 4: Case Studies

4.1. Purpose and methodology

In this chapter we present the findings of four in-depth case studies. The purpose of the case studies is to drill down on the status of access to health for the poor and to analyse the past and current policy efforts to reduce health inequities. Specifically, the case studies will answer the following questions:

a) What is the structure of the access to health services and health coverage systems in the country? How has it evolved over time?

b) What is the status of access to health services by the poor in the country?

c) What are the efforts/policies and related tools in place to improve the level of access to health services especially by the poor in the country? What is potential sustainability of these efforts and are they coherent with the national policies?

d) Is there any available regulatory framework to improve the access to health services in the country? If yes, how has it been able to include the poor?

e) Who are the various actors in the country's health system and how are they integrated? What is the role of NGO's, international organizations and donors working in the country to improve access to health services especially by the poor?

f) What are the challenges and learnings regarding access to health services and health coverage systems?

g) What is the status of data and information management systems for access to health services in the case country?

Each case study is based on extensive literature review and insights from key informant interviews. The contents of the analysis have been synthesised to keep the length of the report manageable and to enable comparisons across the case studies. After each case study has been presented, the report is devoted to a section on learning lessons based on the comparison of the cases.

The case studies have been chosen to reflect the geographic distribution of the OIC member countries, and to showcase wide variations in terms of health outcomes and health inequities. We have chosen Indonesia, Uganda, Turkey and Tunisia. These countries span most of the regions of the OIC and they include one case when remarkable progress has been made in terms of expanding access to health for the poor, namely Turkey. Indonesia and Tunisia have shown some remarkable progress (notably on malnutrition for the former) but the picture is still mixed and much still remains to be done. Uganda is the poorest country of the group and thus face some acute budgetary and institutional constraints. Nonetheless some worthy developments have been ongoing.

4.2. Indonesia

Key Indicators at a glance	2000	2005	2010	2015	2016	2017
Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (per cent of total)	31.6	..	24.5	21.5	20.7	..
Cause of death, by non-communicable diseases (per cent of total)	61.3	..	68.9	72.5	73.3	..
Community health workers (per 1,000 people)	..	..	..	0	..	..
Current health expenditure (per cent of GDP)	2.0	2.8	3.5	3.3	..	..
Demand for family planning satisfied by modern methods (per cent of married women with demand for family planning)	..	..	..	78.8	77	77.9
Diabetes prevalence (per cent of population ages 20 to 79)	..	..	..	..	..	6.32
Hospital beds (per 1,000 people)	..	..	0.6	..	..	..
Immunization, DPT (per cent of children ages 12-23 months)	75	72	81	78	79	79
Immunization, HepB3 (per cent of one-year-old children)	65	65	83	78	79	79
Immunization, measles (per cent of children ages 12-23 months)	76	77	78	75	76	75
Incidence of HIV (per cent of uninfected population ages 15-49)	0.02	0.05	0.04	0.03	0.03	0.03
Incidence of malaria (per 1,000 population at risk)	99	119.1	129.2	26.1	..	..
Incidence of tuberculosis (per 100,000 people)	449	437	415	395	391	..
Life expectancy at birth, female (years)	68.0	69.2	70.3	71.2	71.4	..
Life expectancy at birth, male (years)	64.6	65.2	66.1	67.0	67.2	..
Maternal mortality ratio (modelled estimate, per 100,000 live births)	265	212	165	126	..	..
Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (per cent)	26.3	26.8	27	26.5	26.4	..
Mortality rate, infant (per 1,000 live births)	40.9	33.5	27.5	22.9	22.2	21.4
Mortality rate, neonatal (per 1,000 live births)	22.3	19.2	16.2	13.3	12.8	12.4
Mortality rate, under-5 (per 1,000 live births)	52.1	41.4	33.2	27.2	26.3	25.4
Nurses and midwives (per 1,000 people)	..	..	1.1	1.3	..	..
Out-of-pocket expenditure (per cent of current health expenditure)	45.4	55.2	55.5	48.3	..	..
Physicians (per 1,000 people)	0.162	..	0.14	..	..	..
Pregnant women receiving prenatal care (per cent)	88.3	88.6	92.7	..	..	..
Risk of catastrophic expenditure for surgical care (per cent of people at risk)	..	..	..	22.3	21	20.2
Risk of impoverishing expenditure for surgical care (per cent of people at risk)	..	..	..	18	16.4	15.9
Smoking prevalence, females (per cent of adults)	5.6	4.4	3.6	2.9	2.8	..
Smoking prevalence, males (per cent of adults)	60.6	65	70.6	75.2	76.1	..
Tuberculosis case detection rate (per cent, all forms)	8.9	26	30	32	35	..
Tuberculosis treatment success rate (per cent of new cases)	87	89	89	85	..	..

The structure of Indonesia's health services and health coverage system

The Indonesian health system is characterised by a mixture of public–private provision of services (see Figure A1 in the Annex). Since the decentralisation in 2001, public health service delivery falls under the restriction of district and provincial governments (which are under the Ministry of Home Affairs). The central Ministry of Health remains responsible for the management of some tertiary and specialist hospitals, provision of strategic direction, setting of standards, regulation, and ensuring availability of financial and human resources.

Provincial governments own the provincial hospitals and organize the health services through the provincial health offices (PHOs). The PHOs play a coordinating role for health issues within the province and across districts. The district governments own district hospitals and organize health services through district health offices (DHOs). DHOs also operate health services provided through the primary health centres (*Puskesmas*) and their networks of village health posts (*Poskesdes*); village birth facilities (*Polindes*) and monthly community health extension posts (*posyandu*) (WHO 2017). Community and village-level health service delivery has always been a cornerstone of public health care delivery in Indonesia (even during General Suharto's regime). The relationship between Ministry of Health, PHO and DHO is not a hierarchical one, but each level has its own mandates and areas of authority.

The growing economy of Indonesia and the government's aim of providing affordable universal healthcare coverage (UHC) by 2019, led to an increase in the demand for health services in recent years. To satisfy this demand and improve access to health services the government has opened the health sector for investment, resulting in a growing number of private providers. Private sector providers come from heterogeneous backgrounds including religious affiliated organizations, companies and individuals/group of individuals. The public sector currently still takes the dominant role, especially in rural areas and for primary basic health care provision. However, private health service provision is increasing rapidly and based on official statistics more than 60 per cent of all hospitals in Indonesia are private (World Bank 2014). Based on estimations of a stakeholder from the Ministry of Health (Ministry of Health) around 60 per cent of outpatient visits in Indonesia occurred at private facilities and the rest at public facilities, mostly at primary care level. Inpatient care occurs mainly in public facilities except for the highest wealth quintile (i.e. the richest households) who prefers private facilities for inpatient care. These findings are corroborated by a recent report from the World Bank (World Bank 2014). Private sector health service delivery is regulated by the government (central and local) through accreditation, licensing and registration (WHO 2017). Private sector providers are actively encouraged by the government to enrol in the national UHC scheme under the national social security management agency and improve access to health services (*Badan Penyelenggara Jaminan Sosial*, BPJS).

Access to health services by the poor

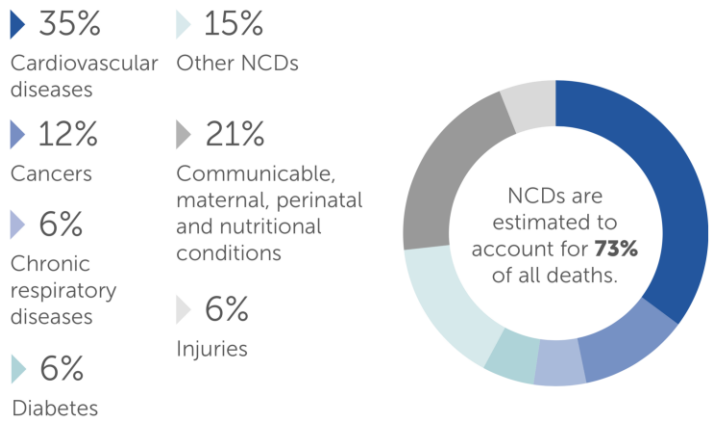
Indonesia has made significant progress in many population health indicators in the last two and a half decades. Life expectancy has steadily increased from 63 years in 1990 to 69 years in 2017, under-five mortality dropped significantly from 84 per 1000 live births in 1990 to only 25 deaths per 1000 live births in 2017 and so did infant mortality (from 62 to 23 per 1000 live birth). Huge progress was also made in maternal mortality with a decrease from 446 death per 100 000 live birth in 1990 to 126 death 2015. Adolescent birth rates also remain far above the South Asian average of 33.8 compared to 50 in Indonesia.

However, progress in the decline of child undernutrition has been slow and stunting levels are still high with 36 per cent of children under 5 years are being too short for their age (WHO, 2015a). Furthermore, progress in combating infectious diseases has been slow with the incidence of Malaria and Tuberculosis remaining high and far above the South Asian averages and the infection ratio for HIV remaining unchanged. Additionally, the prevalence of risk factors for NCDs such as high blood

pressure and obesity as well as NCDs including diabetes are on the rise. The probability of dying from cardiovascular diseases, cancer, diabetes or chronic respiratory disease between the age of 30 and 70 years in 2015 was 26.6 per cent in Indonesia compared to 23.3 per cent in South Asia overall (WHO, 2017).

Figure 31 presents the burden of specific diseases within the Indonesian population. As can be seen the Indonesia health system faces a complex epidemiological challenge of high levels of both communicable infectious diseases and persistent undernutrition and non-communicable diseases (and here in particular cardiovascular diseases).

Figure 31: Proportional Mortality in Indonesia 2016



Source: WHO Noncommunicable Diseases (NCD) Country Profiles, 2018

However, health status varies significantly across geographical locations with people living in Eastern Indonesia and rural areas generally having worse health outcomes. For example, under-five mortality is more than 2 times higher in the Eastern provinces of Maluku and Papua than in Java (73.8 vs. 34.8). Similarly, rural households reporting an under-five mortality more than 50 per cent higher than in urban households (calculations based on BPS, 2012).

Health outcomes also differ significantly by household wealth with people from the lowest quintiles consistently having poorer health than people from better off households. Table 7 presents socio-economic differences in child mortality indicators. The poorest households are more than 3 times more likely to experience the death of a child below the age of 5 years than the wealthiest households are.

Table 7: Disparities in health outcomes by socio-economic status

Wealth quintile	Neonatal mortality	Infant mortality	Under-five mortality
Lowest	29	52	70
Second	21	34	43
Middle	23	33	39
Fourth	15	28	34
Highest	10	17	23

Source: author's own calculations based on (BPS 2012)

Health outcome improvements and differences reflect the development and disparities of coverage of essential health services across the country. Although coverage has improved considerable in Indonesia between 1990-2015 (Badan Pusat Statistik, 2012; WHO, 2017), considerable shortfalls in service coverage remain in literally all public health areas (WHO, 2018). The health service coverage index in 2018 was only 61 per cent in Indonesia which is far lower than expected based on the national income levels of Indonesia (Hogan, Stevens et al. 2018). A recent study on magnitude and scope of inequalities in health service access revealed major disparities in all essential health services across economic status, education, occupation, age and place of residence – both provinces and rural/urban (WHO, 2017). For

most indicators, inequality was pro-rich, i.e. wealthier households had better outcomes than poorer households. These socio-economic inequalities are particularly pronounced with regards to maternal, newborn and child health services.

Access to and use of health services are severely challenged by inadequate human resources in the health sector, restrictions to physical accessibility, and high direct and indirect costs of healthcare, which affect the poor disproportionately. Although human resources for health have increased rapidly in the last 3 decades, ratios are still lower than the internationally recommended figures and strong geographical disparities persist across the provinces and between rural and urban areas.

Similarly, there have been improvements in the physical health infrastructure such as the number of primary health care facilities and inpatient beds over the last two decades; however, Indonesia still lags behind compared to other East Asian countries (WHO, 2017) and considerable disparities with regards to rural and urban areas and across provinces are also seen here. Physical accessibility to health services too remains a critical challenge, particularly in many rural areas. Weak transport infrastructure, especially in rural and remote areas, was highlighted by several stakeholders and exemplified in a recent survey, where more than 85 per cent of rural households described access to hospital care as "very challenging" or "difficult" compared to 46 per cent of urban households (Riskedas, 2018). Rajan et al. (2018) estimates the median distance to the nearest health facility in Indonesia to be five kilometres; but in the Eastern provinces including Papua and Maluku, the median distance is 30 kilometres. Women from poorer households were considerably more likely to cite "Distance to the nearest health facilities" as a barrier to access than women from richer households (21.8 per cent vs 5.8 per cent) (Badan Pusat Statistik 2012).[8] In combination with logistical challenges, other factors such as long waiting times (especially in public facilities) and short opening hours limit physical access to primary health care (Ekawati, Claramita et al., 2017).

Private expenditures for health – mainly out of pocket expenditures[9] which increases the risk for catastrophic expenditures of already poor and vulnerable households – remain consistently high in Indonesia (above 60 per cent of total health expenditure). In 2016, 0.8 per cent of the Indonesian population, equivalent to 2 million people, were pushed into poverty because of out of pocket spending on health services (WHO, 2016; WHO, 2018). Based on DHS data 'getting money' for medical treatment' was the most commonly cited barrier to access to health care among women from the lowest wealth quintile and women with no education (Badan Pusat Statistik, 2012). Worries about financial affordability were also primary barriers for divorced and widowed women and for women with more than 5 children.

Pro-poor initiatives for access to health services

In order to improve the level of access to health services by the poor, e.g. through reducing the financial risks of out of pocket health spending, the government took various measures (WHO, 2017; WHO, 2018).

An early effort was the decentralization of health service delivery in 2001, where the government transferred most of the authority for decision-making, planning and management of the public health service from the central national level to subnational provincial and district level. Most of the authority for health service delivery was given to local district governments, making them de facto responsible for the delivery of health services and responsive to local health needs (WHO, 2017). Furthermore, since 2009, a number of social protection programmes, rolled out to reduce poverty are implemented with coordinated efforts among ministries. For example, the Family Hope Program (or PKH) – a conditional-cash-transfer social assistance program first piloted in 2007 – has close links with health

[8] Similar differences were found with regards to education (24.4 per cent of women with no education vs 6.0 per cent of women with secondary education or more).
[9] 48 per cent of total health expenditure in 2014

services as it targets very poor households with pregnant or breastfeeding mothers, newborns, or school-age children. In 2011, the programme was expanded to 25 out of 33 provinces and PKH beneficiaries were made eligible for free-of-charge services at primary health care or *Puskesmas* (Mahendradhata et al., 2017).

Community-based primary health service delivery has historically been a priority for Indonesia. However, after the decentralisation and the removal of central programming, community-based primary healthcare delivery and vertical programming weakened in many districts. To strengthen community-based service delivery through various policy changes and restructuring of primary health care delivery, several attempts are made. For example, the Healthy Indonesia programme that is implemented through the Family Approach Program (PIS-PK) aims to strengthen community-based outreach and health service delivery by asking *Puskesmas* personnel to undertake regular household visits to monitor 12 health indicators including maternal and child health, family planning, TB surveillance, hypertension, access to sanitation and clean water.

More recently, these efforts included the launch of the *National Health Insurance programme (Jaminan Kesehatan Nasional (JKN))* in January 2014. This insurance programme replaced various previously existing health funding schemes for the poor and insurances, pooling contributions from the government and contributing members who pay in accordance to the health services desired. Premiums for members who are categorized as poor and near poor are paid for by the government.[10] *Jameskas*, the largest of these three programmes targeted 76.4 million poor and near poor in 2014 (Marzoeki et al., 2014). There is strong political commitment and support to achieve full health insurance coverage of the Indonesian population with the current President being one of the major advocates for the programme.

Learnings from Indonesia's JKN

Four years into the health insurance programme approximately 165 million Indonesians have enrolled, making JKN the biggest single-pooled health insurance system in the world (Wiseman, Thabrany et al., 2018). However, stakeholder impressions and first assessments of the effectiveness of JKN in easing poor households' financial burden when accessing health services have had mixed results. Although annual household surveys of Indonesia show that poor households were more likely to utilize health service facilities since the roll-out of the scheme (Sharma, 2018),[11] there is growing evidence that JKN is underperforming and excluding a large proportion of the population who works in the informal sector (WHO 2017, Wiseman, Thabrany et al., 2018), that the selection process of subsidised and non-subsidised JKN members leads to unfair exclusions of poor people (Idris, Satriawan et al., 2017, WHO, 2017), and that people who do not own a national identity card including homeless people; orphans; the elderly who live in nursing homes; some indigenous and tribal population groups living in rural and remote areas; and nomadic people in remote mountainous areas of Indonesia are excluded.[12] Furthermore, many JKN members also still occur high out-off-pocket payments for some services (GIZ, 2015) as the covered costs for inpatient care are very low and e.g. only allows patients to stay for a maximum of three days in care after which the patients either have to leave or pay themselves for additional days of inpatient care.

Indirect health care costs pose another considerable financial burden for poor households, because JKN only provides financial protection for medical cost, and indirect costs such as transportation and accommodation still have to be covered by out of pocket payments. According to one key informant,

[10] 28 million fell below Indonesia's national poverty - set at consumption outlays of US$25 per month per person - in March 2014, around 68 million were classified as near poor or vulnerable (Aji, 2015).

[11] Especially, maternal and newborn health services were utilised more frequently in the Eastern provinces.

[12] For example, a recent study on access to legal identity across 17 provinces found that only half of women in the poorest 30 percent of households have identity cards, varying significantly across provinces. This is very much related to the lack of birth certificates, which 88 per cent of the adults in the poorest 30 per cent of Indonesian households do not possess. This share is higher amongst rural households and 5 times as high amongst people with disabilities (Sumner and Kusumaningrum, 2014).

transportation costs to reach secondary and tertiary health care centres in Papua, for example, are often higher than the direct medical cost – thus making access for many poor households unaffordable. Realizing the potential detrimental effects of indirect health cost on the use of maternal and child health services for poor households the government launched the *DAK Jampersal* programme in 2016, which covers all non-medical cost related to maternal and child health such as transportation and accommodation cost for pregnant mothers who want to deliver in a health facility.

Additionally, poor acceptability of some health care services, lack of trust in the quality of the services and lack of information are other important access barriers. Several stakeholders pointed out that poor JKN beneficiaries were often unaware of the benefits the health insurance scheme entitled them to. In some cases, the JKN membership cards were kept at the house of village heads as poor households did not know how and for what they should use the card. Poor acceptability could pose a barrier to access to health services, especially to maternal and reproductive health services.

The provision of high quality services remains a challenge because the demand for services is far greater than the supply, especially with regards to maternal, newborn and child services (WHO, 2017). People usually expressed lower levels of trust in primary local health care providers and higher levels of trust in hospital and specialist care. Related, the Ministry of Health struggles to attract skilled health workers to rural and remote postings across the countries which further exuberates regional and rural/urban disparities. To counteract this the Ministry of Health has started to offer shorter contracts and higher enumeration for health workers in remote posts (WHO, 2017), and introduced various policies to encourage health workers to take up positions in rural and remote parts of Indonesia. For example, the Healthy Archipelago programme (*Nusantara Sehat*) deploys health workers to underserved rural and remote locations for a two-year assignment. The Presidential Regulation No.4/2017 on Compulsory Service of Specialist Doctor (WKDS), requires all specialist doctors to first undertake 1-year long service in remote district hospitals, regional referral hospitals, and provincial referral hospitals. The Ministry of Health pays for their salaries while local governments provide additional incentives through their regional budget. As of 2017, 870 specialists have been deployed – short of the target of 2,000 specialists.

Dual practice (i.e. health personnel works for both the public and the private sector) is very common in Indonesia and frequently leads to maldistribution of health workers (and in particular specialized doctors) away from public health facilities and towards more lucrative private practice (WHO, 2017).

Actors in Indonesia's health system

Health service in Indonesia is mainly delivered by the public and private sector. All major developments and improvements in the health system in the last decades have mainly been driven by domestic political actors and initiatives (Pisani, Olivier Kok et al., 2017). However, there are a large number of international and national NGOs that support community-based service delivery, in particular preventive healthcare and promotion through the *Posyandu* system. At national level, NGOs raise awareness for various health issues, do advocacy work, raise funds and work in partnership with the government on the monitoring and evaluation of health programmes. To increase their visibility, cooperation and sustainability NGOs have created a joined platform called the Collaboration Forum for Indonesia Community Health Development (*Forum Kerjasama Pengembangan Kesehatan Masyarakat Indonesia*/FKPKMI). All NGO activities in Indonesia are regulated and monitored by the Law (WHO, 2017).

A number of bi-lateral donors and international agencies including AusAID, USAID, GIZ, IDB, ADB, the World Bank, the Global Fund, WHO and UNICEF support the health system development and operation. Support varies and usually includes activities and substantial grants to improve specific aspects of the health sector. For example, infectious disease control initiatives (e.g. malaria, TB, leprosy) have long been supported by donors (in addition to government support and with high-level coordination by the

Ministry of Health). Some international donors also work with local governments, universities and private sector organisations to strengthen specific aspects of the system.

Indonesia's health data and information management systems

Indonesia has a national information system *Sistem Informasi Kesehatan Nasional* (SIKNAS), which is linked with provincial health information systems and district-level health information systems, *Sistem Informasi Kesehatan Daerah* (SIKDA). SIKNAS was developed per the Ministry of Health Decree No. 511/Menkes/ SK/V/2002 and consists of six subsystems: health services; health financing; health workforce; medicines and medical devices; community empowerment; and health management.

A negative consequence of the decentralisation was that the existing district-level health information systems broke down or were weakened in many districts as there were no longer obligations to regularly report to the central level. Multiple separate district-level information systems of varying quality, using different formats, software and data collection approaches were introduced. As highlighted by one of the stakeholders, there are currently only few health outcome indicators that have reliable disaggregated data up to the district level as relevant data are just not collected systematically by all districts. There are also considerable concerns about the quality of district-level monitoring due to lack of district-level capacity. These shortcomings in district-level monitoring have negative implications for the planning and management of local health service delivery and can lead to the exclusion of the poor (WHO, 2017).

Another challenge is that Indonesia's health information system has always been focussed mainly towards the public sector and there is only limited information about the private sector engagement in health services. Given the growing participation of the private sector the lack of information was highlighted as a short-coming by several stakeholders. To improve data availability a number of national health surveys supplement the incomplete district level health information systems and collect a broader range of health information. These include: the National Health Indicator Survey (*Survei Indikator Kesehatan Nasional* /SIRKESNAS); Basic Health Research (*Riset Kesehatan Dasar*/ RISKESDAS); and the Health Facility Survey (*Riset Fasilitas Kesehatan*/RIFASKES). Indonesia also conducts regular Demographic and Health Surveys programme (Su*rvei Demografi dan Kesehatan Indonesia*/SDKI) (BPS, 2012; Indonesia, 2012; World Bank, 2014; WHO, 2017).

The poorly-coordinated and fragmented health information system poses a considerable challenge for the development of the health system and the achievement of UHC in Indonesia. There are ongoing efforts together with WHO to strengthen the health information system by addressing key issues related to: management capability (especially at district-level), cooperation and coordination; data and information indicators need to be defined; improve data sources; collecting, processing and analysing data; and provide adequate human resources and financing (WHO, 2015a).

Summary and Conclusions

Over the past decades Indonesia has shown significant progress regarding the health status of its citizens and towards achieving Universal Health Coverage (UHC). However, several challenges remain to be tackled and reforms of the healthcare system are necessary for further improvements in the future. Indonesia has shown significant decreases in infant, under-five and maternal mortality rates as well as an increase in life expectancy. On the other hand, stunting is still an issue among young children and infectious diseases are tackled in a relatively slow pace as malaria and tuberculosis are still in high levels. HIV/AIDS levels are also unchanged and non-communicable diseases (NCDs) are continuously emerging, the latter recently being the cause of up to 73% of all deaths in Indonesia.

The health system in the country has been recently decentralised giving more power and more responsibility to the provincial (PHOs) and district health offices (DHOs) to act on health issues at the community and village level -something that has always been of high importance in Indonesia. Although the public sector is still dominant, the health sector has opened significantly during the

recent years leading to growing numbers of private providers. Most health services are still provided by the public sector and have shown improvements although only 61% of the population is covered which is relatively low considering national income levels. Furthermore, strong socioeconomic and geographical inequities are observed across the country. There seem to be significant inequalities among different wealth quintiles in health outcomes and especially in under-5 mortality rates, as well as much worse outcomes and access to services in eastern and rural areas of Indonesia comparing to the rest.

Access to health services is in many cases restricted, as there are insufficient human resources, physical restrictions due to remote locations and weak transport infrastructure, and high out-of-pocket expenses which is particularly harmful for the poorest groups of the population. Health infrastructure has generally improved and hospital beds have increased but still lagging behind other East Asian countries.

Efforts have also been made by the government to create social protection schemes to reduce poverty and improve access to health services and facilities. The National Health Insurance Programme, which was recently implemented, issues government-paid premiums for the poorest and near-poor populations and is now the biggest scheme of this kind in the world covering 165 million Indonesians. However, a large amount of the population is still excluded from this scheme mainly because it does not cover workers in the informal sector which remains large. Lastly, another challenge that needs to be addressed is the poor status of health information systems. After the decentralisation, the quality and availability of data has become worse as districts were not obligated to report to a central level and monitoring is still lacking.

The progress observed in the health sector is mostly driven internally (government). The Indonesian government is also collaborating with both national and international organisations such as the World Bank, WHO, UNICEF and the Global Fund to reach closer to the SDGs and towards achieving Universal Health Coverage (UHC).

4.3. Turkey

Key Indicators	2000	2005	2010	2015	2016	2017
Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)	10.4	..	5.7	4.6	4.4	..
Cause of death, by non-communicable diseases (% of total)	81.8	..	87.6	88.8	89.4	..
Community health workers (per 1,000 people)	..	..	..	..	..	..
Current health expenditure (% of GDP)	4.6	4.9	5.1	4.1	..	..
Current health expenditure per capita, PPP (current international $)	442.6	587.4	882.3	996.0	..	..
Diabetes prevalence (% of population ages 20 to 79)	..	..	..	..	..	12.1
Hospital beds (per 1,000 people)	2.6	2.6	2.5	..	..	..
Immunization, DPT (% of children ages 12-23 months)	85	90	97	97	98	96
Immunization, HepB3 (% of one-year-old children)	71	85	96	97	98	96
Immunization, measles (% of children ages 12-23 months)	87	91	97	97	98	96
Incidence of malaria (per 1,000 population at risk)	1741	295.8	0	0	..	..
Incidence of tuberculosis (per 100,000 people)	33	33	25	18	18	..
Life expectancy at birth, female (years)	73.8	76.0	77.6	78.7	79.0	..
Life expectancy at birth, male (years)	66.4	69.1	70.8	72.2	72.5	..
Life expectancy at birth, total (years)	70.0	72.5	74.2	75.5	75.8	..
Maternal mortality ratio (modeled estimate, per 100,000 live births)	79	57	23	16	..	..
Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (%)	22.3	20.2	18.2	16.4	16.1	..
Mortality rate, infant (per 1,000 live births)	31.9	23.1	16.4	11.6	10.8	10
Mortality rate, neonatal (per 1,000 live births)	19	13.7	9.2	7.1	6.5	5.9
Mortality rate, under-5 (per 1,000 live births)	39.2	27.5	19.2	13.4	12.5	11.6
Nurses and midwives (per 1,000 people)	1.8	1.8	2.98	2.7	..	..
Out-of-pocket expenditure (% of current health expenditure)	28.9	24.2	16.9	16.9	..	..
Out-of-pocket expenditure per capita, PPP (current international $)	127.9	142.0	148.9	168.8	..	..
Physicians (per 1,000 people)	1.3	1.5	1.7	..	..	..

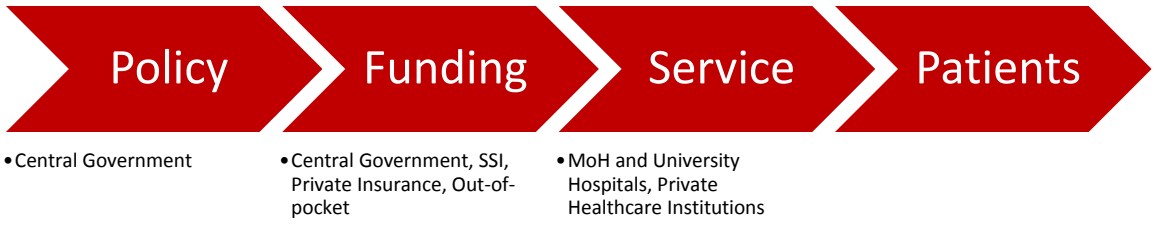
The structure of Turkey's health services and health coverage system

Over the last decade, Turkey has made impressive advances in its health service system, including coverage. Indeed, its health transformation program (HTP) – launched in 2003 – has been widely praised as "a successful example of a country implementing the values and principles of the WHO Tallinn Charter […] ensuring that health systems are equitable, responsive and fair" (WHO, 2012, p. 28) and is frequently proposed as a best practice case for many countries to learn from (World Bank, 2015).

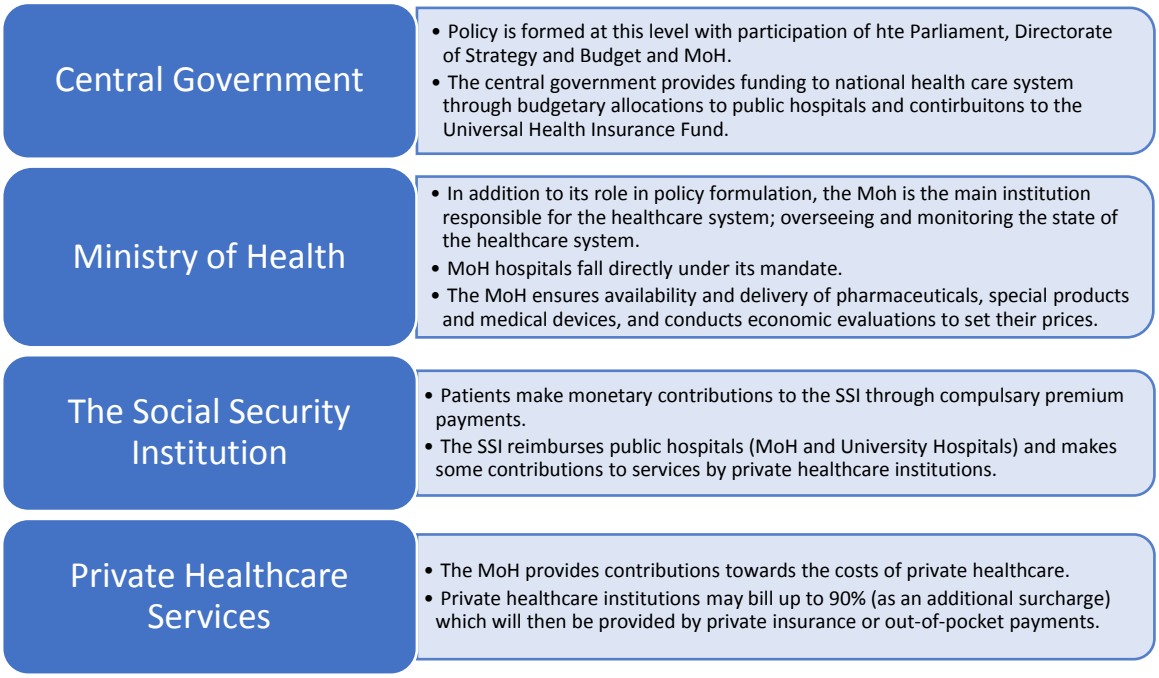
Turkey's Health Transformation Program was launched with the objective of organising resources in healthcare more efficiently, productive and equitable (Giovanis and Ozdamar, 2017). A number of crucial reforms increased health insurance coverage, expanded benefits, reduced cost-sharing, and expanded the infrastructure, health human resources, and health services, shaping its current health structure and contributing to its success. The 2006 Social Insurance and General Health Insurance Law outlines social security rules and the regulation of the General Health Insurance scheme *Genel Saglik Sigortasi* (GHIS) through which health services are financed and which covers the majority of the population.

The universal health insurance is administered by the Social Security Institution (SSI), which in turn has been established as a merger of three previous insurance funds, namely SSK, Emekli Sandığı (GEPF) and BağKur. According to the Government of Turkey, it covers 75.2 million people which responds to approximately 99 per cent of the total population (an increase of 29 per cent compared to 2002) (ESC, 2017). The GHIS provides reimbursement for in- and outpatient preventative, diagnostic and curative services. It is free for all citizens earning less than 279 TL[13] per month and beneficiaries of the Green Card program - a non-contributory health insurance scheme, which is financed by the Ministry of Finance. Citizens who earn more, pay premiums depending on their annual income (Giovanis and Ozdamar, 2017).

Figure 32: Responsibilities and levels in Turkey's health care system



[13] Around 74 US$ on 31 December 2017.



Source: based on ECS 2017.

Both public and private sector facilities provide health services, whereby the Ministry of Health acts as the main actor and provides primary, secondary and tertiary care through its facilities across the country. Universities too are major providers of tertiary care and the private sector has increasingly contributed to the system over recent years. The GoT itself describes the Turkish healthcare system as "a highly regulated market with increasing private sector involvement." (ESC, 2017). Figure 32 gives a snapshot of the different layers of responsibility across Turkey's health system.

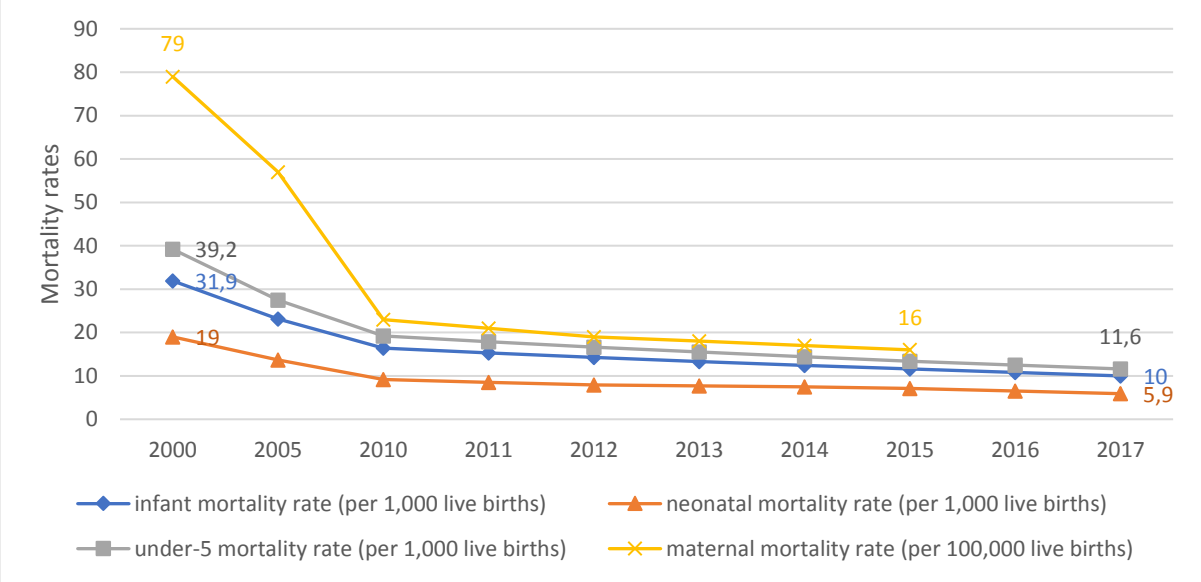
A key element of Turkey's health system is the Family Medicine program, which was rolled out nationwide by 2010. Health centres at the primary care level were replaced by community health centres (CHCs) and family medicine centres, in which each patient is assigned a specific doctor (WHO, 2012). Family doctors are mainly responsible for primary health care, preventive cure and guidance on healthy life styles. This would include advice and guidance on smoking, sports, exercise and foot diets (Giovanis and Ozdamar, 2017). For priority services (vaccination campaigns, maternal and child health, and family planning services), family physicians are supported by Community Health Centres (WHO, 2012).

Access to health services by Turkey's poor

The introduction of universal health insurance in 2008 considerably contributed to achieving almost universal health coverage, not least by reducing out-of-pocket expenditure and catastrophic health expenditures particularly amongst the poor through their enrolment in the Green Card program. Those previously outside the health system – "the uninsured and poor and those living in rural areas" had 2.5 times higher catastrophic health expenditures before the implementation of the UHI in 2008 than the population in urban areas. With the introduction of the universal health insurance program that ratio decreased to 1.3 in 2011 (Giovanis and Ozdamar, 2017). Between 2003 and 2011, the number of Green Card holders increased from 2.5 million to 10.2 million (*Ibid.*).

The HTP led to a number of impressive health outcome improvements. For example, average life expectancy at birth increased from 72.5 years in 2002 to 78 years in 2017, bringing it on par with the WHO European regional average, and above average compared to upper middle-income countries and global average (Turkey statistical yearbook). Child and maternal health indicators, especially mortality rates, greatly improved (see Figure 33): maternal mortality rates dropped to about a sixth from 97 to 16 per 100,000 live births between 2000 and 2015 and infant, neonatal and under-5 mortality rates in 2017 had dropped to a fifth of their original values in 2000.

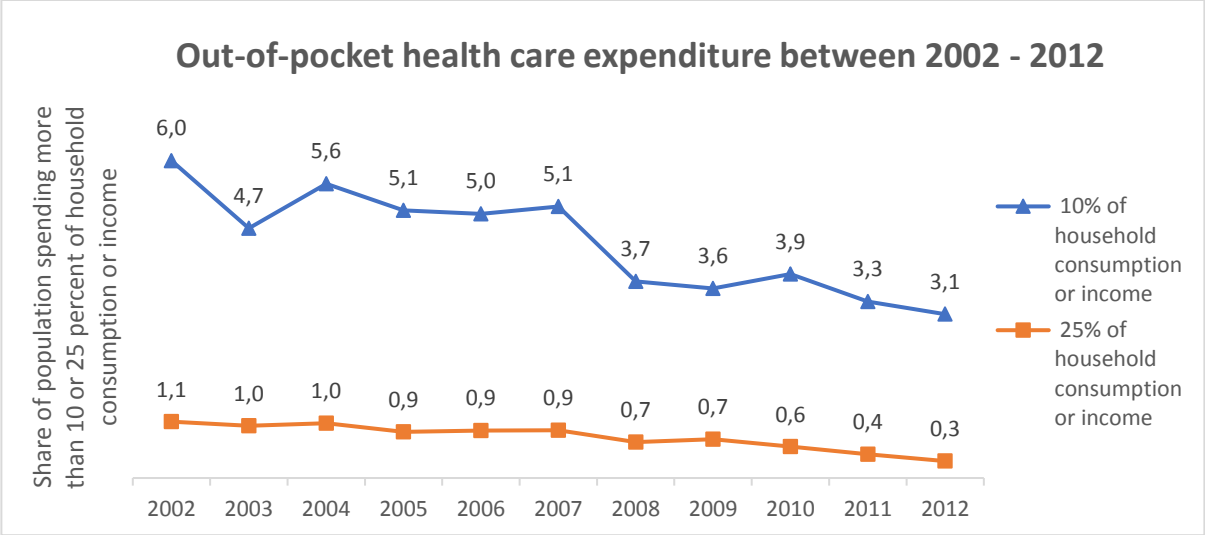
Figure 33 Evolution of child and maternal mortality rates in Turkey between 2000 and 2017



Source: World Development Indicators

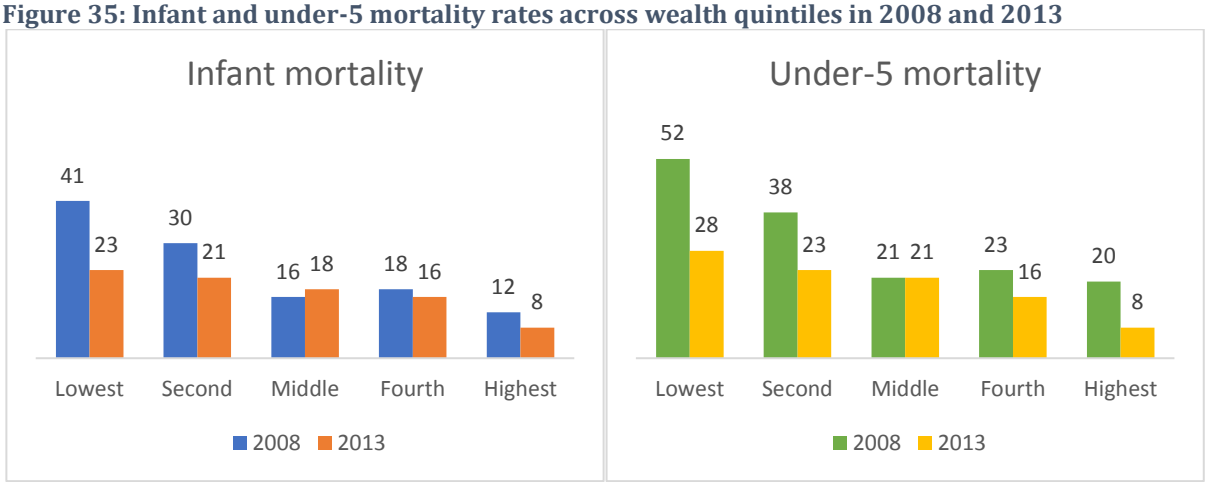
These improvements through the HTP's combination of increasing health insurance coverage, expanding benefits, and reducing cost-sharing on the one hand, and expanding infrastructure, health human resources, and health services on the other hand, were not restricted to richer parts of the population. Prior to the health reforms, "even those who were insured did not have adequate and equal access to health services" (Giovanis and Ozdamar, 2017, p. 3). However, with the expanding supply of health services, the increase in efficiency and decreasing out-of-pocket expenditures (see Figure 34 below), health outcomes such as infant and child mortality rates improved for all wealth brackets (see Figure ***35***), with the lowest income groups catching up most.

Figure 34: OOP expenditure 2002 - 2012



Source: World Development Indicators

Figure 35: Infant and under-5 mortality rates across wealth quintiles in 2008 and 2013



Source: World Development Indicators

However, it is clear from the graphs above that there are still differences between socio-economic income groups; with potential for further improvements. Figure 36 shows further substantial disparities between regions, exemplified by differing maternal mortality rates in 2017. Mortality rates, e.g. those of infants also still differ significantly across urban and rural areas, although such differences have decreased over time and are increasingly attributable to socio-economic conditions and different education levels than lack of access to health services (Tatar et al., 2011). Atun et al.'s (2013) investigation of the impact of HTP on maternal and child health indicators too showed that "improvements occurred in all regions of the country, especially after 2003 in the less well-served east region, rural areas, and in socio-economically disadvantaged groups" (p. 82).

Figure 36: Maternal Mortality Ratio by Provinces (per 100,000 live births) in 2017.

Source: MoH 2018

Reduction of out-of-pocket expenditure through the HTP

Improvements on infrastructure for better accessibility to health centres and public transportation reduced the out of pocket and catastrophic health expenditures significantly. By 2008, out-of-pocket expenditures were on average 1.3 per cent lower, and in rural areas even 2.1 per cent. Catastrophic expenditures were reduced by 0.9 per cent, and probability occurrence of catastrophic health expenditure in rural areas declined by 1.2 per cent. In addition to infrastructure, other measures were taken to reduce out-of-pocket expenditure:

- Reduction of VAT and thus prices for pharmaceuticals
- Green Card Scheme covering all health expenditure, including in- and outpatient services at health centres and hospitals as well as outpatient prescription drugs
- Funding of health care system through taxes, premiums and contributions
- Definition of equity in finance and access to health services is based on the ability to pay
- Incentives to personnel to increase the number of professional staff between 2001 and 2011; e.g. mobile outreach services are provided to those living in those areas. The payment of those physicians is adjusted based on the socio-economic development of the area they practice and those working in underserved areas receive a "service credit"
- Free health care provision for the population under 18 years old

Source: Giovanis and Ozdamar (2017)

The expansion of Turkey's health system for UHC

The HTP have specifically focused on increasing access to health care services for all with an implementation of both demand and supply-side reforms. "Driven by clear vision and strong leadership, the first ten years of Turkey's Health Transformation Programme have dramatically expanded access to health care" (OECD, 2014a, p. 15). Much of the literature emphasises the strong commitment and leadership as well as the systematic and analytical way in which the reforms where prepared and implemented. For example, one of the initial initiatives of the MoH was to carry out a diagnostic exercise with the aim to identify the root causes of Turkey's poor health outcomes. This would lay the basis for the reform design. To inform the design, literature studies on successful health sector reforms in other countries, and study visits were carried out to identify relevant lessons for

Turkey. The learning from these activities then formed the basis of the HTP. Learning from other experiences also influenced the sequencing of reforms in order to build and sustain political buy-in and support and make reforms more sustainable. To that effect, the MoH proceeded in three steps: (1) focus on "quick fixes" of the most important issues which would yield visible results important to patients as well as the general population; (2) then implement systematic reforms in order to improve performance; and (3) focus on long-term issues such as the structure of the ministry in order to match new roles and responsibilities (WHO, 2012). Frequent field visits by a multi-disciplinary field coordination team (FCT) that frequently included health directors from different provinces helped communicating and overcoming challenges as well as building capacity and acceptance for the reforms. Other measures for ensure buy-in and accountability were the establishment of formal and informal feedback mechanisms such as regular monitoring reports and a telephone hotline for patients, as well as passing responsibilities for following up on patient complaints directly onto Deputy Provincial Health Directors and Deputy Hospital Directors (*Ibid.*).

The HTP's structural changes, financing reforms, expansion of infrastructure and human resources, achieved substantial improvements in health coverage and outcomes such as maternal and child health and communicable diseases. However, a number of challenges and opportunities will need to be addressed in order to make UHC long-term fiscally sustainable and improve the quality of the services and health outcomes.

Ongoing and future challenges

One particular area in need of improvements is the quality of diagnostic and curative care, in hospitals specifically (WHO, 2012). Furthermore, the epidemiological transition raises the need to strengthen primary health-care system further (Atun et al., 2013; OECD, 2014; Giovanis and Ozdamar, 2017). Priorities here are an increase in the number of family physicians and nurses, the continued skills development of health staff, and improvements in physical and technical resources within primary health care. Community-based prevention and screening programmes for breast and cervical cancer; chronic illnesses and physical, nutritional, and metabolic risk factors need to be expanded (Atun et al., 2013; WHO, 2012).

In terms of fiscal sustainability, it has been argued that Turkey's health reforms took place during times of economic growth, which facilitated expenditure increases and service expansion. However, due to combination of factors – such as the large share of informal workers which results in less revenue available for health spending,[14] the aging population and epidemiological transition, and increased public expectations and demands on the health system have "started to create burden on the maintenance of the healthcare system sustainability" (Giovanis and Ozdamar, 2017, p. 12). Associated expectations on rising out of pocket expenditure then raise concerns about the sustainability of the health coverage. Informal payments – offered by patients as well as demanded by provider against policies – have also been reported to discourage uptake of the health services (*Ibid.*). The family medicine programme could play a role here: responsible for primary care, clinical guidelines particularly for the prevention of long-term conditions can help reduce prevalence rates and associated costs to patients and the health system.

Another area for progress is the need for monitoring and improvement initiatives related to the quality of care, and the need to collect and report quality measures more regularly and widely specifically, as identified by OECD's review of the health care quality in 2014. In 2015, 80–90 information and communications technology [ICT] companies provided health information systems to hospitals and family medicine facilities across Turkey; and the General Directorate for Health Information Systems of the MoH ran more than 20 central systems to obtain and harmonize different sets of demographics, clinical, and administrative data (World Bank, 2015).

[14] In 2013, 22 per cent of employed workers were estimated to have been active in the informal economy and around 20 per cent did not pay any income tax (Giovanis and Ozdamar, 2017).

Obviously, one integrated HMIS system, based on harmonized and standardized data descriptions, would be more efficient. A standardized national health information system provide nationwide infrastructure for the efficient sharing of electronic health records is still in development. According to ESC (2017), the system will allow patients, hospitals, clinics, medical faculties and laboratories to record and track information regarding patients' health. Furthermore, it is meant to track the workforce and financial status of all institutions providing healthcare services, thus contributing e.g. to evidence-based decision-making, accelerated information flow amongst e-health stakeholders, increased efficiencies by disposing redundancies and coordinating health process, and the use of data for scientific research. According to the government, all health institutions are expected to adopt the electronic information sharing systems by 2023, with indicators in e-Health systems aimed at meeting international standards (ESC, 2017).

Summary and Conclusions

Over the last decade, Turkey has made impressive advances in its health service system, including coverage, much of which is due to its health transformation program (HTP) launched in 2003. The program led to a number of crucial reforms increased health insurance coverage, expanded benefits, reduced cost-sharing, and expanded the infrastructure, health human resources, and health services, shaping its current health structure and contributing to its success. About 99% of the population (75.2 million) are covered by the universal health insurance (UHI) is administered by the Social Security Institution (SSI). It is free for all citizens earning less than 279 TL[15] per month and beneficiaries of the Green Card program - a non-contributory health insurance scheme, which is financed by the Ministry of Finance. Citizens who earn more, pay premiums depending on their annual income. Both public and private sector facilities provide health services, whereby the Ministry of Health acts as the main actor and provides primary, secondary and tertiary care through its facilities across the country. A key element of Turkey's health system is the Family Medicine program, which was rolled out nationwide by 2010. Health centres at the primary care level were replaced by community health centres (CHCs) and family medicine centres, in which each patient is assigned a specific doctor. Family doctors are mainly responsible for primary health care, preventive cure and guidance on healthy life styles.

The insurance program has increased access to healthcare of the poor significantly over the time by reducing out-of-pocket expenditure and catastrophic health expenditures particularly amongst the poor through their enrolment in the Green Card program. Previously the uninsured and poor and those living in rural areas had 2.5 times higher catastrophic health expenditures before the implementation of the UHI. Due to the HTP and UHI, the average life expectancy at birth increased from 72.5 years in 2002 to 78 years in 2017. Child and maternal health indicators, especially mortality rates, greatly improved; maternal mortality rates dropped to about a sixth from 97 to 16 per 100,000 live births between 2000 and 2015 and infant, neonatal and under-5 mortality rates in 2017 had dropped to a fifth of their original values in 2000. It is suggested that such improvements came due to the combination of increasing health insurance coverage, expanding benefits, and reducing cost-sharing on the one hand, and expanding infrastructure, health human resources, and health services on the other hand, were not restricted to richer parts of the population.

However, there are still differences between socio-economic income groups; with potential for further improvements. Mortality rates, e.g. those of infants still differ significantly across urban and rural areas, although such differences have decreased over time and are increasingly attributable to socio-economic conditions and different education levels than lack of access to health services. Much of the literature emphasises the strong commitment and leadership as well as the systematic and analytical way in which the reforms where prepared and implemented. For example, one of the initial initiatives of the MoH was to carry out a diagnostic exercise with the aim to identify the root causes of Turkey's poor health outcomes. Learning from other experiences also influenced the sequencing of reforms in

[15] Around 74 US$ on 31 December 2017.

order to build and sustain political buy-in and support and make reforms more sustainable. To that effect, the MoH proceeded in three steps: (1) focus on "quick fixes" of the most important issues which would yield visible results important to patients as well as the general population; (2) then implement systematic reforms in order to improve performance; and (3) focus on long-term issues such as the structure of the ministry in order to match new roles and responsibilities. Frequent field visits by a multi-disciplinary field coordination team (FCT) that frequently included health directors from different provinces helped communicating and overcoming challenges as well as building capacity and acceptance for the reforms. Other measures for ensure buy-in and accountability were the establishment of formal and informal feedback mechanisms such as regular monitoring reports and a telephone hotline for patients, as well as passing responsibilities for following up on patient complaints directly onto Deputy Provincial Health Directors and Deputy Hospital Directors.

One particular area in need of improvements is the quality of diagnostic and curative care, in hospitals specifically. Furthermore, the primary healthcare services need to be strengthened to face the new health challenges presented by the epidemiological transition. For this an increase in the number of family physicians and nurses, the continued skills development of health staff, and improvements in physical and technical resources within primary health care is needed. Considering the large share of informal workers, demographic and epidemiolocal transitions, Turkey need to prepare for the associated rise of OOP expenditure and related financial sustainability of the reforms. The family medicine programme could play a role here: responsible for primary care, clinical guidelines particularly for the prevention of long-term conditions can help reduce prevalence rates and associated costs to patients and the health system. A standardized national health information system provide nationwide infrastructure for the efficient sharing of electronic health records is still in development. This one integrated HMIS system, based on harmonized and standardized data descriptions, would be more efficient.

4.4. Uganda

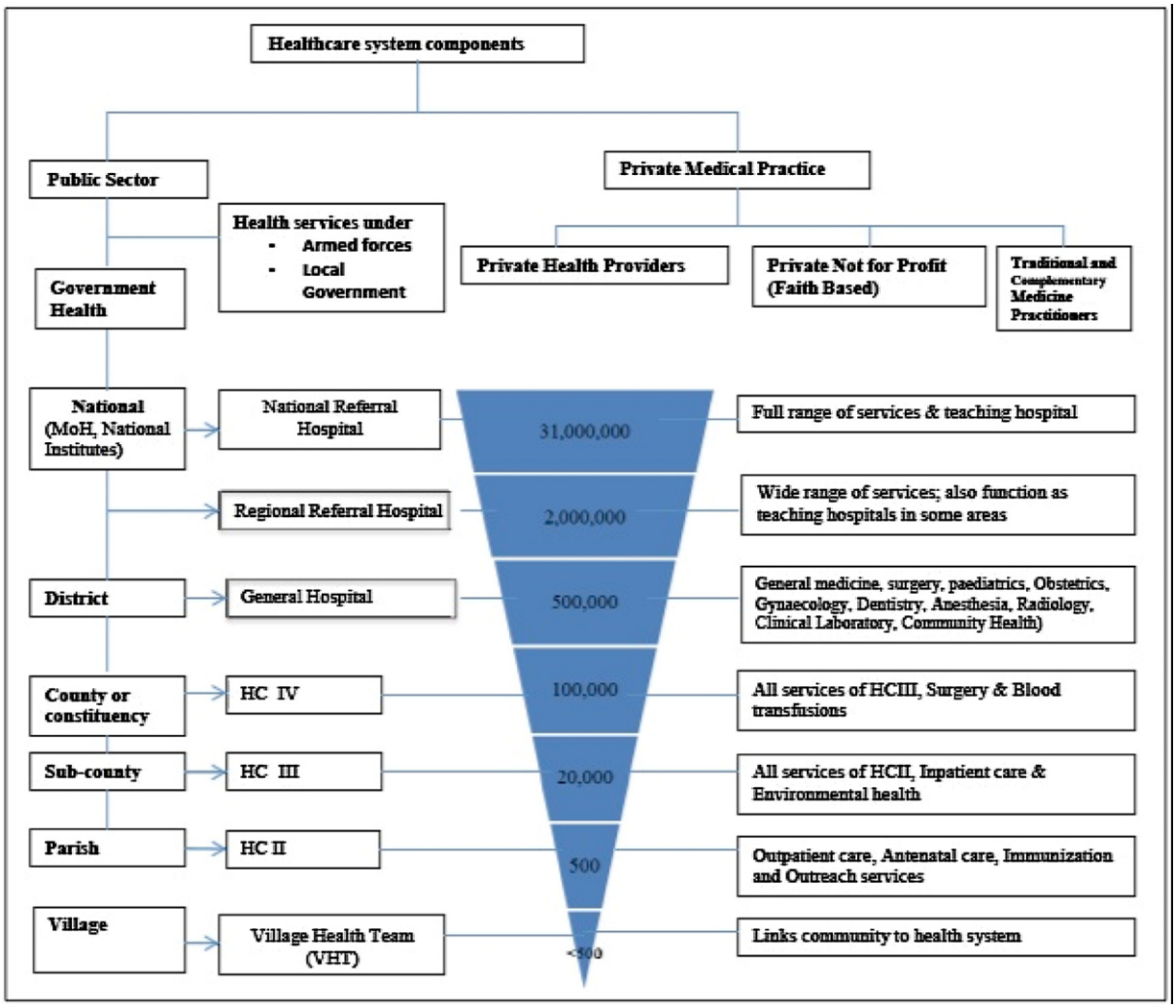
Key Indicators at a glance	2000	2005	2010	2015	2016	2017
Antiretroviral therapy coverage (% of people living with HIV)	0	10	21	55	62	72
Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)	76.8	..	64.5	55.7	54.5	..
Cause of death, by non-communicable diseases (% of total)	16.8	..	25.3	31.9	32.9	..
Current health expenditure (% of GDP)	7.95	11.3	10.7	7.3	..	..
Demand for family planning satisfied by modern methods (% of married women with demand for family planning)	..	..	..	44.6	51.6	49.9
Diabetes prevalence (% of population ages 20 to 79)	..	..	..	..	..	2.5
Hospital beds (per 1,000 people)	..	1	0.5	..	..	..
Immunization, DPT (% of children ages 12-23 months)	52	64	80	85	85	85
Immunization, HepB3 (% of one-year-old children)	..	64	80	85	85	85
Immunization, measles (% of children ages 12-23 months)	57	68	73	80	80	80
Incidence of HIV (% of uninfected population ages 15-49)	0.58	0.73	0.66	0.35	0.3	0.25
Incidence of malaria (per 1,000 population at risk)	516.8	477.6	429.1	218.3	..	..
Incidence of tuberculosis (per 100,000 people)	276	233	210	202	201	..
Life expectancy at birth, female (years)	49.5	54.4	58.9	61.8	62.1	..
Life expectancy at birth, male (years)	44.7	50.8	55.3	57.4	57.7	..
Maternal mortality ratio (modeled estimate, per 100,000 live births)	620	504	420	343	..	..
Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (%)	25.9	24.8	22.7	21.9	21.9	..
Mortality rate, infant (per 1,000 live births)	88.4	68	51	39	37	35.4
Mortality rate, neonatal (per 1,000 live births)	29.4	26.3	24.7	21.6	20.9	20.2
Mortality rate, under-5 (per 1,000 live births)	146	108.8	78	55.3	51.6	49
Nurses and midwives (per 1,000 people)	..	1.3	1.306	0.648	..	..
Out-of-pocket expenditure (% of current health expenditure)	37.7	39.5	33.1	40.5	..	..
Physicians (per 1,000 people)	..	0.12	0.117	0.093	..	..
Pregnant women receiving prenatal care (%)	..	..	..	95.4	97.3	..
Risk of catastrophic expenditure for surgical care (% of people at risk)	..	81.4	68.4	71.4	72.1	74.2
Risk of impoverishing expenditure for surgical care (% of people at risk)	..	84.4	77.5	73.7	74.6	75.1
Smoking prevalence, females (% of adults)	5.4	4.7	4.1	3.6	3.4	..
Smoking prevalence, males (% of adults)	29.2	24.4	20.5	17.2	16.7	..
Tuberculosis case detection rate (%, all forms)	46	62	60	52	52	..
Tuberculosis treatment success rate (% of new cases)	63	73	68	75	..	..

The structure of Uganda's health services and health coverage systems

Uganda's health system is implemented using a public-private partnership framework. Since its decentralization policy of 2001, public health service delivery falls under the largely decentralised local government system governed at district level. However, the Central Ministry of Health remains the custodian of health policy formation, planning, quality assurance, epidemic response, international relations, resource mobilization, and monitoring and evaluation.

Uganda is administratively divided into 139 districts. Each district is administered by the District Health Team (DHT). The coverage goal of the health sector is to have all households in the country living within 5 km of a health facility where they can easily access services. The levels of health facilities are defined based on the local government administrative units (see Figure 37 below and table A2 in the Annex).

Figure 37: Diagrammatic structure of Uganda's health care system



Source: (Acup, Bardosh, Picozzi, Waiswa, & Welburn, 2017)

The GoU recommends that each district should have a general hospital as indicated in the MoH guidelines. However, wide disparities in the geographical distribution and accessibility to hospitals within the country exist. About 59 districts do not have public general hospitals due to the creation of new districts by government (MoH, Uganda, 2016b). There is also inequity in distribution of the health

service providers in public health facilities with majority of staffs being located in mainly urban and peri-urban areas (GoU, 2016). Above the districts hospitals, Uganda has 12 Regional Referral Hospitals (RRH) each serving 2,000,000 people, and two National Referral Hospitals which provide tertiary services to all 44 million Ugandans.

The functioning of the health sector at the various levels is guided by clearly set policies. In line with the African Union adopted the Common African Position (CAP) on the Post-2015 development agenda on January 31st, 2014, the key national health sectors policies and plans are designed to align with the current global health development agenda of ensuring healthy lives and promotion of well-being for all. Uganda's focus for the Post 2015 agenda is therefore to achieve universal and equitable access to quality health care. Priorities identified include:

1. Improved maternal, new born and child health,
2. Enhanced access to sexual and reproductive health and rights including family planning,
3. Special focus on vulnerable groups including children, the youth, the unemployed, the elderly and people with disabilities,
4. Reduced incidence of communicable diseases (HIV/AIDS, Malaria, and TB), including mental health and emerging diseases,
5. Strengthened health systems including health financing,
6. Improved hygiene and sanitation, and
7. Improved Monitoring and evaluation and quality assurance systems.

In order to ensure implementation of sector priorities, Uganda has developed a health financing strategy to guide resource mobilization using a multisectoral approach. There has not been enough progress made to pool resources through health insurance schemes. Sector effectiveness however, is being tracked using the Results Based Financing (RBF) mechanism. There's increased effort to embrace civil society, to increase accountability for invested resources (MoH, Uganda, 2016a). The central Government has established and funds semi-autonomous institutions to deliver specific public health services, such as the Uganda Heart Institute, Uganda Virus Research Institute, Uganda Cancer Institute, and Uganda National Health Research Organization. Other national level institutions are National Drug Authority, National Medical Stores, National Blood Transfusion Services, Chemotherapeutic Research Institute, Central Public Health Laboratories, National and Regional Referral hospitals (National Planning Authority, 2015).

Development partners, such as USAID, SIDA, PEPFAR, GAVI, Global Fund, African Development Bank and WHO, provide budget support to the national rollout policies and NGOs to reach the lowest strata of the population with free or subsidized services. They also support streamlining of the health sector response in accelerating Universal Health Coverage. However, a number of concerns were raised in stakeholder interviews interviewed regarding (a) the sustainability of interventions funded by development partners; (b) a lack of agreement over health priorities, e.g. donors like PEPFAR and Global Fund have interest in the control of infectious diseases like HIV, TB, and Malaria; however, interest in controlling NCDs is limited; (c) limited support for health physical infrastructure from donors; (d) lack of ICT development leads to barriers to improving access to health services by the poor; and (e) lack of reach of in the most under- privileged areas by NGOs.

Pro-poor approaches for better access to health services

As part of the health sector reforms of the 1990s, Uganda identified and defined an Essential Health Benefits package called the *Uganda National Minimum Health Care Package* (UNMHCP), designed to address its key health priority areas (Ssengooba, 2004). The overriding aim is for the state to guarantee free access to a set of health services it can't afford and to assist in resource allocation in the health sector in the face of a huge and growing health burden that has to be addressed with small public health budgets.

The UNMHCP is delivered by public, private-not-for-profit (PNFP), and private-for-profit health providers, and traditional/ complementary medicine practitioners (TCMP). Facility-based PNFPs are predominantly faith-based and have a large infrastructure base comprising of a network of hospitals and lower level health facilities administered by the religious bureaus at the national levels in partnership with local diocesan boards. About 75 per cent of PNFP facilities are administered by four faith-based medical bureaus while the rest under humanitarian and community - based health care organizations.

Private for Profit (PFP) health providers encompass all cadres of health professionals who provide health services outside the PNFP establishment. The PHP have a large urban and peri-urban presence and provide a wide range of services mainly in primary and secondary care. They are managed privately but are licenced and supervised by regulatory boards and councils. (GoU, 2010). A significant proportion of the population often seeks health services from traditional medical practitioners in addition to or instead of the modern sector of health service system. Examples of these include herbalists, traditional birth attendants, traditional bone setters, hydro therapists, traditional dentists among others (MoH, Uganda, n.d.).

Majority of both rural and urban populations seek services in the private clinics and drug shops or self-medicate at home. These sources of care attract out of pocket payments on the part of the households and are a reflection of inadequate coverage and or quality of the curative services delivered through the public and PNFP sectors. Failure to align the resources to a feasible range of interventions and to target them where they are needed most makes it impossible to buy a $28 package for every Ugandan with a purse of $8 per capita (Ssengooba, 2004). Given the inadequacy of the resources to shoulder the UNMHCP as designed on the HSSP, there is re-prioritization with an explicit and implicit rationing process within the package of services and across population coverage. It is this re-prioritization that in part works against quality, equity and utility of benefit to the users.

The Ministry of Health has been designing a National Health Insurance Scheme (NHIS) to ensure that adequate funds are raised for residents to use health care services and remain protected from financial catastrophe or hardships. The design was informed by national stakeholder consultations as well as visits to other countries to study health insurance systems, and studies with the P4H Alliance, the World Bank, African Development Bank, ILO and WHO amongst others (Basaza et al., 2013). However, according to the stakeholder interviews, political support is low for this strategy, and few Ugandans are in formal employment to be tracked down and/or being able to afford a contribution to such scheme. Whilst different ministries are working on plans for the financial implementation in order to proceed with the proposed National Health Insurance Bill from 2012, there are worries that there might be a significant lag if the integration of informally employed and indigent persons is contingent upon the scheme's sustainability/ profitability (ISER, Uganda, 2015).

Access to health services by Uganda's poor

Access to health services by the poor is plagued by a number of challenges related to infrastructure, human resources and financial affordability. Although 72 per cent of Uganda's population lives within 5 kilometres of a health facility, even where health facilities exist, access to basic health care elements is far from optimal. The health infrastructure remains out-dated, old and dilapidated at all levels (Ministry of Health, Uganda, 2015). Functionality of some health facilities particularly Health Centre IVs remains inadequate (National Planning Authority, 2015). Public health facilities are plagued with a frequent and at times chronic stock out of essential medicines and supplies. Intensive and critical care services are only available at 37.5 per cent of the hospitals. 13.4 per cent of health facilities carry out scheduled maintenance of medical equipment (Ministry of Health-Uganda, 2014).

Furthermore, the number of health workers per 1,000 population in Uganda is still far below the WHO guidelines. In 2017/18 FY, the doctors, nurses and midwife's ratio per 1,000 population was only 0.4.

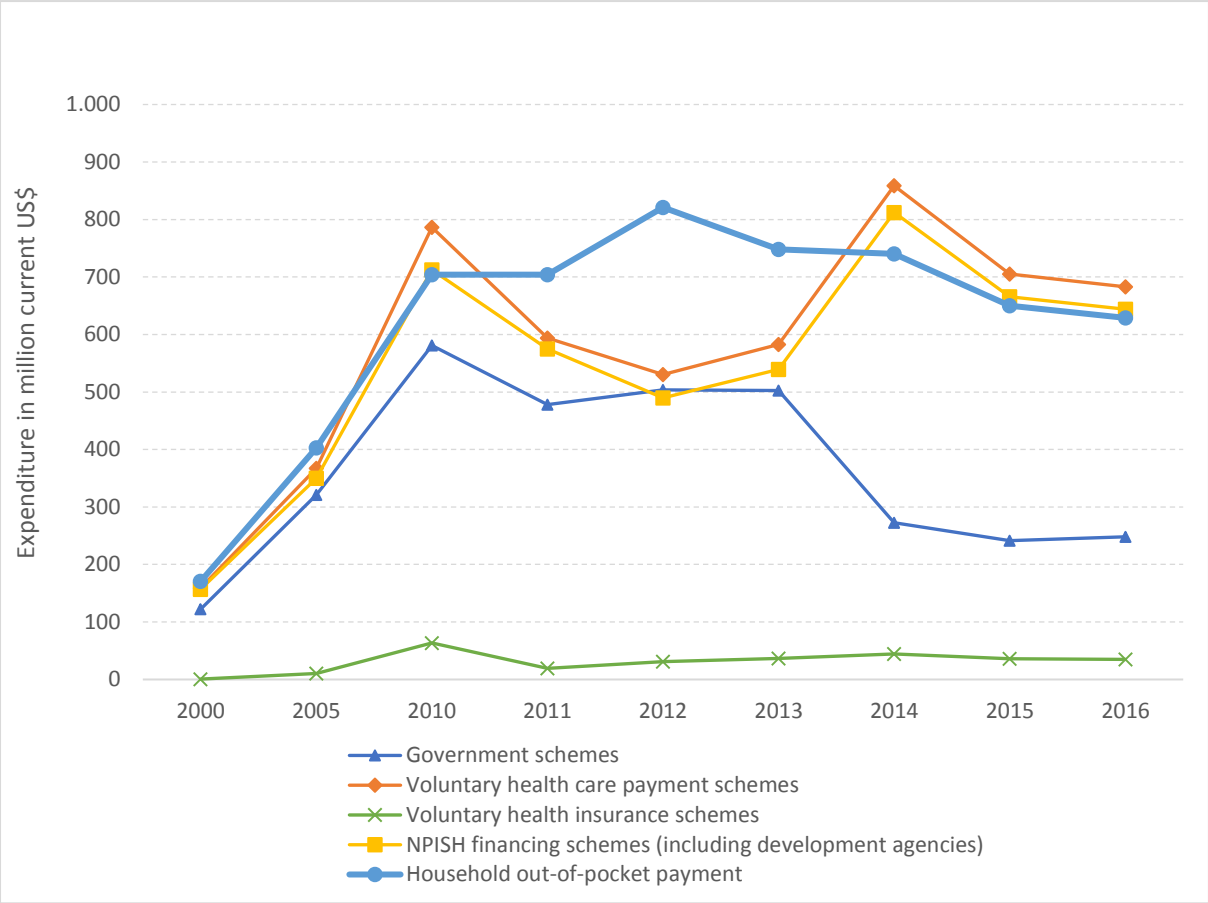
Nurses and midwives are staffed to 83 per cent and 76 per cent respectively. Overall, this translates to a doctor to patient ratio of 1: 24,725 (target 1: 23,500), midwives: client ratio of 1: 11,000 (target 1: 9,500) and Nurse to patient ratio is 1: 18,000 (target 1: 17,000). There are other critical cadres that are severely in short supply; such as pharmacists, anaesthetic staff, health administrators and cold chain technicians (Ministry of Health, Uganda, 2015). In addition to a shortage of staff, the sector has been plagued with high levels of organized absenteeism by HRH especially in the public sector as raised by several stakeholders. Absenteeism by health workers cheats Government time of up to 40 per cent of their employment time (MoH, Uganda, 2016b). Through funding from DFID and Office of the Prime Minister (OPM), the government acquired 52 biometric finger print-readers and 188 robust phones. The intervention was observed to rise duty attendance from 79 per cent in January 2017 to 87 per cent in May 2018 (AHSPR, 2018).

Stakeholders argued that most of the barriers were most felt in access to maternal, neonatal, child and adolescent health services and non-communicable diseases (NCD). The rural population, where majority of the poor live, are particularly constrained in terms of access to health care by geographical physical features such as rivers, mountains, poor road network and hills (Pariyo et al., 2009). The majority of health facilities are found within urban and peri-urban areas. Furthermore, where PNFP facilities are the closest point of health service, different faith impedes citizens from using their services. Additionally, concerns around quality, health worker attitudes and inadequate physical infrastructure of most health facilities for persons with disabilities pose challenges to demand. Those who can afford it (upper and middle-income earners), then purchase private insurance from employers or use out of pocket expenditures to pay for private health services.

A recent health facility survey revealed that the unavailability of medicines (23 per cent), long waiting times (13 per cent), long distance (12 per cent), limited range of services (14 per cent) and understaffing (10 per cent) were the main reasons for people to avoid health public facilities. Private facilities were mainly avoided due to the associated costs (39 per cent) and a limited range of services (23 per cent) (UBOS, 2016).

With respect to financial affordability, a review of government allocation to the health sector as a percentage of the total budget, indicates a downward trend in funding that currently stands at 6.9 per cent for FY 2017/18 from 8.9 per cent 2016/2017. Health expenditure per capita stands at 15 per cent government, 42 per cent donors and 43 per cent OOP (MoH, Uganda, 2016a) (see an overview on health spending between 2000 and 2016 in Figure 38 below). Feedback from stakeholders identified this as a problem as indicated below. As far as delivery and financing of the UNMHCP is concerned, government provides $8 per capita instead of the initial costed $28 per capita. WHO recommends a per capita funding for UHC to be $34. It is such funding gaps that have contribute to high out of pocket expenditure for the population even at government health facilities. The private wings of hospitals, PNFPs and Private Health Providers (PHP) are financed through user fees. The dependency on user fees as the main mechanism of financing for private sector has created equity gaps with the poor unlikely to afford the services (GoU, 2010). The poor in Uganda then rely on savings and help from family and friends to mitigate the impact of health shocks.

Figure 38: Health expenditures development in Uganda between 2000 and 2016



Source: World Development Indicators

Health data and information management systems in Uganda

The level of access to health information is poorly documented. However, e-health has become a stronger area of focus, and a national e-health technology framework completed and an e-health strategy draft. Several local innovation programs on e- and m-health exist and could be leveraged to build country ownership and reduce the total cost of ownership (Ministry of Health, Uganda, 2015). However, Information Communication Technology (ICT) is not well developed in Uganda at rates optimal to match health needs of the poor. On average, only 3.8 per cent of the household heads own a computer (UBOS, 2018). Also, phone coverage is not wide spread and the poor neither have access to SMART phones, nor are they likely to be able to afford airtime and internet data to access health information.

At national level, the country was able to transition to Health Management Information Systems (HMIS), District Health Information System (DHIS)-2 which is an electronic web-based reporting mechanism and revised reporting tool availed to ensure disaggregation and Human Resource for Health Information System (HRIS). The affiliated institutions in collaboration with Ministry of Health, have some notable eHealth services such as the Ware House Management System (WMS) and the computerized Logistic Management Information System (LIMS). Others include mTrac, U- Report (MoH, Uganda, 2016c). The mechanisms for evidence generation and oversight however, need to be streamlined and strengthened to avoid scenarios where data generation is resource driven as opposed to need driven (Ministry of Health, Uganda, 2015). Other platforms are mTrack and Uganda EMR. CDC/PEPFAR utilizes Hibrid for data collection and reporting and has also rolled out Himap in

collaboration with Makerere University – Monitoring and Evaluation Technical Support (METS) Program.
According to the Department of Health Information at Uganda's Ministry of Health, a number of information systems are pilots by donors & implementing partners that will need to be streamlined and strengthened. Examples of partners with such systems that improve access are UNICEF that is piloting the family connect platform for RMNCAH, BRAC and World Vision. The Government continues to maintain a strong stewardship over this development area, to ensure the emerging e-health architecture is aligned to the pillars of e-health house of value and are contributing to the National Health Record Program (Ministry of Health, Uganda, 2015). There are isolated mobile applications developed by local innovators which have not yet gone to the market. Many of the existing e-health services are development partner projects and have tended to be proof of concept pilots awaiting formative evaluation to inform buy in and scale up by the Government (MoH, Uganda, 2013). At the moment, the projects fail due to sustainability in terms of supporting infrastructure such as affordable and reliable power, connectivity, maintenance and hosting options (MoH, Uganda, 2016c).

Summary and Conclusions

Uganda's difficulties to ensure access to health care is evident by its performance in health-related MDGs, as Under- 5 mortality rate was the only goal that was achieved. Over the years, the country has initiated a number of health system reforms and initiatives. While the Ministry of Health is the primary steward, both public and private healthcare providers (public–private partnership) are working together under the governance of local governments at district level with a goal to cover all households within a 5km radius of a health facility. The relevant health policies have been designed in accordance with global health development agenda of ensuring healthy lives and promotion of well-being for all; i.e. the health financing strategy to guide resource mobilization using a multisectoral approach. Two of the most important reforms to include the poor are health insurance schemes and Results Based Financing (RBF) mechanism for sector effectiveness. Healthcare actors like NGOs, International Organizations and other development partners have envisioned universal health coverage and has made considerable progress in the control of infectious diseases like HIV, TB, and Malaria. However, there is little interest in controlling NCD.

The physical access to healthcare is suffering from the lack of trained health professionals. The number of health workers per 1,000 population is currently of 1.5 which is below the WHO threshold of 2.5 medical staff (Doctors, nurses, and midwives) per 1,000 population. The functionality of the integrated human resource information system (iHRIS) is still low due to inability of various institutions to update data in the system regularly and low use of HRIS data for decision making at district level. As a result, there is high level of absenteeism of the healthcare providers, especially in the public sector. There is evidence of chronic stock out of essential medicines and supplies, unavailability of intensive and critical care services, lack of scheduled maintenance of medical equipment. There is high concentration of health facilities around urban and peri-urban areas. Furthermore, there is low acceptability and utilization of available services due to perceived quality and faith of the people.

Access to healthcare by the poor in Uganda is also affected by the high out of pocket (OOP) expenditure. Health expenditure per capita stands at 15% financed by the government, 42% financed by donors and 43% financed by OOP. A review of government allocation to the health sector as a percentage of the total budget, indicates a downward trend in funding that currently stands at 6.9% for FY 2017/18 from 8.9% 2016/2017. As far as delivery and financing of the UNMHCP is concerned, government provides $8 per capita instead of the initial costed $28 per capita. Observation and discussion with relevant stakeholders suggest that the poor in Uganda rely on savings and help from family and friends to mitigate the impact of shocks.

Uganda is also one of the countries who are considering technology for health. eHealth has become a stronger area of focus and there is a completed national eHealth technology framework and a draft eHealth strategy in the country. At National level, the country was able to transition to Health

Management Information Systems (HMIS), District Health Information System (DHIS)-2 which is an electronic web-based reporting mechanism and revised reporting tools availed to ensure disaggregation and Human Resource for Health Information System (HRIS). In addition, several local innovation eHealth and mHealth initiatives exist. However, the mobile-cellular network coverage is not widespread and the poor neither have access to Smartphones nor can afford airtime and internet data to access health information. On average 3.8% of the household heads own a computer.

The findings of this exercise indicate that a lot of progress has been made in addressing health access for the poor in Uganda. Uganda has invested tremendously in developing health sector reforms, policies and strategies aimed at meeting its Universal Health Coverage goals. However, there has been little progress in changing the key health status indicators in Uganda. The findings flag-posts the following:

- There is a trade-off between equity and quality. Gaining health equity comes at a sacrifice of efficiency /quality.
- The 5km radius target for households versus health facilities does not guarantee access if supply-side issues like health worker motivation, commodities and quality are not addressed. The absence of the latter can be a barrier to access too.
- The new technologies are many and increasing in cost. Thus, these may delay Universal Health Coverage.
- Implementation of the basic care package is possible if governments from developing countries commit at least 15% of their National Budgets to health and define the package very clearly.
- The government needs to explore ways to fund the country's own priorities.
- Accessing healthcare is challenging for the poor because of high out of pocket expenditure.

Possible recommendations for Uganda include:

- The health sector needs to work towards achieving Universal Health Coverage (UHC) through establishment and operationalization of a national health insurance schemes while harnessing synergies from public and private partnerships and strengthening the referral systems. The National Health Insurance once operationalized would lead to reduction in the long-term indebt-ness or poverty caused by out of pocket expenses for the poor and reductions on the contribution of development partners that contribute substantially to financing of health services in Uganda.
- Increased Government revenue for funding health care would improve access to health among the poor. Encourage community financing systems for the poor to relieve them from the burden of catastrophic health expenditures.
- There is need to make an economic case to invest in reproduction health MNCAH and NCDs in Uganda just like infectious diseases that are relatively well funded.
- Governments needs to harness the growing ICT sector to increase access to information by the poor. The existing e- health and m-health platforms need to be regularly assessed, costed and regulated by Ministry of Health and Uganda Communications Commissions with the aim to ensure efficient and effective standardized ICT systems that can improve access to health by the poor.
- There is need to streamline the referral systems and mobilizing local resources for sustainability. Strengthening the referral systems with ambulance that are well equipped and facilitated with fuel would improve service utilization.
- Improving availability of medicines for NCDs, family planning commodities and other key essential medical supplies and medical diagnostics.
- Free services /with good demand creation activity through mobilization.
- The re-introduction of modest user-fees at public health facilities, proper implementation of performance-based financing may help to improve service quality, reduce absenteeism from

health workers, introduce competition within the sector and increase health work motivation and morale.

- Involvement of top leadership of country (Health in all policies) is critical to ensuring health access.

4.5. Tunisia

Key Indicators at a glance	2000	2005	2010	2015	2016	2017
Antiretroviral therapy coverage (% of people living with HIV)	0	19	24	28	31	31
Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)	12.4	..	8.7	7.9	7.8	..
Cause of death, by non-communicable diseases (% of total)	79.5	..	84.4	85.5	85.8	..
Current health expenditure (% of GDP)	5.0	5.4	5.9	6.7	..	..
Diabetes prevalence (% of population ages 20 to 79)	..	..	..	..	..	8.5
Hospital beds (per 1,000 people)	..	..	2.1	..	..	..
Immunization, DPT (% of children ages 12-23 months)	97	98	98	98	98	98
Immunization, HepB3 (% of one-year-old children)	94	97	98	98	98	98
Immunization, measles (% of children ages 12-23 months)	95	96	97	98	96	98
Incidence of HIV (% of uninfected population ages 15-49)	0.01	0.01	0.01	0.01	0.01	0.01
Incidence of tuberculosis (per 100,000 people)	26	26	28	38	38	..
Life expectancy at birth, female (years)	75.8	76.7	77.1	77.6	77.8	..
Life expectancy at birth, male (years)	70.8	71.9	72.7	73.5	73.7	..
Maternal mortality ratio (modeled estimate, per 100,000 live births)	84	74	67	62	..	..
Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (%)	19.3	18.2	17.5	16.4	16.1	..
Mortality rate, infant (per 1,000 live births)	26.3	19.6	14.9	12	11.6	11.2
Mortality rate, neonatal (per 1,000 live births)	18	13.2	9.9	8	7.7	7.5
Mortality rate, under-5 (per 1,000 live births)	31.7	23.1	17.4	14	13.5	13
Nurses and midwives (per 1,000 people)	..	..	2.24	2.653	2.642	..
Out-of-pocket expenditure (% of current health expenditure)	38.6	42.1	42.1	39.8	..	..
Physicians (per 1,000 people)	0.8	0.9	1.2	1.3	..	..
Pregnant women receiving prenatal care (%)	91.5	..	..	..	..	..
Risk of catastrophic expenditure for surgical care (% of people at risk)	..	39.2	26.6	15	12.3	12.8
Risk of impoverishing expenditure for surgical care (% of people at risk)	..	12.7	6.2	3.2	2.7	2.6
Smoking prevalence, females (% of adults)	7.2	3.9	2.2	1.2	1.1	..
Smoking prevalence, males (% of adults)	56.6	59.1	62.2	65.4	65.8	..
Tuberculosis case detection rate (%, all forms)	80	80	80	80	80	..
Tuberculosis treatment success rate (% of new cases)	91	90	85	91	..	..

The structure of Tunisia's health services and health coverage system

Over the past 50 years, Tunisia has shown a significant effort in building and maintaining a national healthcare system that is accessible for all. After its independence in 1956, Tunisia created a free for all healthcare system which was at the time funded solely by the public sector. In 1982, a new policy implemented health centres which improved access to services, extended the existing services and led to the development of a private health sector. Today, Tunisia's health care system is based both on the public sector as well as a continuously growing private sector (Chahed et al, 2014). There is a large imbalance between the two sectors both in coverage and in financing: Whereas the public sector deals with 80 per cent of the whole population and makes up only 20% of the total health expenditure, the private sector deals with only a 20 per cent of the population and benefits from a 60 per cent of total expenditures (Chahed et al, 2014).

Tunisia also established its main health insurance mechanism, the National Fund of Health Insurance (NFHI) in 2006 to improve coverage of health care services across the country. The mandated social insurance scheme is still in effect today, which included public and private sector workers and is financed both by employees and employers. Initially, the scheme covered the 68 per cent of the population (in 2006) but was later extended for more coverage through the private sector and resulted in nearly 90 per cent of the population having access to health services by 2014. Although insurance schemes have shown significant progress over the past years, a few gaps remain. Between 8 – 10 per cent (almost 1 million people) of the population is still not covered by health insurance, and the inefficiency of specific public aid schemes are still causing a strain to the government's budget (Chahed et al., 2014).

The results of this progress in the Tunisian healthcare system can be seen in a number of indicators. Since 2006, 95 per cent of the population has access to a health care facility within 5 km of their homes (WHO, 2006). Coverage of immunisations against DTP and measles is also very high at 95 per cent for children just below 2 years old (DHS Comparative Report 46, 2017). Immunisation coverage of children of 1 year has been at 96-98% for most diseases since 2013, which has eliminated polio diseases and neonatal tetanus in the country. The progress in neonatal tetanus coverage is in fact impressive as it increased from only 40% of children in 1990 to 96% in 2013 (WHO, 2015b). Furthermore, the percentage of mothers that receive antenatal care (ANC) and the proportion of births attended by a skilled professional maintain a very high level in the past few years: During 2012, 98 per cent of pregnant women received ANC at least once, and 98.6 per cent of births were attended by a professional health worker (World Bank, 2017; see also Figure 39).

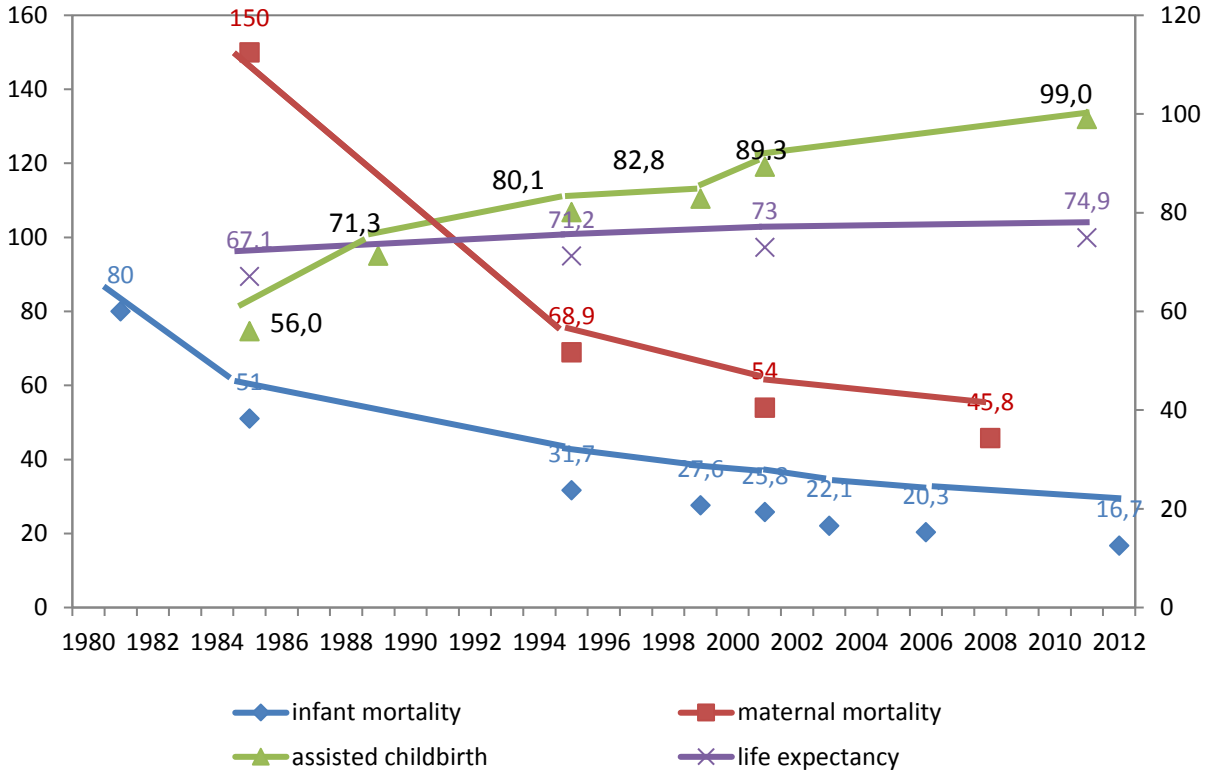
This progress in access is reflected in improved health indicators. For example, fertility rates now show a relatively "stable" population at 2.1 births per woman (MICS, 2011-12). According to the World Bank (2017) in the period 2006-2015 the infant mortality rate fell from 18.5 to 12.1 per 1,000 live births, and the mortality rate among children under 5 years old decreased from 21.7 deaths to 14 per 1,000 live births. Likewise, maternal mortality shows a downwards trend, falling from 74 to 64 deaths per 100,000 live births in between 2005-2015 (Maternal Mortality Estimation Inter-Agency Group 2016). Furthermore, life expectancy of Tunisian citizens has increased dramatically from 42 in 1960 to 75.7 years in 2016, which is the highest reported in the North African region and globally higher than average (World Bank, 2018). Lastly, Tunisia shows very low HIV/AIDS prevalence at 0.1% among adults of ages 15-49 and has officially eliminated malaria (WHO, 2015b).

Although Tunisia has shown very high health indicators and improved access relative to other low and middle-income countries, the country has not yet achieved universal health coverage (UHC) – one of the SDGs that it had committed itself to reach until 2030. One of the main problems that appear in the structure of Tunisia's health care system is the unbalanced development between public and private sector. The growing private sector has caused large out-of-pocket household expenses, which is particularly damaging for the 10 per cent of the population, which is not covered with insurance.

Furthermore, the public sector is still less efficient in allocating health expenditure than the private sector (Chahed et al., 2014).

Furthermore, some disparities still exist among different geographic and socio-economic groups. For example, Coastal areas seem to be more equipped than the western part of the country. The number of doctors and specialists, the quality of medical equipment as well as the overall coverage of services is lower in the western regions of the country too (Chahed et al, 2014). One of the general concerns is the low number of hospital beds in health facilities that correspond to the people of each area. According to WHO, the hospital beds ratio in 2015 was 2.3 per 1,000 people, which is still lower than the global average and the average of other middle-income countries.

Figure 39: Trends of Tunisian's demographic indicators (1980-2012)



Source: Chahed et al. (2014)

Access to health services by Tunisia's poor

Tunisia has established a health insurance mechanism to improve access to health services by the underserved parts of the population. Since 1960, Tunisia implemented a social protection system with two "components", or two public medical aid schemes addressed at the poorest and more vulnerable population groups. The first component of Tunisia's Free Medical Assistance for the Poor (FMAP) scheme covers the poorest with free health care. Eligibility is determined depending on local poverty lines and regional quotas. The second component of FMAP covers those groups of the poor who experience low living conditions or earn below minimum wage/certain wage threshold but are not eligible to be exempt of all health fees. These groups benefit from a reduced-fee plan where certain services are subsidised. Although poverty rates have fallen significantly from 25.4 per cent in 2000 to 15.2 per cent in 2015 (OECD, 2018), 24 per cent of the population is still enrolled in either of these two schemes (Chahed et al., 2014).

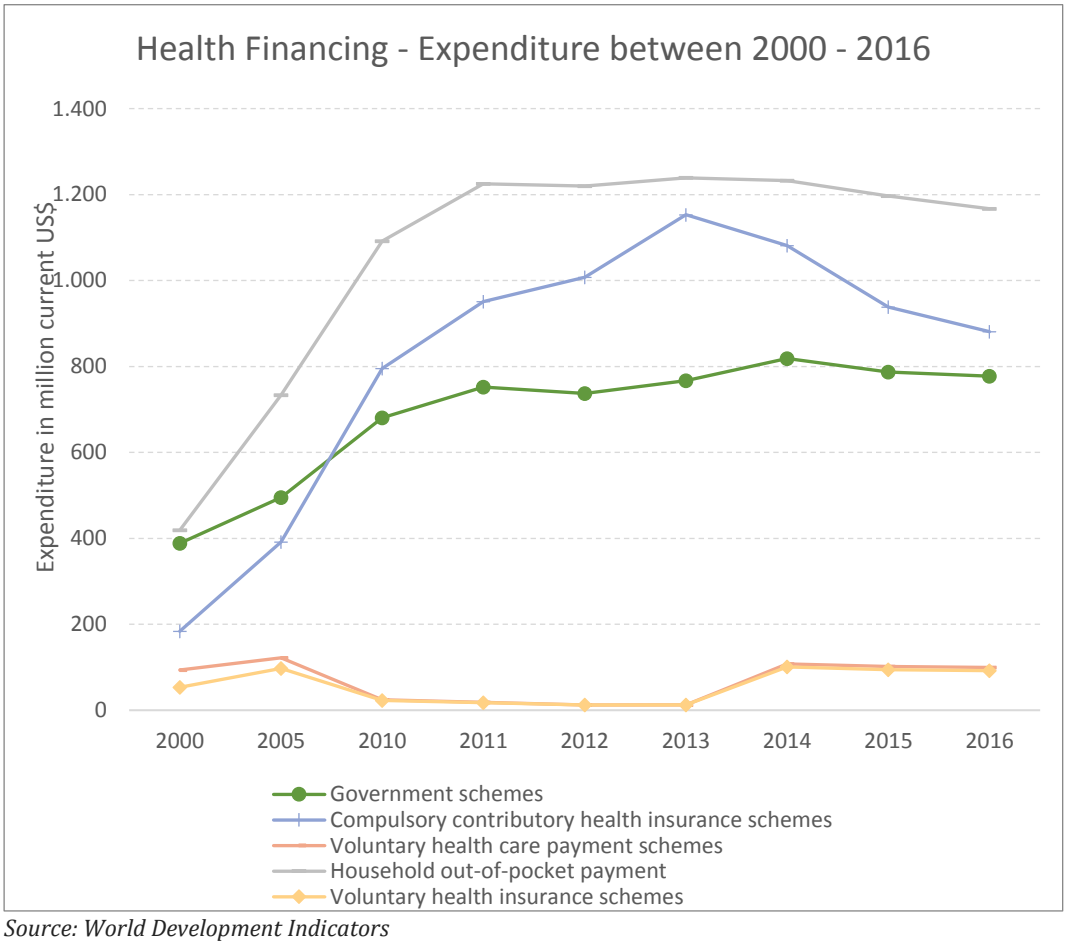
However, it is important to remember that almost 10 per cent of the population are not covered by any kind of insurance which means that they are burdened with the whole amount of their needed

expenditure on health. According to the World Bank (2013), FMAP is funded and managed entirely by the public sector, which has shown a lot of inefficiency issues and is relatively weak in targeting the poorest sections of the population. The institutional framework and targeting will have to be reformed in order to achieve truly guaranteed free health care for the poor.

In 2010, 45.8 per cent of the total health expenditure were "out of pocket" expenses, hinting towards high amounts of money spent by the poorest and uncovered parts of the population for health services in the private sector. This went in hand with a reduction of public sector spending on healthcare from around 45 per cent in 1970s to around 26 per cent in 2008, and an expansion of the private health sector.

Health inequities are visible across many health outcomes or health access indicators, when comparing the poorest with the richest quintiles of the population. For example, under-5 mortality rates are much higher amongst the poorest part of the population (32 deaths per 1,000 live births), compared to those in the richest (16 deaths per 1,000 births) (MICS, 2011-12); and the percentage of pregnant women aged 15-49 that had at least 4 antenatal visits was 96.3% for the richest quintile, but only 73.2% for the poorest. Likewise, 89.1 per cent of women of the same age amongst the richest wealth quintile being were assisted by a medical professional while giving birth, whereas only 62.8 per cent of women in the poorest quintile of the population benefitted from this service (MICS, 2011-12). Further reforms and policies are needed to reduce the socio-economic disparities and secure free access to the poorest and most vulnerable parts of the population.

Figure 40: Health expenditures development in Tunisia between 2000 and 2016



Source: World Development Indicators

Pro-poor initiatives for access to health services

Since its independence, Tunisia has strived to implement new policies that improve access to health services, especially focusing on the underserved groups of the population. Among these efforts are the guarantee of free contraception for all, which was established during the 1960s, and free antenatal and postnatal visits for all pregnant women, which was part of a new policy during the 1990s (Chahed et al., 2014). Most of these policies were part of a publicly funded free-for-all health care system.

However, in the latest years demand for higher quality health care has shifted investment towards the private sector. Demographic and lifestyle changes among others, have caused increased investment on private hospitals that now complement the public sector with higher quality services. A significant example of this shift was the International Finance Corporation's (IFC) first investment in Tunisia's health sector with the goal of broadening access to quality health care for lower-income groups and people in remote areas. IFC invested $8.2 million on the private clinic "Amen Sante", which was part of a plan to complement public investment, create more than 1,000 jobs and enhance the skills of the private health sector (IFC, 2011).

One of the most recent and most important actions that the government took was adopting the modern Constitution of Tunisia, which was established in 2014 and reaffirmed health care as a fundamental human right. Along these lines, the Ministry of Health established a 5-year plan (2016-2020), which showed the government's commitment to strengthen the current healthcare system and fighting existing and emerging diseases across the country. Recently, Tunisia also announced a national HIV/AIDS strategic plan along with a big campaign to raise awareness about the matter, support most-at-risk groups and eventually eliminate HIV/AIDS prevalence. The plan is supported by the Global Fund to fight AIDS, Tuberculosis and Malaria which also funds several NGOs that are contributing aid. However, there is a lack of organised screenings, no routine testing during antenatal visits, no opioid substitution (methadone) therapy and inefficient monitoring (WHO, 2015). The establishment of standardised tests, the adoption of modern technology and improvements in efficiency are essential for the success of the plan and the elimination of HIV/AIDS in Tunisia.

Overall, the Tunisian government shows strong political commitment to achieve Universal Health Coverage (UHC) as specific goals have been set for the near future. According to WHO (2015), the government seeks to maintain and improve its high achievements in maternal and child health, focus on non-communicative diseases that are currently emerging, reduce regional inequalities, improve pharmaceutical technology, create a nationwide HR programme and improve the training of medical professionals to be on par with international standards.

Actors in Tunisia's health sector

Most of the regulatory framework in Tunisia comes from the public sector and the Ministry of Public Health (MoH), as these are the entities that regulate the national health insurance scheme and the access to health for the poorest parts of the population. According to the World Bank (2013), the MoH acts as the "main steward", although its supervision on the private sector is limited.

As the Tunisian government is committed to achieve UHC as a member of the World Health Organisation, a lot of the necessary reforms are designed and implemented with the help and/or supervision of international organisations such as WHO and World Bank. The WHO has been collaborating with the government of Tunisia for several years now to improve the health status of the country and achieve Universal Healthcare Coverage (UHC) as part of the SDGs. Along these lines, the World Bank has also launched the Universal Health Coverage Studies Series (UNICO Study Series) which monitor and evaluate the process and the challenges towards achieving UHC for many countries including Tunisia. These studies also help pursue Tunisia's priority is to expand coverage of all parts of the population, tackle diseases and improve the relatively low skills of medical professionals, technology in equipment, and lastly updating information systems to today's standards.

Civil Society Organisations have also become very active in the fight for the "rights of patients to access quality care services without the financial burdens being placed on individuals and families, including access to quality and affordable medicines, particularly for patients with chronic diseases and cancers"

(GHW, 2015, p. 132). The Tunisian Association Defending the Right to Health (ATDDS) also acts as a link between the voice of CSOs and NGOs and the promotion and establishment of health as a right in the constitution, as well as in new laws and policies through its engagement with members of the constitutional assembly (Ibid.). Figure A2 in the Annex gives an overview on the main actors and fund flows in Tunisia's health system in 2010.

Tunisia's health data and information management systems

Health information systems in Tunisia are outdated and poorly designed, which is mainly due to an underinvestment in the sector. Even though the government has taken action towards the development of electronic records and the institutionalisation of health accounts in the recent years, routine administrative health facilities databases, which allow for subnational analysis, have been reported to have problems with accuracy. The National Institute of Statistics provides with household surveys while also disaggregates health expenses in wealth quintiles, which can prove to be very useful for analysis of the lower income groups and comparisons with the rest. However, the same problems of mild inaccuracies have been reported for NIS surveys as well.

The two main data sources for information about access to health in Tunisia are then the Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). However, the most recent data available on the subject is from 2011-12, which renders measuring progress since 2012 difficult.

Summary and Conclusions

Tunisia has shown remarkable progress in terms of health outcomes during the past few decades, but improvements in certain aspects of its health system are necessary in order to achieve universal healthcare coverage (UHC). The country is showing relatively high health indicators comparing to other countries of similar income levels as well as high coverage in health services. The percentage of the population that is covered by health insurance is approximately 90% and immunization coverage is almost at 100%, while HIV/aids is almost non-existent and malaria has been officially eliminated. Likewise, fertility rates are low and stable, maternal as well as infant mortality rates have decreased and life expectancy for Tunisians has risen dramatically. However, there are still health inequities in the country, as the private sector is growing rapidly along with higher out-of-pocket expenses that come with this expanse, while the public sector is still responsible for 80% of the population but is still relatively underfunded and inefficient.

Inequalities in health are also observed between different socioeconomic and geographic groups of the population. The public sector is also providing a health insurance scheme that covers all health expenses for the poorest and subsidises specific services for those with below minimum wage. This health care system also provides with free contraception for all, as well as antenatal and postnatal visits to health centres for pregnant women. However, one of the main problems that the Tunisian system has to face is that the 8-10% of the population is still not covered by health insurance, which also means that they are forced to pay very high out-of-pocket expenses to a rapidly growing and expensive private sector. Furthermore, one of the challenges to be tackled in the future is the lack of high-quality health infrastructure especially in western areas of the country. Medical equipment, hospital beds, and even the number of medical personnel and doctors seems to be lesser, while health information systems are generally deemed outdated and unreliable mainly due to the lack of funding. Focus should be in improving these aspects of Tunisia's healthcare system as well as addressing the aging of the population and currently emerging non-communicable diseases (NCDs) such as cancer and heart disease.

The government of Tunisia is currently collaborating with several different international organisations and NGOs to take a step closer towards the SDGs of 2030 and achieving Universal Health Coverage. The World Health Organisation, the World Bank, NGOs, Civil Society Organisations, the Ministry of Public Health and many others are coordinating their efforts towards raising awareness of health issues, establishing health as a fundamental human right and actively improving access to health services for all people in Tunisia.

4.6. Learnings from the case studies

From the case studies, a number of themes emerge that can inform our thinking about health sector reforms aimed at expanding health service access for the poor and reaching the target of universal health coverage in countries. These themes relate to the design and implementation of health sector reforms, the issue of health insurance as a way of reducing out-of-pocket health expenditure, the involvement of the private sector, information management systems, and nature of health priorities in past and future.

With respect to reforms, a thorough understanding of the level of health and access to health services, and barriers to good health is essential to design reform with high impact at a large scale. A good example is Turkey, where structured steps for understanding the own context and learning from other countries' experiences was undertaken in the form of extensive literature reviews, and field visits were undertaken. Furthermore, monitoring and communicating progress at each step has been essential, as have long-term engagement, dedication and leadership.

The importance of political leadership has also been observed in Indonesia, where domestic political concerns were usually the main drivers for all subsequent improvements in the health system (and not external pressures or triggers. This experience is very different in Uganda, where donor support does not always meet government priorities. In addition, gaining and maintaining voter support has been essential, e.g. in Indonesia, at district level, the ability to provide successful local health service model has become an important vote catcher for local leaders. Similarly, Turkey prioritized 'emergencies' in their list of reforms in order to keep voters and politicians onboard for subsequent reforms that would take more time.

The importance of community-based primary health care to reach poor people is a common theme across the case studies. Especially Indonesia has made good progress in several health indicators including maternal and child health (although there are still gaps) by strengthening community-based services and out-reach and vertical, integrated programming; and Turkey's family medicine programme is seen as a very strong contributor to health outcome improvements as well. Locating highly-skilled health personnel to provide service in rural and remote areas has been proven a challenge; however, with the 'right', context-specific policies and incentives this can be achieved as seen in both cases. For example, Indonesia offered flexible, short-term contracts to attract health workers and in particular specialists to remote, rural areas; and Turkey made very positive experiences with abolishing dual service and incentivising remote work.

Related to the importance of community based primary health care is the role it can play in tackling new health challenges, such as NCDs, which are on the increase globally. These new challenges will be most effectively tackled at the primary care level through regular screening of the targeted population, as global experience demonstrates.

Health insurance is an essential part of achieving universal health care as it helps reduce out-of-pocket expenditures which are a major barrier to access to health globally. However, implementing insurance cover for all has its challenges – particularly where informal workers, people without ID cards, indigenous people and people living in very remote areas easily 'fall off the system'. These experiences are clearly made in Indonesia and Uganda. Furthermore, the design of eligibility criteria can prove challenging as seen in Tunisia where some population groups are too poor to afford out-of-pocket health expenditures but not poor enough to receive state support.

The private sector can be a great support in addressing shortcomings in health service supply and thus make health services more inclusive. For example, realizing the considerable gaps and shortcomings in public health service delivery (e.g. lack of human resources and physical infrastructure, huge regional disparities in service coverage), the government of Indonesia hast started to actively

encourage the private sector to contribute to health service deliver as part of their UHC scheme. Private sector engagement is regulated by the government, although there are still shortcomings in the monitoring of private sector activities. Private healthcare providers currently cover up to 60 per cent of health care in Indonesia (in particular hospital care) and are also frequented by poor people. In Turkey too, the private sector is growing under public regulation. In other countries, e.g. Tunisia, the private sector has grown – with some incentives by the state – not to complement the state's health provision, but because of its gaps. Emerging from the experiences is the realization of the role the private sector can play in filling gaps more efficiently as public institutions usually do, as well as the potential dangers in relation to affordability, particularly for the poor. Careful monitoring and regulation seem to be necessary in order to ensure that all segments of the population can access high-quality health care.

Finally, a common theme across the case study was the importance - or lack thereof- of high-quality information management systems which are crucial to inform decision-making, identification of health priorities, identification of inequalities and areas of exclusion, accountability, transparency, management, planning and allocation of resources. Even where data information management systems exist, they are often different across different levels of responsibility and not integrated as one tool that different stakeholders can use as a source of information and where information can be shared. Furthermore, there are often different indicators used by different stakeholders and data collectors, further adding barriers where attempts of harmonisation are made.

Overall, the experiences show that, as access barriers are reduced, for example through the reduction of out-of-pocket health expenditures and physical infrastructure, demand for health services increases as many needs are not met (yet). This in turn puts pressure on existing infrastructure and resources to the point where quality can be compromised. Thus, (further) investments are needed to expand and improve physical infrastructure, qualified staff, improve and maintain quality to meet demand. Besides health sector specific investments, there is also a need for other sectors' investments, such as the transport sector for access for remote/poorly connected populations. Investments in basic infrastructure such as access to safe drinking water and sanitation will contribute to better health too and reduce pressure on the health sector by preventing communicable diseases in the first place. So do investments in the education sector about better sanitation and hygiene practices that improve health outcomes.

Chapter 5: Recommendations

Globally, access to health has been a major challenge for decades. Despite the recognition of health as human right, roughly 4 billion people lack access to essential healthcare. In 2017, 10.5 per cent of the world population had to spend 10 per cent of their household budget for health, forcing 12.5 per cent of them to survive on less than USD 2 per day (World Bank & WHO, 2017). Because of the ongoing demographic and epidemiologic transition and the existing burden of infectious diseases (and related epidemics), low- and middle-income countries are struggling to cope with already stretched resources. Because of the multi-dimensionality and related complexities of access to health, no blanket approach can address on its own the disparities of access to health. However, the lessons of the report lead us to formulate four key recommendations for the OIC countries.

In order to expand access to health services to and increase the level of health outcomes for all population groups, demand and supply side changes need happen simultaneously. This should involve the reduction of direct out-of-pocket health expenditures and indirect costs for health care as the most important barriers on demand side; and the improvement and expansion of service infrastructure and human resources on supply side; tying in with the focus on Universal Health Coverage, conceptualized as access to quality promotive, preventive, curative, rehabilitative and palliative health care by all without any financial adversity (WHO, 2018). Based on the case studies and with a view on the wider literature we recommend:

Reforms that aim at ensuring access to quality health care by the poorest populations should be prepared carefully designed and implemented.

- ⇨ Literature reviews, field visits, and consultations can be very useful tools to gain a deep understanding of when and how poor populations (try to) access health services and which barriers they face.
- ⇨ Exchange with other countries and global health initiatives that can provide insights in what has been tried and tested to tackle similar challenges can be helpful in identifying possible pathways of policy design and implementation.
- ⇨ Monitoring and regular evaluations will keep informed of progress made and help identify new challenges or bottlenecks that need more/further attention.
- ⇨ Political will for reforms can be sustained by careful sequencing of reforms. For example, implementing change that addresses biggest emergencies first that benefits larger parts of the population will buy voter support and build trust in the ability of the system to achieve change.

Community-based primary health care needs to be strengthened in order to reach poor population groups across the countries.

- ⇨ Infrastructure – both in terms of physical health infrastructures and medical supply and technology, as well as basic infrastructure and transport – needs to be expanded and improved to reach and connect to rural and remote areas.
- ⇨ Incentives for skilled health personnel to provide services in rural and remote areas need to be designed and implemented. Depending on context, this might need to involve
    - Ensuring that sufficient numbers of medical and nursing students and other health professions are trained and receive adequate salaries,
    - Ensuring that contracting for health human resources addresses challenges within the system, e.g. through performance incentives, location incentives, dealings with dual practice, etc., and
    - Outsourcing of health services where needed, combined with monitoring and regulation policies.

Health insurance schemes as a way of pooling risks and expanding health service coverage need to be designed carefully.

- ⇨ The design of benefits, contributions, subsidies and eligibility criteria for poor population groups need to be based on a profound understand of levels of poverty and risks and vulnerabilities.
- ⇨ Special attention needs to be paid to ensure that groups that are easily 'overlooked', such as those without identity cards, those in very remote areas, indigenous and tribal populations, are included.
- ⇨ The inclusion of informal workers into the mandatory contributory systems is a major challenge that needs to be tackled, with informal workers constituting more than 60 per cent of the global workforce (ILO, 2018). In OIC countries, the share of informal employment is particularly high in the African group and estimated to be frequently more than 70 and 80 per cent, and up to around 90 per cent in Sierra Leone, Benin, Cote d'Ivoire, and Chad.
    - In many countries, contributory health insurance schemes are open to informal workers on a voluntary basis – here, the level of contribution will be crucial in defining how large the share of the informal worker population will be who can afford to participate.
    - Given the size of the informal workforce in some countries, health care services and benefit packages will need to be designed with specific needs of this group in mind, e.g. informal workers do not have access to sick leave and particular emphasis needs to be paid to preventive care and services, and the promotion of healthier workplaces and practices.

Private sector engagement can contribute to efficiency and quality, but its activities in the health sector need to be monitored and regulated in order to ensure that good quality healthcare can be accessed by all parts of society. Unfortunately, there is no robust evidence yet as to which 'mix of public and private health provision' work well or even best (Wadge et al., 2017). However, a positive starting point for countries is to assess the level to which the private sector could complement governments in providing integrated health services. Steps for such analysis would involve to

- Assess to what extent private providers are already serving patients and whether these services are safe, effective and of good quality
- Examine to what extent patients from different socio-economic and socio-cultural backgrounds can access these services and how barriers could be reduced
- Investigate how private health providers affect the larger health system, e.g. with respect to availability of trained health workforce and the extent to which private providers work with government and regulatory organisations, and how positive links can be strengthened, and negative impacts mitigated.

Countries need to invest in high-quality integrated information management systems in order to identify what works as well as challenges, uncover inequality in access to good quality healthcare and health outcomes, and thus inform programming and financing priorities and decision-making. Furthermore, disaggregated data which informs on health-related SDG indicators, particularly under target 3.8 which relates to the UHC, needs to be collected and shared at all levels and different programmes and sectors. This will inform policy and programming as mentioned, but also in order to strengthening global partnerships by providing the opportunity to track progress on health interventions and policy frameworks and how they contribute to access related challenges and better health outcomes for all population groups. That way, experiences and learning can be shared globally to advance this goal with the support of and to each other. Based on international experience, the following 'strategic areas for action' (based on WHO, 2017d) are recommended

- Improve governance by strengthening robust collaboration between health and other sectors, across public and private spheres under the oversight of a multi-sectoral coordination mechanism
- Invest in individual-level, facility- based and population-based data from multiple sources and capacities to handle, exchange and use such data for health
- All institutions and development partners should align their data, monitoring and accountability efforts

- Using eHealth strategies can facilitate the generation of data and help with availability of timely quality data for decision making
- Use scalable, affordable, open access software systems to facilitate collaboration and the use of common data architecture, standards, tools, etc.
- Invest in the establishment of transparent national oversight mechanisms for key indicators
- Use data to design policies, systems and services that improve access to need-based good quality services.

References

Acup, C., Bardosh, K. L., Picozzi, K., Waiswa, C., & Welburn, S. C. (2017). Factors influencing passive surveillance for T. b. rhodesiense human African trypanosomiasis in Uganda. Acta tropica, 165, 230–239.

Adams, A. M., Ahmed, T., Arifeen, S. El, Evans, T. G., Huda, T., & Reichenbach, L. (2013). Innovation for Universal Health Coverage in Bangladesh: A Call to Action. The Lancet, 382, 2104–2111.

Ahmed, S. M., Alam, B. B., Anwar, I., Begum, T., Huque, R., Khan, J. A., … Osman, F. A. (2015). Bangladesh health system review. (A. Naheed & K. Hort, Eds.), Health Systems in Transition (Vol. 5). Manila: Regional Office for the Western Pacific (WPRO), World Health Organization (WHO). Retrieved from http://apps.who.int/iris/bitstream/handle/10665/208214/9789290617051_eng.pdf?sequence=1

Ahmed, S. M., Evans, T. G., Standing, H., & Mahmud, S. (2013). Harnessing pluralism for better health in Bangladesh. Lancet, 382(9906), 1746–1755. https://doi.org/10.1016/s0140-6736(13)62147-9

Ahmed, S. M., Hossain, M. A., Chowdhury, A. M. R., & Bhuiya, A. U. (2011). The health workforce crisis in Bangladesh: shortage, inappropriate skill-mix and inequitable distribution. Human Resources for Health, 9(1), 3. https://doi.org/10.1186/1478-4491-9-3

Ahmed, S. M., Petzold, M., Kabir, Z. N., & Tomson, G. (2006). Targeted intervention for the ultra poor in rural Bangladesh: Does it make any difference in their health-seeking behaviour? Social Science & Medicine, 63(11), 2899–2911. https://doi.org/10.1016/J.SOCSCIMED.2006.07.024

AHSPR. (2018). Annual Health Sector Performance Report, FY2017/18. MoH, Uganda. Retrieved from http://health.go.ug/sites/default/files/MoH%20AHSPR%202017_18%20FY.pdf

Assaf, Shireen, Leah Horton, Marta Bornstein, and Thomas Pullum (2017) Levels and Trends of Maternal and Child Health Indicators in 11 Middle East and North African Countries, DHS Comparative Report No.46; 155-165; Rockville, Maryland, USA: ICF.

Atun, R., Aydın, S., Chakraborty, S., Sümer, S., Aran, M., Gürol, I., Nazlıoğlu, S., Özgülcü, Ş., Aydoğan, Ü., Ayar, B. and Dilmen, U., 2013. Universal health coverage in Turkey: enhancement of equity. The Lancet, 382(9886), pp.65-99.

Badan Pusat Statistik (2012). Demographic and Health Survey in Indonesia. Jakarta, Indonesia, BPS, BKKBN, Kemenkes, and ICF International.

Bangladesh Health Watch. (2012). Moving Towards Universal Health Coverage. Bangladesh Health Watch Report 2011. Dhaka: Bangladesh Health Watch, James P Grant School of Public Health, BRAC University.

Ben Romdhane, H., F. Tlili, A. Skhiri, S. Zaman, and P. Phillimore (2015) Health System Challenges of

Ncds in Tunisia, Int J Public Health 60 (Suppl 1): S39–46.

Bigdeli, M., & Annear, P. L. (2009). Barriers to access and the purchasing function of health equity funds: lessons from Cambodia. Bulletin of the World Health Organization, 87(7), 560–564. https://doi.org/10.2471/BLT.08.053058

Bloom, G., Berdou, E., Standing, H., Guo, Z., & Labrique, A. (2017). ICTs and the challenge of health system transition in low and middle-income countries. Globalization and Health, 13(1), 56. https://doi.org/10.1186/s12992-017-0276-y

Bloom, G., Henson, S., & Peters, D. H. (2014). Innovation in regulation of rapidly changing health markets. Globalization and Health, 10(1), 53. https://doi.org/10.1186/1744-8603-10-53

Bloom, G., Standing, H., & Lloyd, R. (2008). Markets, information asymmetry and health care: Towards new social contracts. Social Science & Medicine, 66(10), 2076–2087. https://doi.org/10.1016/j.socscimed.2008.01.034

BPS, B., Kemenkes, and ICF International, (2012). Indoensian Demography and Health Survey 2012. Jakarta, Indonesia, BPS, BKKBN, Kemenkes, and ICF International.

Braithwaite, J., Mannion, R., Matsuyama, Y., Shekelle, P., Whittaker, S., Al-Adawi, S., … Hughes, C. (2017). Accomplishing reform: successful case studies drawn from the health systems of 60 countries. International Journal for Quality in Health Care, 29(6), 880–886. https://doi.org/10.1093/intqhc/mzx122

Caruso, B. A., Sevilimedu, V., Fung, I. C.-H., Patkar, A., & Baker, K. K. (2015). Gender disparities in water, sanitation, and global health. The Lancet, 386(9994), 650–651. https://doi.org/10.1016/S0140-6736(15)61497-0

Chahed, Arfa (2014) Full Case Study: Monitoring and evaluating progress towards Universal Health Coverage in Tunisia, Universal Health Coverage Collection

Chokri Arfa, Heba Elgazzar (2013) UNICO Studies Series 4 Consolidation and Transparency: Transforming Tunisia's Health Care for the Poor, The World Bank, Washington DC, January 2013

Clark, P. (2016). Can the State Foster Food Sovereignty? Insights from the Case of Ecuador. Journal of Agrarian Change, 16(2), 183–205. https://doi.org/10.1111/joac.12094

Culyer, A. ., & Wagstaff, A. (1993). Equity and equality in health and health care. Journal of Health Economics, 12(4), 431–457. https://doi.org/10.1016/0167-6296(93)90004-X

Culyer, A. J. (2001). Equity - some theory and its policy implications. Journal of Medical Ethics, 27(4), 275–283. https://doi.org/10.1136/JME.27.4.275

Ekawati, F. M., M. Claramita, K. Hort, J. Furler, S. Licqurish and J. Gunn (2017). "Patients' experience of using primary care services in the context of Indonesian universal health coverage reforms." Asia Pacific family medicine 16(1): 4.

ESC (2017). 9th National Report on the Implementation of the European Social Charter (Revised) submitted by THE GOVERNMENT OF THE REPUBLIC OF TURKEY on Thematic Group II "Health, social security and social protection" Articles 3, 11, 12, 13, 14, 23, and 30. European Social Charter, April 2017. Online at https://rm.coe.int/168070b782, last accessed 16 February 2019.

Evans, D. B., Hsu, J., & Boerma, T. (2013). Universal health coverage and universal access Editorials. Bull World Health Organ. https://doi.org/10.2471/BLT.13.125450

GIZ (2015). Out of pocket payments in the National Health Insurance of Indonesia. A review. Jakarta, Ministry for National Development Planning and GIZ.

Ghosh, S. (2014). Equity in the utilzation of healthcare services in India: evidence from National Sample Survey. International Journal of Health Policy and Management, 2(1), 29–38.

GHW (2015) The right to health in Tunisia, Global Health Watch 4, Section B:6; p.127-133

Giovanis, E. and Ozdamar, O. (2017). The effects of policy reforms on out-of-pocket health expenditures: Evidence from Turkey. Policy Perspective No. 22, Economic Research Forum, October 2017.

Gomez Quiñonez, S., Walthouwer, M. J. L., Schulz, D. N., & de Vries, H. (2016). mHealth or eHealth?

Efficacy, Use, and Appreciation of a Web-Based Computer-Tailored Physical Activity Intervention for Dutch Adults: A Randomized Controlled Trial. Journal of Medical Internet Research, 18(11), e278. https://doi.org/10.2196/jmir.6171

Gottret, P., & Schieber, G. (2006). Health Financing Revisited. The World Bank. https://doi.org/10.1596/978-0-8213-6585-4

GoU. (2010). The Second National Health Policy (Government policy). Retrieved from https://www.unicef.org/uganda/The_Second_National_Health_Policy.pdf

GoU. (2016). Health Financing Strategy 2015/16- 2024/25. Kampala, Uganda. Retrieved from https://health.go.ug/sites/default/files/Health%20Financing%20Strategy%202016.pdf

Gutierrez, M. A., Moreno, R. A., & Rebelo, M. S. (2017). Information and Communication Technologies and Global Health Challenges. In H. de F. Marin, E. Massad, M. A. Gutierrez, R. J. Rodrigues, & D. Sigulem (Eds.), Global Health Informatics: How Information Technology Can Change our Lives in a Globalized World (pp. 50–93). Elsevier. https://doi.org/10.1016/B978-0-12-804591-6.00004-5

HEU. (2012). Expanding Social Protection for Health: Towards Universal Coverage: Health Care Financing Strategy 2012-2032. Dhaka. Retrieved from http://socialprotection.gov.bd/wp-content/uploads/2017/03/HCF-Strategy-Bd-2012-2032.pdf

Idris, H., E. Satriawan and L. Trisnantoro (2017). "The Impact of Health Insurance on Healthcare Utilization Among Those Working in the Informal Sector: Evidence from the National Socioeconomic Survey (Susenas) in Indonesia." Advanced Science Letters 23(5): 4892-4895.

IFC (2011) Bringing high quality health to Tunisia, IFC [Online]; Available from: https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/features_health_tunisia_072511

Indonesia, R. o. (2012). Peta Jalan Menunju Jaminan Kesehatan Nasional 2012-2019. Jakarta, Republic of Indonesia.

ISER, Uganda. (2015). Economic and Social Rights Advocacy (ESRA) Brief (Brief No. Issue 4). Kampala, Uganda.

Iqbal, M., Hanifi, S. M. A., & Wahed, T. (2009). Characteristics of Village Doctors. In A. Bhuiya (Ed.), Health for the Rural Masses: Insights from Chakaria. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B).

Jacobs, B., Ir, P., Bigdeli, M., Annear, P. L., & Van Damme, W. (2012). Addressing access barriers to health services: an analytical framework for selecting appropriate interventions in low-income Asian countries. Health Policy and Planning, 27(4), 288–300. https://doi.org/10.1093/heapol/czr038

Jeffrey, B., Russell, M., Yukihiro, M., Paul, S., Stuart, W., & Samir, A.-A. (2017). Health Systems Improvement Across the Globe: Success Stories from 60 Countries. (B. Jeffrey, M. Russell, M. Yukihiro, S. Paul, W. Stuart, & A.-A. Samir, Eds.). 6000 Broken Sound Parkway NW, Suite 300 Boca Raton, FL 33487-2742: CRC Press. https://doi.org/10.1201/9781315586359

Kampmeijer, R., Pavlova, M., Tambor, M., Golinowska, S., & Groot, W. (2016). The use of e-health and m-health tools in health promotion and primary prevention among older adults: a systematic literature review. BMC Health Services Research, 16 Suppl 5(Suppl 5), 290. https://doi.org/10.1186/s12913-016-1522-3

Khatun, F., Hanifi, S. M. A., Iqbal, M., Rasheed, S., Rahman, M. S., Ahmed, T., … Bhuiya, A. (2014). Prospects of mHealth Services in Bangladesh: Recent Evidence from Chakaria. PLoS ONE, 9(11), e111413. Retrieved from http://dx.doi.org/10.1371%2Fjournal.pone.0111413

Kiwanuka, S. N., Ekirapa, E. K., Peterson, S., Okui, O., Rahman, M. H., Peters, D., & Pariyo, G. W. (2008).

Access to and utilisation of health services for the poor in Uganda: a systematic review of available evidence. Transactions of the Royal Society of Tropical Medicine and Hygiene, 102(11), 1067–1074. https://doi.org/10.1016/j.trstmh.2008.04.023

Lewis, T., Synowiec, C., Lagomarsinoa, G., & Schweitzera, J. (2012). E-Health in Low- and Middle-Income Countries: Findings from the Center for Health Market Innovations. Bulletin of the World Health Organization, 90(5), 332–340. https://doi.org/10.2471/BLT.11.099820

Mabughi, N., & Selim, T. (2006). Poverty as social deprivation: a survey. Review of Social Economy, 64(2), 181–204. https://doi.org/10.1080/00346760600721122

Maternal Mortality Estimation Inter-Agency Group (2016) Maternal Mortality in 1990–2015, WHO,

UNICEF, UNFPA, World Bank Group, United Nations Population Division

MICS (2011-12) Tunisia Multiple Indicator Cluster Survey 2011-2012, Ministry of Regional Development and Planning (Tunisia), National Institute of Statistics (Tunisia), United Nations Children's Fund (UNICEF). New York, United States: United Nations Children's Fund (UNICEF), 2014.

MoH, Turkey. (2018). Health Statisics Yearbook 2017. Republic of Turkey, Ministry of Health, Ankara 2018.

MoH, Uganda. (2015, September). Health Sector Development Plan 2015/16-2019/20. MoH. Retrieved from file:///E:/IDS/Others/Health%20Sector%20Development%20Plan%202015-16_2019-20.pdf

MoH, Uganda. (2014). Uganda Hospital and Health Centre IV Census Survey. Kampala, Uganda: Ministry of Health. Retrieved from https://www.who.int/healthinfo/systems/SARA_H_UGA_Results_2014.pdf

MoH, Uganda. (2013). Uganda National eHealth Strategic Plan 2012/2013- 2014/2015 (Government policy). Kampala, Uganda. Retrieved from http://www.ubts.go.ug/assets/publications/Uganda%20National%20eHealth%20Strategic%20Plan_April%202013.pdf

MoH, Uganda. (2016a). Health Financing Strategy 2015/16-2024/25. Kampala: Ministry of Health. Retrieved from https://www.google.com/search?source=hp&ei=uw4eXLucOY7c5gLG27_QAg&q=pdf+Health+financing+strategy&btnK=Google+Search&oq=pdf+Health+financing+strategy&gs_l=psy-ab.3...6620.16614..17898...1.0..1.881.17475.5-22j6....2..0....1..gws-wiz.....6..0j35i39j0i131j0i131i67j0i67j0i10i67j0i22i30j0i8i13i10i30j0i8i13i30j33i22i29i30.TnJWXgNGOao

MoH, Uganda. (2016b). Strategy for improving Health Service Delivery 2016-2021. Kampala, Uganda: MoH, Kampala. Retrieved from http://health.go.ug/sites/default/files/MoH%20Booklet%20with%20covers-hakuna%20%20mchezo-2.pdf

MoH, Uganda. (2016c). Uganda National eHealth Policy November 2016 (Policy Document No. Policy Document). Kampala, Uganda: Ministry of Health Kampala. Retrieved from http://health.go.ug/sites/default/files/National%20eHealth%20Policy%202016_1.pdf

MoH, Uganda. (n.d.). National Policy on Public Private Partnership in Health (Government policy). Kampala, Uganda. Retrieved from https://www.ucmb.co.ug/files/UCMBdocs/Reports/ARTICLES/National%20Policy%20on%20Public%20Private%20Partnerships%20in%20Health%20-%20%20Final%20version.pdf

Molla, A. A., & Chi, C. (2017). Who pays for healthcare in Bangladesh? An analysis of progressivity in health systems financing. International Journal for Equity in Health, 16(1), 167.

https://doi.org/10.1186/s12939-017-0654-3

National Planning Authority. (2015, June). Second National Development Plan 2015/16 - 2019/20. NPA. Retrieved from http://npa.ug/wp-content/uploads/NDPII-Final.pdf

OECD (2014), OECD Reviews of Health Care Quality: Turkey 2014: Raising Standards, OECD Publishing. http://dx.doi.org/10.1787/9789264202054-en.

OECD (2018), OECD Economic Surveys: Tunisia

OIC (2013) Implementation Plan for the OIC Strategic Health Programme of Action 2014-2023 (OIC-SHPA)

Oliver, A., & Mossialos, E. (2004). Equity of access to health care: outlining the foundations for action. Journal of Epidemiology and Community Health, 58(8), 655–658. https://doi.org/10.1136/jech.2003.017731

Pariyo, G. W., Ekirapa-Kiracho, E., Okui, O., Rahman, M. H., Peterson, S., Bishai, D. M., … Peters, D. H. (2009). Changes in utilization of health services among poor and rural residents in Uganda: are reforms benefitting the poor? International Journal for Equity in Health, 8(1), 39.

Peters, D. H., Garg, A., Bloom, G., Walker, D. G., Brieger, W. R., & Hafizur Rahman, M. (2008). Poverty and Access to Health Care in Developing Countries. Annals of the New York Academy of Sciences, 1136(1), 161–171. https://doi.org/10.1196/annals.1425.011

Pisani, E., M. Olivier Kok and K. Nugroho (2017). "Indonesia's road to universal health coverage: a political journey." Health policy and planning 32(2): 267-276.

Saini, V., Garcia-Armesto, S., Klemperer, D., Paris, V., Elshaug, A. G., Brownlee, S., … Fisher, E. S. (2017). Drivers of poor medical care. The Lancet, 390(10090), 178–190. https://doi.org/10.1016/S0140-6736(16)30947-3

SESRIC (2013) OIC Strategic Health Programme of Action 2013-2022 (OIC-SHPA)

SESRIC (2017) OIC Health Report 2017

Sharma, S. e. a. (2018). "Lessons from the Far East: Indonesia's Progress toward universal health coverage."

Shrime, M. G., Dare, A. J., Alkire, B. C., O'Neill, K., & Meara, J. G. (2015). Catastrophic expenditure to pay for surgery worldwide: a modelling study. The Lancet Global Health, 3, S38–S44. https://doi.org/10.1016/S2214-109X(15)70085-9

Song, Y., & Bian, Y. (2014). Gender differences in the use of health care in China: cross-sectional analysis. International Journal for Equity in Health, 13, 8. https://doi.org/10.1186/1475-9276-13-8

Ssengooba, F. (2004). Uganda's minimum health care package: rationing within the minimum?

Sutton, M. (2002). Vertical and horizontal aspects of socio-economic inequity in general practitioner contacts in Scotland. Health Economics, 11(6), 537–549. https://doi.org/10.1002/hec.752

Tatar, M., Mollahaliloglu, S., Sahin, B., Aydın, S., Maresso, A., & Hernández-Quevedo, C. (2011). Health systems in transition. Health, 13(6).

UBOS. (2016). Uganda Bureau of Statistics (UBOS). Retrieved from https://www.ubos.org/onlinefiles/uploads/ubos/statistical_abstracts/2016%20Statistical%20Abstract.pdf

United Nations. (n.d.). Universal Declaration of Human Rights. Retrieved January 10, 2019, from http://www.un.org/en/universal-declaration-human-rights/

Wagstaff, A. (2002). Poverty and health sector inequalities. Bulletin of the World Health Organization,

80, 97–105. https://doi.org/10.1590/S0042-96862002000200004

WHO (2013), Official Development Assistance (ODA) for Health in Tunisia (2003-2013), WHO

WHO. (2014). WHO country cooperation strategy Bangladesh 2014-2017. India: World Health Organization, Country Office for Bangladesh. Retrieved from http://www.searo.who.int/bangladesh/publications/ccs_ban_2014-2017.pdf?ua=1

WHO. (2015). Accessibility. Retrieved October 24, 2018, from http://www.who.int/gender-equity-rights/understanding/accessibility-definition/en/

WHO (2015a). "Global Database on Child Growth and Malnutrition: Cut-off points."

WHO (2015b), Health profile: Tunisia, Cairo: WHO Regional Office for the Eastern Mediterranean; 2017. Licence: CC BY-NC-SA 3.0 IGO.

WHO (2016). Global Health Expenditure database. Genevea, World Health Organisation.

WHO. (2017). Human rights and health. Retrieved February 1, 2019, from https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health

WHO (2017). The Republic of Indonesia health system review. World Health Organization, World Health Organisation.

WHO. (2017). "World Health Statistics 2017: Monitoring health for the SDGs ", from https://www.who.int/gho/publications/world_health_statistics/2017/en/.

WHO. (2017a). 10 facts on health inequities and their causes. Retrieved January 23, 2019, from https://www.who.int/features/factfiles/health_inequities/en/

WHO. (2017b). Iran (Islamic Republic of): country profiles. WHO. Retrieved from https://www.who.int/gho/countries/irn/country_profiles/en/

WHO. (2017c). Lebanon: country profiles. Retrieved March 3, 2019, from https://www.who.int/gho/countries/lbn/country_profiles/en/

WHO. (2017d). Malaysia: country profiles. Retrieved March 3, 2019, from https://www.who.int/gho/countries/mys/country_profiles/en/

WHO. (2017e). World Health Statistics 2016: Monitoring health for the SDGs. WHO. Retrieved from https://www.who.int/gho/publications/world_health_statistics/2016/en/

WHO (2018). 2018 Health SDG Profile: Indonesia. Genevea, World Health Organisation.

WHO. (2019). Poverty and health. Retrieved February 1, 2019, from https://www.who.int/hdp/poverty/en/

WHO. (2019). South Africa - statistics summary (2002 - present). Retrieved March 3, 2019, from http://apps.who.int/gho/data/node.country.country-ZAF

Wiseman, V., H. Thabrany, A. Asante, M. Haemmerli, S. Kosen, L. Gilson, A. Mills, A. Hayen, V. Tangcharoensathien and W. Patcharanarumol (2018). "An evaluation of health systems equity in Indonesia: study protocol." International journal for equity in health **17**(1): 138.

World Bank (2013) *Fairness and Accountability: Engaging in Health Systems in the Middle East and North Africa - The World Bank Health Nutrition and Population Sector Strategy for MENA (2013-2018)*

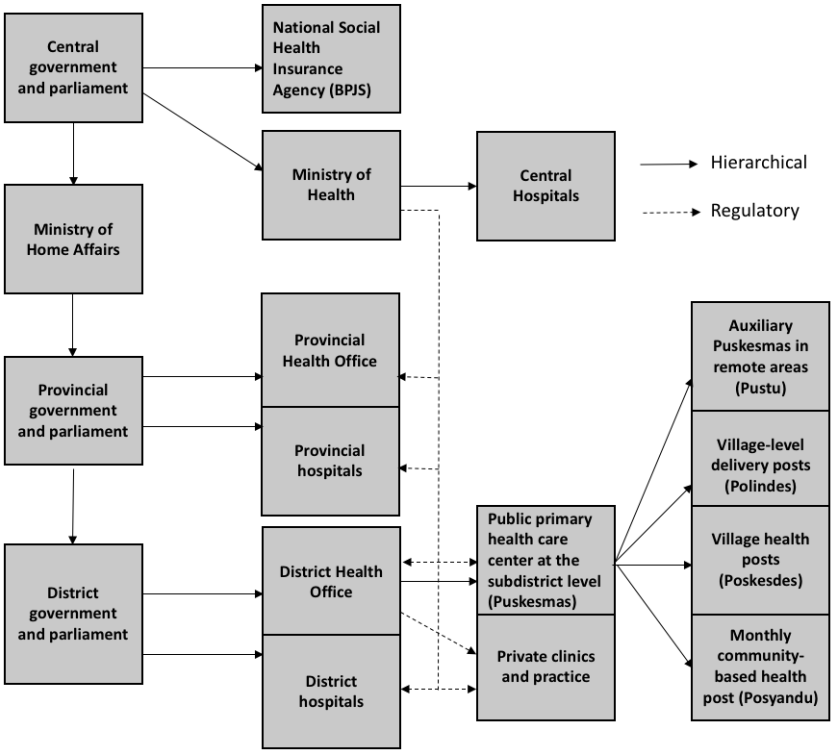
World Bank (2014). Universal Health Coverage for Inclusive and Sustainable Development: Country summary report Indonesia. Jakarta, Indonesia, Health, Nutrition and Population Global Practice World Bank Group.

World Bank (2015). International Bank for Reconstruction and Development Project Appraisal Document on a Proposed Loan for a Health System Strengthening and Support (Hsss) Project. World Bank Report No: PAD1294, August 28, 2015.

World Bank (2019) *World Development Indicators: Tunisia* [Online], Available from https://data.worldbank.org/country/tunisia

Annexes

Figure A1: The organisation of Indonesia's health system



Source: Author's adaptation from Asia Pacific Observatory and WHO (2015) cited in World Bank, (2016)

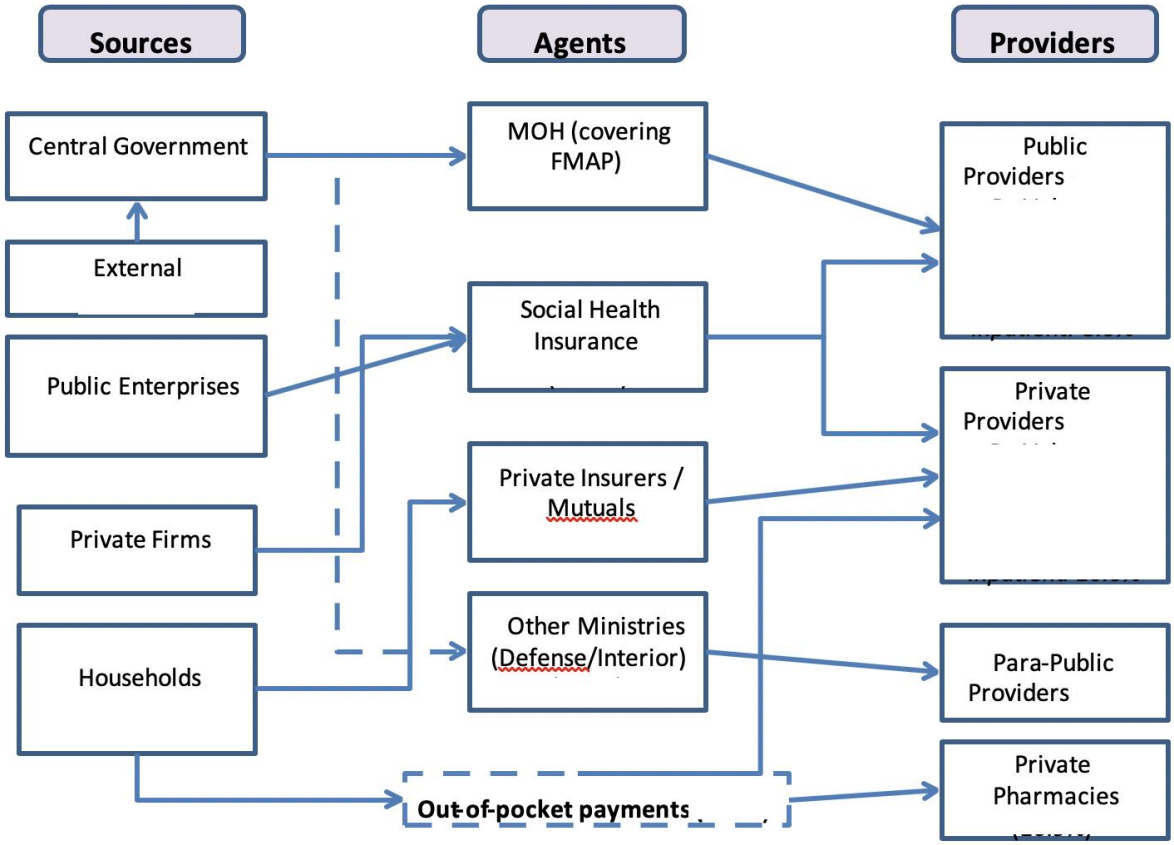
Table A2: The organizational structure and functions of government health services in Uganda

Level (Location	Total (public facilities)	Total (private - not for - profit facilities)	Total (private- for profit facilities)	Target population (public facilities)	Function (government facilities)
Village Health Team in each village	-	-	-	1,000	Community based preventive and promotive services
Lower level (level II) primary care facility (Parish level).	1,662	496	1,391	5,000	Provides preventive, promotive and outpatient curative services, and emergency maternal deliveries.
Mid – level (level III) primary care facility (Sub-county level)	868	251	69	20,000	Provides all the above services in addition, it provides inpatient, maternity and laboratory services.
Higher level (level IV) primary care facility (County level)	166	14	8	100,000	Provides all the above services in addition it provides blood transfusion, laboratory services. Supervises levels II and III.
General hospital (District level)	50	62	21	500,000	District level referral facility. Provides all the above services but more comprehensive than PCF IV. Services provided include; Medicine, Surgery, Obstetrics, Gynaecology, Paediatrics, Family Medicine, X-ray (Plane and mobile).
The district health services (District)	-	-	-	500,000	Stewardship of district health services. Supervises all the above facilities.
Regional Hospitals	12	-	-	2 million	Provides all services provided by a district level general hospital. In addition, it provides specialized services (Medicine, Surgery, Obstetrics, Paediatrics, ENT, Ophthalmology, Orthopaedics, Anaesthesia, Pathology, Psychiatry, Dentistry, and community medicine. Regional referrals

					have specialists, train nurses, have a blood bank, do basic and applied research and provide engineering services to facilities in its health zone.
National Hospitals	3	-	-	10 million	Provides all services by regional hospitals but more comprehensive and advanced than regional hospitals. For instance national hospitals offer advanced diagnostic services such as MRI and CT Scans. They have super specialists and train Doctors, pharmacists, Nurses, Dental Surgeons and graduate nurses and carry out advanced research.
Ministry of Health	-	-	-	Entire Country	Stewardship: policy formulation, setting standards, quality assurance, resource mobilization, capacity building, research coordination, monitoring & evaluation, nationally coordinated services such as epidemic control.

Source: Ministry of Health-Uganda (2014)

Figure A2: Main Actors and Fund Flows in the Tunisian Health System



Source: World Bank (2013)