Trends in Health Financing and the Private Health Sector in the Middle East and North Africa

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Recommended Citation: Sustaining Health Outcomes through the Private Sector Project and Health Finance and Governance Project. 2018. Trends in Health Financing and the Private Health Sector in the Middle East and North Africa. Rockville, MD: Abt Associates Inc.

Cooperative Agreements: AID-OAA-A-15-00067 (SHOPS Plus) and AID-OAA-A-12-00080 (HFG)

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About HFG: USAID's Health Finance and Governance (HFG) project will improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team will work with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. As a result, this five-year, $209 million global project will increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG will support countries as they navigate the economic transitions needed to achieve universal health care.

About SHOPS Plus: Sustaining Health Outcomes through the Private Sector (SHOPS) Plus is USAID's flagship initiative in private sector health. The project seeks to harness the full potential of the private sector and catalyze public-private engagement to improve health outcomes in family planning, HIV/AIDS, maternal and child health, and other health areas. SHOPS Plus supports the achievement of US government priorities, including ending preventable child and maternal deaths, an AIDS-free generation, and FP2020. The project improves the equity and quality of the total health system, accelerating progress toward universal health coverage.

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Acronyms

AMO	Assurance Maladie Obligatoire
ANAM	Agence Nationale d'Assurance Maladie
AOR	Agreement Officer Representative
ARI	Acute Respiratory Infection
BBC	British Broadcasting Corporation
CASNOS	Caisse Nationale des Assurances Sociales des Non Salariés
CIF	Civil Insurance Fund [Jordan]
CIP	Civil Insurance Program [Jordan]
CNAM	Caisse Nationale de l'Assurance Maladie
CNAS	Caisse Nationale des Assurances Sociales des Travailleurs Salariés
CNOPS	Caisse Nationale des Organismes de Prévoyance Sociale
CNSS	Caisse Nationale de Sécurité Sociale
Dh	Dirham
DHS	Demographic and Health Survey
EMRO	Eastern Mediterranean Regional Office
FMAP	Free Medical Assistance Program
FP	Family Planning
GDP	Gross Domestic Product
GGE	General Government Expenditure
GGHE	General Government Health Expenditure
GHI	Government Health Insurance
GNI	Gross National Income
GPCHE	General People's Committee for Health and Environment
HCAC	Health Care Accreditation Council
HEIS	Household Expenditure and Income Survey
HFG	Health Finance and Governance
HIO	Health Insurance Organization
HRH	Human Resources for Health
HSMP	Health Sector Modernization Program

ICRC	International Committee of the Red Cross
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Person
IMC	International Medical Corps
IMF	International Monetary Fund
IRC	International Rescue Committee
ISIL	Islamic State of Iraq and the Levant
ISQUA	International Society for Quality in Health Care
JAFPP	Jordanian Association for Family Planning and Protection
JUH	Jordanian University Hospital
KAUH	King Abdullah University Hospital
KHCC	King Hussein Cancer Center
MCH	Maternal and Child Health
mCPR	Modern Contraceptive Prevalence Rate
MENA	Middle East and North Africa
MICS	Multiple Indicator Cluster Survey
MOF	Ministry of Finance
MOH	Ministry of Health
MoHE	Ministry of Higher Education
MoHP	Ministry of Health and Population
MoPH	Ministry of Public Health
MoPHP	Ministry of Public Health and Population
MSF	Médecins Sans Frontières
MSPHR	Ministère de la Santé, de la Population et de la Réforme Hospitalière (Ministry of Health, Population, and Hospital Reform)
NCD	Non-communicable Diseases
NGO	Nongovernmental Organization
NHA	National Health Accounts
NSSF	National Social Security Fund
OOP	Out-of-Pocket
PAPFAM	Pan Arab Program for Family Health
PHCC	Primary Health Care Center

PPP	Public-Private Partnership
PRCS	Palestinian Red Crescent Society
PvtHE	Private Health Expenditures
RAMED	Régime d'Assistance Médicale
RMS	Royal Medical Services
SHOPS Plus	Sustaining Health Outcomes through the Private Sector Plus
SNS	Service National Sanitaire
STEPS	STEPwise Approach to Disease Surveillance
THE	Total Health Expenditures
UHC	Universal Health Coverage
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNRWA	United Nations Relief and Works Agency
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

Executive Summary

In the past several decades, countries in the Middle East and North Africa have made significant improvements in developing their health systems and improving the health status of their populations. However, the region continues to face substantial and diverse political, macroeconomic,social, and health challenges. In 2010–2011, the mass uprisings over high unemployment, poverty, and political repression known as the Arab Spring began in several countries. These events led to a wave of social and political upheaval that had enduring repercussions throughout the region. Iraq, Libya, Syria, and Yemen remain embroiled in prolonged violent conflicts. Other countries are more stable but undergoing significant changes and reforms.

The Middle East and North Africa region is experiencing an epidemiological transition from a high burden of communicable disease to noncommunicable disease, although the timing and pace of this transition varies by country.

Though health data from the region are scarce and outdated, available information on key health indicators shows significant improvements in recent decades. Life expectancy is rising, maternal and infant mortality are declining, and health coverage is increasing to varying degrees in all countries. The Middle East and North Africa region is experiencing an epidemiological transition from a high burden of communicable disease to an increasing burden of noncommunicable disease, although the timing and pace of this transition varies by country. Noncommunicable diseases, mainly cardiovascular diseases, hypertension, and cancers, account for 60 percent of the disease burden and over half of premature deaths across the region (WHO 2016a). Moreover, ongoing wars in Iraq, Libya, Syria, and Yemen have created new health challenges that threaten to reverse the health advances of recent decades. In these countries, the burden of noncommunicable diseases is compounded by limited access to health services, destruction of health infrastructure, conflict-related injuries, and outbreaks of infectious diseases. The aforementioned conflicts—particularly the civil war in Syria—have created regional refugee crises that are straining the health systems of host countries, mainly Jordan and Lebanon.

The response to increasingly complex health and security challenges in the region requires an emphasis on well-functioning national health systems that provide equitable, affordable, and quality health services to all citizens, refugees, and displaced people. Developing effective health financing mechanisms for citizens and displaced people of all income levels and harnessing the private health sector's strengths and potential contributions to complement overstretched public resources are key strategies to strengthen health systems and deliver an impactful response. Effective health systems are essential not only to improving health outcomes but also to fostering regional stability and security.

To understand current health financing policies and mechanisms, as well as the current role of the private sector in the health systems of the Middle East, the USAID Middle East Regional Bureau commissioned the Sustaining Health Outcomes through the Private Sector (SHOPS) Plus and Health Finance and Governance (HFG) projects to conduct a review of health financing and the private health sector in the 11 low- and middle-income countries in the region, focusing on the years 2008 to 2017.[1] The countries included in this analysis are Algeria, Egypt,

[1] Phoebe Sloane, Miloud Kaddar, Emma Golub, Daniela Gutierrez, Intissar Sarker. 2018. Trends in Health Financing and the Private Health Sector in the Middle East Region. Rockville, MD: Abt Associates Inc.

Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, the West Bank and Gaza, and Yemen. This review aims to highlight regional trends and identify gaps in information.

Trends in health financing and the private health sector

The following trends and observations describe the general health financing and private sector landscape across the 11 countries.

1. **All 11 countries face the challenge of poor health data for decision making.** Complete, accurate, and timely data are needed as health system dynamics become increasingly more complex. Currently, data on access to and use of public and private health services are limited. Conflict exacerbates this problem, as reliable data collection is not feasible in some areas due to security concerns.
    a. **For health financing in general, there is a need for good data** about household health expenditures and the cost of public and private health services and programs.
    b. **Limited data are available about the size, scope, use, and quality of the private health sector.** While some countries have registries and databases of private providers, they are often incomplete and out of date. There are few current population-based surveys that ask about sources of health care.
2. **Total and per capita health expenditures are increasing.** Health expenditure has increased in all non-fragile countries in per capita terms and as a proportion of public expenditure or of a country's economy and income.
3. **Prepayment schemes have expanded slowly.** Prepayment of health expenditure has increased in some countries as tax-based and health insurance schemes have expanded, but large segments of the population in the region are still uncovered.
4. **Uncovered household expenditure on health care remains high in many countries.** Middle Eastern countries have some of the lowest levels of public expenditure on health, which translates into high levels of out-of-pocket household spending. In recent years, this situation has worsened in some countries due to drastic declines in public and export revenues, and to governance issues, instability, and conflict.
5. **Passive purchasing of health products and services is dominant.** Very limited use is made of active purchasing provider payment methods to promote productivity, quality, and equity. The result is substantial inefficiency, waste, corruption, and popular dissatisfaction with health services.
6. **Many countries have adopted new health laws and strategies that address health financing.** Countries such as Algeria, Egypt, Jordan, Morocco, and Tunisia are grappling with health system challenges—the need to increase health financing, large uninsured populations, weak planning and monitoring mechanisms, an unregulated private health sector, and an inconsistent quality of health care services.
7. **External support has never been significant.** Assistance from donors and international agencies has been limited to countries such as Egypt, Jordan, Morocco, and Yemen, mainly in the form of budget support and earmarked funding for specific projects. While external funding has increased and diversified since 2011 for countries affected by conflict, it does not cover a humanitarian response to pressing basic social and health needs.

8. **Funding health services for refugees is a major challenge.** This is especially true in countries with large refugee populations, such as Jordan and Lebanon. In countries with smaller refugee populations, such as Algeria, Egypt, and Iraq, refugees living outside of camps are often covered under public schemes similar to those for citizens.
9. **Governance of the private sector is limited and uneven.** While many countries include the private sector at least nominally in national health strategies and policies, regulation and monitoring of the private sector is weak. Some countries, such as Egypt, Jordan, and Tunisia, have public or independent entities for accreditation of public and private health facilities, but others, such as Algeria, have no formally recognized accreditation body. Reporting of the private sector into national health information systems is limited in most countries, and may include only notifiable diseases. In most countries, the private sector is fragmented or not well-coordinated to represent and advocate for itself. Professional associations and unions that include both the public and private sector are common, but there are few private sector-specific associations.
10. **Available data show that the private sector is an important and growing source of care for both the wealthy and the poor throughout the Middle East and North Africa, even in countries with strong public health sectors.** While detailed data on health service use and satisfaction are scarce, many reports and key informants suggest that use of private services is growing. The most recently available Demographic and Health Survey, Multiple Indicator Cluster Survey, and Pan Arab Program for Family Health survey data show that the sector is a major source of care for maternal and child health and family planning for both the wealthy and poor. For example, for acute respiratory infection (ARI) symptoms, over half of children in 8 of the 11 countries were taken to a private sector source. Significant portions of women seek their modern family planning methods in the private sector, ranging from 43 percent in Egypt to 90 percent in Iraq.* Anecdotal evidence suggests that growth in use of the private sector is fueled by dissatisfaction with availability of public services and patient perceptions that private sector services are higher quality.
11. **The growing role of the private sector in service delivery increases health expenditure.** Rapid growth in use of the private health sector results in high out-of-pocket expenditures because the cost of private sector services is generally high and few patients have health insurance. Even if they do, public and private insurance schemes usually reimburse only part of the fees and, for some services and products, none at all. Drugs purchased at private pharmacies also drive up out-of-pocket spending.
12. **In conflict and post-conflict settings, the private sector develops on an ad hoc basis in response to changing health needs, locations of violence or destruction, and the weakening of health systems, among other conflict-related factors.** The private sector is a key source of care where government servicesare unavailable or have broken down, which occurred in large parts of Iraq, Libya, Syria and Yemen. It often develops in a fragmented and unregulated way, including United Nations organizations, international and local NGOs, and for-profit providers. The private for-profit sector is often weakened, as running a business is challenging and can be dangerous under such circumstances.
13. **Available data show that the private sector is a key source of health care for refugees living both in and outside of camps in countries such as Jordan and Lebanon.** United Nations (UN) agencies and NGOs often provide primary and secondary services to refugees living inside and outside of camps. Refugees living outside of camps

may also access the private for-profit sector, depending on their ability to pay and the availability and quality of public sector services.

This report begins with discussion of the region's health financing landscape, followed by an overview of the private health sector landscape. It concludes with recommendations for USAID investment.

Regional Overview

Introduction

In the past several decades, countries in the Middle East and North Africa have made significant improvements in developing their health systems and improving the health status of their populations. However, the region continues to face substantial and diverse political, macroeconomic, social, and health challenges.

To understand health financing policies and mechanisms and the role of the private sector in the health systems of Middle Eastern countries, the USAID Middle East Regional Bureau commissioned the Sustaining Health Outcomes through the Private Sector (SHOPS) Plus and Health Finance and Governance (HFG) projects to conduct a review of health financing and the private sector in the 11 low- and middle-income countries in the region, focusing on the years 2008 to 2017.[2] The countries included in the analysis are Algeria, Egypt, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, the West Bank and Gaza, and Yemen.

A wave of social and political upheaval has had enduring repercussions throughout the region. Iraq, Libya, Syria, and Yemen remain embroiled in prolonged violent conflicts. Egypt, Lebanon, and the West Bank and Gaza continue to experience political instability. Other countries such as Algeria, Jordan, Morocco, and Tunisia are more stable but undergoing significant changes and reforms. The economic situation varies greatly across the region, as it includes low-, middle-, and high-income countries, with a variety of economic drivers, including oil, tourism, and manufacturing. Across all 11 countries in this review, the population is largely young and urban, with over half under the age of 25 and living in cities.

Though health data from the region are scarce and outdated, the information available on key health indicators shows significant improvement in recent decades. Life expectancy is rising, maternal and infant mortality are declining, and health coverage is increasing in varying degrees in all countries. The region is experiencing an epidemiological transition with the decline of communicable diseases and the rise of noncommunicable diseases (NCDs) and injuries, though the timing and pace of this transition also varies by country. NCDs, mainly cardiovascular diseases, hypertension, and cancers, account for 60 percent of the disease burden and over half of premature deaths across the region (WHO 2016a).

> The Middle East and North Africa region faces challenges in training and retaining health personnel, particularly in conflict zones and rural areas.

In recent decades, health infrastructure, technology, and human resources have improved in both the public and private health sectors in most countries. Countries including Egypt, Jordan, Lebanon, and Tunisia have become regional centers for medical tourism due to the perceived high quality of some services offered in their private sectors. However, the Middle East and North Africa region faces a variety of health challenges. Curative approaches, particularly for the management of NCDs, are more common than preventive approaches, which contributes to higher costs. Access to health services varies greatly across and within countries. Health services and infrastructure are concentrated in urban areas in most countries, mirroring the overall population distribution. Health coverage ranges from less than 10 percent in Yemen to

[2] Phoebe Sloane, Miloud Kaddar, Emma Golub, Daniela Gutierrez, Intissar Sarker. 2018. Trends in Health Financing and the Private Health Sector in the Middle East Region. Bethesda, MD: Abt Associates Inc.

over 80 percent in Algeria, Jordan, and Lebanon. Coverage of care for NCDs varies. In Algeria and Egypt, for instance, chronic NCD care is covered under public insurance schemes, but those without coverage have few financing options aside from out-of-pocket (OOP) payments. The region also faces challenges in training and retaining health personnel, particularly in conflict zones and in rural areas.

Ongoing conflict in Iraq, Libya, Syria, and Yemen has created new health challenges that threaten to reverse the health advances of recent decades. In these countries, the burden of NCDs is compounded by limited access to health services, destruction of health infrastructure, conflict-related injuries, and outbreaks of infectious diseases. Health infrastructure and medical personnel have been systematically targeted for attack in all four countries, exacerbating the region's overall challenges in retaining health care workers. In 2016, Syria and Yemen experienced the highest number of attacks on hospitals and health facilities in the world (Safeguarding Health in Conflict Coalition 2017). By 2013, 70 percent of the health workforce had left Syria (Baker and Brown 2015). Conflict and displacement are increasing demand for mental health services, which remain underdeveloped across the region (Okasha et al. 2012; Médecins Sans Frontières 2012). Yemen experienced perhaps the largest cholera outbreak in modern history, with over 800,000 suspected cases reported in 2017 (Lyons 2017). Syria has had outbreaks of polio and measles since the start of the war in 2011 (Gladstone 2017).

The aforementioned conflicts—particularly the civil war in Syria—have created regional refugee crises that are straining the health systems of host countries, mainly Jordan and Lebanon. Recent estimates place the number of Syrian refugees at 5.6 million, primarily living in Turkey (3.5 million), Jordan (1.6 million, or 9 percent of the population), and Lebanon (1 million) (UNHCR 2016, UNHCR 2018).

Patients with NCDs require access to chronic care, which is often inaccessible or absent in fragile states.

The majority live in urban host communities, not camps. In 2017, the UN-led Regional Refugee and Resilience Plan for the Syrian crisis requested $4.69 billion to support refugees and host communities (UNHCR 2016). According to the most recent Jordan Response Plan for the Syria Crisis, Jordan alone requires $224 million to address the health needs of Syrian refugees between 2017 and 2019 (Ministry of Planning and International Cooperation 2016). Refugees and other displaced populations face tremendous challenges accessing and paying for health services.There are limited data on NCDs in humanitarian crises (Ruby et al. 2015). Existing evidence shows that they are a major issue for refugees and residents of both fragile and stable states in the region. Patients with NCDs require access to chronic care, which is often inaccessible or absent in such states. Relief agencies generally provide immediate basic primary care but key stakeholders have severely limited guidance on how to address NCDs in fragile environments (Ruby et al. 2015). NCD prevalence is high among Syrian refugees. A recent survey of Syrian refugees in Lebanon found that over half of refugee households had at least one member with hypertension, cardiovascular disease, diabetes, chronic respiratory disease, or arthritis (Doocy et al. 2016a).

Improving the delivery of health services contributes to fostering stability throughout the region, not only in the four fragile states, but in all 11 countries included in this report. Strengthening economic development and social services including health is key to long-term stability. This is a pillar of counterinsurgency strategies that focus on winning "hearts and minds" (Berman et al. 2011; Marrogi et al. 2015; Long 2006). All sides in conflict may use these strategies. Violent insurgent groups and US-designated terrorist groups, such as the selfproclaimed Islamic State in Iraq and Syria (ISIS) and Hezbollah, and Hamas, court civilian support by providing health and other social services (Ho and Baskaran 2015; Cammett 2014; Malka 2012). At the same

time, studies have shown that US-funded provision of social services has contributed to shifting civilian support away from such groups and decreasing violence (Berman et al. 2011).

The response to increasingly complex health and security challenges in the region requires an emphasis on well-functioning national health systems that provide equitable, affordable, and quality health services to all citizens, refugees, and displaced people. Developing effective health financing mechanisms for citizens and displaced people of all income levels and harnessing the private health sector's strengths and potential contributions to complement overstretched public resources are key to strengthening health systems and improving health outcomes.

A refugee camp in Aleppo, Syria in 2013. Recent estimates place the number of registered Syrian refugees at 5.6 million, primarily living in Jordan, Lebanon, and Turkey.

Photo credit: IHH

This review aims to highlight regional trends and identify gaps in information. For health financing, specific objectives included identifying trends in sources, pooling, and purchasing mechanisms with a focus on whether health financing mechanisms protect poor and disadvantaged populations from foregoing care and from impoverishment. For the private health sector, specific objectives included identifying trends in the private sector policy environment, service provision, and collaboration between the public and private sectors, with a focus on family planning, maternal and child health (MCH), NCDs, and health issues experienced by refugees.

The desk review covered the most recent Demographic and Health Surveys, Multiple Indicator Cluster Surveys (MICS), Pan Arab Project for Family Health (PAPFAM) surveys, and National Health Accounts analyses, as well as reports from WHO, the World Bank, the International Monetary Fund, USAID, UN High Commissioner for Refugees (UNHCR), the International Rescue Committee, and other international development and humanitarian aid organizations. In addition, the assessment team conducted over 50 interviews with key informants working in both the public and private health sectors. Due to the overall dearth of information available, the scope and depth of information for each country varies.

Health Financing

Health financing can be understood in both a broad sense and a narrow one. In the broad sense, it concerns the resources mobilized and used to improve the health status of a population and to protect them from risk factors that may damage their mental, social, and physical development. In the narrow sense, it focuses on the financing of the components and functions of the health system that is working to meet the health needs of the population.

According to WHO, health financing is the "function of a health system concerned with the mobilization, accumulation, and allocation of money to cover the health needs of the people, individually and collectively, in the health system. The purpose of health financing is to make funding available, as well as to set the right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care" (WHO 2010).

Both aspects of health financing are important in the Middle East. In low-income countries or countries in conflict, the funding allocated to health services, with the exception of some preventive interventions such as immunization, has no significant impact on the population's health unless minimum conditions for good health (basic housing, education, transport, nutrition, water and sanitation) also exist. In middle-income countries, although the aforementioned conditions exist, health financing can be negatively affected by an economic downturn caused by an event like a sharp decline in oil prices or tourism revenues, or institutional instability resulting from conflicts in the region.

This review adopts the WHO definition of health financing and uses a common analytical framework for the 11 countries. The framework is built around the three health financing functions of revenue collection, pooling, and purchasing, and the three universal health coverage dimensions of population coverage, benefits package, and financial protection. To document those functions and dimensions, the assessment team used the WHO Global Health Expenditure Database in combination with National Health Accounts data, when available.

The following trends help describe the general health financing landscape in the 11 countries.

1. **Total and per capita health expenditures are increasing.** Although in varying proportions, health expenditure has increased in all nonfragile countries in per capita terms and as a portion of public expenditure or of a country's economy and income.
2. **There has been slow expansion of prepayment schemes in some countries.** Prominent among them are Algeria, Jordan, Morocco, Tunisia, and the West Bank and Gaza. Prepayment of health expenditure has increased in some countries as tax-based and health insurance schemes expand, but large segments of the population in the region are still not covered.
3. **Compared to other regions in the world, Middle Eastern countries have some of the lowest levels of public expenditures on health, which translates into high levels of OOP spending.** OOP household expenditure on health care remains high in many countries. A drastic decline in public and export revenues as well as conflicts, instability, and governance issues have exacerbated this situation (Figure 1).
4. **Expanding private sector service delivery increases health expenditures.** The cost of private sector services is generally high. Because few households have financial protection through health insurance, rapid growth in the use of the private providers results in high OOP spending. Even if households have financial protection, public and private insurance schemes usually reimburse only part of patients' fees; for some services and products, there is no reimbursement. In addition, drugs purchased at private pharmacies drive up OOP expenditure.
5. **Passive purchasing mechanisms are dominant.** Very limited use is made of active purchasing provider payment methods to promote productivity, quality, and equity. The result is substantial inefficiency, waste, corruption, and popular dissatisfaction.
6. **External support from donors and international agencies has never been significant in the region.** Exceptions are countries such as Egypt, Jordan, Morocco, and Yemen, mainly in form of budget support and earmarked funding for specific projects.

Donors have typically focused on family planning, reproductive health, HIV/AIDS, and immunization. Obtaining assistance for emergency humanitarian responses has been a significant challenge in recent years. Although external funding has increased and diversified since 2011 for countries affected by conflicts and war, it remains far short of what is needed to cover the basic, pressing social and health needs.

7. **Conflict and post-conflict context and opportunities.** The ongoing conflicts in Libya, Syria, and Yemen are health and financial disasters for their populations and economies. The Syria conflict has spillover effects because of refugee populations that are stressing the health systems of Jordan and Lebanon in particular. When the conflicts end, the health systems of the affected countries will need a nearly complete rebuild—offering the opportunity to help them create not the partially successful preconflict systems, but rather up-to-date systems less reliant on OOP expenditure, passive purchasing, and unregulated private provision.
8. **Funding health services for refugees is a major challenge.** This is especially true in countries with large refugee populations, such as Jordan and Lebanon. In countries with smaller refugee populations, such as Algeria, Egypt, and Iraq, refugees living outside of camps are often covered under public schemes similar to those provided to citizens.
9. **Many countries have adopted new health laws, strategies, and reforms that include health financing dimensions.** Countries such as Algeria, Egypt, Jordan, Morocco, and Tunisia, are grappling with universal challenges related to improving the performance of health systems—increasing health spending, covering large uninsured populations, strengthening weak planning and monitoring mechanisms, regulating the private sector, and consistently providing quality health care services.
10. **All 11 countries face the challenge of poor data for decision making. Complete**, accurate, and timely data are needed in this region, as health system dynamics are becoming more complex and multifaceted. For example, there are limited data on household health expenditures, actual use of and access to public and private facilities, and the cost of health services and programs, particularly since 2011.

Revenue collection

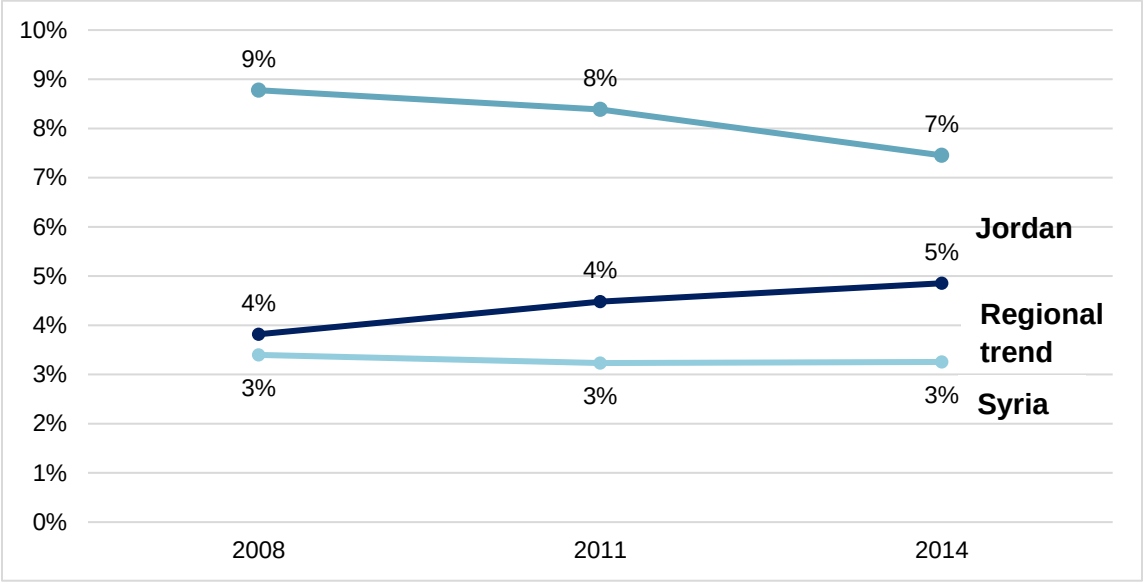
The amount of revenue collected and the ways it is collected have important implications for financial protection and equity. Three key health financing indicators are used to approach the revenue collection dimension: total health expenditures (THE) as a percentage of gross domestic product (GDP), general government health expenditure (GGHE) as a percentage of GDP, THE per capita, and GGHE as a percentage of general government expenditure (GGE).

Figure 1 indicates the level of THE within a country relative to that country's national income (GDP). The regional WHO-Eastern Mediterranean Regional Office average was around 4 percent in 2008 and then stabilized between 4.5 and 5 percent between 2011 and 2014.[3] Most of the countries included in this analysis have a percentage that is higher than the regional average, except Syria (around 3 percent). Jordan has one of the highest levels of THE as a percentage of GDP (approximately 7.5 percent in 2014). Higher-income countries tend to spend

[3] The regional trend in all graphs is from the WHO-Eastern Mediterranean Regional Office, which includes more countries than the 11 in this report. The Eastern Mediterranean region includes 21 states in the Middle East, North Africa, Horn of Africa, and Central Asia.

a greater share of their GDP on health. Political instability and a decline in the price of oil have impeded national income growth for several of the countries in recent years.

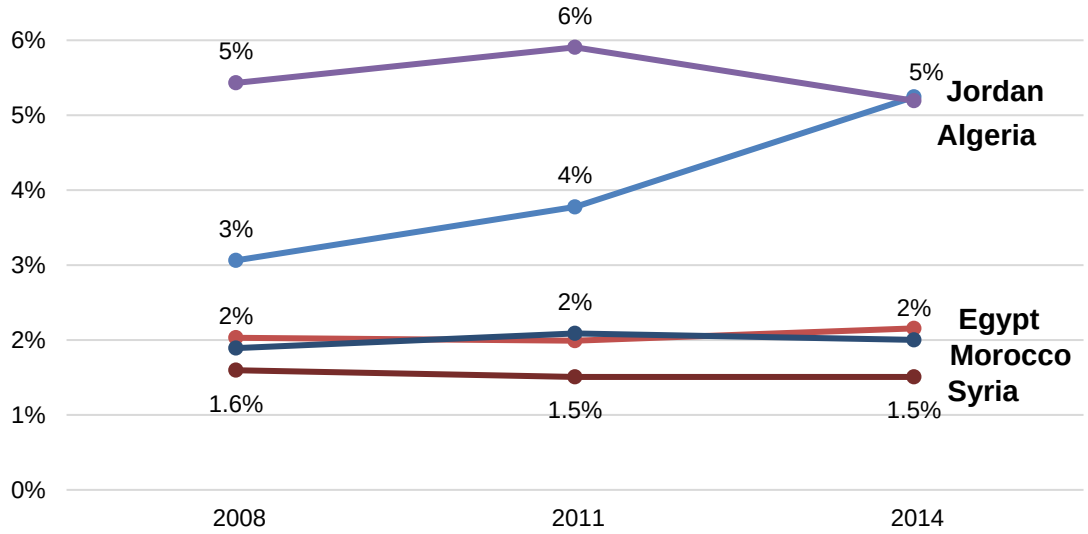
Figure 1. Health expenditure relative to national income: Total health expenditure as a percentage of GDP, 2008-2014



Source: WHO Global Health Expenditure Database, 2008–2014

GGHE as a percentage of GDP (Figure 2) shows both the fiscal capacity of the government and its commitment to health relative to other uses of public spending. In Egypt, Syria, and Morocco, the share of GGHE as a percentage of GDP is rather low and consistent (1.5 to 2 percent), while Jordan has the highest percentage (just over 5 percent) among the countries analyzed. Algeria is the country with the highest growth in this indicator, which rose from approximately 3 percent in 2008 to just over 5 percent in 2014.

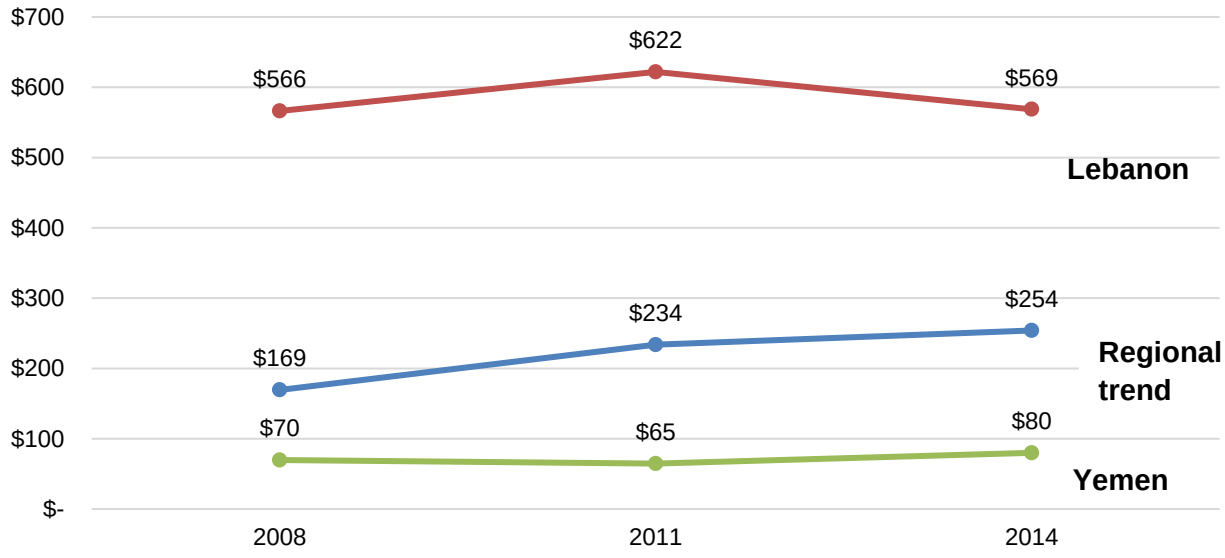
Figure 2. Government health expenditure relative to national income: GGHE as a percentage of GDP, 2008–2014



Source: WHO Global Health Expenditure Database, 2008–2014

Figure 3 represents THE per capita for each country compared to the regional average, which increased from $169 in 2008 to $254 in 2014. Most of the high-income countries had higher per capita health expenditures than the regional average. Lebanon had the highest per capita health expenditure at more than $622 in 2011, but it fell to $569 in 2014. Yemen, a state experiencing severe conflict, has very low, steady per capita health spending.

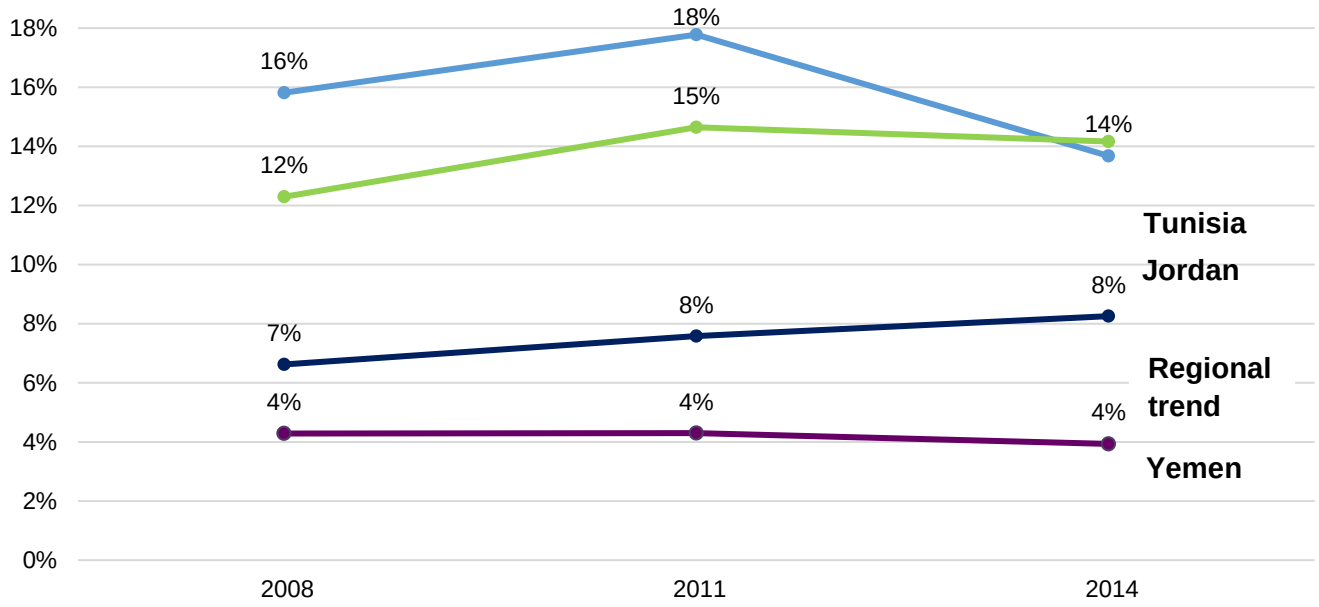
Figure 3. Total health expenditure per capita (USD), 2008–2014



Source: WHO Global Health Expenditure Database, 2008–2014

GGHE as a percentage of GGE is an indicator of the priority that a government gives to funding health relative to other public expenditure. Both GGHE and GGE include the revenues raised and expenditure made from compulsory social health insurance contributions. African heads of state recommended a target of 15 percent of total government expenditure that should be devoted to the health sector (called the Abuja Target). None of the 11 Middle Eastern and North African countries has recently reached this 15 percent target. Jordan and Tunisia are closest with rates of 13.7 percent and 14 percent, respectively, in 2014. The regional average stood at 8 percent in 2014 (Figure 4).

Figure 4. Government prioritization of health: government health expenditure as a percentage of general government expenditure, 2008–2014



Source: WHO Global Health Expenditure Database, 2008–2014

The barely growing regional average for GGHE/GGE over 2008–2014 indicates little increase in the priority that Middle Eastern governments give to health. All other regions of the world invest more in health (18.1 percent in the Americas, 15.5 percent in Europe, and 14.3 percent in the Western Pacific in 2014). Most of the countries studied invested less than 10 percent over this time period although four countries—Jordan, Tunisia, Lebanon, and Algeria— exceed the regional average. Countries that are below the regional average, such as Yemen, have a consistently low GGHE/GGE. This is due to their political contexts, such as Yemen's ongoing conflict, and economic factors, including the decline in oil prices and thus the drop in oil income.

Pooling

Pooling refers to accumulating revenue via prepayment financing mechanisms to ensure that unpredictable individual financial risks are accounted for and are distributed among all members of the pool. Three main mechanisms are generally used to pool revenue and health risks: (1) state-funded health systems funded through taxation, (2) social health insurance funded by mandatory employee and employer contributions, and (3) voluntary private health insurance. In most Middle Eastern countries, these pooling arrangements co-exist, but their respective roles and institutional setups vary considerably. Pooling levels across countries are measured using two indicators: GGHE as a percentage of THE, and social security funding (social health

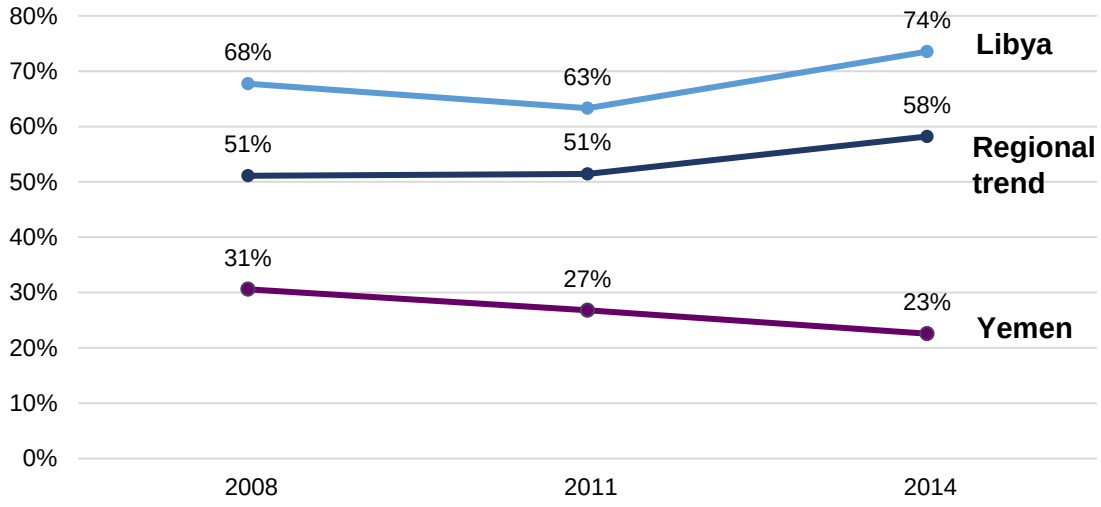
insurance pooling of mandatory contributions) as a percentage of GGHE. This analysis found that prepayment of health expenditure has increased in some countries as tax-based and health insurance schemes expand, but pooling and cross-subsidization of health financial risk between the rich and poor remain limited. Large segments of the population in the region are still uncovered.

> Large segments of the population in the Middle East and North Africa do not have health coverage.

GGHE as a percentage of THE indicates a country's pooling or risk sharing level and the commitment of its government to cover its population's healthcare. GGHE includes both central and local government tax-funded health spending, payroll tax-funded mandatory social health insurance, and external revenues (loans and grants) that flow through government accounts. Expenditures from these sources comprise mandatory prepayment for health care. This indicator is important to universal health coverage because mandatory prepayment is the main recommended source of funding in a universal health care system.

The regional average rate of GGHE/THE grew from 51 percent in 2008 to 58 percent in 2014 (Figure 5). Of the countries studied, Libya had the highest rate of GGHE/THE with 74 percent in 2014. This highlights how countries with a relatively high income tend to have more mandatory prepayment sources. On the other hand, Yemen had the lowest rate of GGHE/THE, with 23 percent in 2014. According to health experts (e.g., McIntyre and Kutzin 2014), a rate below 30 percent indicates a serious problem of collective coverage of health expenditures. Among the countries surveyed, only Yemen falls below the 30 percent mark, where it has stayed since 2009.

Figure 5. General government health expenditure as a percentage of total health expenditure, 2008–2014

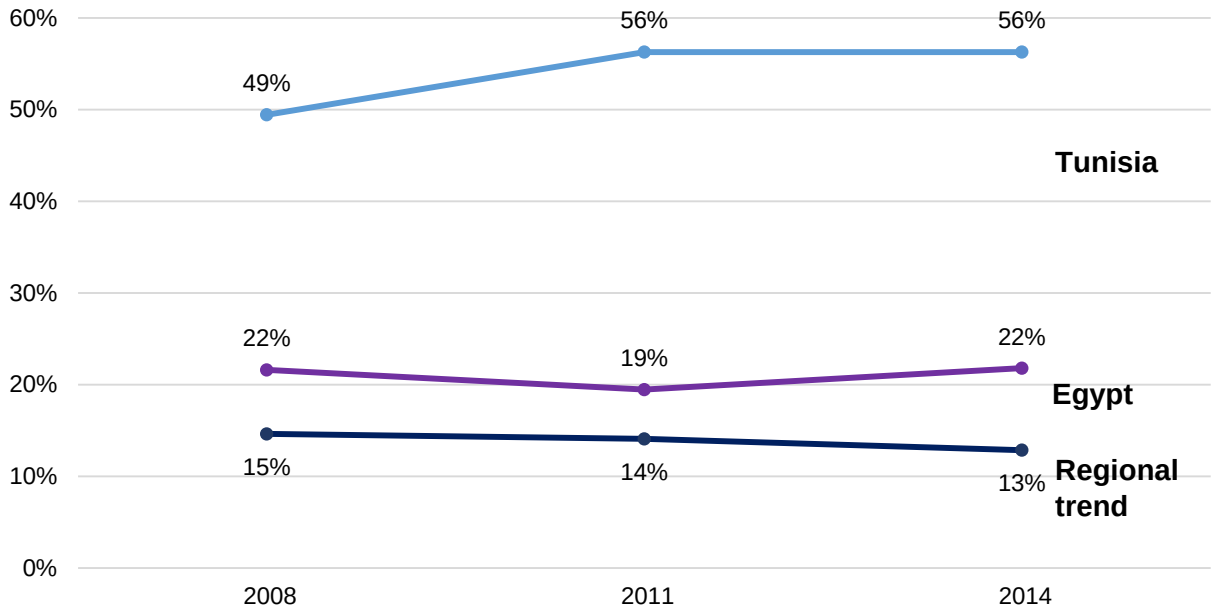


Source: WHO Global Health Expenditure Database, 2008–2014

Social security funding as a percentage of GGHE measures the share of social health insurance contributions to GGHE. Social health contributions in all countries come primarily from mandatory withholding from formal sector wages (and related charges to employers). Hence, the share of the economy in formal employment affects the potential for social security funding

as a percentage of GGHE. The regional average share of social security in GGHE ranges from approximately 15 percent in 2008 to 13 percent in 2014 (Figure 6), which is lower than in other regions (55 percent in Europe, 75 percent in the Americas, and 67 percent in the Western Pacific in 2014). This is mainly due to the modest role of social health insurance in oil-dependent economies (except Algeria), and low-income countries.

Figure 6. Social security fund as a percentage of general government health expenditure, 2008–2014



Source: WHO Global Health Expenditure Database, 2008–2014

The 11 countries included in this analysis are mostly above the WHO-Eastern Mediterranean Regional Office regional average. Tunisia stands out from the others with the highest rate of 56 percent. Of the 11 Middle East and North Africa countries in this report, Egypt has one of the lowest rates at 22 percent, below the recommended 30 percent.

Purchasing and payment methods

Purchasing refers to the transfer of pooled funds to health care providers. Several specific issues require consideration, including provider payment (how health care providers are paid and what incentives payment mechanisms create), strategic or active purchasing versus passive purchasing, and organizational structure and governance of the purchaser. This analysis showed that passive purchasing of health products and services is dominant in most countries. Very limited use is made of active purchasing provider payment methods to promote productivity, quality, and equity. The result is substantial inefficiency, waste, corruption, and popular dissatisfaction.

Regarding provider payment mechanisms, SHOPS Plus and HFG observed various arrangements across countries, ranging from a single entity overseeing pooling and purchasing to separate organizations dealing with those issues. Most countries are trying to establish a mix of purchasing arrangements. The ministry of health remains the main institutional purchaser of health services, but the purchaser could be a semi-autonomous or autonomous public entity such as the Central Medical Stores in Tunisia and Algeria for pharmaceutical products or a

mandatory insurance fund such as the Health Insurance Organization in Egypt or the Mandatory Health Insurance in Morocco. Purchasing could be undertaken centrally by one of these institutions such as the Social Health Insurance entity in Algeria or at a more decentralized level, where each decentralized organization is responsible for purchasing services for its resident population. There are very few examples of this decentralized organization in the Middle East and most of them are pilot projects.

Passive purchasing of health products and services is dominant in the 11 countries in the Middle East and North Africa studied.

Photo credit: Jordan Association for Family Planning and Protection

Regarding payment methods, passive purchasing is dominant in tax-based financing, but health insurance organizations are playing an increasingly important role as purchasers, mainly through contracting. Since most sources of funding are either a government budget allocation or OOP payments, fee-for-service and flat budgets are the dominant payment methods for services. In the public sector, the flow of funds is generally not linked to performance and is based on a rigid system of line item budgeting built on historical trends with inputs such as drugs and supplies, provided in kind, and salaries unrelated to productivity or quality. Generally, ministries of health and public institutions provide budgets, inputs, and salaries based solely on qualifications and experience, not performance. The few exceptions are external contracting with public and private sector providers for select and specialized services such as dialysis and cancer treatments. Ministries of health tend to automatically transfer budgets to hospitals and health facilities, and social health insurance pays providers based on bills submitted. Initiatives have been launched to implement different provider payment mechanisms such as capitation and performance-based payments with both public and private providers, such as in Egypt, Jordan, and Lebanon. Most of these projects are limited in scale except when both the purchaser and the provider are in the private sector, as in Jordan and Lebanon.

In most of the countries studied, separating purchasing and provision functions is on the health system reform agenda to encourage active purchasing and to link provider payments to provider performance, efficiency, and the delivery of quality services. However, implementation is very slow because the reform requires a new allocation of resources, considerable information, and management capacity. For example, most countries are trying to establish gatekeeping mechanisms at the primary health care level and appropriate referral routes to access hospital and specialized services. Success has been limited thus far, because the preconditions for success are not thought through and put in place, and deeply rooted existing behaviors and practices impede change.

Population coverage

Population coverage refers to the share of the total population that is eligible (beneficiaries) for a set of interventions such as promotive, preventive, curative, rehabilitative, and palliative health services. For this, it is important to assess the share of the eligible population that actually has access to quality health services and is financially protected, meaning that the use of and any payment required for these services does not expose the user to financial hardship.

In most of the countries analyzed, population coverage is high as health care services in the public sector are officially free of charge for almost all citizens or residents, whether they are covered through a tax-based free medical assistance mechanism (such as in Jordan, Morocco, West Bank/ Gaza, and Tunisia) or through social or voluntary health insurance schemes. Available data show that population coverage is relatively high in Algeria, Jordan, West Bank/Gaza and Tunisia, reaching more than 60 percent of the total population. Population coverage is increasing in other countries such as Lebanon and Morocco. Covering 60 percent of the population is moderate by global standards—low relative to the US and Europe, but high compared to sub-Saharan Africa and South East Asia. However, population coverage is low by global standards in countries in conflict such as Libya, Syria, and Yemen, and especially among refugees and other marginalized groups.

Population coverage is generally high as health care services in the public sector are officially free of charge for almost all citizens or residents. The exceptions are countries in conflict.

Various issues affect coverage levels across the region. Key among them are:

- The level of coverage is closely linked to social and professional status, location of residence, type of health insurance, and other factors that tend to favor those of higher socioeconomic status.
- Shortages of health products and services are frequent in the public sector, which is intended to cover the informal sector and disadvantaged population.
- The population to be covered is not always well identified, especially in rural areas, in the informal sector, and among the unemployed or undocumented immigrants.
- In countries such as Jordan, Palestine, and Tunisia, some population groups have double or even triple coverage by overlapping programs, while others have none.
- Health insurance membership is compulsory for some groups and voluntary for others. This voluntary character of health insurance seems to work in countries with higher levels of coverage, likely because insurance premiums are entirely paid for or are heavily subsidized. In countries with lower levels of coverage, premiums may not be fiscally feasible and the value for many informal households of prepayment not broadly understood and accepted given the size of the population not yet covered.

True population coverage can only be effectively captured through regular national and local household surveys. Surveys such as censuses, the Demographic and Health Surveys, and the Multiple Indicator Cluster Surveys show disparities in coverage and access to different categories of health care services by area of residence, gender, or socio-professional category. However, these surveys are conducted infrequently and focus on maternal, reproductive, and child health, and the information they contain is useful but not sufficient to inform health financing policies and programs. Disparities in coverage and access are aggravated by war, conflict situations, and large flows of refugees, or in cases of severe constraints on public finances. In these contexts, reliance on the private sector is growing and household spending is increasing even faster than in non-conflict countries.

Benefits package

Very few countries included in this analysis have been able to adopt an explicit definition of the range of services that different population groups are entitled to and under what conditions. Many countries, such as Algeria, Egypt, Iraq, Libya, and Syria, have official health policies, plans, or strategy documents that claim the population is entitled to benefit from all types of preventive and curative services in the public sector without any restriction. Countries in the region are slowly changing these benefits for three reasons: (1) the burden of disease has changed to be dominated by NCDs and injuries and therefore, costs are rapidly growing, (2) health systems are increasingly diversifying in terms of legal status, service delivery, funding, and types of services for various population groups with different levels of payment, and (3) new funding and delivery arrangements are being introduced in the public and private sectors, leading to changes in the services included in the benefits package such as in Egypt, Jordan, Lebanon, and Tunisia.

Consequently, several health institutions in the countries studied are introducing restrictive measures such as copayment for certain services and products, mechanisms to limit patients' direct access to hospitals and specialists without referral, reduction and adjustment in reimbursement rates, and explicit definition of the range of services that different population groups are entitled to and under what conditions. For example, in Algeria, Tunisia, and the West Bank and Gaza, services for people suffering from chronic diseases are explicitly defined. Specific health benefits may take the form of a positive list, where services covered are precisely itemized, or a negative list, where services that are excluded from coverage are specified. In other countries, there may also be guidelines for how the population can access certain services. For example, patients may need to follow a referral route and start by visiting the primary health care level to access specialist services, a practice known as gatekeeping. Explicit rationing approaches arestill being developed. The most dominant rationing mechanism used in the public sector is the chronic underfunding of health services, which leaves a significant financial burden on households, for example, to purchase drugs not available at the facility. Some health insurance organizations, aiming to balance income and expenditures, are increasingly reducing reimbursement levels without making explicit changes to the benefits package through various mechanisms. Performance and consequences of all these arrangements and measures varies within and between the countries studied and more studies are needed to assess the actual practices and their effects.

Financial protection

Financial protection refers to funding health services in a way that protects individuals and households from the catastrophic and impoverishing consequences of paying for health care. The two commonly used indicators to track financial protection are the incidence of catastrophic health expenditures and the incidence of impoverishment due to health care spending. According to the WHO, financial catastrophe is when direct OOP payment exceeds 40 percent of household income net of subsistence needs (WHO 2010). Few countries conduct household expenditure surveys and therefore publicly available data on these indicators are limited. OOP payments as a share of THE provides important, yet less direct, insight into the potential level of financial protection since the greater the share of OOP payments, the lower the likelihood that a population is financially protected and vice versa.

Most low- and middle-income countries in the region have low levels of public expenditure on health, which translates into high levels of OOP household spending and low financial protection. OOP spending ranged from as low as 21 percent in Jordan to 76 percent in Yemen

in 2014. As seen in the following table, most countries have an OOP spending rate that exceeds 30 percent of THE. The only exceptions are Algeria from 2008 to 2014, Jordan from 2009 to 2014, and Iraq from 2008 to 2011. Yemen's OOP spending rate is high, reaching 76 percent in 2014. Egypt, Morocco, and Syria have had a relatively stable rate of around 58 percent over the years. In contrast, Algeria and Libya have low OOP spending rates (around 26 percent in 2014); the lowest rate of OOP spending is in Jordan, which reduced household contributions from 32 percent in 2008 to 21 percent in 2014.

Table 1. Out-of-pocket expenditure as a percentage of total health expenditure

Year	Yemen	Morocco	Egypt	Syria	Iraq	Tunisia	Lebanon	Algeria	Libya	Jordan
2008	68	57	56	53	25	40	44	26	32	32
2009	74	56	57	54	26	38	42	27	31	23
2010	74	57	58	54	26	36	46	29	30	22
2011	72	58	57	53	25	36	46	28	37	21
2012	72	57	58	54	38	37	37	26	30	22
2013	75	59	56	54	37	36	38	26	30	22
2014	76	58	56	54	40	38	36	26	26	21

Effects of conflict on health financing

Plagued by war, political instability, and low oil prices, the economies and health financing of countries in conflict, such as Iraq, Libya, Syria, and Yemen, are heavily impacted. Civil war has left countries' economies extensively damaged and has inflicted a heavy human cost. The social and economic impacts of the conflicts are large and growing. The lack of sustained access to health care, education, housing, and food have exacerbated the impact of the conflicts and pushed millions of people into unemployment, poverty, and exile. With the ever-increasing cost of war and the collapse in trade and export revenues, the fiscal situation is dire. The severe drop in oil revenues in Libya and Iraq, for example, and disruptions in trade in Syria and Yemen have placed even more pressure on the countries' external balances, resulting in the rapid depletion of their international reserves. Their governments continue to prioritize spending on the military and emergencies.

The intensity and length of the conflicts have resulted in previous trends worsening, which has resulted in the decline of public funding and an increase in OOP payments. However, this information remains anecdotal and is not documented by any reliable sources due to the conflict and the dismantling of existing data collection and information systems. In these countries, economic growth is weak or negative, health infrastructure is devastated, the functioning of public administration has deteriorated, and OOP payment in both the public and private sector has become the dominant source of funding.

In Syria, it is estimated that more than 50 percent of public hospitals and community health centers are closed or only partly functional (Coutts et al. 2015). The health infrastructure still in place is in critical condition since it is difficult to access electricity, fuel, and drinking water. In addition, many staff who used to work in these structures have been killed during the crisis, and

massive migration also has depleted the health workforce—less than 50 percent of Syrian and Iraqi medical personnel remain active due to migration. The remaining personnel and specialists are not able to respond to the growing demand for care.

External support from donors and international agencies has never been significant in the countries studied except in Yemen, mainly coming from UN agencies and representing less than 1 percent of public expenditures before the war (WHO 2006). Support also has fallen dramatically as organizations have either scaled back their projects and activities or withdrawn completely from the countries. Even obtaining assistance for the emergency humanitarian responses in the region was a significant challenge (European Civil Protection and Humanitarian Aid Operations 2017) but external funding has increased in recent years and donors aim to respond to humanitarian crises. For example, in Syria, almost half of the European Commission's humanitarian assistance goes to immediate lifesaving and emergency humanitarian operations. This assistance includes the provision of safe drinking water, sanitation and hygiene, food, child protection activities, and emergency items (European Civil Protection and Humanitarian Aid Operations 2017).

These circumstances in combination with other factors such as inflation, reduction of imports of medicines, depreciation of the local currencies, increases in transportation, insurance and maintenance costs, reduced supply of electricity and water, high unemployment, and food insecurity have presented major challenges for public health service delivery. The result is a health disaster for the population. Countries in conflict have experienced a dramatic decrease in national health spending, particularly of public financing, a relative substitution of donors and UN agencies (although donor funding remains largely inadequate compared to the unmet needs of the affected population). Other changes include new vital and active roles for local and international NGOs, a focus on emergency health relief, an increase of external referrals and treatment abroad, and a shift to household health expenditures becoming the dominant source of funding.

Impact of refugees on health financing

Covering health services for refugees is a major challenge in countries with large refugee populations, such as Jordan and Lebanon. In countries with smaller refugee populations, such as Algeria, Egypt, and Iraq, refugees living outside of camps are often covered under the same public schemes that citizens are. In Syria and Lebanon, Syrian refugees face considerable difficulties in paying for health care. Until 2014, the Jordanian Ministry of Health provided free services to Syrians registered with the Ministry of Interior. Since 2016, Syrians have been charged at the subsidized rate for non-Jordanians in Ministry of Health clinics, though they still receive reproductive health services for free, except for facility delivery. One survey of refugees living outside of camps in Jordan found that over half of Syrian refugee households reported OOP expenditures for their most recent medical visit (Doocy et al. 2016a). According to the 2016 UNHCR survey, 81 percent of Syrian refugee households in Jordan spent JOD 105 ($148) on health care in the month before the survey, though their monthly income was only JOD 233 ($328) (UNHCR 2016).

Private health sector

The private sector (Box 1) is increasingly being recognized as a key health partner in the Middle East and North Africa and globally. Often facing significant financial and human resource constraints, governments are unable to meet all of the population's health care needs on their own. As such, health systems are increasingly leveraging the assets and mobilizing the

resources of both the public and private sectors. The private health sector can improve the efficiency of resource use, alleviate the patient load at public facilities, and decrease wait times.

Box 1. The private health sector defined

Private sector entities contribute to the health system in the following ways.

Delivering services: doctors, nurses, midwives, and community health workers in for-profit, nonprofit, and faith-based organizations

Financing care: health insurance companies and private companies

Providing pharmaceuticals and laboratory and diagnostic services: pharmaceutical wholesalers, distributors, retail pharmacies, laboratories, and diagnostic facilities

Engaging in policy dialogue and advocacy: private provider associations

The private sector can also deliver services and drugs in areas not reached by ministries of health.

Despite these potential benefits, private sector involvement in the health systems of the 11 countries studied has not been optimized due to a number of factors, including the traditional mandate across Middle Eastern and North African countries whereby the state provides free social services to the population, a lack of communication between the public and private health sectors, a lack of knowledge regarding the scope of the private sector, weak regulation of the private sector, and poor private health sector reporting.

A closer look at the current and prospective role of the private health sector in the Middle East and North Africa is particularly important at this point in time given that regional instability and conflict are reshaping many countries' health systems and needs.

Four main trends describe the private health sector across the 11 countries:

1. **Governance of the private sector is limited and uneven.** While many countries include the private sector at least nominally in national health strategies and policies, regulation and monitoring of this sector is weak. In most countries, the private sector is fragmented and not well coordinated to represent and advocate for itself.
2. **Limited data are available about the size and scope of the private sector.** While some countries have registries and databases of private providers, they are often incomplete or outdated. Data on the use of private sector services is also scarce.
3. **The data that are available show that the private sector is an important and growing source of care throughout the Middle East and North Africa.** This is the case to varying degrees across all countries for which data is available, even those with strong public health sectors.
4. **In conflict and post-conflict settings, the private sector develops ad hoc in response to changing health needs, locations of violence/ destruction, and the weakening of health systems, among other conflict-related factors.** The private sector is a key source of care where government services are unavailable or have broken down.
5. **Available data show that the private sector is a key source of health care for refugees living both inside and outside of camps in countries such as Jordan and Lebanon.** UN agencies and NGOs often provide primary and secondary services to

refugees living inside and outside of camps. Refugees living outside of camps may also access the private for-profit sector, depending on their ability to pay and the availability and quality of public sector services.

Governance

In the 11 countries included in this review, the capacity of governments to engage and leverage the private sector is limited. Most countries have included the private sector in national health plans at least nominally and several have public-private partnership (PPP) strategies, but these frameworks often lack regulations and mechanisms to support implementation. Even in Lebanon, where the private sector is dominant, government oversight is weak. Some countries, such as Egypt and Jordan, have public or independent entities that are responsible for the accreditation of public and private health facilities, but others, such as Algeria, have no formally recognized accreditation body. According to key informants, suspicion between the public and private providers is a key barrier to collaboration throughout the region. Private sector actors often view their public counterparts as inefficient and overly bureaucratic, while the public sector sees the private as uncooperative or too focused on making a profit.

While registries of private providers and facilities exist, they are usually out of date or incomplete, and private sector reporting into the national health management information system is limited. Some countries have a central registry of private providers, which is usually part of a larger registry of all licensed providers. For example, in Egypt and Jordan, the public sector and professional associations register public and private providers or facilities at the time they are licensed. There is currently no mechanism for updating this registry when providers move or close. Egypt's Ministry of Health and Population also has a registry for private providers, but it is not updated regularly. Reporting of the private sector into national health information systems is minimal in most countries, usually limited to notifiable diseases. In some countries, the private sector may underreport in order to avoid taxes or government controls.

Suspicion between the public and private providers is a key barrier to collaboration throughout the region.

In most countries, the private sector's ability to organize, represent, and advocate for itself is weak. Across countries, public and private providers are generally required to register with professional associations, unions, or syndicates for their cadres when they become licensed. While these associations tend to be active and well organized, they do not advocate for the private sector's specific interests. In some countries, such as Egypt and Lebanon, associations help set quality standards and prices for services, and serve as arbiters of complaints against individual providers. Associations for private providers or facilities exist in certain countries, including the Private Hospital Association in Jordan and the recently founded Syndicat National Medecins Liberale (National Union of Private Physicians) in Algeria. These associations vary in their level of activity and their ability to represent and advocate for their members in policy making.

Public-private partnerships

While there are many PPPs throughout the region, most developed on an ad hoc basis and not as part of larger national PPP strategies. Many countries include the private sector in national policies, but few have dedicated PPP legislation or government departments. Egypt and Morocco have better developed PPP policies, and Egypt has a PPP Central Unit. Contracting out services by the public sector to the private is permitted in most countries, but its prevalence

varies. Contracting is very limited in Algeria, for instance, while in Lebanon almost all public health services are contracted out to NGOs or private hospitals. Lebanon is engaged in efforts to reform its contracting system so that it is based on clear performance and quality standards (WHO 2017b). PPPs also exist between the public sector and multinational pharmaceutical firms in several countries, including Algeria and Morocco. Egypt has two PPPs to develop hospitals in partnership with private universities (Ministry of Finance 2017). In Morocco, a PPP between the Ministry of Health and the Lalla Salma Foundation led to the establishment of the National Cancer Institute in 2016 (Oxford Business Group 2017).

Although rare, regional PPPs exist. For example, the King Hussein Cancer Center in Jordan is a regional destination for oncology training and care. According to key informants, Libya had a contract with the King Hussein Cancer Center to send its citizens to Jordan for cancer treatment that recently ended. Public sector physicians from the West Bank and Gaza travel to train in oncology at the cancer center as well.

In dealing with conflict and its effects, several ministries of health have established partnerships with local and international NGOs to improve service delivery in areas where public capacity is limited. In Iraq, for example, Médecins Sans Frontières (MSF) is collaborating with the Ministry of Health to provide mental health services in public facilities (MSF 2012). International Medical Corps provides mental health services in several public facilities in Jordan (International Medical Corps 2017).

Service delivery

The private sector is robust in some countries (Egypt, Jordan, Lebanon, Tunisia, West Bank and Gaza), and it plays a smaller but essential role in service delivery in others (Algeria, Iraq, Morocco). As in other parts of the world, health systems in the Middle East and North Africa are mostly under the purview of ministries of health, which are responsible for the financing, regulation, policy development, human resources management, and delivery of health services.

Data on the private sector, though limited, suggest that there is a wide range in the size and scope of the private sector across countries. In countries such as Egypt and Lebanon, the majority of hospitals, primary health care clinics, and pharmacies operate in the private sector. In other countries, the growth of this sector is recent. For example, Algeria's first private hospital opened in 2014.

Dual practice is legal and common in most countries, which can lead to competition between the public and private sectors for personnel and other resources. The exception to this insight is Jordan, where dual practice is illegal and rare. Public sector salaries are generally lower and

Box 2. Why patients seek care in the private sector

- Convenience, including longer hours of operation
- Perceived higher-quality services and greater provider competence
- Better response times, attractive facilities, and more personal consultation with physicians
- Availability of drugs during public stockouts, and wider drug availability
- Access to specialists and specialized diagnostic equipment
- Perception that monetary cost of goods and services indicates higher quality
- Perceived confidentiality regarding stigmatized illnesses

providers may refer patients to their private practices where they can charge higher fees (WHO 2014). In countries such as Egypt and the West Bank and Gaza, public clinics typically close in the early afternoon and providers then work at their private practices later in the day. This arrangement leads to shorter hours of operation in the public sector, limiting access.

While information on private providers' role in health service delivery is limited, available data show that the private sector is a significant source of care for family planning and MCH services throughout the region. The most recent population-based surveys provide information on the source of care for only a handful of illnesses or other health-related issues in certain countries. Although limited, these data present an important view of the private health sector's role in the region.

For example, the most recent population-based surveys show that the private sector is a major source of care for child health, including treatment of ARI symptoms (Figure 7) and diarrhea (Figure 8). For ARI symptoms, over half of children in all countries, except for Jordan, were taken to a private sector source. Diarrhea treatment shows similar trends, though data is only available for three countries. In most countries, the most common private providers consulted for both ARI and diarrhea treatment were pharmacies or private physicians.

Figure 7. Source of acute respiratory infection treatment for children under five (%)

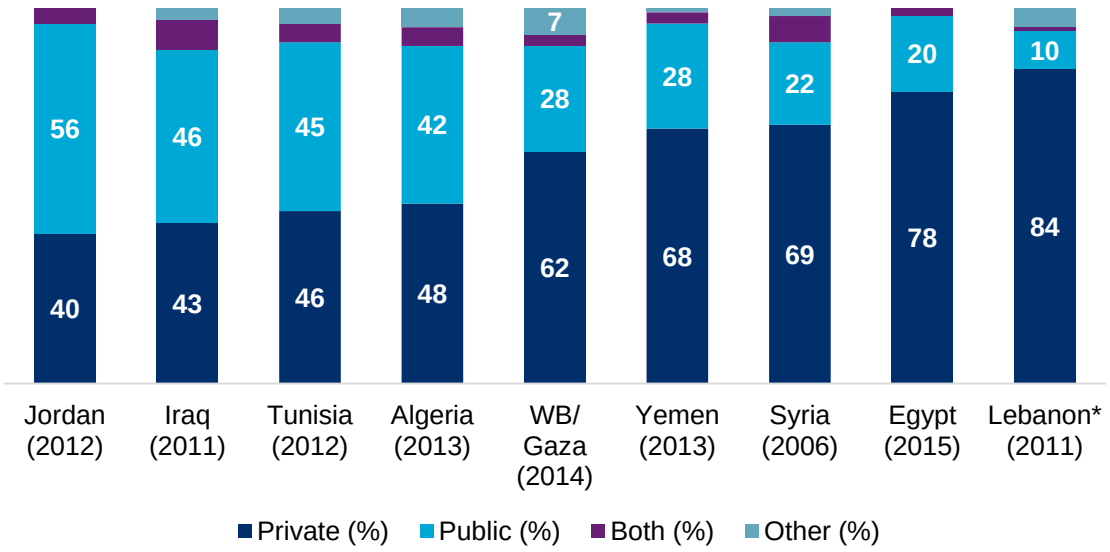
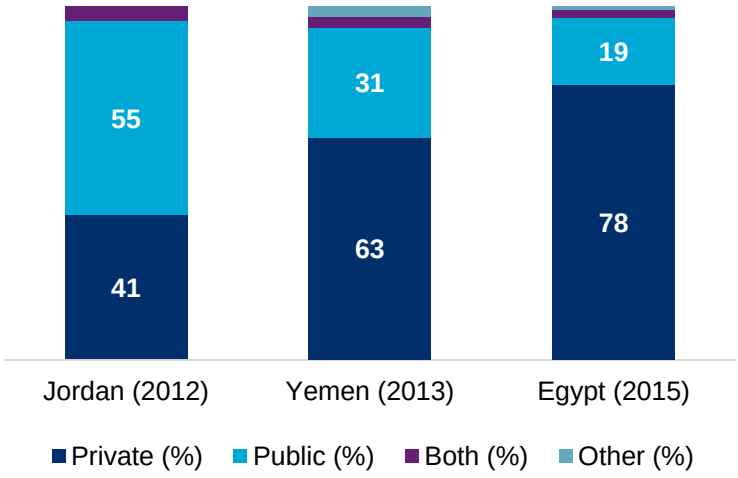


Figure 8. Source of diarrhea treatment for children under five (%)

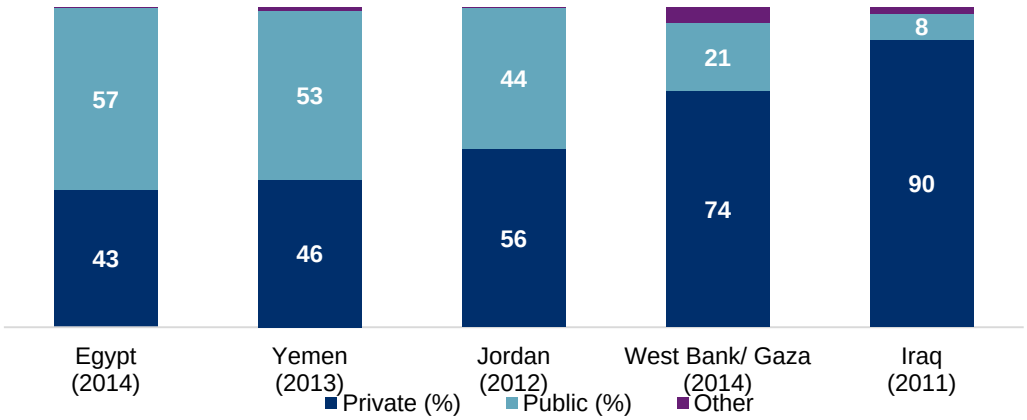


Sources: Egypt, Jordan, Yemen from DHS. Years as noted.

Note: Bars add to more than 100 percent because patients sought care in multiple sectors.

Data also show that the private sector is a significant source of modern contraceptive methods among women currently using a modern method, ranging from 43 percent of women obtaining their method from the private sector in Egypt to 90 percent in Iraq (Figure 9). In Egypt, Yemen, Jordan, and Iraq, pharmacies are consistently one of the top two sources of modern contraception. Other common private sources vary by country; these include private physicians in Iraq and private clinics and NGOs in Jordan. In the West Bank and Gaza, the UN Relief and Works Agency for Palestine Refugees health centers and hospitals are the most common source.

Figure 9. Source of modern methods of contraception among married women currently using modern contraception (%)

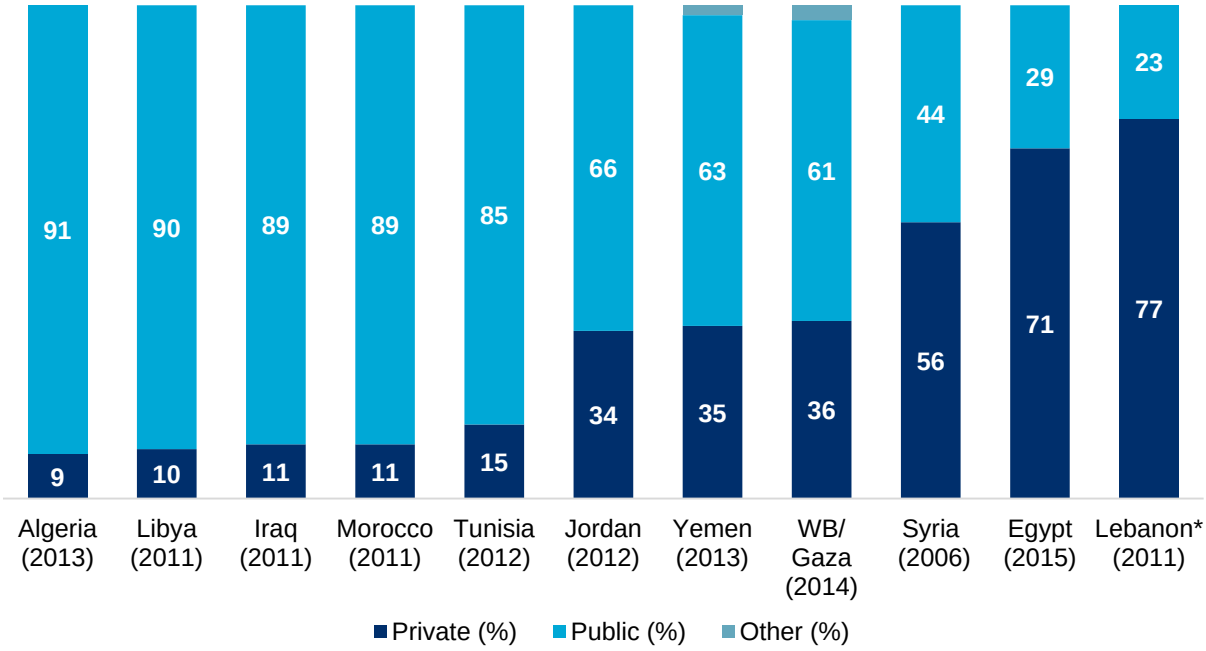


Sources: Iraq and West Bank/Gaza data from MICS. Egypt, Jordan, and Yemen data from DHS. Years as noted.

Note: Bars add to more than 100 percent because patients sought care in multiple sectors.

In most countries, less than half of women choose a private sector facility for delivery. The majority of women across the region deliver in health facilities, except for in Yemen where only about a third of women do so.3 Only about 10 percent of women who delivered in a facility reported using private facilities in Algeria, Libya, Iraq, and Morocco, and about a third used private facilities for delivery in Jordan, Yemen, and the West Bank and Gaza. However, use of the private sector for deliveries is high in four countries; over half of deliveries in Egypt, Lebanon, Syria, and Tunisia were in private facilities (Figure 10).

Figure 10. Place of delivery for births among women who delivered in a health facility (%)

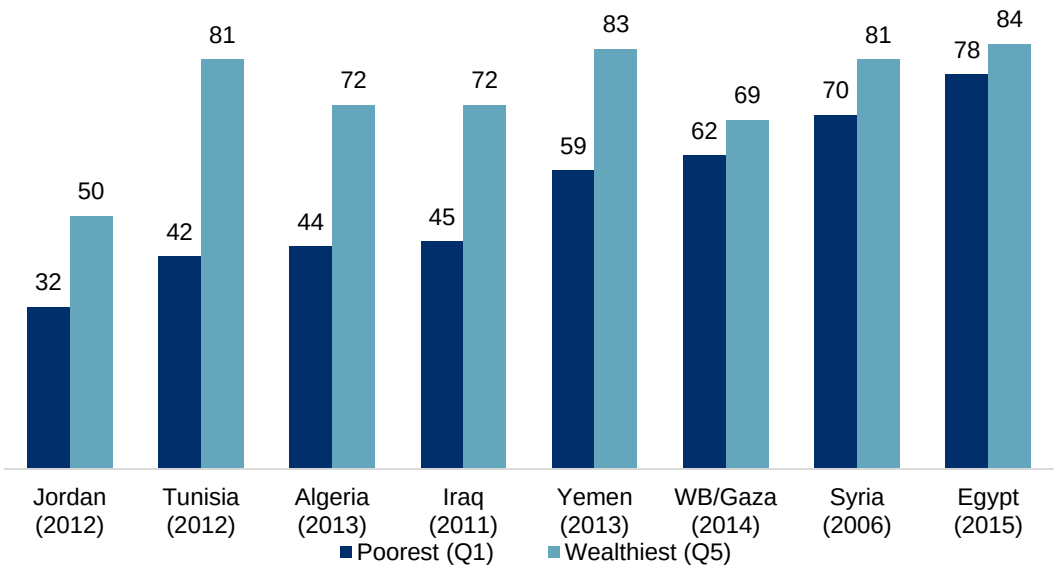


Sources: Algeria, Iraq, Lebanon, West Bank/Gaza, Syria, and Tunisia data is from MICS and is for delivery within two years prior to survey. Libya and Morocco data from PAPFAM surveys and for delivery within five years prior to survey. Egypt, Jordan, and Yemen from DHS surveys and for delivery within five years prior to survey. Years as noted.

*Lebanon data is only for Palestinian refugees.

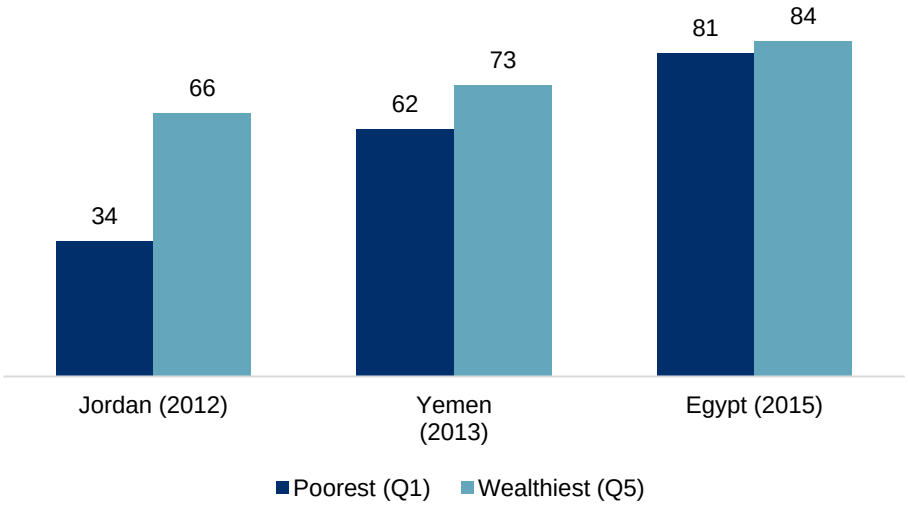
Use of the private sector for MCH is common for both the wealthy and poor. In all countries for which data is available, it is more prevalent among the wealthy, likely because they have the ability to pay. In Jordan, Tunisia, Algeria, and Iraq, ARI data show that health markets are well segmented, as use of private sector services among those in the wealthiest quintiles is higher than in the poorest quintile (Figure 11). Still, across all countries shown, over one-third of people in the lowest wealth quintile use the private sector for both ARI and diarrhea treatment (Figures 11 and 12).

Figure 11. Use of the private sector for acute respiratory infection treatment in children under five, by wealth quintile (%)



Sources: Algeria, Iraq, Lebanon, West Bank/Gaza, Syria data from MICS. Egypt, Jordan, Yemen data from DHS. Years as noted.

Figure 12. Use of the private sector for diarrhea treatment in children under five, by wealth quintile (%)

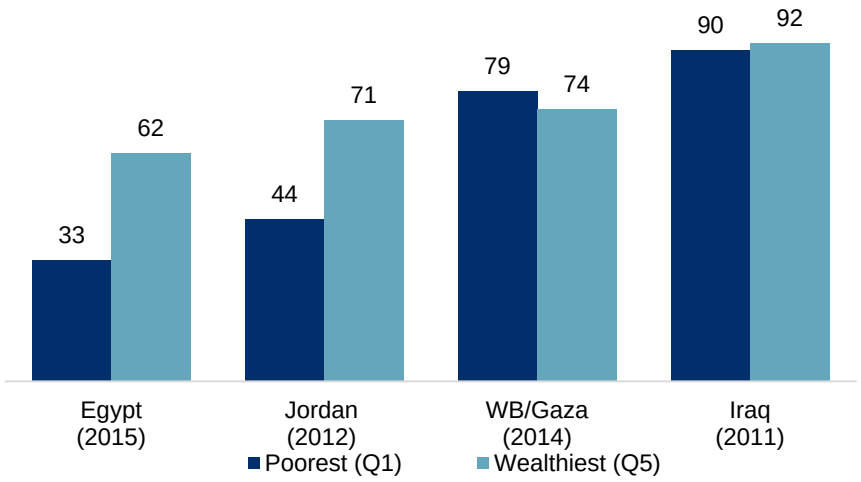


Sources: Egypt, Jordan, Yemen from DHS. Years as noted.

The private sector is a common source for modern family planning methods among people in both the lowest and highest wealth quintiles (Figure 13). Use of the private sector is high among the wealthy and poor in the West Bank and Gaza and Iraq. In the West Bank and Gaza, this may be because NGOs, particularly the UN Relief and Works Agency for Palestine Refugees, play such a large role in health service provision. In Iraq, this may be because of weakened public service delivery due to the conflict. However, data are not sufficient to draw conclusions about reasons for higher private sector use in certain countries or for certain health services.

The market appears to be better segmented in Egypt and Jordan, with fewer people from the lowest wealth quintile using private sources for modern family planning.

Figure 13. Use of private sector sources for modern methods of contraception, by wealth quintile (%)

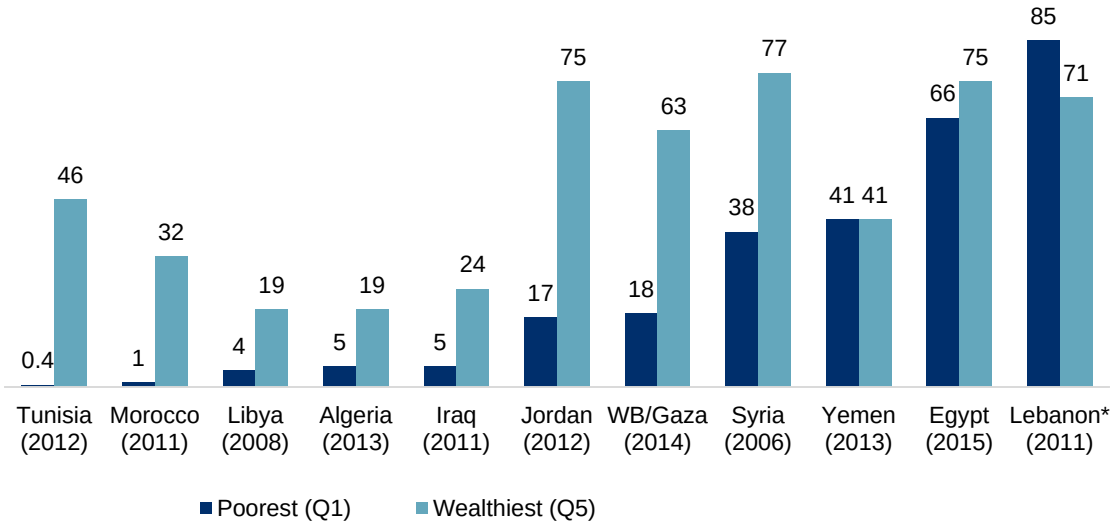


Sources: Egypt, Jordan, Yemen from DHS. West Bank/Gaza from MICS. Years as noted.

In most countries, use of the private sector for deliveries is less common among the poor than the wealthy (Figure 14). This is likely because of the high cost of facility delivery. Many women may choose to use the publicsector, especially if public and private health schemes commonly cover delivery there. Typically, treatment for ARI and diarrhea as well as buying family planning methods is less costly than a delivery in a facility.

In Lebanon, the data used in this analysis only covers Palestinian refugees. The high number of refugees from the lowest wealth quintile (85 percent) who delivered in private facilities used NGO sector facilities, mostly Palestine Red Crescent Society hospitals.

Figure 14. Use of private sector facilities for delivery among women who delivered in a facility, by wealth quintile (%)



Sources: Algeria, Iraq, Lebanon, West Bank/Gaza, Syria, and Tunisia data are from MICS and are for delivery within two years prior to survey. Libya and Morocco data are from PAPFAM surveys and for delivery within five years prior to survey. Egypt, Jordan, and Yemen data are from DHS surveys and for delivery within five years prior to survey. Years as noted.

*Lebanon data is only for Palestinian refugees.

While reports suggest that many people perceive higher service quality in the private sector than in the public sector, there is little reliable evidence on this issue. Existing data suggest that quality in the private sector is uneven, given limited regulation and oversight. There are many private sector facilities recognized for excellence throughout the region, particularly hospitals accredited by international standards in Egypt, Jordan, Tunisia, and East Jerusalem that are renowned for quality secondary and tertiary care. However, in some service areas—often where there is limited oversight of the private sector—service quality is inconsistent. In a recent study of private sector family planning services in Egypt, most providers reported that they had received no family planning training for 10 years (Abdel Tawab et al. 2016). These issues are not unique to Egypt. In many countries, there are limited opportunities for continuing medical education for private providers of any cadre. Key informant interviews highlighted this issue for pharmacies in particular. Pharmacies often act as primary care providers in several countries and are a key source of care for MCH and family planning, yet many pharmacists had little training or knowledge in counseling patients on how to properly use medications or on their side effects (Amin 2016; Amin and Chewning 2016). In most countries, enforcement of prescription drug regulations is limited.[4]

Box 3. Syrian field hospitals

Over half of public hospitals and health centers in Syria are closed or partially functioning (WHO 2016b; Coutts et al. 2015). This has led to restructuring of health facilities to meet the medical and humanitarian needs of those affected. These new facilities include field hospitals administered by NGOs and communities. Established in locations including factories, farms, caves, and basements, the so-called field hospitals have saved the lives of countless patients and health workers, although they often lack the necessary equipment and staff to be as effective as they could be and are targeted by armed forces (Alahdab 2014). Field hospitals increase opportunities for care, help to prevent displacement, and, when fortified, can ensure the protection of equipment (Fallon and Kieval 2017).

The private health sector in conflict settings

In conflict settings, health systems become fragmented between areas controlled by governments and opposition forces. Security issues also make national data collection challenging or impossible. In this context, data on the private health sector is scarce in conflict and post-conflict settings.

While already limited, oversight of the private sector weakens further in conflict or post-conflict settings when health systems and government functions fragment. In countries affected by protracted conflict, including Iraq, Libya, Syria, and Yemen, health sector governance varies geographically and over time depending on the intensity of fighting. Prior to the start of their respective conflicts, Iraq, Libya, and Syria had strong public health sectors and budding private sectors. The private sector, though less developed, also played an important role in Yemen.

[4] Understanding the supply and availability of health products is a key part of the private health sector. However, examining this was beyond the scope of this review, so this information is not included.

Professional associations that included the private sector were strong in Syria, for instance. National health policies and strategies still exist and are implemented to varying degrees in parts of these countries that are under government control. Monitoring of the private sector, which was limited before conflict, has declined, especially as ad hoc or informal private health providers and facilities may emerge to fill gaps left by destruction of the pre-conflict health system. In Iraq, Syria, and Yemen, international organizations and NGOs play a strong role in governing and monitoring service quality in the private, nonprofit sector through the humanitarian cluster system, under which international and local NGOs, usually vetted by the UN, coordinate efforts to make sure needs are met and to avoid duplication. In areas of these countries not under government control, some local and international NGOs have taken over running and supplying formerly public health facilities.

In Iraq, Libya, Syria, and Yemen, the private for-profit sector has been greatly weakened as the uncertain economic and security environment increases the challenges of running a business.

In conflict and post-conflict settings, the private sector develops ad hoc in response to changing health needs, locations of violence/destruction, and the weakening of health systems, among other conflict-related factors. Ad hoc field hospitals, for instance, are one response in Syria (Box 3). The role of UN organizations and NGOs such as the International Committee of the Red Cross, the International Rescue Committee, and International Medical Corps has increased in order to fill gaps left by the weakening and destruction of parts of the public and for-profit private sectors, particularly in primary and secondary service delivery. While international NGOs offer swift responses to acute health needs, experience, and funds, they may not remain in-country for long or have clear accountability mechanisms; they may lack local knowledge or disregard local capacity. Local NGOs also operate amid conflict. While these organizations tend to possess local knowledge and credibility, they may lack resources.

In conflict settings, for-profit providers, typically located in urban settings, tend to provide primary and secondary care and pharmaceutical supply (Witter and Hunter 2017). Their relative strengths may include capacity, flexibility, and perceived higher quality (Witter and Hunter 2017). However, these providers may lack regulation, charge high fees, and many may leave in response to worsening violence (Witter and Hunter 2017). In Iraq, Libya, Syria, and Yemen, the private for-profit sector has been greatly weakened as the uncertain economic and security environment increases the challenges of running a business. Foreign workers played a critical role in the Libyan for-profit sector prior to the civil war but many have left since it began.

When conflicts limit local medical resources, patients may travel to other parts of the region to seek private care. For example, thousands of Iraqis travel to Beirut and Amman each year for weeks or months to seek treatment in the private sector. This has a high cost, particularly for people with chronic diseases such as cancer that require multiple costly treatments (Dewachi 2013). Many patients sell properties and belongings, or borrow money to cover travel and treatment expenses (Skelton 2013).

PPPs between local and international NGOs and the government are important to service delivery in conflict and post-conflict settings. For instance, MSF partners with the Iraqi Ministry of Health to expand access to mental health care in public health facilities (MSF 2012). In Yemen, the NGO community serves as an intermediary between the public and private for-profit sectors, supporting the former by acquiring some resources from the latter. Donors fund these PPPs, so they may not be sustainable in the long run.

Private sector care for refugees

Available data show that the private sector, both for-profit and nonprofit, is a key source of health care for refugees living both inside and outside camps. UN agencies, namely UNHCR, typically provide primary and secondary services to refugees living in camps, referring them out to the public or private sectors as needed for tertiary and chronic care. Refugees living outside camps may access care from NGOs or from the private for-profit sector, depending on their ability to pay for services. A 2017 UNHCR survey found that 64 percent of Syrian refugees (registered with the UNHCR) in Egypt seek care in the private sector. In Egypt, Syrian refugees are entitled to access primary health care in the public sector; many did not due to limited awareness of the benefit and other factors (Nielsen 2017). A 2014 survey of Syrians living outside camps in Jordan found that 39 percent of health services sought by Syrian refugees were in the private for-profit sector and 10 percent were in the private NGO sector (Doocy et al. 2016b). The largest barrier to private sector care for refugees is cost.

Recommendations and Knowledge Gaps

Recommendations for USAID investment

The following recommendations support USAID's plan for "strategic transitions"—moving select middle-income countries to a model of US engagement that relies less on traditional development assistance and more on other forms of cooperation. This includes a shift from service delivery to capacity building, drawdown of grant funding, and a prudent reduction in USAID's physical presence.

General recommendations

- Help implement USAID's strategic transition from service delivery and grant funding to capacity building and technical assistance. This should use a phased approach and a realistic timeline, taking into account gaps in public finance and local capacity.
- Continue contributing to multilateral development banks and UN agencies, whose lending, investment programs, and technical assistance tend to be better matched to middleincome countries' financial and technical needs.
- Focus grant resources on capacity building in partner countries to ensure the sustainability of USAID investments (e.g., family planning and primary health care in Egypt and Jordan). Each country-specific strategy should identify the appropriate menu of technical assistance to be implemented, and a realistic timeframe for implementation.

Health financing recommendations

- Support a shift from passive purchasing to active and strategic purchasing by sharing experiences, tools, and best practices of other countries, and providing mid-term support to tax-based and health insurance entities to introduce new purchasing arrangements and to manage the transition.
- Strengthen countries' capacity to (1) expand and manage social health insurance

schemes and prepayment mechanisms and (2) implement, monitor, and evaluate the universal health coverage agendas and plans.

- Promote domestic revenue mobilization for social services in general and health in particular. Strengthen partner countries' revenue administration and collection, advise on tax reform, encourage a culture of tax compliance, and strengthen pro-poor policies and public financial management, including health expenditure review and monitoring.
- Provide strategic advice, tools, and information on key health policy issues and particularly on health technologies and human resources for the 21st century, health information platforms, contractual arrangements, equity-oriented policy, health system governance, health service management and evaluation, priority setting and benefit package design, results-based financing, economic evaluation methodology, and evidence-based decision making.
- Help countries institutionalize the National Health Accounts exercise and use of the results to inform policy dialogue and decision making on health policy and financing.

Private health sector recommendations

- In priority countries where USAID would like to invest in working with the private health sector, it may be necessary to conduct more detailed assessments to better understand the size and scope of the private sector and to find private sector partners. Conducting private sector assessments or censuses in key countries, such as Jordan or Egypt, is one way to do this. An assessment captures key information such as who comprises the private sector, which services and products they provide and to whom, where private providers are located, and more. Assessments can focus on a specific health area or they can cover a range of health priorities. Having this information can help local stakeholders to more effectively harness the private sector's strengths in their health systems.
- On a country basis, establish a formal platform such as a technical working group that functions to initiate or support dialogue between the public and private sectors to support the implementation and regular updating of regulations and procedures, the development of private sector components of national health strategies, and the identification of opportunities for PPPs.
- Support existing private provider associations to advocate for themselves in policy making to strengthen governance of the private sector.
- On a country basis, support collaboration between the public and private sectors to build a total market approach for increasing access to priority health products and services. A total market approach (TMA) is a lens or process for developing strategies that increase access to priority health products and services. It involves taking into account free, subsidized, and commercial delivery methods as well as clearly defining the roles and target populations of the public and private sectors to increase access for all segments of a population.

- The private health sector is a critical provider of care for NCDs across the region. Governments are advised to prioritize PPPs for NCDs, particularly for NCD prevention, building on successful models in Egypt and Lebanon.
- Facilitate collaboration between the public and private sectors to strengthen referral systems. This will help to increase efficiency by ensuring the private sector complements the public sector in service provision.
- Support provider associations or other possible training venues to provide continuing medical education to private providers.
- Focus on training and organizing private pharmacies to improve the quality of MCH and family planning services, including counseling on the use of child health treatments and family planning methods, including possible side effects.

Recommendations for fragile states

For countries experiencing prolonged conflict, different types of investments are necessary to support and rebuild health systems. Guidance on health interventions in fragile states advocates sequencing for maximum effectiveness. This means that donors, including USAID, should focus on short-term, urgent relief to save lives during conflict. This may require large financial and technical support for several years, delivered in close collaboration with other donors and partners. As the country stabilizes, donors can focus on longer-term development goals and make investments similar to those recommended above for stable states (Management Sciences for Health 2007). During post-conflict transitions, it is important to consider how to advise countries so that they can take advantage of rebuilding to rethink their health system design, governance, and management.

Recommended investments related to health financing and the private health sector include:

- Sponsor applied research and interventions related to health financing in conflict, as little is known about this area. Possible research topics include the mix and sequencing of financing mechanisms, regulation and public financial management, payment systems and incentives at the facility and health worker levels, and possible contributions of overall health financing strategies to wider state building.
- Sponsor applied research on effective interventions for providing chronic NCD care through the private sector in conflict and post-conflict settings. There is little research on this topic, but the need for NCD care is high among Syrian refugees in Lebanon and Jordan, and among people living in unstable situations in Iraq, Libya, Syria, and Yemen.
- Promote focused approaches to improve service quality in conflict settings, possibly through financial incentives or substitutes for state regulation where state oversight has broken down or become fragmented in conflict. These approaches could include external and self-accreditation, franchised service provision, and community monitoring of health service availability and quality.
- Consider contractual non-state partners to provide basic health services, including those for NCDs. These activities should be accompanied by the implementation of innovative

ways to build or rebuild the capacity of ministries of health to manage and administer funds to NGOs and other partners, set policy, regulate the market, and contract services.

- Where mobility is limited due to security, support remote, video- or phone-based training and supportive supervision for providers in areas that are not physically accessible to improve service quality.
- Where health systems have become fragmented or destroyed, explore the feasibility of creating health service directories that are accessible via mobile phones for refugees or internally displaced persons who are moving frequently or living in unfamiliar areas.
- In more stable areas of conflict and post-conflict states, train and organize private pharmacies to improve the quality of counseling and services, particularly for MCH and family planning services.
- Establish a transition mechanism and well-defined financing rules for shifting from humanitarian aid to development aid. This is critical to avoid maintaining dependency and state-avoidance practices.
- After conflict ends, focus on rebuilding private health sector infrastructure, providing medical supplies, and helping to rebuild private provider associations or networks. Continue to provide health personnel salaries while assisting with the transition to sustainable revenue models.

Key knowledge gaps

There are substantial gaps in existing knowledge about health financing and the private sector in the region. USAID would be well advised to invest in more detailed reviews in priority countries to help fill these gaps.

Health financing

There is little information available on how revenue is collected and how various public and private contributions to health systems are structured. In addition, there is little detailed information on levels and sources of OOP payments among different populations, especially by socioeconomic status. Better understanding of revenue collection and contributions has important implications for promoting equity in health financing.

Knowledge is limited on how policymakers define benefits packages. There is little information on what tools are used for priority-setting, structuring benefits packages, funding them, and evaluating their effectiveness. Understanding how policymakers decide on benefits packages is important for structuring health financing mechanisms.

There is limited information on the effects of different active purchasing arrangements and payment methods on service quality and cost in the public and private sectors. Several countries have piloted different purchasing arrangements or initiatives aimed at separating providers and payers, but little is known about the results of these pilots.

There is limited information on the population coverage of different financing regimes in these 11 countries, as well as on people's access to basic or specialized health services and

their household health expenditures. Population-based health surveys are needed to gather reliable data in this area.

For countries bordering Syria, little is known about the impact of refugees and the Syrian crisis on health financing and performance in Jordan, Lebanon, and other countries. Data are lacking about the extent to which alternative providers and donors have stepped in to fill widening financial gaps in Syria as the conflict has unfolded.

Few sources have examined lessons learned on financial protection from countries previously in conflict and reconstruction efforts that could be applied to Middle Eastern countries in conflict. These lessons could help to inform post-conflict rebuilding to improve health financing systems.

Private health sector

Little is known about the size and scope of the private health sector, types of providers in it, services they offer, and populations they serve. Existing government, professional association, syndicate, or other records of private providers are inconsistent and usually out of date. It is unclear how the private sector complements or competes with the public sector in most countries.

There is little information on lessons learned and successful policy models for supporting the private sector in the Middle East. Certain countries have dedicated PPP units within government, contract extensively with the private sector for certain services, and have made efforts to include the private sector in policy making. However, it is unclear what the effects of these policies have been and whether they are successful in supporting private sector development or increasing public-private dialogue.

Data are extremely limited on the use of private sector health services. As discussed above, few reliable, recent population-based surveys ask about the use of health services. The surveys that do exist are often designed for low-income countriesand focus on family planning and MCH services. While small-scale studies gather data on NCD service use among specific populations, such as refugees, nationally representative data on sources of health care, particularly for NCDs, are rare.

A lack of reliable data exist on how the private sector evolves during conflict, which makes it challenging to know how to support the private sector in conflict and post-conflict settings. Reports suggest that the private health sector changes substantially during conflict, with instability causing for-profit providers to close or move, new types of providers to open due to changing demand, increased roles for local and international NGOs, and deterioration of public health systems.

Two children await medical care in Iraq.

Photo credit: DVIDSHUB/ Sgt. Daniel West

Methods

The assessment team – comprised of the SHOPS Plus and HFG teams – used a mix of quantitative and qualitative methods in a desk review to understand what health data are available in the MENA, identify gaps in health data, review health financing and spending, examine key health issues affecting refugees, assess the role of the private sector in MCH, family planning, and NCD services, determine the legal and regulatory framework governing the private sector, and examine opportunities for PPPs. The team used quantitative data from the most recent DHS, MICS, and PAPFAM surveys, the WHO's Global Health Expenditure database and NHA, and numerous other databases and reports to understand sources of health services, health expenditures, and key health status indicators. The team also reviewed reports from the WHO, World Bank, IMF, USAID, UNHCR, IRC, and other international and local development and humanitarian organizations.

The SHOPS Plus team also analyzed DHS, MICS, and PAPFAM data to examine the private sector as a source of care for MCH and family planning services. (See Table Q for the survey used by country.). The survey reports do not typically include analysis of source of care by public/private, but the data needed for analysis are available in the datasets.

Table 2: Data on Sources of MCH and Family Planning Services by Public/Private

Country	Year	Source
Algeria	2012-13	MICS4
Egypt	2014	Standard DHS
Iraq	2011	MICS4
Jordan	2012	Standard DHS
Lebanon (Palestinians only)	2011	MICS4
Libya	2007	PAPFAM
Morocco	2011	PAPFAM
Palestine	2014	MICS5
Syria	2006	MICS3
Tunisia	2011-12	MICS4
Yemen	2013	Standard DHS

After the initial desk review, the team conducted over 50 key stakeholder interviews using key informant interview guides. Assessment staff adapted the guides from tools that SHOPS Plus and HFG staff had developed for previous private sector and health systems assessments. Team members spoke with a broad range of representatives from the public, private nonprofit, and private for-profit sectors in the 11 countries (Table R). The informants included government officials, representatives of donor organizations working in the region, USAID implementing partners, professional and technical associations, private providers, private provider associations, NGOs, private insurance companies, pharmaceutical companies, and academic institutions. The senior health financing consultant also visited Egypt on May 22–24, 2017, to meet with key informants at WHO-EMRO as well as representatives from Egyptian health insurance companies, NGOs, the Ministry of Health and Population, and USAID implementing partners.

Table 3. Key Informant Interviews Conducted by Country

Countries	Number of interviews conducted
Algeria	7
Egypt	11
Iraq	2
Jordan	5*
Lebanon	4
Libya	1
Morocco	7
Syria	1
Tunisia	2
West Bank and Gaza	10
Yemen	2
Total	52

Note: To protect the privacy of the interviewees, this report does not include the names of the key informants. The number of interviews in certain countries is small, so information could be traced back to them easily.
*The Jordan analysis also drew on 15 key informant inteviews Abt's Health Service Delivery Activity conducted for its private sector strategy.

The assessment team synthesized findings from the desk review and interviews into this report.

Limitations

The assessment team encountered several key limitations when conducting this review. First, there is little nationally representative data on health service utilization, health expenditures, or perceptions of the public and private health sectors in these 11 countries. In some cases, it was not possible for us to locate the most current data, particularly statistics on service delivery and health facilities. There are very few population-based surveys in these countries. Many of the most recent DHS, MICS, and PAPFAM surveys are out of date and do not reflect changes resulting from recent political and social transitions. For Syria and Libya, the data are more than 10 years ago. Still, the findings provide insight into patterns in key health indicators, particularly use of the private sector.

Second, data on health financing is inconsistent across sources. The WHO Global Health Expenditure database and NHA estimates do not always match. This was the case for Egypt, Jordan, Morocco, and Tunisia. There are no health expenditure data for the West Bank and Gaza. Moreover, at the time of this review, WHO data on health were available only up to 2014.[5] Thus, the data do not reflect post-2014 changes in the economic, institutional, and political contexts that have affected health financing in general or public funding and financial protection for vulnerable groups in particular, especially in countries experiencing conflict or a reduction in oil revenues. We tried to overcome these limitations in data by prioritizing data from more recent studies where they were done, and collecting newer qualitative information from key informants. However, even most NHA exercises were conducted before 2015.

[5] 2015 data were released in December 2017, after this report was drafted.

Finally, because this study was primarily a desk review, our ability to conduct key informant interviews in each country was limited.

Despite these gaps, this report has compiled available data into one source on regional trends and is a base for future USAID investigation into the private health sector and health financing in priority countries.

Stable States

Algeria

The People's Democratic Republic of Algeria is home to approximately 39.7 million people. With 80 percent of the country covered by the Sahara Desert, 71 percent of its population lives in urban areas along the Mediterranean coast (UNPD 2017). The population is young, with 45 percent below the age of 25 (UNPD 2017).

Abdelaziz Bouteflika has been the President of Algeria since 1999. Algeria's recent history was shaped by the Black Decade of the 1990s, when a brutal civil war was fought between the Government of Algeria and an Islamic insurgency. In 2006, the government's charter for national reconciliation became law. In 2011, the government passed reforms in response to the Arab Spring uprising, such as lifting the state of emergency that had been in place for 19 years.

Algeria's upper middle-income economy relies heavily on the extractive sector, specifically on oil and natural gas. Authorities have implemented some structural reforms and are developing a long-term strategy to foster greater private sector activity and economic diversification. The country ranks 83 out of 188 countries and territories in the Human Development Index (UNDP 2016). This growth translated into a per capita gross national income (GNI) (Atlas method) of $4,270 in 2016 (World Bank 2016) and has funded government investments in the country's infrastructure, social stability, and overall development. The poverty rate was 5.5 percent as of 2011, but unemployment is high, estimated at 10.5 percent of the population in 2016 (IMF 2017). Algeria is currently dealing with the financial pressures that come with declining oil prices (IMF 2017). It ranks 166th out of 190 in the World Bank's Doing Business Index (World Bank 2017).

Health providers in Algeria. Algeria is one of five countries studied that, on paper, entitles its citizens to benefit from all types of preventive and curative services in the public sector without any restriction.

Photo credit: Kyle Spradley/CAFNR

Health Status

Algeria has made substantial progress in health. Immunization coverage is over 90 percent. The maternal mortality ratio (modeled estimate) dropped from 148 in 2008 to 140 in 2015 (World Bank 2017). As of 2012-2013, two-thirds of pregnant women had four or more antenatal care visits (Assaf et al. 2017). Ninety-seven percent of women both delivered in a health facility and had their most recent birth assisted by a skilled birth attendant (Assaf et al. 2017). Table 1.1 provides a snapshot of key health indicators.

Table 1.1: Key Health Indicators, Algeria

	2008	2013–2015
Life expectancy at birth (years)*	74	76
Maternal mortality ratio (modeled estimate, per 100,000 live births)*	148	140
Infant mortality rate (per 1,000 live births)*	25.3	21.9
Under-5 mortality rate (per 1,000 live births)**	--	23
Total fertility rate (births per woman)**	--	2.8
mCPR (percent of women ages 15-49)**	--	48.8

Sources: * World Bank 2017; ** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

Similar to many countries in the region, Algeria is undergoing a demographic and epidemiological transition in which communicable diseases have declined and NCDs and injuries are rising as major causes of morbidity and mortality. NCDs cause 80 percent of deaths, with cardiovascular diseases (41 percent) and cancer (10 percent) together accounting for half of all deaths (WHO 2014). The most frequent types of cancer in men are lung, bladder, prostate, and colorectal cancer. In women, breast cancer is most common, followed by cervical and colorectal cancer (MSPRH 2014a).

Treatment for NCDs is largely the realm of the public sector. Direct government expenditures cover cancer treatment. In 2003, Algeria established one of the first publicly funded cancer prevention programs in North Africa (Oxford Business Group 2015). The Algerian government has developed a National Multi-Sectoral Strategic Plan for Integrated Control of Risk Factors for NCDs and national prevention programs (MSPRH 2014a); however, these have been difficult to implement. Algeria also has treatment options within the private sector.

Health System

The Algerian health system is made up of three sectors—public, quasi-public, and private—of which the public is by far the largest. More than 90 percent of all beds are found in public hospitals. The Ministry of Health, Population and Hospital Reform (*Ministère de la Santé, de la Population et de la Réforme Hospitalière*, or MSPRH) runs the public sector and regulates the rapidly growing private sector. There are also specialized national institutions, such as the Pasteur Institute and Cancer Centers and Institute, as well as public entities in charge of drug regulation, public health promotion, and health research. While the Algerian constitution guarantees free access to health care services in the public sector, in practice, access and utilization vary (Zehnati 2014). The semi-public sector comprises large public firms such as Sonatrach (a state-owned hydrocarbon firm) and Sonelgaz (state-owned utility firm), which provide outpatient health care for their employees and their families.

Across all sectors, Algeria's health system has grown dramatically, driven in large part by the increased prevalence of NCDs and the rapid introduction of new drugs and medical devices. Between 2000 and 2012, the number of medical practitioners increased from 22,123 to 49,280. This growth was largely fueled by increases in specialists; in 2000, 4,939 doctors were specialists (approximately 22 percent), and by 2012, 19,306 (39 percent) were specialists (MSPRH 2014b). The pharmaceutical market grew from $500 million in 2000 to $7 billion in 2016, making Algeria one of the most developed health markets in Africa and Middle-East (BMI Research 2015).

Health Financing

In Algeria, health financing is dominated by public sources and is primarily channeled through public agents to both public and private facilities. While the MSPRH has not developed detailed NHA since 2005, WHO estimates provide some insights into how funds flow through the system. Algeria's health expenditure indicators are found in Table 1.2.

Table 1.2: Health Expenditure Indicators, Algeria, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	61.3*	206.4	361.7
THE as a percent of Gross Domestic Product (GDP)	3	4	7
General Government Health Expenditure (GGHE) as a percent of GDP	3	3	5
GGHE as a percent of THE	73	73	73
GGHE as a percent of General Government Expenditure (GGE)	9	8	10
Social Security Funds as a percent of GGHE	35.5	35.2	36.3
Out-of-Pocket (OOP) Expenditure as a percent of THE	26	26	26
Private Health Expenditure (PvtHE) as a percent of THE	27	27	27
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	97	96	97
Private Insurance as a percent of PvtHE	3	3	3
External Resources on Health as a percent of THE	-	-	-

Source: WHO Global Health Expenditure Database 2017
* This figure is inconsistent with local sources (NHA 2005)

As Algeria's health system has grown, so have health expenditures. THE represented 7 percent of GDP in 2014, up from 4 percent in 2008 (Table 1.2) (WHO 2017). The health share of total public spending also has increased, from 8 percent in 2008 to 10 percent in 2014. This was accompanied by a substantial increase in the salaries of public sector staff, the financing of investment in medical infrastructure, and the importation of costly drugs and specialized equipment for NCDs. Per capita spending on health increased rapidly between 2008 and 2014, from $206 to more than $360. This growth is the result of rapid increases in demand, supply, and costs of health services and products; the rise in NCDs; and the expansion of health insurance and the private sector (WHO 2017).

Pooling

Health funds are mobilized mainly by the government, through its tax revenue and particularly its oil revenue. Funding also comes from the social security system, which was unified in 1983 to reduce the fragmentation of several earlier social security systems, which were based on various categories of employees and activity sectors (Zine-Eddine, Kaddar, and Sabri 2008). Unification has created two social security funds: the National Health Insurance Fund for Salaried Workers and their dependents (*Caisse Nationale des Assurances Sociales des Travailleurs Salariés*, CNAS) and the National Health Insurance Fund for Non-Salaried Workers and their dependents (*Caisse Nationale des Assurances Sociales des Non Salariés*, CASNOS). CNAS is a compulsory scheme that covers those who are formally employed in either the public or private sector, while CASNOS is compulsory for non-salaried workers.

Although there were some fluctuations, the sources of funding have remained relatively consistent from 2008 until now (Table 1.3). Public sources cover approximately 75 percent of THE; the remaining 25 percent of funding comes directly from households (WHO 2017, Lamri 2014), mainly in the form of OOP payments, as the private insurance industry is very limited in size.

In total, **compulsory prepayment mechanisms including money coming from either general taxation or mandatory contributions to the social health insurance schemes mentioned above have been dominant** so far in Algeria.

Because the most recent NHA exercise used 2005 data, there are little current data on households' use of health care and the amounts of their OOP health expenditures. Anecdotal evidence suggests that their OOP expenses are primarily "top-up" payments to cover the costs of specialized care that are more than social health insurance reimbursement rates, especially at private facilities and for more expensive pharmaceutical products.

Table 1.3: Sources of Health Funding, Algeria, 2000–2014 (%)

Source	2000	2005	2010	2014
Government budget	38	43	50	44
Social health insurance	36	32	30	31
Households	26	25	20	25

Sources: NHA, 2005 and Lamri 2014

Purchasing and Payment Methods

In the private sector, the majority of payments are made out of pocket, and based on fee for service. In the public sector, purchaser-provider integration is the dominant arrangement. Payment is not linked to any performance indicators—MSPRH funds flow through the integrated system by a rigid line item budgeting based on historical trends (i.e., passive purchasing). Recipients of the funds (e.g., hospital managers) have very limited autonomy over their internal financial resources except for some teaching hospitals and the experimental teaching hospital in Oran.

Social health insurance schemes make a global (lump-sum) contribution to the MSPRH budget. They contract also with private providers for certain services such as dialysis and cardiovascular therapies. CNAS and CASNOS reimburse insured users of private medical services and pharmaceutical products according to a rigid reference-price basis. Both schemes reimburse private providers based on negotiated rates and pharmaceutical reference prices. Reimbursement for most pharmaceutical products included in the schemes' reimbursable drugs lists is usually about 80 percent of the cost; drugs for chronic diseases are fully covered. These pharmaceutical expenditures are the greatest expense category for the social health insurance schemes (Bourkaeib 2017). To reduce these costs, CNAS is considering new procedures and performance-based mechanisms to negotiate prices with medicine manufacturers, especially for costly cancer and cardiovascular drugs.

Contractual arrangements on package of health services and payment methods between social health insurance and the MSPRH have been experimented and have been on the agenda since 1983 with no concrete scale-up or convincing positive results. Overall public financial management in Algeria lacks a robust information system and transparent mechanisms for budget formulation, execution, and monitoring.

Private Health Sector

Although small compared to the public sector, the private health sector has grown considerably since the early 1990s. Decree 88-204 legalized the participation of the private sector in the health system in 1988 (Allia 2014). Private providers primarily operate on a for-profit basis, focusing on curative care (Zehnati and Payron 2013).

Policy and Governance

The MSPRH regulates the health system and is divided into two directorates: 1) The Directorate General for the Prevention and Promotion of Health and 2) The Directorate General for Health Services and Hospital Reform. **The latter has two offices that cover the private sector: the sub-directorate of private hospitals and the sub-directorate of private medicine.** Additionally, the Ministry of Labor and Social Security manages the national health insurance program and the Ministry of Higher Education and Scientific Research is in charge of physician training (MSPRH 2014a). All medical training institutions are run and supervised by the public sector. **According to key informants, there are no private institutions for training doctors, pharmacists, or surgeons; there are, however, some for nurses and nurse aides.**

Public-private engagement in the health sector has been limited. In regions where there are a shortage of specialists, the government contracts with private providers to deliver health services. PPPs also exist among pharmaceutical firms, notably between SAIDAL, a public company, and large multinational firms. The government is trying to strengthen contracting activities to allow public hospitals to transfer patients to private facilities for

additional treatment because the latter are often better equipped for advanced care (Oxford Business Group 2015).

Private sector reporting poses a challenge. While the law requires private providers to report quarterly, in practice, private clinics have been found to under report in an effort to avoid taxes and controls (Zehnati 2014). While there are currently no accreditation mechanisms in Algeria, in 2015, the MSPRH closed 20 private facilities after surprise inspections revealed infringements on authorized procedures, and improper staffing and personnel reporting (Oxford Business Group 2015). The Annuaire Statistique reports on the public sector but not the private sector.

Algeria is currently considering health legislation that encourages the role of the private sector, particularly in the fight against NCDs (All Africa 2016). However, according to key informants, there is no enabling legislation yet to support this and there is little public-private engagement. The new law also calls for an accreditation mechanism for both sectors, but it has not yet been implemented. While limited dual practice has been allowed since 1999, the new health law would ban it due to concerns over conflict of interest. Stakeholders acknowledge that such a ban would be difficult to enforce.

The private sector is starting to organize into nascent associations in order to advocate for itself as these policies advance. The *Syndicat National Medecins Liberales* (National Union of Private Physicians) was formed in 2016 and plans to focus on advocacy with the MSPRH. Another important association is the Syndicat des Pharmaciens d'officines (SNAPO) which, according to key informants, is one of the most powerful associations and includes many private pharmacists.

Service Delivery

While there is limited data on the role of private providers in delivering health services, as of 2012-2013, the private sector is an important source of care for child health across income levels. The 2012-2013 MICS survey only provides information about the source of care for deliveries and acute respiratory infections (ARI) (Table 1.4). These two data points present a limited—but important—view of the private sector's role in the health system. For example, 91 percent of women deliver in public health facilities and only 9 percent go to the private sector. Public sector use for deliveries is high regardless of wealth quintile, though use of private facilities does tend to increase with wealth. Yet the private sector is an important source of care for child health, as almost half of caregivers (48 percent) took children with symptoms of acute respiratory infection (ARI) for treatment in the private sector and another 5 percent took them to both public and private sources. This importance holds true for all income groups. Among those in the poorest wealth quintile, 44 percent took their children to the private health sector.

Table 1.4: Sources of MCH and FP Care, Algeria

Indicator	Private	Public	Both	Other
Place of delivery (percent of women who gave birth in a health facility in 2 years prior to survey)	9	91	--	0

ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	48	42	5	5

Source: MICS 2013 (MSPRH and UNICEF 2015)

The private sector is composed of for-profit providers at independent consultation offices, private clinics, and pharmacy and retail drug outlets. These facilities are mainly found in northern coastal cities and historically have complemented the public sector by filling gaps in service provision (Pacific Prime 2017). As of 2014, the private sector included mainly consultation offices (about 6,700 for general medicine and 7,300 for specialized medicine) and private clinics (400 specializing mainly in surgery and hemodialysis). The abundance of specialists can be attributed to the fact that it is more lucrative to operate in the private sector as a specialist than a generalist. Additionally, the health system allows patients to go directly to a specialist without having seen a generalist. The majority of pharmacists (90 percent) are in the private sector (MSPRH 2014b).

The first private hospital opened in 2014. However, according to key informant interviews, there are no agreements in place between national social insurance programs and private hospitals. To our knowledge, there is no official registry of private providers. Key informants stated that the Ministry of Labor, Employment, and Social Security keeps records of private providers and facilities, but did not know whether it is up to date. This could be a source of information to better understand the scope of the private sector in Algeria.

With the growth of the private sector, key informants indicated that dual practice has increased. Given that public salaries are low and dual practice is legal, physicians may refer patients to the private sector in order to generate more lucrative fee-for-service private clientele (Zehnati and Peyron 2013). Anecdotal evidence suggests that referrals are not systematic due to inefficiency in public hospitals and preferential treatment for patients who are wealthy or well-connected (Zehnati and Peyron 2013). Patients generally face two barriers to accessing health services: the difficulty of getting physical access to the services in the public sector and the financial barrier to accessing the private sector (Zehnati 2014).

Although most treatment for NCDs occurs in the public sector, there are options in the private sector. NCDs services in the private sector are paid for out of pocket, through social security, or health insurance (Lamri, Gripiotis, and Ferrano 2014). The Chahids Mahmoudi hospital is a privately owned hospital that aims to be a world class cancer treatment institution to discourage treatment-seeking abroad. The Danish pharmaceutical firm Novo Nordisk established a PPP with the public sector in 2011 to launch a mobile clinic that travels to remote areas to offer diabetes diagnosis and other services (Oxford Business Group 2015).

Refugees

Algeria is host to refugees primarily from the Western Sahara (90,000) and Palestine (4,016). The private sector, primarily international NGOs, is an important source of health care for them. Saharawi refugees, from the Western Sahara, mainly live in camps and manage the health systems in their camps themselves, so these systems are effectively private. They are financially dependent on international organizations. **The most common health concerns in these camps are diabetes and hypertension** (UNHCR 2016). The relatively small number of registered refugees based in Algiers and Tindouf are entitled to the same basic, public health

care as Algerians. Services not covered by the public scheme are supported by the UNHCR when possible (UNHCR 2017).

Egypt

With a population of more than 90 million, **the Arab Republic of Egypt is the most populous country in the MENA**. Approximately 51 percent of Egypt's population is under 25 years of age (UNPD 2017). Fifty-seven percent live in rural areas (World Bank 2017a).

Egypt has undergone several political changes since mass pro-democracy demonstrations forced President Hosni Mubarak to cede power in 2011. Muslim Brotherhood politician Mohamed Morsi, elected president in 2012, was in power for only a year when the military ousted him in a coup. Current president Abdel Fattah el-Sisi has been in power since 2014.

Egypt is a lower middle-income country with a GNI per capita (Atlas method) of $3,460 in 2016 (World Bank 2017b). The economy is diverse, comprising tourism, agriculture, services, extraction, and other sectors. Political instability since 2011 has negatively impacted the economy. Annual GDP growth dropped from 5.1 percent in 2010 to 1.8 percent in 2011 and has since gradually grown to 4.3 percent (World Bank 2017b). The economy continues to recover, but high inflation is a concern (World Bank 2017b). **Economic resources are limited given the growing size of the population.** The proportion of the population living in poverty increased from 21.6 percent in 2008 to 27.8 percent in 2016 (World Bank 2017b). Egypt ranks 128th out of 190 in the World Bank's Doing Business Index (World Bank 2017b). Currently, the economic power of the army is growing as Sisi deploys it to manage national projects, including supplying medical commodities to hospitals (Saleh 2016). Business leaders see Sisi's government as suspicious of the private sector and are wary of participation in the economy (Knecht and Alsharif 2015).

A nurse in Egypt vaccinates an infant.

Photo credit: Omar Mohsen

Health Status

Egypt has seen improvements in several population health indicators since 2008 but still faces challenges. For instance, the maternal mortality ratio decreased from 45 per 100,000 live births in 2008 to 33 in 2015 and the infant mortality rate fell from 26 per 1,000 live births in 2008 to 20 in 2015 (World Bank 2017b), as shown in Table 2.1. As of 2014, 92 percent of children were fully immunized, 80 percent of women received regular antenatal care, and 90 percent had skilled attendants at delivery (DHS 2014; see MoHP, El-Zanaty and Associates, and ICF International 2015). However, these improvements are not evenly distributed. For example, under-5 mortality is highest in rural areas and in the poorest wealth quintiles (DHS 2015). Reproductive health challenges include the increase in the total fertility rate from 3.0 (2008) to 3.5 (2014), and the high prevalence (87.2 percent) of female genital mutilation (World Bank 2017b). Egypt also faces child malnutrition and a concentrated epidemic of hepatitis C viral infection (WHO 2014a).

Table 2.1: Key Health Indicators, Egypt

	2008	2014–2015
Life expectancy at birth (years)*	70	71
Maternal mortality ratio (modeled estimate, per 100,000 live births)*	45	33
Infant mortality rate (per 1,000 live births)*	26.3	20.1
Under-5 mortality rate (per 1,000 live births)**	28	27
Total fertility rate (births per woman)**	3.0	3.5
mCPR (percent of women ages 15-49)**	57.6	56.9

Sources: * World Bank 2017; ** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

Like many developing countries, Egypt is undergoing the epidemiological transition from a higher burden of communicable to non-communicable diseases and injuries (MoHP 2014). NCDs are the heaviest disease burden, accounting for 85 percent of deaths. Cardiovascular diseases and cancers together account for 60 percent (WHO 2014c). Risk factors contributing to this high toll include smoking, with 46 percent prevalence in men, and obesity, found in almost half of Egyptian women (45 percent). The prevalence of hypertension and diabetes mellitus in the adult population is around 40 percent and 17 percent, respectively (MoHP 2012).

Egypt is addressing this rising burden with a dedicated NCD unit, a National Cancer Committee working on cancer control, a multi-sectoral task force for NCDs, and NCD indicators based on WHO guidelines (WHO 2016). The Government of Egypt and WHO are developing a national multi-sectoral action plan for the prevention and control of NCDs for 2017–2022 (WHO 2017b).

Health System

The health care system in Egypt is complex and fragmented with public, quasi-public, and private entities involved in management, health financing, and service delivery. However, its wide reach provides geographic accessibility (WHO 2010). Three sub-systems co-exist:

- The public sector, dominated by the Ministry of Health and Population (MoHP), has a network of hospitals and primary care units; university hospitals are under the governance of Ministry of Higher Education (MoHE). Other ministries also support health service operations.
- The private sector includes a variety of service providers and pharmacies, some for-profit, some nonprofit, and some mixed.
- The quasi-public sector is mainly represented by the Health Insurance Organization (HIO),

the main public health insurance mechanism for formal employees and a health service provider. However, many government institutions and large companies opted out of the HIO and set up parallel insurance schemes and service provision networks.

Egypt's constitution adopted in 2014 emphasizes the right to health and access to quality services. Article 18 affirms the role of the state to encourage participation of the private sector in health service delivery (State Information Service 2014). A new health law is under review that aims to move the Egyptian people toward UHC, including universal financial protection. In order to get there, **stakeholders acknowledge a need for reforms, including increased private sector participation.**

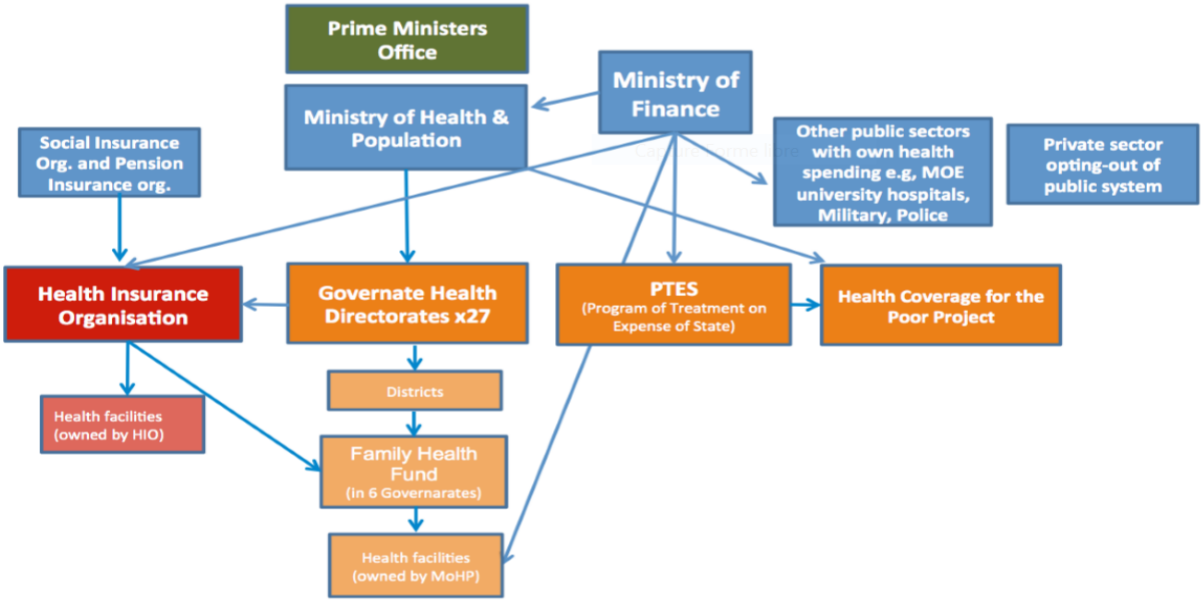
Health Financing

According to the 2012 NHA and WHO estimates, household OOP payments represent between 56 percent and 60 percent of THE and funding from public entities represents between 31 percent and 38 percent. Public and private business represents 8 percent, and private agents, including private/syndicate insurance, firms, and NGOs, represent around 2 percent (MoPH, 2012).

Pooling and managing health funds, and establishing harmonized compulsory prepayments programs with money coming from either general taxation or mandatory contributions to social insurance schemes, is problematic in Egypt as a multitude of entities and stakeholders are responsible for collecting contributions. These include the Ministry of Education, Ministry of Social Insurance, MoHP, and the HIO. Due to this fragmentation and lack of effective administrative capacity, only 76 percent of the mandatory contributions are actually collected from public and private sector employees (MoHP 2012). Many big corporations have opted out of the social health insurance system and have set up parallel health financing and service provision systems.

In Egypt, the flow of funds from sources to financing schemes and agents, then on to providers, operates in multiple streams, making it difficult to effectively coordinate and manage across ministries, sectors, and entities at all levels of the health system. Figure 15 depicts Egypt's health financing structure.

Figure 15: Health Financing Structure, Egypt



Source: Adapted from Khalifa (2016). This is a simplified diagram of the key funding sources; it excludes OOP spending as a major source of funding, which occurs in almost all transactions (including top-ups to pay for MoHP- and HIO-provided services that are supposed to be at no charge). The initial version of this diagram was developed by Mr. Riku Elovainio, Technical Officer, Health Financing, WHO Egypt Office.

The public financing entities include:

- The HIO, which covers almost 60 percent of the population;
- The MoHP, responsible for preserving health in Egypt and for providing free or subsidized services for uninsured citizens;
- The Program of Treatment on Expense of the State (PTES), intended to provide financial protection for all the uninsured, particularly for reimbursing catastrophic expenses; and
- Family Health Funds, piloted in a few governorates to provide citizens with a basic package of primary services and not yet scaled up.

Other ministries, including the Ministry of Interior, the Ministry of Transport, and the Ministry of Defense, operate health facilities with their own mechanisms and health service operations for their employees and dependents. The Ministry of Planning, which funds capital and investment costs, allocates funding directly to public health facilities. The MoHP spending represents 57 percent of general government health expenditure, the HIO represents 19 percent, the university hospitals 14 percent, and other ministries and public entities around 9 percent. Egypt's health expenditure indicators are found in Table 2.2.

Table 2.2: Health Expenditure Indicators, Egypt, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	77.7	100.7	177.8
THE as a percent of Gross Domestic Product (GDP)	5	6	7
General Government Health Expenditure (GGHE) as a percent of GDP	2	2	4
GGHE as a percent of THE	40	39	50
GGHE as a percent of General Government Expenditure (GGE)	12	10	24
Social Security Funds as a percent of GGHE	24.3	21.6	21.8
Out-of-Pocket (OOP) Expenditure as a percent of THE	57	54	41
Private Health Expenditure (PvtHE) as a percent of THE	60	61	50
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	96	88	81
Private Insurance as a percent of PvtHE	3	2	11
External Resources on Health as a percent of THE	1.0	1.4	1.3

Source: WHO Global Health Expenditure Database 2017

Several dimensions of Egyptian health financing are remarkable. First, the proportion of government expenditures allocated to health is relatively modest compared to both general government expenditures (7 percent in 2014) and to GDP (4 percent in 2014). Second, while household OOP expenditures have decreased over the past decade, they are still 41 percent of THE in 2014, and pharmaceutical products represent 50 percent of OOP spending. Third, health insurance schemes, both public and private, cover only part of the population and remain modest in terms of benefit packages. Fourth, expenditure for curative care is dominant—only 6 percent of THE goes to preventive care (MoHP 2012, Khalifa 2016).

Recent household health expenditure and utilization surveys show relatively high satisfaction with health services, but differences persist by facility type (Pande, Abdel-Hamid, and Elshalakani 2015). For example, patients overwhelmingly prefer private outpatient facilities, resulting in higher OOP expenditure, as private facilities are very poorly covered under most existing social health insurance schemes (World Bank 2010). Most public facilities are characterized by frequent shortages of medications, few available specialists, and poor compliance with standard treatment protocols. This is mainly due to little funding, mismanagement and supply chain issues. This common perception of the poor quality of

services offered by the public sector has fueled a lack of confidence in it, even among low-income groups who may have fewer resources for OOP payments (Khalifa 2016).

Purchasing and Payment Methods

Since the majority of payments are out of pocket, fee-for-service is the dominant method of payment. In the public sector, purchaser-provider integration is dominant, and the flow of funds is not linked to any performance indicators and is based on a rigid system of line item budgeting built on historical trends. The HIO payment system provides a lump-sum budget to most of its health services, with some exceptions for external contracting with public and private sector providers for select services such as dialysis and cancer treatments. It must be noted that the Family Health Funds have tried to implement different provider payment systems such as capitation and performance-based payments with limited success due to a high turnover of medical staff and the weakness of the health information system (MoHP 2014).

Health Financing Reforms

National authorities and partners are fully aware of the challenges the health system faces, including those related to health financing. After adoption of the 2014 constitution, with Article 18 instituting a right to health care for every citizen, a full-fledged health financing strategy is under development in order to help Egypt reach its ambitious health financing goals. These goals include reducing OOP spending to 28 percent by 2030, and increasing public funding of primary health care (MoHP 2014). Many challenges remain as the new health law is designed and implemented.

Private Health Sector

The private health sector has grown tremendously since the 1990s (WHO 2014a; WHO 2014b). The government enacted legislation to support private investment and regulate the market; however, it did not establish effective means of regulation, licensing, or partnership with the private health sector (WHO 2014a; WHO 2014b). **Government encouragement of the private sector has been hindered by weak governance, state bureaucracy, and limited resources, as well as the insecure environment following the 2011 uprising and the perception that the benefits offered to the private sector are inadequate** (WHO 2014b).

Policy and Governance

Policies exist for regulating the private sector and encouraging cross-sectoral collaboration, but their effectiveness is limited. There are multiple regulatory bodies that oversee the activities of the private sector. The MoHE is responsible for training health care professionals; the Department of Nongovernmental Curative Care in the MoHP licenses providers. The Ministry of Social Solidarity registers NGOs. Medical professionals are required to register through one of five syndicates (medical doctors, dentists, pharmacists, nurses, and physiotherapists). The syndicates have a code of ethics and a disciplinary system and are responsible for regulating some aspects of service quality (WHO 2014a). Accreditation of private health facilities is managed by the MoHP's General Department of Quality (WHO 2014a), though key informants noted that some private hospitals are accredited through international organizations.

Dual practice is widespread in Egypt and a 2002 study found that over half of private sector physicians have a public sector job as well (Abdel-Tawab et al. 2016). Most public sector clinics

close at 2pm, leaving time for providers to work at their private practices later in the day. One challenge in cross-sectoral coordination is private sector reporting into the health information system, which is practically nonexistent (MoHP 2014).

There is little coordination between the public and private sectors. One assessment of the private sector's contribution to family planning quoted an MoHP official as saying that the private sector had no clear representatives for the public sector to coordinate with, such as private-sector specific provider associations or syndicates (Abdel-Tawab et al. 2016).

Egyptian legislation supports public-private partnerships through contracting, but PPPs offer few benefits to private providers (WHO 2014). Public facilities may contract individuals who are assessed by the hospital director and board. In 2006 the Government of Egypt adopted a PPP policy led by the Public Private Partnership Central Unit. Major health PPPs underway include the Mowassat Specialized University Hospital Project and the Smouha Maternity University Hospital and Blood Bank (Ministry of Finance 2017). Egypt has sponsored several media campaigns related to NCDs and risk factors. For example, a mobile health (mHealth) PPP called the "BeHe@lthy, Be Mobile"—a collaboration between ministries, the WHO, the International Telecommunication Union and three local telecommunications companies—was implemented to address diabetes (WHO 2015b).

Service Delivery

As of 2015, over half of Egyptians sought some type of health care from the private sector regardless of income quintile. For most services, the public sector aims to serve poorer or more vulnerable populations that have less ability to pay for services. However, data shows that people of all wealth levels use both public and private services. Among those in the lowest income quintile, 70 percent of outpatient visits as of 2008 were in the private sector: 42 percent at private clinics, 25 percent at pharmacies and 3 percent at other private providers (Nakhimovsky et al. 2011). More recently, the 2015 DHS showed that 88 percent of women deliver in a health facility, and, of those, 71 percent deliver in a private facility (Table 2.3). In the lowest wealth quintile, 66 percent of women who delivered in a facility used the private sector (DHS 2015). While the majority of women using modern contraception obtain their methods from the public sector (55 percent), the private sector still plays a key role as 44 percent of women obtain methods from private sources. The top private sources of modern methods are NGOs, pharmacies, and private doctors. The private sector is a major source of care for child health, as 78 percent of caregivers sought treatment for diarrhea or ARI in the private sector, and 2 precent sought treatment in both the public and private sectors. There was less variation between wealth quintiles in use of private sources for child health. Even in the lowest wealth quintile, 81 percent of caregivers used private sources for diarrhea treatment and 78 percent of caregivers used private sources for ARI treatment. Private doctors were the most common source for child health.

Table 2.3: Sources of MCH and FP Care, Egypt

Indicator	Private	Public	Both	Other
Source of modern methods of contraception (percent of women of reproductive age currently using modern contraception)	44	55	--	1
Place of delivery (percent of women who gave birth in health facility 5 years prior to survey)	71	29	--	--
Diarrhea treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for diarrhea)	78	19	2	1
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	78	20	2	0

Source: DHS 2015. Some rows add to more than 100 percent because patients sought care in multiple sectors.

The majority of hospitals, primary health care clinics, and pharmacies in Egypt operate in the private sector. The private sector is enormous and diverse. Egyptian legislation lists five categories of facilities: private medical clinics (including laboratories and radiology clinics); specialized clinics; specialized medical centers; private hospitals; and convalescence homes. While there are more private hospitals (1,351) than public (646), the latter have more hospital beds (96,820, compared to the private sector's 31,653). Seventy-eight percent of primary health clinics are private (51,484) compared to the 4,937 public clinics. There are over 60,000 private pharmacies, comprising an estimated 97 percent of all pharmacies in the country (WHO 2014b).

Egypt has one of the largest markets for health care in the MENA and has become a center for medical tourism through its private sector, particularly for cosmetic procedures, renal dialysis, and chemotherapy (MedHalt 2015).

Faith-based organizations and NGO networks play a significant role in health service delivery, but according to key informant interviews, increased government scrutiny in the current political climate may limit their visibility and the reach of their operations. The principal non-profit private providers include houses of worship, NGOs and civil society (WHO 2014a). Faith-based organizations historically played an important role in service delivery; for instance, the Muslim Brotherhood ran 24 hospitals through the Islamic Medical Association in 2011 (Brooks and Minor 2013).

Private pharmacies also serve as primary health care providers although they may not have the required medical training to do so. Anecdotal evidence suggests that patients often go to pharmacies to avoid longer wait times at public facilities. Pharmacy staff diagnose patients and prescribe medicines with mixed quality. For example, studies have documented inappropriate antibiotic prescription (Sabry, Farid, and Dawoud 2014), low quality counseling on

family planning (Amin 2016), and lack of counseling on changes to medication needed while fasting during Ramadan (Amin and Chewning 2016).

Refugees

Syrian refugees registered with the UNHCR in Egypt are entitled to access primary health care in the public sector, but 64 percent seek care in the private sector due to limited awareness of the benefit and other factors (UNCHR 2017). There are approximately 205,000 refugees in Egypt, 122,000 Syrian and 83,000 from other countries, mainly Sudan, Ethiopia, Eritrea, and Somalia (UNHCR 2017). The number of unregistered refugees is not known, but the Government of Egypt states that there are 500,000 Syrian refugees (Karasapan 2016). Syrian refugees in Egypt do not reside in camps; the majority live in urban areas. According to a 2012 presidential decree, Syrian refugees registered with UNHCR are entitled to access subsidized or free public sector health services as any Egyptian citizen would. The government also provides support to unregistered Syrians in Egypt (WHO 2015a). Yet a recent UNHCR survey found that close to 75 percent of Syrian refugee families spend an average of 735 Egyptian pounds ($100) on health care in the month before the survey, with highest costs incurred in the private sector (UNCHR 2017). NCDs are a main health concern with 39 percent of surveyed refugee families self-reporting hypertension, diabetes, and heart diseases as primary ailments. Refugees (as well as Egyptian citizens) often face high costs for secondary and tertiary health services. UNHCR typically subsidizes these costs for registered refugees. In Egypt, UNHCR partners with MoHP, Arab Medical Union (AMU), Caritas, Mahmoud Society, Episcocare, Terre des Hommes, Medecins de Monde, Pathfinder, and Save the Children to provide health services to registered refugees (UNCHR 2017).

Jordan

The Hashemite Kingdom of Jordan is a lower middle-income country with a population of 9.5 million. Fifty-five percent of the population is under the age of 25 (UN 2017) and 84 percent live in urban areas (World Bank 2017c). Jordan's population is growing at an estimated 3.2 percent per year (World Bank 2017b), driven by a total fertility rate of 3.5 (JPFHS 2012; see Department of Statistics and ICF International 2013), increasing life expectancy, and the arrival of Syrian refugees since 2011. Regional instability and the increasing refugee population have hurt Jordan's economy in recent years. GDP growth declined to 2 percent in 2016, from 7 percent in 2008 (The Economist 2017). In 2017, the World Bank downgraded Jordan from an upper middle income to a lower middle income country (World Bank 2017c). Unemployment rates reached an all-time high in 2016 at 15.3 percent (World Bank 2017b). Jordan historically has been dependent on high levels of international aid and it has become more aid dependent since the start of the Syria crisis in 2011 (The Economist 2017). The mining and quarrying sectors, tourism, and construction currently drive Jordan's economy (World Bank 2017d). Jordan imports most of its energy, primarily natural gas, and energy diversification is a key focus for the government (World Bank 2017d).

Since the onset of the civil war in Syria in 2011 and the resulting refugee crisis, one of Jordan's most pressing socioeconomic challenges has been managing the influx of 1.4 million refugees who make up almost 20 percent of the population. Over 80 percent of Syrian refugees live in urban host communities (World Bank 2017d). Eighty-six percent of refugees live below the poverty line of 68 Jordanian dinars per month ($95) (MOPIC 2015). Jordan is already host to over 2 million Palestinian refugees who have arrived in waves since 1948.

Health Status

Jordan has seen major improvements health status of the population in recent decades. Life expectancy was 74 years in 2015. The maternal mortality ratio declined from 86 per 100,000 live births in 1990 to 58 in 2015 (World Bank 2017d). In 2015, the infant mortality rate was 15.5 per 1,000 live births in 2015 and the under-5 mortality rate was 21 per 1,000 live births in 2015. However, health indicators differ considerably across regions and governorates, with rural areas lagging (JPFHS 2012). Jordan also faces challenges in nutrition, as one-third of all Jordanian children under the age of five and women between the ages of 15 and 49 are anemic (JPFHS 2012). Table 3.1 provides a snapshot of key health indicators.

Table 3.1: Key Health Indicators, Jordan

	2007–2008	2012–2015
Life expectancy at birth (years)*	73	74
Maternal mortality ratio (modeled estimate, per 100,000 live births)*	58	58
Infant mortality rate (per 1,000 live births)*	19.0	15.5
Under-5 mortality rate (per 1,000 live births)**	21	21

Total fertility rate (births per woman)**	3.6	3.5
mCPR (percent of women ages 15-49)**	41.9	42.3

Sources: * World Bank 2017; ** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

Similar to many countries in the MENA, Jordan is undergoing an epidemiological transition with communicable diseases declining and NCDs and injuries rising. NCDs are the leading cause of death (76 percent). Of the NCDs, cardiovascular diseases account for 35 percent of deaths, followed by cancers (15 percent) (WHO 2014). NCDs are a serious issue for Jordanians as well as for Syrian and Palestinian refugees. Approximately a quarter of Syrian refugees also suffer from chronic conditions, requiring costly and frequent long-term treatments (World Bank 2013). NCD interventions are a key part of Jordan's national health strategies, and it has developed a plan of action against obesity, diabetes, and hypertension. It also has developed or is in the process of developing several policies and media campaigns to support tobacco control (WHO 2015). But the government has only partially developed a set of national indicators and targets to measure progress in reducing NCDs and their risk factors (WHO 2015).

However, the Syrian refugee crisis is leading to the reemergence of communicable diseases is threatening the health gains achieved prior to the start of Syrian conflict in 2011. This has serious ramifications and implications for both Syrian refugees and host communities. The incidence of communicable diseases such as measles, leishmaniasis, tuberculosis, and diarrhea is higher among the Syrian refugee population than among the Jordanian host communities. A total of 34,314 communicable disease cases were reported among the Syrian population between 2013 and 2014 (High Health Council 2015).

Health System

The Jordanian health sector is relatively well developed, providing a range of both advanced medical services and basic primary care to most citizens at low cost. Jordan's health system is diverse and fragmented with multiple public, semi-public, and private programs both financing and delivering care. The public sector is dominated by the Ministry of Health (MOH); Royal Medical Services (RMS), which serves the armed forces; and the university hospitals, Jordan University Hospital (JUH) and King Abdullah University Hospital (KAUH). The Jordanian Association of Manufacturers of Pharmaceuticals (JAPM) works with the Jordanian Food and Drug Administration and MOH to develop and enforce pharmaceutical legislation and guidelines (High Health Council 2015).

Though the public sector is dominant, the private sector, both for-profit and nonprofit, plays an important role in service delivery. Jordan has about 64 private hospitals of various sizes and many private general practitioners and specialists. Private insurance schemes cover many private services and public health insurance programs will cover private services for patients referred for services not provided in the public sector (WHO 2006). Major NGOs include the Jordanian Association for Family Planning and Protection (JAFPP) and the United Nations Relief and Works Agency (UNRWA), which serves Palestinian refugees. Jordan is also a regional destination for medical tourism in many areas, including NCDs. It houses one of the region's premier cancer treatment centers, the King Hussein Cancer Center (KHCC). Balancing

its attempts to develop the medical tourism sector with the health needs of the population is a challenge for Jordan.

Heath service delivery data show the density of health posts is high but decreased between 2010 and 2013 from 22.6 to 19.3 per 100 000 people (WHO 2017a). Health workforce density has stayed fairly constant since 2008, with about 2.7 physicians and 2.8 nursing and midwifery personnel per 1,000 people (WHO 2017a). Jordan faces major challenges in training of health professionals, in part because there are no requirements for continuing medical education, and also because of high staff turnover, particularly in rural areas and in the public sector (WHO 2017a).

The influx of Syrian refugees is creating increasing demand and strain for the Jordanian health system. According to the most recent Jordan Response Plan for the Syria Crisis, Jordan requires $224 million to address the health needs of Syrian refugees between 2017 and 2019 (MOPIC 2016).

In collaboration with many public and private partners, the High Health Council led the development of the National Strategy for the Health Sector in Jordan (2016-2020). This strategy focuses reforms on strengthening primary health care, supporting partnership between the public and private health sectors, implementing a national health insurance system, improving overall service quality and efficiency, increasing health care financing, and increasing regional medical tourism to Jordan (High Health Council 2016).

Health Financing

Jordan has been able to conduct National Health Accounts exercises under the leadership of the High Health Council and MOH. This is a challenge given the highly fragmented health system and multiple players and mechanisms. As a result of this nine-year effort (2007-2016) by the High Health Council General Secretariat, the Jordanian NHA team has produced its sixth NHA Technical Report (High Health Council 2016).

The NHA report published in 2016 indicates that in 2013 THE was approximately $2.656 billion compared to $2.352 billion in 2012, representing 7.89 percent of the GDP in 2013 and 7.58 percent of the GDP in 2012. Health expenditure per capita in 2012 was $368 compared to $327 in 2013 and only $171 in 2000. Thirty-five percent of THE originates from private sources and 61 percent is from government. International donors contribute the remaining 4 percent (High Health Council 2016). Jordan’s health expenditure indicators are found in Table 3.2 below.

The private sources are premiums paid by people for private commercial insurance, expenditures incurred by self-insured businesses that directly pay for health care services for their employees, and OOP spending for health care and drugs. The public sources are mainly general revenue allocations by the Ministry of Finance to the MOH, RMS, KAUH, and JUH.

Table 3.2: Health Expenditure Indicators, Jordan, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	171.3	320.9	358.9
THE as a percent of Gross Domestic Product (GDP)	10	9	7
General Government Health Expenditure (GGHE) as a percent of GDP	5	5	5
GGHE as a percent of THE	48	62	70
GGHE as a percent of General Government Expenditure (GGE)	14	16	14
Social Security Funds as a percent of GGHE	9.7	22.2	8.7
Out-of-Pocket (OOP) Expenditure as a percent of THE	39	32	21
Private Health Expenditure (PvtHE) as a percent of THE	52	38	30
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	75	84	69
Private Insurance as a percent of PvtHE	5	13	23
External Resources on Health as a percent of THE	4.5	1.5	6

Source: WHO Global Health Expenditure Database 2017

WHO data show that THE per capita doubled between 2000 and 2014 while THE as a share of GDP decreased from 10 percent to 7 percent. Shares of GGHE/THE and GGHE/GGE remained stable over the years. The significant decrease in OOP and private health expenditure compared to THE (52 percent in 2000, 30 percent in 2014) is remarkable, one of the lowest among the 11 countries. Private insurance has grown rapidly since 2000 and is now about one-fourth of private health expenditure.

Public health expenditures by function indicates that almost 75.0 percent is spent on curative services, 16.0 percent on preventive measures, 6.0 percent on administration, 1.5 percent on training, and 1.5 percent on miscellaneous activities. The expenditure on drugs in Jordan is $74 per capita, which is higher than most countries in the same income group. Drug expenditure

accounted for approximately 26.6 percent of THE on health care services, and also accounted for 2 percent of the GDP in 2013 (High Health Council 2016).

Health insurance and prepayment schemes covered almost 70 percent of the population in 2010: the largest scheme, Civil Insurance Fund (CIF), is for civil servants and their dependents. Table 3.4 shows the percent of the Jordanian population that is covered by health insurance or receives free services from the governorate. The second largest program is the Military Insurance Fund (MIF) managed by the RMS, which mostly covers dependents of military staff as well as other populations including staff of security services and other high-ranking officials. The two university hospitals manage the other two public funds. Additionally, around 750,000 people have private health insurance, mostly through their employers (World Bank 2015). The MOH manages the Civil Insurance Program (CIP), which is funded by contributions from employees that do not generally reflect the cost of services and, furthermore, have not been revised to account for price increases for several years (World Bank 2015). The RMS MIF covers about 1.7 million people. The contributions of the members of the MIF are very low (ranging from $3.5 to $7 per month) and do not reflect the costs of services either, further destabilizing the financial position of the Jordanian health system with risks for repercussions on the larger fiscal position of the government (World Bank 2015). Table 3.3 shows the distribution of the Jordanian population with health insurance by source of insurance and sex.

Table 3.3: Distribution of Jordanian Population with Health Insurance by Source of Insurance and Sex

Source of Insurance	Male	Female	Total
MOH	40.5	42.9	41.7
RMS	38.4	37.5	38.0
University Hospitals	2.5	2.5	2.5
UNRWA	2.5	2.5	2.5
Private insurance	13.1	11.7	12.4
Other	2.4	2.6	2.5
Source outside of Jordan	0.5	0.3	0.4
Total	100	100	100

Source: Department of Statistics of Jordan 2015

Table 3.4: Percentage of Population Covered by Health Insurance or Free Services from Governorate, Jordan

Governorate	Health Insurance (General population)		Health Insurance and Free Services (Includes children under 6 who receive free health services) *	
	Jordanians	**Total**	**Jordanians**	**Total**
Capital (Amman)	47.79	36.26	54.28	40.40
Balqa	72.46	61.70	75.98	64.55
Zarqa	54.04	46.29	60.17	50.45
Madaba	75.22	65.79	78.51	68.52
Irbid	75.88	63.12	79.25	65.62
Mafraq	81.49	71.77	84.27	73.35
Jerash	84.57	78.32	86.84	79.93
Ajloun	90.70	84.62	91.92	85.71
Karak	88.52	80.53	89.87	81.69
Tafila	89.55	85.08	90.53	86.01
Ma'an	83.93	77.84	85.79	79.49
Aqaba	73.45	59.45	77.50	62.35
Total	63.41	51.62	68.14	54.90

Source: Department of Statistics of Jordan 2015

With respect to service coverage, the benefits packages available to Jordanians vary across the different insurance programs. For the most part, the packages are generous, particularly the MOH/CIF package, which includes both primary health care and hospital-based services. However, the benefit packages and premiums vary both within the public sector and between the public and private sector (UNICEF 2016).

Main Trends in Health Financing

Health spending is relatively high (THE per capita is $358 and THE as a percent of GDP is 7 percent in 2014) compared to the other countries in the region and to Jordan's level of per capita income. With the rapid demographic and epidemiological transitions, the low economic growth (2.8 percent in 2016 compared to 8.0 percent between 2004 and 2008), the burden of refugees, and the dominant curative health care model, such high levels of health expenditures may prove to be unsustainable. A recent World Bank report projected that without a health financing reform, THE will continue to rise (World Bank 2015).

Government revenues are the major source of health funding in Jordan. Around 62 percent of all health revenues are mobilized by government and around one-third from the private sector. Government funds for health are raised from two main sources, general taxes and the social health insurance contributions made by the members of the government health insurance programs. An important policy issue for Jordan is the extent to which these sources of health funding can be sustained and, potentially, increased. Currently, the two main public health insurance funds, the CIF of the CIP and the MIP of the RMS, are underfunded relative to the cost of covered services due to low contribution rate (World Bank 2015).

The health system is relatively fragmented with many government and private insurance funds and pooling arrangements. There are at least seven different types of health insurance pools, each with different covered benefits and some overlap in people covered. Overall health insurance is high but even and sometimes duplicative (World Bank 2015).

It is difficult to accurately estimate the health insurance coverage rate for Jordan. Based on various sources, formal health insurance coverage is estimated at 70 percent of the total population, including those with duplicate coverage but excluding new refugees. Approximately 8 percent of the total population has a double coverage (World Bank 2015). However, most Jordanians without health insurance or other means can receive medical assistance through the Royal Court and other agencies. While this system ensures effective coverage to all Jordanians, it also undermines efforts to expand formal coverage through other structured and potentially more effective programs. Between 2010 and 2013, health insurance coverage increased modestly through the MOH/CIF but more rapidly in the RMS scheme. According to UNICEF's Household Expenditure and Income Survey (HEIS), 60 percent of people in Amman had some form of health insurance coverage compared to 94 percent in Ajlun in 2013. The 2015 census provided more details on health insurance coverage sources and coverages (See Tables 3.3 and 3.4). One concern is that health insurance coverage appears to have decreased from 2010 to 2013 in five of 12 governorates: Aqaba, Jarash, Mafraq, Tafiela, and Zarqa (UNICEF 2016). The relatively low rate of health insurance coverage in Amman and other governorates reflect the inequities faced by the vulnerable populations, minorities, and refugees. This decrease is confirmed by the 2015 census particularly for the governorate of Amman, where the health insurance coverage does not exceed 48 percent for the Jordanians and 36 percent of the total population.

Household payments for medical goods and services is still a concern. Almost one-third of total health spending is made by households and a large share of that is out of pocket, i.e., only a relatively small share of total health spending is in the form of private prepayment (High Health Council 2016). Even though OOP expenditure on health as a share of total health spending is declining, annual OOP expenditure on health for the average household has increased in absolute terms (from 136 JD in 2008 to 215 JD in 2013) across all wealth quintiles and particularly for the wealthiest quintile and refugees (UNICEF 2016). Household survey data

analysis shows that there are significant inequities in OOP expenditures across socioeconomic groups and geographic regions, and between urban and rural areas (World Bank 2015).

Households of Syrian refugees are particularly vulnerable to catastrophic health expenditures. The Vulnerability Assessment Framework, a survey conducted in 2015 by U.N. agencies focusing solely on Syrian refugees, found that almost 21 percent of the households surveyed experienced catastrophic health expenditure. The Health Access and Utilization Surveys conducted by U.N. partners in 2014 and 2015 show that "the percent of refugee women who reported incurring no costs for [deliveries] since entering Jordan dropped from 75 percent in 2014 to 49 percent in 2015" (UNICEF 2016).

The share of pharmaceutical expenditures in THE and household health expenditure remains high. In 2013, the HEIS showed that expenditure on medicines made up 62 percent of OOP expenditure on health. However, this was higher for the poorest quintile (69 percent) than for the richest quintile (59 percent), and varied across regions (from 54 percent in Mafraq to 74 percent in Tafiela) (UNICEF 2016).

Purchasing and Payment Methods

The types of purchasing arrangements have changed very little over the last several decades. They are related to the nature and responsibilities of the purchasing agents, the political and technical accountability mechanisms, and population coverage. For the most part, the Jordanian government health system continues to rely on annual budget allocations to provide facilities owned and operated by the program based on line items and on fee-for-service for specialist care. While both types of reimbursement systems are relatively uncomplicated to manage, neither of them offers providers strong incentives to improve performance and enhance efficiency and quality in service delivery. Alternatively, government hospitals have become increasingly more autonomous and some elements of case-based reimbursements systems have come into play, particularly in University Hospital schemes (World Bank 2015).

Private Health Sector

Policy and Governance

The private health sector participates in the development of national health polices and strategic plans, but suspicion between the public and private sector hinders cooperation. The MOH supervises all health services, including the private sector. But there is little oversight of the private sector after initial licensing of providers and facilities. The High Health Council includes members from both the public and private sectors, and develops overall policy and strategy for the health sector, including the National Strategy for the Health Sector in Jordan (NSHSJ), 2015-2019 (High Health Council 2015).

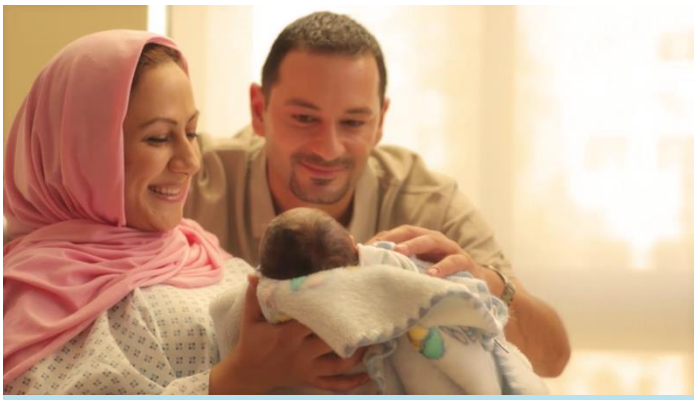
Organization and advocacy for the private sector are limited in Jordan. Membership in trade unions such as the Jordanian Medical Council, Jordanian Nursing Council, and Jordanian Pharmacists Association is required for all medical professionals, public and private. However, these groups do not have private sector-focused activities. The Jordanian Medical Council administers the exams for general practitioners and specialists while the Jordanian Nursing Council designed the licensing process for nurses (High Health Council 2015). The private sector generally does not organize or advocate for itself. Jordan has only one private provider association, the Private Hospital Association, that focuses on promoting quality standards and supporting private hospitals to obtain local and international accreditation. About 70 percent of the 65 private hospitals in Jordan are members. Dual practice is illegal in Jordan (High Health

Council 2015) and, according to interviews with key informants in all parts of the health sector, is uncommon.

Jordan is supporting accreditation of public and private health facilities, mainly through the Health Care Accreditation Council (HCAC). HCAC, established in 2007, is a nonprofit that provides accreditation, consulting, capacity building, and research to public and private institutions in order to improve the quality of health care in Jordan. HCAC can accredit facilities in Jordan based on the standards of the International Society for Quality in Health Care's (ISQua) International Accreditation Program. As of 2017, HCAC had accredited 25 hospitals and 94 primary health centers (HCAC 2017). Some private hospitals also obtain accreditation from international bodies.

Service Delivery

The Jordanian health care market is currently well segmented, with people from lower socioeconomic quintiles, who have less ability to pay for services, seeking free or low cost care in the public sector and those in higher socioeconomic quintiles, who are able to pay for services, using the private sector (Ravishankar and Gausman 2016; El-Khoury 2011). This holds true for services including vaccinations, antenatal care, delivery, and family planning (Ravishankar and Gausman 2016; El-Khoury 2011). There is little recent, comprehensive data available on use of the private sector for services outside of MCH and family planning. As of 2006, the private sector comprised nearly 40 percent of all initial patient contacts (WHO 2006). For-profit private facilities mainly serve wealthier Jordanians and medical tourists from the MENA, while NGOs serve typically Syrian and Palestinian refugees. Since Jordan stopped providing free public medical services to Syrians in 2014, there has been a rise in Syrian refugees seeking care in the for-profit private sector (Doocy et al. 2016).



Jordanian parents greet their newborn in a hospital.

Photo credit: SHOPS Project

According to the 2012 Jordan Population and Family Health Survey, over half of women (56 percent) who use a modern family planning method obtained it in the private sector (Table 3.5). Private hospitals and doctors were the most popular source of modern methods, followed by private pharmacies, and NGOs. Ninety-nine percent of women delivered in a health facility, though of those only 34 percent went to a private facility. However, there was significant variation by wealth quintile, as only 17 percent of women in the lowest wealth quintile delivered in a private facility compared to 75 percent of women in the highest wealth quintile. Approximately 40 percent of caregivers sought treatment for ARI symptoms and diarrhea in the private sector only, and another 4 percent sought treatment in both the private and public sectors.

Table 3.5: Sources of MCH and FP Care, Jordan

Indicator	Private	Public	Both	Other
Source of modern methods of contraception (percent of women of reproductive age currently using modern contraception)	56	44	--	0.3
Place of delivery (percent of women who gave birth in health facility 5 years prior to survey)	34	66	--	--
Diarrhea treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for diarrhea)	41	55	4	--
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	40	56	4	--

Source: JPFHS 2012

There is little information available about the total number of private providers in Jordan or services they provide, though the private sector seems most robust in the urban centers of Amman, Zarqa, and Irbid, where most of the population lives. According to USAID implementing partners in Jordan, information is lacking mainly because providers are only required to become licensed once, when they begin practicing. There are no requirements for relicensing or for continuing medical education, so their information is not updated if they move or stop practicing. The 2015 Public Expenditures Perspectives reported that 4,225 out of 11,932, or 35 percent of hospital beds were in the Private Sector (Fiscal Reform Project 2015). It also reported that 80 percent of providers in Jordan worked in the private sector, according to the 2014 MOH Statistical Handbook (Fiscal Reform Project 2015).

NGOs are an important source of care, particularly for Syrian and Palestinian refugees and poor Jordanians. Data on the number of NGO health programs operating in Jordan and the services they provide differ across sources. Key NGOs include the following:

- **UNRWA** provides primary health care to over 50 percent of Palestinian refugees in Jordan (approximately 1.2 million people) through 25 health clinics and four mobile clinics, and also funds referrals to secondary and tertiary care (UNRWA 2017). Services include general medical consultations, diagnostics (lab tests, x-rays), family planning, NCD services for diabetes and hypertension, and dental care.
- **JAFPP** was the largest NGO source for modern family planning methods according to the 2012 JPFHS, serving 11 percent of women who use a modern method. JAFPP has a network of 23 clinics throughout the country.
- **The International Rescue Committee** (IRC) works primarily in the north of Jordan with

Syrian refugees and Jordanians, providing primary health services and family planning through its five clinics (three fixed and two mobile) as well as health education and community outreach.

- The Noor Al-Hussein Foundation's **Institute for Family Health** (IFH) runs 12 clinics nationally that provide a variety of services including primary health care, reproductive health, child health, gender-based violence prevention and counseling, and psychosocial services.
- The **International Medical Corps** (IMC) runs three primary health clinics and one hospital in Azraq refugee camp (IMC 2017) with a focus on serving Syrian refugees. IMC also provides mental health services in 17 locations, in their own clinics and in MOH primary health care clinics.

Refugees

The private sector is an important source of care for Jordan's 1.3 million Syrian refugees, but cost remains the biggest barrier for Syrians seeking care in the public or private sectors. Until 2014, the MOH provided free services to Syrians registered with the Ministry of Interior. Since 2016, Syrians have been charged at the subsidized rate for non-Jordanians in MOH clinics. However, a 2016 policy now allows Syrian refugees to receive reproductive health services for free, except for delivery. Estimates of use of the private sector vary by source, but sources show that a large proportion of Syrians do seek care in the private sector. For example:

- A 2015 UNHCR survey found that **58 percent of Syrians who sought medical care first went to a private facility** (including private clinic/hospital, NGO, or pharmacy) (UNHCR 2015)
- A 2014 survey of Syrians living outside of camps in Jordan found that **38.7 percent of health services sought by Syrian refugees were in the private for-profit sector and 9.8 percent were in the private, NGO sector** (Doocy et al. 2016)

However, costs for health care are high for Syrians: 51.8 percent of households reported OOP expenditures for their most recent medical visit (Doocy et al. 2016). One survey found that 81 percent of interviewed households spent 105 JD on health care in the month before the survey, though their monthly income was only 233 JD (UNHCR 2015). Major NGOs serving Syrian refugees include IRC, IMC, and the Jordan Health Aid Society (JHAS). All three organizations provide a variety of health services, including mental health as this is a pressing need among refugee populations (IRC 2017; IMC 2017). IMC, for example, provides mental health services in 17 locations both in camps and in urban host communities (IMC 2017).

The private NGO sector is also an important source of care for Palestinian refugees in Jordan, particularly UNRWA, which serves over half of the Palestinian refugee population, over 1.1 million people. UNRWA provides a variety of primary health care services, including general consultations, family planning, and NCD treatment, as well as diagnostics (UNRWA 2017).

Lebanon

The Lebanese Republic, or Lebanon, is an upper middle-income country with a population of 6 million. Forty-four percent of the population is under the age of 25 (UNPD 2017) and 88 percent live in urban areas (World Bank 2017a). Lebanon is known for its social and religious diversity. This diversity is considered one of Lebanon's strengths but at the same time contributes to political and social instability (Cherri, Gonzalez, and Delgado 2016). Lebanon's political system is confessional, meaning that government offices are divided proportionally among different religious groups, including Christians, Sunni Muslims, Shia Muslims, and others. Lebanon is still dealing with the legacy of its own 15-year civil war (1975–1990). The government is relatively weak and faces frequent upheaval, so religious groups and political parties often provide services to their members, dominating a variety of economic and social institutions. In addition, regional instability, particularly the Syrian conflict and resulting refugee crisis, have greatly affected Lebanon's economic, political, and social situation since 2011. According to the UNHCR, Lebanon is host to at least 1 million Syrian refugees (UNHCR 2017), making up almost a quarter of the country's population. Lebanon's economy is driven by tourism, real estate, and construction, but growth has slowed in recent years and is unlikely to rebound soon given national and regional instability (The Economist 2017). Still, GDP per capita was $7,914 in 2016, up from $7,013 in 2008 (World Bank 2017a).

Health Status

Lebanon's health indicators are good relative to many countries in the region, but ongoing regional conflict and the Syrian refugee crisis pose challenges. As shown in Table 4.1, life expectancy at birth was 79 years in 2015. Already low, under 5 mortality has continued to decline from 11.4 per 1,000 live births in 2008 to 8.4 in 2015 and infant mortality has declined from 9.8 per 1,000 live births in 2008 to 6.9 in 2016. Recent numbers on maternal mortality differ by source; according to the WHO, the ratio was 15 per 100,000 live births in 2015. The modern contraceptive prevalence rate (mCPR) was 46.8 percent in 2009, and there is little more recent information.

Table 4.1: Key Health Indicators, Lebanon

	2008–2009	2015
Life expectancy at birth (years)*	78	79
Maternal mortality ratio (modeled estimate, per 100,000 live births) **	--	15
Infant mortality rate (per 1,000 live births)*	9.8	7.2
Under-5 mortality rate (per 1,000 live births) *	11.4	8.4
Total fertility rate (births per woman)*	1.6	1.7
mCPR (percent of women ages 15-49)*	46.8	--

Sources: * World Bank 2017; ** WHO 2017a. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

With the influx of refugees, Lebanon has experienced several outbreaks of communicable diseases, such as measles and leishmaniasis. Lebanon promoted vaccinations in response and the number of reported cases of these diseases declined between 2013 and 2015. Lebanon has not experienced an outbreak of polio despite the disease's reemergence in neighboring Syria.

NCDs account for approximately 85 percent of total deaths in Lebanon (WHO 2014). Nearly half of all deaths (47 percent) were due to cardiovascular diseases and 22 percent were caused by cancer. Lebanon underwent an epidemiological transition in the 1990s in which the burden of communicable diseases declined and that of NCDs rose (IHME 2017, MOHP and WHO 2016). High body mass index, tobacco use, and high blood pressure are the most common NCD risk factors (IHME 2017). As of 2016, approximately 68 percent of adults over 18 and 33 percent of children ages 5-19 were overweight (WHO 2017a). As of 2013, 43 percent of men and 34 percent of women over 18 smoked tobacco (WHO 2017a). Risk factors, including tobacco use and high blood pressure, are generally higher among males than females (WHO 2017a).

Lebanon has had a national NCD program since 1996 that is focused on prevention and education. In 2012, the MOPH worked with the WHO to pilot an early detection initiative for diabetes, hypertension, and dyslipidemia that also included prevention activities and case management interventions. In 2013, the initiative was integrated into the package of health services provided at primary health care centers (PHCCs) and by 2015, the package was provided at 146 PHCCs (MOPH 2016a). The MOPH conducts various awareness campaigns regarding mental health, prevention of obesity and kidney diseases, various cancers (breast and cervical), cardiovascular diseases, and others (MOPH 2017a).

Health System

The private sector, both for-profit and non-profit, dominates the Lebanese health system. The system offers primary, secondary, and tertiary care, both general and specialized, and is a regional destination for medical tourism (Kronfol 2006; Blanchet, Fouad, and Pherali 2016). At the same time, it is highly uncoordinated (Blanchet, Fouad, and Pherali 2016). Lebanon's history of conflict has weakened public sector service provision and governance through the Ministry of Public Health (MOPH), which regulates health care in Lebanon and purchases many services from the private sector (Cammett 2011; WHO 2016). The majority of service providers at all levels are private (Ammar et al. 2016) and are concentrated in urban areas, as is most of the population (WHO 2016). Over 90 percent of pharmacies and laboratories are in the private sector (MOPH 2012a).

For primary care and some secondary services, the Lebanese health system includes:

- 213 PHCCs managed by the MOPH, though some services are contracted to local and international NGOs, such as IMC and the WHO (MOPH 2017; WHO 2016).
- About 700 private, non-profit PHCCs, mostly run by NGOs, faith-based organizations, and, in some cases, sectarian political parties (WHO 2016)
- About 9,000 private, for-profit clinics (WHO 2016)
- Services vary at PHCCs, but often include vaccination, child health, reproductive health, NCDs, mental health, care for acute conditions, and drug dispensing.

Private hospitals dominate secondary and tertiary care in Lebanon. Lebanon has 147 private hospitals housing approximately 12,000 beds and 27 public hospitals with about 1,200 beds (WHO 2016). There is a surplus of beds; the hospital occupation rate is usually around 55 percent (MOPH 2012a). While service quality and technology in the private sector are perceived to be high and many Lebanese hospitals have international accreditation, the sector is largely unregulated (MOPH 2012a). Since 1996, the MOPH has allowed public hospitals to operate largely autonomously in their management and budgeting, and efficiency and service quality in public hospitals has improved (MOPH 2012a).

Lebanon's government is active in addressing both prevention and control of NCDs, and recently adopted a new NCD Prevention and Control Plan 2016-2020 (MOPH and WHO 2016). The MOPH funded a National NCD Control Program from 1997 to 2007, which later turned into several National Committees related to specific NCDs or risk factors, such as the National Cancer Committee and the National Tobacco Control Committee (MOHP and WHO 2016). NCD services are provided by a variety of actors, mostly private, at the primary, secondary, and tertiary levels. They are financed through the MOPH or NGOs for vulnerable populations, as well as through OOP payments, and, for those who have it, private insurance. For example, the WHO subcontracted the Young Men's Christian Association (YMCA) to provide chronic medications at 435 PHCCs (WHO 2016). The MOPH also runs a number of public awareness campaigns for NCDs, such as the National Campaign Against Diabetes, National Breast Cancer Awareness Campaign, and World No Tobacco Day (MOPH 2017b).

Health Financing

The Lebanese health system is highly diverse in terms of payers and providers both in the public and private sectors. Health financing is based on a wide range of sources, including general government revenues, social and private health insurance schemes, and households (WHO 2016).

The most important source of health financing is OOP spending by households, which accounted for 38 percent of health spending in 2012. Private insurance companies stand second, accounting for 16 percent. The National Social Security Fund (NSSF) (15 percent of THE) and the MOPH (14 percent) are the largest public spenders. The NSSF mainly collects contributions from covered private sector employees and employers, and contracted government employees; the contributions are deducted from their salaries. The MOPH acts as an "insurer of last resort" and is funded by the government budget. The Civil Servants Cooperative, which accounts for 6 percent of THE, collects contributions from covered regular government employees and their families, while four schemes related to security forces (army, internal security forces, general security, and state security) cover uniformed staff members and their dependents. The security forces' schemes are funded exclusively by tax revenues and accounted for 8 percent of THE (MOPH 2012b). Table 4.3 summarizes the 2012 NHA estimates.

Table 4.2: Summary of National Health Accounts, Lebanon, 2012 ('000 LBP)

Financing Intermediaries	Funding Sources					Total Expenditures
	Households		Employer	Treasury	Extra budgetary	
	Fees for Services (OOP)	Contributions / Premiums	Contributions / Premiums		(Donations / Loans)	
Ministry of Public Health				647,220,844		647,220,844
National Social Security Fund		120,608,667	422,130,333	145,005,250		687,744,250
Civil Servants Cooperative		33,110,290		250,000,000		283,110,290
Army				240,985,225		240,985,225
Internal Security Forces				97,870,001		97,870,001
State Security Forces				9,494,444		9,494,444
Customs				7,346,716		7,346,716
General Security Forces				18,445,265		18,445,265
Private Insurance		446,992,958	292,391,892			739,384,850
Mutual Funds		128,011,108		31,000,000		159,011,108
International Organizations					21,793,445	21,793,445

Source: MOPH 2012b

Households	1,735,230,986					1,735,230,986
Total	1,735,230,986	728,723,023	714,522,225	1,447,367,745	21,793,445	4,647,637,424
% THE	37.34	15.68	15.37	31.14	0.47	100

Spending on hospitals was 40 percent of THE (MOPH 2012b). The private sector accounts for 71 percent of THE, of which 37 percent is out of pocket. The public sector is the main payer for hospital care, while the private sector dominates in terms of service provision (WHO 2016). Lebanon's health expenditure indicators are found in Table 4.4 below.

Table 4.3: Health Expenditure Indicators, Lebanon, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	579	566	568
THE as a percent of Gross Domestic Product (GDP)	11	8	6
General Government Health Expenditure (GGHE) as a percent of GDP	3	3	3
GGHE as a percent of THE	30	39	48
GGHE as a percent of General Government Expenditure (GGE)	8	9	11
Social Security Funds as a percent of GGHE	46.3	54.2	52.5
Out-of-Pocket (OOP) Expenditure as a percent of THE	57	44	36
Private Health Expenditure (PvtHE) as a percent of THE	70	61	52
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	81	72	70
Private Insurance as a percent of PvtHE	17	24	30

External Resources on Health as a percent of THE	2.1	1.2	1.0

Source: WHO 2017b

Around 47 percent of Lebanese citizens are covered by health insurance: 23 percent are covered by the NSSF, 9 percent by military schemes, 7 percent by private insurance, 4 percent by the Civil Servants Cooperative, and 4 percent by other schemes (Ammar 2009).

The remaining 53 percent are able to use services provided by the MOPH, which serves as an "insurer of last resort." The MOPH covers hospitalization costs at 95 percent (in government hospitals) and 85 percent (in contracted private hospitals) and 100 percent of medication costs for chronic and high-risk diseases such as cancers and cardiovascular diseases (Blanchet, Fouad, and Pherali 2016).

The MOPH plays a major role in preventive care, regulation, and curative care. To provide hospital coverage to about 250,000 cases per year, the MOPH contracts with 26 government and 105 private hospitals. Individual patients make copayments for the share of hospital charges not covered by the MOPH. Where the patient is unable to afford copayment, a ministerial waiver may be applied. As such, the MOPH is a major funder of private hospitals, allocating about 64 percent of its total annual budget (of about $367 million) for hospitalization coverage in 2012 (MOPH 2014).

Main Trends in Health Financing

THE per capita is relatively high (more than $560) compared to other countries in the region but has not grown since 2000, despite substantial overall income growth. The relatively high spending per capita is related to the heavy curative and hospital-oriented care model, the middle-income status of the country, and high prevalence of NCDs (WHO 2016).

Funding health services for refugees is a significant challenge.

Photo credit: South Lebanon Cluster Munition Coalition

The share of THE relative to GDP decreased significantly from 11/12 percent in 2000 to 6 percent in 2014 (WHO 2017b). However, the share of General Government Health Expenditure (GGHE) as a percent of THE increased between 2000 and 2014 as the government was adopting a new policy and assuming its role as "insurer of last resort" for those with none or limited formal insurance coverage (WHO 2016).

Out of pocket payment as a percent of THE declined from 57 percent in 2000 to 44 percent in 2008 and 36 percent in 2014 (WHO 2017b) as government was increasing its contribution to the health sector funding and private health insurance spending grew.

External funding is very limited in Lebanon (2 percent of THE in 2000, 1 percent in 2008 and 2014) and is now largely oriented towards refugees and displaced populations as a result of the

Syrian crisis. There are around 1.2 million Syrian in Lebanon registered with the United Nations High Commission for Refugees (Blanchet, Fouad, and Pherali 2016).

Funding of health services for refugees is a significant challenge. In 2011, UNHCR was in charge of health coverage for Syrian refugees. In May 2013, due to the high cost of health care in Lebanon and a decrease in international funding, UNHCR had to increase co-financing payments by refugees from 15 percent to 25 percent. Despite the efforts made by the UNHCR and local authorities, the level of financial protection for Syrian refugees remains precarious (UNHCR 2014, Blanchett, Fouad, and Pherali 2016).

Since 1999, the MOPH has been engaged in a set of reforms including developing a unified Beneficiaries Database, engaging in a decentralization process, developing new payment mechanisms, improving efficiency of MOPH spending, in particular regarding funds allocated to contracted hospitals (private and public), scaling up autonomy of public hospitals and new contracting schemes, revising of the pricing structure of pharmaceuticals and the promotion of generics, strengthening primary health care and promoting essential drugs, reinforcing the Epidemiological Surveillance Program, and regulating the supply of human resources (Ammar 2009).

Improvements in performance and perception of health care have been observed as results of the reform measures including in the public sector (Khalife et al. 2017) but persistent challenges remain because of the complex structure of the system, the effects of the Syrian crisis, the regional environment, and the political context.

Private Health Sector

Policy and Governance

A national Primary Health Care Strategy was first developed in 1993, updated in 2005 and again in 2011. The initial strategy served as the foundation for the national network of primary health care centers, which are primarily operated by private NGOs (El-Jardali et al. 2014).

Lebanon has been implementing an accreditation program for PHCCs since 2008. Given that PHCCs are largely run by NGOs, this is an important mechanism in the private sector to ensure quality of services. In collaboration with Accreditation Canada, the program is in its fifth phase of implementation. A recent study found that accreditation was associated with improved service delivery and quality with having an indirect impact on patient satisfaction (El-Jardali et al. 2014).

The Health Strategic Plan (2016-2020) is the primary health policy document in Lebanon. It has four strategic goals: 1) Modernize and strengthen sector governance, 2) Improve collective public health and promotion, 3) Continue progress toward UHC, and 4) Develop and maintain emergency preparedness and health security (MOPH 2017b). Among the priorities are strengthening partnerships with the private sector. WHO will help support as part of the Country Cooperation Strategy (WHO 2017c).

Service Delivery

There are no recent nationally representative MICS and DHS surveys from Lebanon. However, 2011 MICS data on Palestinian refugees in Lebanon provides a window into sources of care for one historically disadvantaged group in Lebanon. The MICS data show that **the private sector is an important source of care for Palestinian refugees**, as over 98 percent of women delivered in a health facility, and of those 77 percent of women delivered at a private health facility (Table 4.5). Private sector delivery was high for all wealth quintiles with 85 percent of the

poorest and 71 percent of the wealthiest choosing a private facility. The private sector is also a major source of sick child care, as 84 percent of children who received treatment for ARI symptoms were taken to the private sector, but these data are based on a sample of only 98 so must be interpreted with caution.

Table 4.4: Sources of MCH and FP Care, Lebanon (Palestininan refugees only)

Indicator	Private	Public	Both	Other
Place of delivery (percent of women who gave birth in health facility 2 years prior to survey)	77	23	--	--
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	84	10	1	5

Source: MICS 2011 (Palestinian Central Bureau of Statistics and UNICEF 2012)

The MICS data is not surprising as the private sector dominates service delivery in Lebanon. According to key informants, there are around 9,000 private physicians' clinics, some 6,000 private pharmacies, and around 6,000 dental clinics in the private sector. Physicians or NGOs own and operate 82 percent of hospitals (World Bank 2017b). Contracting arrangements between the MOPH and 26 public and 105 private hospitals allow lower income patients to pay a subsidized rate (World Bank 2017b). Primary health care is also largely delivered by the private sector through private clinics or a network of PHCCs. The network of PHCCs was established in the early 1990s to improve access to services for low income groups. The MOPH contracts with selected facilities to deliver services at reduced rates by providing in kind support (World Bank 2017b). Each PHCC has a catchment area that covers a population of 17,500 (MOPH 2016). There are currently 204 centers in this network (out of 1085 facilities) and 67 percent are run by NGOs (World Bank 2017). A new system of contracting with the private sector is being planned and will be based on performance and quality standards (WHO 2017c).

Refugees

The influx of over 1 million Syrian refugees since 2011 has strained Lebanon's health system (Government of Lebanon and the United Nations 2017). The UNHCR's 2014 Vulnerability Assessment in Lebanon found that 89 percent of Syrian refugees reported being able to access primary health care services and 80 percent could access secondary or tertiary services (UNHCR 2017). The majority of Syrian refugees (80 percent) reported accessing primary health care services through PHCCs, while 16 percent went to private doctors or clinics, and 2 percent went to mobile clinics (UNHCR 2014b). In addition, some refugee settlements have Syrian doctors operating informal practices. Mobile units also deliver services and provide referrals to PHCCs and free medicines, though the UNHCR recently found that few refugees used mobile clinics for health services (UNHCR 2014b). Tertiary care is available to Syrian refugees through a network of 53 public and private hospitals contracted by UNHCR.

Cost of services or treatments were the main barrier reported for Syrian refugees who did not access care. According to a 2014 UNHCR survey, Syrian refugees who needed health care spent an average of $90 per month. Costs for delivery in health facilities are high. Eighty percent of women reported paying for all or part of their delivery, with an average cost of $230. Some medications, such as those for acute illnesses, vaccination, and family planning, are free

with coverage from UNHCR and other organizations. But others are only partially covered; refugees pay a small fee for chronic medications ($0.67) and pay for 25 percent of hospital services (UNHCR 2014).

The UNHCR reported that lack of access to NCD care and antenatal care are primary concerns among Syrian refugee populations (UNHCR 2014b). Fifty-six percent of people with a chronic condition reported difficulty accessing services.

While there are NGOs providing mental health services, the need exceeds what is available (Government of Lebanon and the United Nations 2017). In 2014, 60 percent of Syrian refugees who sought mental health care reported successfully accessing it (UNHCR 2014b). Yet there are long wait lists for certain services, such as those for survivors of sexual and gender-based violence (Government of Lebanon and the United Nations 2017). Further, many Lebanese providers may not have training in short-term effective interventions for conflict survivors (Weissbecker and Laichner 2015).

Morocco

45 percent of Morocco's population is under the age of 25 (UNPD 2017).

Photo credit: David Rosen

The Kingdom of Morocco is a lower middle-income country and with a population of approximately 34.5 million. Thirty-nine percent of the population lives in rural areas (HCP 2016) and 45 percent is under the age of 25 (UNPD 2017). Key sectors of the economy include agriculture, tourism, aerospace, automotive, phosphates, textiles, and apparel. Agriculture accounts for about 13 percent of GDP and 40 percent of employment (African Development Bank 2015). Morocco has increased investment in its port, transportation, and industrial infrastructure to position itself as a hub and broker for business throughout Africa. Its GDP per capita was $3,196 in 2016. Morocco's economy grew by only 1.5 percent in 2016 due to the adverse impact of poor rainfall but the economy is projected to grow by 3.7 percent in 2017 and around 4 percent in 2018 (African Development Bank 2017).

Morocco is implementing many reforms to improve economic growth and to social conditions but faces major challenges, including the wide gap between rural and urban standards of living, as well as high poverty and unemployment rates that cause social discontent.

Health Status

Morocco has made many important strides in health in recent decades, but disparities remain, particularly between urban and rural areas and wealth quintiles. In 2015, the infant mortality rate was 24.1 per 1,000 live births, a decrease from 30.9 in 2008 (Table 5.1). The under-5 mortality rate was 28 per 1,000 live births in 2015, again a decrease from 36.1 in 2008. The maternal mortality ratio also decreased from 172 in 2008 to 121 in 2011. PAPFAM data from 2011 shows an mCPR of 53.9.

Table 5.1: Key Health Indicators, Morocco

	2008–2011	2015
Life expectancy at birth (years)*	73	75.5
Maternal mortality ratio (modeled estimate, per 100,000 live births)*	172	121
Infant mortality rate (per 1,000 live births)*	30.9	24.1
Under-5 mortality rate (per 1,000 live births)*	36.1	28.0

Total fertility rate (births per woman)*	2.6	2.5
mCPR (percent of women ages 15-49)**	53.9	--

Sources: * World Bank 2017; ** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

PAPFAM data from 2011 show differences in key health indicators based on income level and geography. Nationally, only 41.4 percent of women had four or more antenatal care visits during their last pregnancy, but this figure is much higher among the wealthiest women (76.2 percent) than among the poorest (11.8 percent). Many more urban women had four or more antenatal visits (61.9 percent) than rural women (24.4 percent). While 77.6 percent of women nationally had their most recent birth assisted by a skilled birth attendant, this number was much lower (50.5 percent) among the poorest women compared to the wealthiest (98.8 percent). Fewer rural women (63.8 percent) had a skilled birth attendant compared to urban women (93.6 percent). The same is true of facility delivery. Across Morocco, 73.2 percent of women delivered at a health facility during their most recent birth, but this was lower among the poorest women (41.4 percent) compared to the wealthiest (94.5 percent). Only 56.3 percent of rural women delivered in a facility, whereas 92.9 percent of urban women did.

Morocco, like many countries in the region, is undergoing a demographic and epidemiological transition in which communicable diseases have declined and NCDs and injuries are rising. NCDs are currently a high priority in Morocco, as they account for 75 percent of deaths, mainly from cardiovascular diseases (34 percent), diabetes (12 percent) and cancer (11 percent) (WHO 2014). Increasing life expectancy (49.3 years in 1962, 70.6 in 2012), changes in lifestyle and nutrition combined with improved socioeconomic status, urbanization, housing and environment have led to rapid rise of NCDs in the past few decades.

Adult risk factors for high blood pressure and obesity are higher among females (33.6 percent and 21.9 percent, respectively) than males (31.2 percent and 10.5 percent). Men, however, are much more likely to smoke than women, with 32 percent of males currently smoking compared to only 2 percent of females (WHO 2014).

Health System

The health care system is a mix of public and private financing and service delivery. The government assumes responsibility primarily for basic public health programs and hospital services and for regulation of the health sector. The Ministry of Health (MOH) is a major provider of services and offers the entire population access to public health centers, dispensaries, diagnostic centers, and public hospitals. Concern exists, however, over the quality of care these facilities provide (Prah Ruger and Kress 2007). Formal health insurance coverage was voluntary until 2005 and covers 16 percent of the population—primarily civil servants and some formal private sector employees (CESE 2017). All Moroccans are eligible to receive care in MOH facilities when and where available.

Public health infrastructure in Morocco is made up of 2,690 primary care units and 144 hospitals that house over 22,100 beds (MOH 2015). Five new university hospitals are planned to be added to the current establishments in Rabat, Casablanca, Fez, Oujda, and Marrakech over the next few years. The new university hospital facilities in Tangiers, Agadir, Laayoune, and Beni Mellal are expected to add up to 3,200 beds. The private sector comprises an additional 6,763

surgical centers and 439 clinics, located mostly in urban centers like Casablanca, Rabat, and Marrakech.

Human resources are a key constraint for Morocco's health system. There is a shortage of medical, technical, and nursing staff and uneven geographic distribution of these staff. The dearth of personnel has been attributed to a variety of causes, including relatively low salaries and incentives to work in the public sector, outdated training methods, long training, and an insufficient replacement rate—the number of employees working under the auspices of the MOH who reach retirement age is approximately 1,500 departures each year and only 900 doctors graduate annually from Morocco's five public medical schools (Oxford Business Group 2017b).

In 2012, Morocco had 0.62 doctors for every 1,000 inhabitants. Its target, however, is to reach one doctor for every 1,000 inhabitants by 2020. To that end the government plans to train 3,300 doctors every year, but is far from reaching this target. A number of initiatives and programs are underway to tackle this human resources issue, such as building training infrastructure, reformulating the curricula and modules, introducing new teaching methods, and improving work conditions. However, the challenges and gaps remain high particularly because of the limited number of budgeted positions offered at the MOH every year (fewer than 1,000 in 2017). Morocco is developing new schools to support its goal, including new teaching facilities in Agadir and Tangier, financed by the Saudi Development Fund, that will open in 2018 and can train up to 4,500 medical students (Oxford Business Group 2017b).

Another key health system issue in Morocco is equity in physical access to health services and financing. An estimated 20 percent of the population lives more than 10 km away from a primary care center (Oxford Business Group 2017b).

A predominantly curative approach to NCD management is used in Morocco. Despite the existence of national NCD prevention strategies and programs, their operationalization remains deficient and difficult to implement because of the dominant curative model in place and lack of convergent effort toward prevention and promotion of a public health approach. This has heavy implications on costs of health services and on health financing requirements.

Health Financing

The health system in Morocco is financed by a combination of general government revenues, social health insurance, and private spending with household resources accounting for a major share of the latter. Over the last decade, Morocco steadily increased its total health spending as well as its health expenditure per capita. According to the WHO, THE increased as a share of GDP (5 percent to 6 percent from 2008 to 2014), while GGHE remained relatively stable compared to GDP (2 percent in 2008 and 2014), to THE (35 percent in 2008 and 34 percent in 2014) and to the GGE (6 percent in 2008 and 2014).

The results and ensuing estimates from the five rounds of NHA (1997/1998, 2001, 2006, 2010, and 2013) suggest that the health financing profile has evolved in different ways. It is obvious that the share of national income as well as the share of the state budget devoted to health have remained relatively stable. On the other hand, there has been an increase in the share of collective health financing (government budget plus social insurance), particularly through the prepayment schemes, and a relative reduction, in recent years, of OOP payments: 57.3 percent in 2006, 50.7 percent in 2013 (MOH 2017). This is not reflected in the WHO Global Health Expenditure database.Table 5.2 summarizes the trends in main health expenditure indicators.

Table 5.2: Health Expenditure Indicators, Morocco, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	53.5	153.5	190.1
THE as a percent of Gross Domestic Product (GDP)	4	5	6
General Government Health Expenditure (GGHE) as a percent of GDP	1	2	2
GGHE as a percent of THE	29	35	34
GGHE as a percent of General Government Expenditure (GGE)	5	6	6
Social Security Funds as a percent of GGHE	-	23.5	24.6
Out-of-Pocket (OOP) Expenditure as a percent of THE	54	57	58
Private Health Expenditure (PvtHE) as a percent of THE	71	65	66
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	77	87	88
Private Insurance as a percent of PvtHE	23	13	12
External Resources on Health as a percent of THE	-	1.0	1.6

Source: WHO Global Health Expenditure Database 2017

In the past decade, Morocco has sought to achieve UHC to ensure better access to health services. As part of this effort, it has implemented several reforms to increase the population covered under various medical schemes. The National Health Insurance Agency (*Agence Nationale d'Assurance Maladie*, ANAM) was created in 2002 by Law No. 65-00 to provide technical and regulatory assistance to enhance the financial solvency of various mandatory coverage schemes, and it became operational in 2005.

In 2005, the government split its national health coverage system into two main schemes: The Mandatory Health Insurance Plan (Assurance Maladie Obligatoire, AMO) and the Medical Assistance Regime (Régime d'Assistance Médicale, RAMED) (Zine-Eddine, Kaddar, and Sabri 2008). ANAM provides technical supervision for AMO, and oversees the financial FYstability of

both systems. In 2017, according to official estimates, these two schemes combined with private health insurance schemes provided coverage to around 62 percent of the Moroccan population (34 percent covered via AMO). In addition, private insurance schemes cover a small percentage of the population (5 percent) (WHO-EMRO 2015).

AMO is a mandatory social health insurance scheme that targets individuals with the ability to pay. It covers five categories of the population: public sector employees, formal private sector employees, retired pensioners, and students. AMO is managed by two institutions: The National Provident Organizations Fund (*Caisse Nationale des Organismes de Prévoyance Sociale*, CNOPS) and the National Social Security Fund (*Caisse Nationale de Sécurité Sociale*, CNSS). CNOPS runs the largest mandatory prepayment scheme in Morocco for current and retired public sector employees and their dependents. Its benefits include hospitalization, ambulatory care (laboratory services, radiology and medical imagery, etc.), long-term care, and medicines at government and private facilities. Contributions are set at 5 percent of the employee's salary, split equally with the employer (2.5 percent each), with minimum monthly contribution of Dh (dirhams) 70 ($7) and a maximum of Dh400 ($40). CNOPS can either make direct payments to the providers or reimburse the incurred cost to the user. These reimbursements are calculated on a basic rate; beneficiaries bear any charges in excess of these rates. CNOPS fully covers charges for care in public hospitals; for private facilities, it pays 70 percent of charges for listed medicines, 80 percent of charges for ambulatory care, and 90 percent of charges for hospital care (WHO-EMRO 2015).

CNSS manages the mandatory scheme for current and retired formal private sector employees. Its contribution rate is 4 percent of the client's salary shared equally with the employer (2 percent each). It has a relatively comprehensive package of services that includes hospitalization, ambulatory care for children up to 12 years of age, and maternal health (antenatal, delivery, and postnatal). CNSS benefits cover 90 percent of charges for long-term treatment in public hospitals, 70 percent of charges for hospital and ambulatory care in private sector, and 70 percent of the charges for listed medicines (WHO-EMRO 2015).

Private sector practitioners often charge rates that exceed the AMO reimbursements, and the insured clients are responsible for the additional costs. CNOPS provides its beneficiaries with a level of benefit coverage similar to that of parastatals group insurance plans, but much higher than those offered by CNSS and private health insurance organizations. The differences between average per capita expenditures in CNOPS and CNSS are due in part to differences in reimbursement rates, which may vary between the CNSS and the CNOPS from 70 percent to 100 percent for chronic diseases and from 90 percent to 100 percent for inpatient care. While private insurers generally offer their beneficiaries better insurance coverage than the CNSS, guaranteed benefits are often capped by type of illness and by person, thus reducing the overall benefits provided by private health insurance plans.

In September 2015, the government extended AMO coverage to post-secondary students, adding about 260,000 people to the pool of beneficiaries, with additional financing coming from the government (around $10 million as a lump sum). While free for students enrolled in the public sector, those studying in the private sector must contribute Dh400 ($40) annually (Oxford 2017). Originally, AMO only covered spouses and children of the insured. In July 2017, Parliament adopted a bill to also include family members who are under the direct responsibility of the insured, such as siblings and parents (Oxford Business Group 2017b).

RAMED focuses on poor and vulnerable populations. It was introduced to replace a previous charity scheme that used to give the poor access to essential health care by means of a special card issued by local authorities (CESE 2013). The RAMED adopts a rights-based approach to health care and provides its beneficiaries free access to health services at government hospitals

and health centers for a defined package of services. RAMED does not cover services offered through the private sector (CESE 2014). RAMED launched as a pilot project in November 2008 in one region (Tadla-Azilal) before expanding to the rest of the country in 2012. The scheme aimed to cover 8.5 million people, or 28 percent of Morocco's inhabitants. According to officials in 2016, RAMED covered 10.5 million people, exceeding its initial target. While this means that more people than originally planned can access health services, it also means that the scheme needs additional resources. Seventy-five percent of RAMED's expenditures are funded by the general government budget via the MOH. Local authorities and beneficiaries themselves contribute additional funding. Beneficiaries pay an annual contribution of Dh120 ($12) per person or Dh600 ($60) per household. However, an estimated 700,000 RAMED members struggle to contribute their share, threatening the scheme's expansion and sustainability. To improve this situation, several proposals are currently being considered, including the possibility of shifting the management of the scheme from the MOH, Minister of Interior, and ANAM to another body.

According to key informants, RAMED is far from achieving its targets mainly because of the complex administrative process of submitting documentation in order to be eligible for RAMED which undoubtedly excludes the most vulnerable populations such as the illiterate and those in more remote areas**.** Among the key issues is the process of properly identifying the poor and vulnerable due to the lack of coherence between the scoring system and the decision of the Local Permanent Commission (CPL). Furthermore, the scoring system used to target the near-poor population groups is not yet able to precisely identify the eligible population. Errors of exclusion and inclusion persist and the motivation to join RAMED is still limited.

RAMED faces challenges related to the inadequate coverage resulting from the chronic underfunding of public health facilities, and the absence of an explicit entitlement to an essential package of health services. As a result of these factors, most RAMED beneficiaries have to spend significant amounts of money particularly on pharmaceutical products and medical devices to have access to health services in public hospitals. Ensuring that covered health services are accessible, particularly in rural areas that lack infrastructure and medical personnel, is also a significant hurdle (CESE 2013). Around 45 percent of doctors operate in either of the two major cities of Rabat or Casablanca, whereas only 24 percent of health professionals work in the rural parts of the country. To address this challenge, authorities are considering introducing a National Health Service (*Service National Sanitaire*, SNS) that would assign medical students to designated regions nationwide for a period of two years following graduation. If the SNS bill passes, doctors assigned to rural and disadvantaged areas would receive additional compensation to complement their base salaries (Oxford Business Group 2017).

Outside of these schemes, approximately 37 percent of the population—roughly 12.6 million people—is uninsured (WHO-EMRO 2015). This population consists mainly of independent, self-employed professionals, such as doctors, lawyers, and architects, and those in the informal sector. Proposals to cover these populations include establishing a new institutional structure similar to AMO or integrating informal sector workers into existing institutions, specifically the CNOPS (Oxford Business Group 2017b).

Purchasing and Payment Methods

In the public sector, purchaser-provider integration is dominant, and the flow of funds is hardly linked to any performance indicators and is based on a rigid system of line item budgeting built on historical trends, and number of staff and/or beds. The MOH funding mechanism system

provides a lump-sum budget to most of its entities with some exceptions for external contracting with private sector providers for logistics and maintenance services. It must be noted that within the public finance management reform, a new system has been introduced recently to develop and implement a program and results-oriented budget with a defined set of objectives and indicators and clearer identification of roles and responsibilities at the central, regional, and peripherical levels of the public health system. A certain level of autonomy in resource management is envisioned in the near future to improve the purchasing of products and services. Many factors are to be considered for a successful implementation of this new planning and budgeting system including an increase of funding, stability and quality of staff and managers, and an effective health information system (MoH 2016).

In the private sector, the majority of payments are out of pocket, and fee for service is the dominant way of paying for services. With the expansion of social health insurance, new contractual arrangements are introduced by AMO for select services such dialyses, cancer treatment, and other costly treatments and products.

Separation of functions between purchaser and provider, pooling of resources to better negotiate prices and quality of products and services, and more autonomy for public health entities are all on the agenda of the public health system reform (MOH 2014).

Main Challenges in Health Financing

Morocco faces several health financing challenges (MoH 2012, MoH 2013a, CESE 2014, WHO-EMRO 2015). Principal among them are:

- Reducing the amount of OOP spending, as this spending exposes households to the risk of catastrophic health expenditures and impoverishment
- Increasing the current levels of government health financing to guarantee coverage of indigent populations. This will depend on additional resource mobilization but also on efficient management of the health sector
- Expanding coverage to the informal sector
- Reinforcing efficient purchasing and provider payment mechanisms that offer a clear separation between providers and purchasers through effective contractual arrangements. This is seen as a priority for the RAMED scheme.

The new National Health Strategy 2017-2021 and the MOH Action Plan 2016-2021 propose strategies to tackle these challenges as part of the movement toward UHC and equitable health systems that begun in 2005 (WHO 2016). It remains to be seen whether these are more successful and efficient than previous announcements and plans.

Private Health Sector

The private sector in Morocco covers general and specialized care at all levels. The private medical sector includes almost half of doctors, nearly 90 percent of pharmacists and dental surgeons, and nearly 10 percent of paramedics in Morocco (MOH 2015). The private for-profit sector has grown rapidly, but is mainly concentrated in urban areas, similar to the distribution of the population. The number of private doctors' offices has increased from 2,552 in 1991 to 7,310 in 2011. There are 332 private clinics in the country (Oxford Business Group 2017a). The quasi-public sector is made up of clinics and health centers managed by the health

insurance associations or foundations such as CNOPS and CNSS. NGOs are also active in the private sector in Morocco and are seen as a credible and trusted source of care.

Public-private partnerships have been growing since 1980. In the wake of growing demand for services, the public sector engages with NGOs and associations in partnerships to deliver services in hard to reach areas. According to key informant interviews, the MoH has developed a partnership with the private for-profit sector to purchase of dialysis services for over 1,000 patients. PPPs also exist between public and multinational pharmaceutical firms.

Policy and Governance

Article 31 of the 2011 Constitution guarantees the right to health care. In the same year, Law 34-09 was passed which relates to the health system and provision of care in both public and private sectors (WHO 2016). More recently, a law passed April 2017 establishes a legal framework for PPPs.

The importance of the private sector is reflected in the 2017-2021 WHO country cooperation strategy. Strategic Priority 1 is “Increase fair access to affordable, high-quality health services, with a view to moving towards universal health coverage.” Strengthening coordination with the private sector is listed as a way to achieve this strategic priority. Strategic priority 4, “Supporting the drive towards advanced regionalization and strengthening governance in the health sector,” also stresses the importance of the involvement with the private sector (WHO 2016).

The private sector is also referenced throughout a white paper produced in 2013 by the MOH. The document outlines three priority areas for the governance of the health sector. One of them is modernizing health governance. In this section, there is a recognition that the public and private sectors need to complement each other rather than compete. To achieve this, capacity needs to be built and governance structures need to be strengthened in order to foster PPPs (MOH 2013a).

The MOH is the key regulatory body as it is responsible for the preparation of health laws and decrees, formulating and implementing health policy and programs, issuing executive resolutions, providing authorization to health professionals and institutions and conducting inspections of health interventions, structures, and activities. This includes the private sector, both for-profit and nonprofit. However, various factors and commercial reasons have motivated some private facilities to get accreditation from foreign organizations and intercountry hospital networks.

Rising demand for services and limited capacity of the public sector to fully meet demand has led to reform in the health sector. Prior to 2015, only doctors were reserved the right to establish private clinics. Since 2015, reform has allowed private investors to also establish private clinics (Oxford Business Group 2017b)

The importance of the private sector in NCD work is addressed in key strategy documents. According to the WHO country cooperation strategy, Morocco aims to work with the private sector to reduce salt, sugar and fats in processed foods (WHO 2016). The private sector is also referenced to throughout the National Cancer Prevention Strategy in achieving key objectives. One example is the use of PPPs for end-of-life care (MOH 2010). PPPs have been instrumental in making strides in cancer research in Morocco. A partnership between the Ministries of Health and Higher Education and the Lalla Salma Foundation helped establish the first Cancer Research Institute in 2016 (Oxford Business Group 2017b).

Service Delivery

There is little recent data available about utilization of private sector services in Morocco. One of the most recent nationally representative surveys is the 2011 PAPFAM survey shows the private sector playing a large role in some services and not others. According to PAPFAM data, 73 percent of women delivered in a health facility for their most recent birth in the past five years. Of those who delivered in a facility, only 11 percent went to a private facility (Table 5.3). Of those in the wealthiest quintile who delivered in a facility, 32 percent chose a private facility. Among those in the poorest quintile who delivered in a facility, only 1 percent chose the private sector

Table 5.3: Source of MCH Care, Morocco

Indicator	Private (%)	Public (%)	Other
Place of delivery (percent of women who gave birth in health facility 5 years prior to survey)	11	88	1

Source: MOH, PAPFAM et al. 2012

However, the private sector plays a key role in other types of services. PAPFAM data show that **pharmacies are a key source of family planning and child health care.** The PAPFAM survey did not clearly distinguish between public and private pharmacies, but other sources suggest that 90 percent of pharmacies in Morocco are private. So we surmise that the majority of pharmacy care is private. According to this survey, pharmacies were the most common source of modern family planning methods: 56 percent of women who use a modern method obtain it from pharmacies, followed by public health centers (40 percent). Twenty-six percent of caregivers chose pharmacies as a source of care for diarrhea in children under 5 and 46 percent chose pharmacies for treatment of ARI symptoms in children under five. Public health centers were the most common choice for diarrhea (38 percent) and the second most common choice for ARI symptoms (32 percent). Relatively few caregivers went to private clinics or doctors for diarrhea care (15 percent) or ARI symptoms (14 percent). Use of pharmacies, public or private, for ARI treatment was slightly higher among wealthiest quintile (44 percent) than poorest (41 percent).

Refugees

As of 2016, there were approximately 4,277 refugees in Morocco. The primary countries of origin are Syria (2,927), Yemen (461), and Cote D'Ivoire (281) (UNHCR 2016). Historically, Morocco has been a transit point for migration to Europe. However, new legislation passed in 2013 is aimed at offering legal benefits to migrants and asylum seekers. The new policy has 11 action programs, one of which is specifically focused on health. The two objectives relating to health are 1) ensuring that immigrants and refugees have access to the same health services as Moroccan citizens and 2) coordinate the actions of health associations (MOH 2013b). To further support migrants, a document called the "Practical guide to facilitate your integration in Morocco" was released in 2015. It includes a chapter on how to access medical care in both the public and private sectors (MOH 2015).

Tunisia

The Republic of Tunisia has a population of 11.4 million (UNPD 2017). The population is largely young and urban, with 70 percent living in urban areas (World Bank 2016) and 40 percent below the age of 25 (UNPD 2017).

The Arab Spring began in Tunisia with mass demonstrations over high unemployment, poverty, political repression and corruption that unseated President Zine-El Abidine Ben Ali in 2011. **Among the countries that experienced such uprisings, Tunisia is the only one that has seen significant progress in democratization, although the process is incomplete.** Mohamed Beji Caid Essebsi, the leader of the secular party, won the first free presidential election in 2014, defeating the opposing Islamist party.

Tunisia is a lower middle-income country with a GNI per capita (Atlas method) of $3,690 in 2016 (World Bank 2016). **In 2016, the World Bank re-classified Tunisia from upper middle income to lower middle income, based on its declining GNI per capita (World Bank 2016).** Between 2007 and 2016, Tunisia's GDP growth rate declined from 6.7 percent to 1.1 percent (World Bank 2016). Dialogue on economic and social reforms increased following the Tunisian revolution in January 2011 and increases in poverty and unemployment (Arfa and Elgazzar 2013). Despite recent reforms, GDP growth is still too low to affect significant changes in unemployment or income. Overall unemployment is 15 percent and is higher among youth (ages 15-24) at 35 percent (World Bank 2017b). However, Tunisia expects economic growth to rise to 2.3 percent in 2017 with improvements to sectors that are key drivers of the economy: agriculture, phosphate extraction, and manufacturing (World Bank 2017a). Tunisia ranks 88th out of 190 in the World Bank's Doing Business Index (World Bank 2017b).

Health Status

Health indicators register substantial improvements in health and nutrition in Tunisia since 2000. Life expectancy at birth increased modestly from 74.6 to 75.5 years between 2008 and 2015 (Table 6.1). Over the same period, infant mortality rates dropped, from 16.6 to 12.1 deaths per 1,000 live births and under-5 mortality rates dropped from 19.4 to 14.0. From 2008 to 2015, the maternal mortality ratio (modeled estimate, per 100,000 live births) decreased from 69 to 62. Despite overall improvements in health, disparities exist between those of different income quintiles. For instance, 59.5 percent of children 12-23 months in Tunisia had received basic vaccinations as of 2012, but this figure was higher among those in the wealthiest quintile (74 percent) than among those in the poorest (46 percent) (Assaf et al. 2017).

Table 6.1: Key Health Indicators, Tunisia

	2008	2012–2015
Life expectancy at birth (years)*	74.6	75.5
Maternal mortality ratio (modeled estimate, per 100,000 live births)*	69	62
Infant mortality rate (per 1,000 live births)*	16.6	12.1

Under-5 mortality rate (per 1,000 live births)*	19.4	14.0
Total fertility rate (births per woman)*	2.1	2.2
mCPR (percent of women ages 15-49)**	--	51

Sources: * World Bank 2017; ** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

NCDs are the most pressing health concern in Tunisia, accounting for 82 percent of deaths. Cardiovascular diseases alone account for nearly half of all deaths (49 percent). Cancer is the second leading cause of death (12 percent), most commonly lung cancer among men and breast cancer among women (WHO 2014). Adult risk factors vary depending on gender. For instance, tobacco smoking is much higher among males (52 percent) than females (11 percent), but obesity is much higher among females (31.7 percent) than males (12.8 percent) (WHO 2014).

While NCDs are a priority for the Ministry of Public Health (MOH), national prevention programs have found limited success because approaches to NCD treatment in Tunisia are predominantly curative. The MOH is raising awareness on hypertension and diabetes through a public awareness campaign and strengthening the morbidity registry for cardiovascular diseases and cancers. Currently there is no NCD strategy; however, Tunisia is taking steps to develop a comprehensive, multi-sectoral committee and strategy (WHO 2017a).

Health System

Tunisia operates a mixed public-private health system. The system is mainly managed by the MOH and its regional directorates. Health care is provided by public facilities, which account for 87 percent of all hospital beds (Arfa and Algazzar 2013); a para-public sector, which provides care for people covered by the country's social health insurance scheme as well as the semi-public medical services provided by some national firms; and the private sector. Public entities such as the Institut National d'Accrédiation en Santé (INAS) are in charge of applied research, evaluation, and regulation.

Tunisia guarantees health as a human right in its constitution and the public sector adequately provides preventive and curative care for the majority of the population (WHO 2010). Overall, Tunisia's health system has adequate levels of infrastructure, health professionals, and general medical equipment. However, **the system suffers from insufficiently skilled personnel (particularly nonmedical), poor equipment maintenance, and limited regulatory and information system capacities**. About 69 percent of the total hospital capacity is concentrated in the eastern coastal region of the country, which aligns with where the majority of the population lives (MOH-Tunisia 2013). Yet disparities between regions, governorates, and social groups are of great concern. The density of doctors is considerably lower in Tunisia's poorer regions (Arfa and Elgazzar 2013).

Health Financing

Health care in Tunisia is financed through a combination of social health insurance, general government revenues, and private spending, with health insurance accounting for an increasingly greater share. Between 2000 and 2014, THE per capita increased from 119 to 305 in current U.S. dollars, THE as a percent of GDP increased from 5 to 7 percent, whereas GGHE as a percent of THE remained relatively constant (between 54 percent and 57 percent). OOP payment as a percent of THE also was relatively constant (between 36 percent in 2000 and 40 percent in 2014) (WHO 2017b). Table 6.3 provides a summary of Tunisia's health expenditure indicators.

Table 6.2: Health Expenditure Indicators, Tunisia, 2000-2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	119.5	242.6	305.3
THE as a percent of Gross Domestic Product (GDP)	5	6	7
General Government Health Expenditure (GGHE) as a percent of GDP	3	3	4
GGHE as a percent of THE	55	54	57
GGHE as a percent of General Government Expenditure (GGE)	12	12	14
Social Security Funds as a percent of GGHE	28.9	49.4	56.3
Out-of-Pocket (OOP) Expenditure as a percent of THE	36	40	38
Private Health Expenditure (PvtHE) as a percent of THE	45	46	43
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	80	87	87
Private Insurance as a percent of PvtHE	18	11	10
External Resources on Health as a percent of THE	0.9	0.5	-

Source: WHO Global Health Expenditure Database 2017b
*GGHE includes government health expenditures as well as social health insurance expenditures.

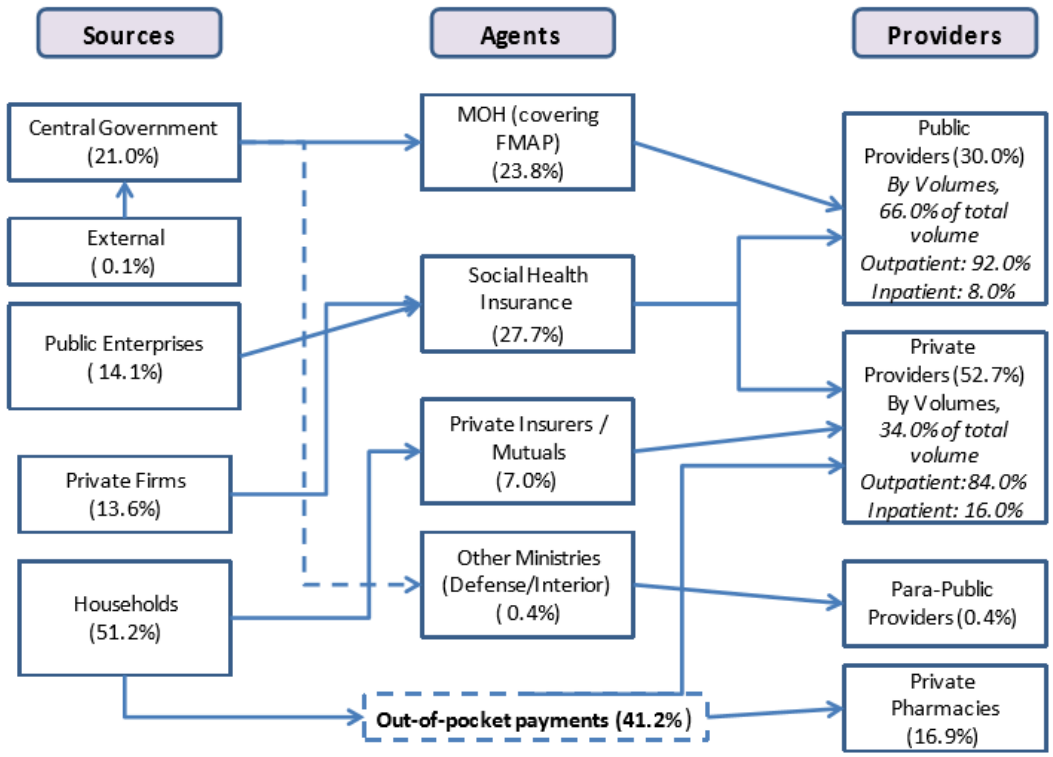
The main health financing agents are the central government, national health insurance, known as the *Caisse Nationale de l'Assurance Maladie* (CNAM), private insurance, and OOP

payments (Figure 16). Several key informants mentioned that private health spending by households rose rapidly since 2010 with an average annual rate of growth of 19 percent (this growth is not consistent with WHO database figures). This growth has been attributed to increased household spending on pharmaceuticals and the growing use of private care. Private expenditures accounted for 51 percent of THE in 2010, approximately 80 percent of which are direct payments at the point of use and 20 percent of which represents health insurance premiums (Arfa and Elgazzar 2013).

CNAM covers the formally employed and their dependents, which is approximately 68 percent of the total population. It purchases health services from public and private providers. CNAM contracts with doctors, laboratories, dentists, and pharmacists.

The Free Medical Assistance Program (*Assistance Médicale Gratuite*, FMAP) is financed by transfers from the Ministry of Finance to the MOH health facilities without any specific links to the costs or use of the health services provided by the facilities to the FMAP beneficiaries (Arfa and Elgazzar 2013).

Figure 16: Main Actors and Fund Flows in the Tunisian Health System, 2010



Source: Arfa and Elgazzar 2013:

CNAM is the result of the reforms implemented in 2004 aimed to increase health coverage, reduce the financial burden on the government budget, limit the burden of OOP spending, and increase the involvement of insurance funds in the financing of health expenditures. CNAM pooled the existing government health insurance regimes within the *Caisse Nationale de Retraite et de Prévoyance* (CNRPS), covering the civil servants and retirees and *Caisse*

Nationale de Sécurité Sociale (CNSS), covering the formally employed in the public and private sectors (MOH/World Bank 2016).

The health insurance payroll taxes that fund CNAM were unified from those of the predecessor systems and calculated as a percent of salary. CNAM included coverage of services of accredited providers in the private health sector. To do so, CNAM introduced new procedures concerning access to private facilities and a reimbursement mechanism for health care expenditures.

Under the CNAM system, there are three affiliation options for the insured to access ambulatory care (public affiliation, private affiliation, and reimbursement system). With the public affiliation option (62 percent of the insured in 2013, against 71 percent in 2008), the patient has direct access to government-provided health care without restrictions and has to pay user fees up to a yearly ceiling. The objectives for the fee charged and ceiling are to increase funds going into the government health care system and encourage consumer responsibility through reducing unnecessary use of services (Ayadi and El Abassi 2017).

With the private affiliation option (13 percent of the insured in 2013 against 10 percent in 2008), the patient is required to choose a private general practitioner who serves as a gatekeeper to specialist care services. Copayments are higher than those paid under the public affiliation option and an annual ceiling exists. With a reimbursement system affiliation (18 percent of the insured in 2013 against 13 percent in 2008), patients have access to both government and private facilities, but pay the full fees to health care providers at the time of use and subsequently obtain partial reimbursement from CNAM. The amounts reimbursed to patients are calculated based on rates negotiated with providers and on pharmaceutical reference prices. Within the private and the reimbursement system affiliation, the insured must cover the full cost of any additional services used beyond the annual ceiling.

Regardless of the affiliation option, CNAM covers all health care expenses when the patient is suffering from one of 24 chronic conditions (called *Affections Prises en Charge Intégralement* (APCI) or fully covered conditions) irrespective of if the care was provided in government or private health care facilities. Moreover, while all insured patients have access to inpatient care in government facilities, they must pay a standard lump-sum fee per day of hospitalization. Childbirth and a limited list of surgeries in private clinics are covered with a fixed lump sum paid by CNAM.

The health insurance reform did not change the eligibility enrollment criteria, which included having a professional career and having worked at least 50 days during the last two quarters or at least 80 days during the last four quarters. The FMAP continued after the CNAM reforms as a state-subsidized scheme to cover lower-income persons who are not eligible for CNAM (MOH/World Bank 2016).

The FMAP has two schemes: FMAP1 is designed for the poorest who are exempted from health care fees in the government facilities, and FMAP2 is designed for the vulnerable population not classified as the poorest who receive care at reduced fees. In both schemes, beneficiaries are identified by local authorities and regional quotas are applied to identify beneficiaries. The two FMAP programs have been consolidated and have gradually succeeded in reaching a larger proportion of informal workers and low-income individuals (Arfa and Elgazzar 2013). Within this new framework, access to health services is not subject to any restrictions, rationing, or ceilings. However, budget limitations and drug shortages in government facilities are implicit forms of service rationing, pushing FMAP patients toward private health care services (Arfa and Achouri 2008). FMAP programs were expanded in the recent years but 10 percent of the population remains uncovered (Abu-Zaineh et al. 2014, Elgazzar et al. 2010).

Since the revolution in January 2011, there has been heightened awareness of inequalities in terms of access to health care services and there is more concern about UHC (Dialogue Sociétal 2014). In 2011, the FMAP programs were extended to cover approximately 29 percent of the households (. The government has demonstrated more interest in health care via increased budgets. Despite this trend, macroeconomic data show that household spending accounted for 38 percent of THE in 2014 versus 36 percent in 2000. This share is similar to that prevailing in the EMRO region (40 percent) but is large compared to 10 percent in Turkey or 29 percent in upper middle-income countries. One analysis estimated that OOP health spending contributed 13 percent to an increase in the poverty gap and not only for poor and vulnerable groups (Ayadi and Zouari 2015).

Main Trends in Health Financing

Tunisia continues to rely significantly on government health expenditures in the financing of THE, which reached 57 percent in 2014. Unlike in other countries in the region, social health insurance contributions are now the main source of public spending in Tunisia, accounting for 29.2 percent of THE.

Although the government allocated close to 14 percent of its budget to health, taxation accounted for less than 25 percent of THE. In addition, economic growth has been weak since the revolution in 2011. After a contraction of 1.9 percent of GDP in 2011, the economy grew by 3.6 percent in 2012, 2.6 percent in 2013, and 2.2 percent in 2014.

The rapid growth of the private sector in the provision of services, coupled with a generous benefit package and fee-for-service as the payment method resulted in constant pressure on health insurance organizations' budgets.

Although about 90 percent of the population is covered by a health insurance mechanism, the high share of OOP expenditure on health (38-40 percent of THE) places many households at risk of catastrophic expenditures and impoverishment. According to the 2010 National Survey of Household Budget, Consumption and Living Standards, the western regions of the country are the most affected by catastrophic expenditures; an average 5–7 percent of the population there incur such expenditures (Ayadi and Guisset 2014). In the remaining regions, the average incidence rate is around 4 percent of the population. These rates vary also by wealth quintile between and within regions; however, overall the poorest 40 percent of the population is the most affected, with incidence rates of catastrophic expenditure ranging from 5 to 11 percent compared with 1 to 3 percent for the richest quintiles. These findings indicate that while the overall financial protection is inadequate, the poor are the most affected. They also suggest that the medical assistance schemes for the poor and the near-poor are providing only limited financial protection at least in part as a result of the underfunding of public health facilities and the unequal distribution of health infrastructure across the country.

Included in the 2014 constitution was a commitment to UHC and an aim to reduce OOP expenditures. Moreover, the recommendations of the public debate in 2014 on Policy Dialogue on Health Policies, Strategies and Plans aimed to "reduce the costs supported by the citizen" because of their catastrophic and impoverishing impacts. The recommendations called for a reform of CNAM institutional arrangements because they were found to overly benefit the wealthier population.

Increasing government funding is an obvious option even if it is difficult to implement in the current difficult social and economic situation. The 2015 MOH/World Bank report states that reforms should go beyond FMAP and CNAM and the government and the private health care sectors to address quality of services in the government health facilities (MOH/WB 2016).

A recent scientific paper concluded that “the current health insurance schemes, despite improving accessibility to health care services, are nevertheless incapable of achieving effective coverage of the whole population for all services. Attaining the latter goal requires a strategy that targets the “trees” not the “forest” (Makhloufi, Ventelou, and Abu-Zaineh 2015)**.**

Private Health Sector

While the public health sector is dominant in Tunisia, the private sector is growing quickly and includes a well-developed medical tourism industry. The private sector predominantly offers curative care; while no reliable data have been collected on private sector provision nationally, it is known that the sector offers little preventive care (WHO 2010). Private clinics developed during the 1980s, when hospital doctors were granted permission to establish semi-private practices (Oxford Business Group n.d.). A series of tax incentives in the 1990s helped encourage growth. The private sector is concentrated in the capital (Tunis) and coastal regions (WHO 2010).

Policy and Governance

As the private sector expanded in recent decades, policies were created to regulate it. The government established standards for buildings, equipment, and staff (WHO 2006). Overall, the MOH regulated the activities of the private sector, and its inspection departments oversaw private facilities (WHO 2006). MOH authorization was necessary to establish a private clinic until legislation in 2001 removed this requirement (Oxford Business Group, n.d.); currently, accreditation of facilities (in both sectors) is not a standard practice. The National Health Accreditation Authority was established in 2012 to address this, but it is not yet fully functional. Some private facilities obtain accreditation from international organizations (WHO 2006). Health professionals were supervised by the MOH and by professional orders, which were permitted to supervise certain defined aspects of their respective professions (WHO 2006). However, Tunisia lacks widely accepted standards of practice for health professionals.

A pathologist at work in Tunis, Tunisia.

Photo credit: Patrizia Cocca

Overall, governance of the private sector is weak. This has had many ramifications, including increased health expenditures and undercutting the public sector’s referral role (WHO 2010). A number of challenges, including the need to elevate the importance of preventive and integrated care and the need to establish coordination and complementarity between the public and private sectors, have not been addressed because decision making mostly happens at the central level (despite efforts to decentralize), which is out of tune with local realities (WHO 2010).

With regards to PPPs, as of 2006, public facilities were permitted to outsource to private service providers (WHO 2006). **According to the 2016-2010 MOH plan for the health sector, key priorities include improving the regulation of the private sector and establishing PPPs** (WHO 2017).

Service Delivery

The private sector treats about 20 percent of Tunisians (Comité Technique du dialogue societal 2014). According to the MOH, there were 2,653 private health facilities as of 2015, including 2,006 pharmacies. This figure also consists of private clinics, 111 hemodialysis centers, and 445 laboratories. There are substantially more beds in public than in private hospitals (20,488 vs 5,020, respectively) (MOH/World Bank 2016), but there are more doctors working in the private (7,675) than in the public sector (6,832). Pharmacists mainly operate in the private sector; there are 2,006 private pharmacists compared to only 587 in the public sector (MOH/World Bank 2016). Most heavy medical equipment in Tunisia is found in the private sector (WHO 2010).

Tunisia is a destination for medical tourism (Oxford Business Group n.d.). **Foreigners account for a large proportion (approximately 30 percent) of private institutions' clientele, which has impacted the types of services that are provided**. Clinics now offer a wider range of medical services, including dentistry, optics, orthopedics, and cosmetic operations.

While there is limited national data available on utilization of the private sector, the 2012-2013 MICS survey provides information about the source of care for deliveries and children with ARI symptoms. These two data points present a limited—but important—view of the private sector's role in the health system (Table 6.4). Overall, the vast majority of women who delivered in a facility (85 percent) chose a public one; only 15 percent sought care in the private sector. About half of caregivers seeking care for children with symptoms of ARI went to the private sector, and pharmacies were the most common source of care. Use of the private sector for both deliveries and treatment for ARI symptoms was much higher among the wealthy. For deliveries, 46 percent of women in the highest wealth quintile went to the private sector compared to only 4 percent of women in the lowest wealth quintile. For treatment of ARI symptoms, use of the private sector was significant across wealth quintiles, but was much more common among those in the highest wealth quintile (81 percent) than among those in the lowest (42 percent).

Table 6.3: Sources of MCH Care, Tunisia

Indicator	Private	Public	Both	Total
Place of delivery (percent of women who gave birth in health facility 2 years prior to survey)	15	85	--	0
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	45	46	5	4

Source: UNICEF 2012

Refugees

There are not significant numbers of refugees in Tunisia as of 2015. Refugees are entitled to health services in the public sector. There are plans for a National Asylum Law that has not yet been passed. UNHCR has four partners in Tunisia: the Tunisian Red Crescent, Islamic

Relief, the Adventist Development and Relief Agency, and the Arab Institute for Human Rights (UNHCR 2016).

West Bank and Gaza

The West Bank and Gaza are considered lower middle income and have a population of 4.6 million (UNPD 2017), with the majority of the population (65 percent) living in the West Bank. Sixty-two percent of the population is under the age of 25 (UNPD 2017) and 75 percent lives in urban areas (World Bank 2017). Gaza is one of the most densely populated areas in the world, with over 2,100 people per square kilometer; 1.9 million Palestinians live in Gaza and the majority (1.3 million) are refugees (UNRWA 2017). The Palestinian Authority governs the West Bank and Gaza, but Hamas holds de facto power in the Gaza Strip.

The economic situation differs between the West Bank and Gaza. The West Bank has experienced positive growth recently, with GDP increasing 3.5 percent in 2015, but growth has been inconsistent in Gaza, fluctuating between recessions and rebounds, funded mainly by donor aid (WHO and World Bank 2016). Movement and access restrictions in the West Bank and Gaza as well as conflict in Gaza limit economic growth (World Bank 2016a). The Palestinian economy collapsed in 2014 when Gaza descended into a recession as a result of Hamas' war with Israel and ongoing conflict (World Bank 2016a). Donor aid to the Palestinian Authority has declined in recent years, greatly reducing overall public funding. Current donor funding for the Authority's budget is about $800 million, which is about $1 billion lower than it was in 2008 (World Bank 2016a). Reduced and unstable public funding has led to financial challenges in health and other sectors.

Health Status

Health indicators have improved significantly in recent decades in the West Bank and Gaza and are similar to those of other lower middle-income countries in the region (MOH 2016). Life expectancy at birth increased slightly from 72.1 in 2008 to 73.3 in 2015 (Table 7.1). The infant mortality rate is 17.1 while the under-5 mortality rate is 21.0 per 1,000 live births. The mCPR is 43.8 percent. The maternal mortality ratio has decreased from 58 per 100,000 live births in 2008 to 45 in 2015. For their most recent pregnancy, 95.5 percent of women reported having four or more antenatal care visits and 99.3 percent of women gave birth in a health facility. **NCDs are the most common cause of death in the West Bank and Gaza and account for 70 percent of deaths, mainly cardiovascular disease and cancer (Ministry of Health 2016).**

A mother and child at a clinic in Zababdeh, West Bank.

Photo credit: Anglican Video

Table 7.1: Key Health Indicators, West Bank and Gaza

	2008–2010	2014–2015
Life expectancy at birth (years)*	72	73
Maternal mortality ratio (modeled estimate, per 100,000 live births)**	58	45
Infant mortality rate (per 1,000 live births)*	20.5	17.1
Under-5 mortality rate (per 1,000 live births)***	23	21
Total fertility rate (births per woman)***	4.5	4.1
mCPR (percent of women ages 15-49)***	44.2	43.8

Sources: * World Bank 2017; ** Ministry of Health 2016; *** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

It is important to note that there are wide disparities in health status and service delivery between the West Bank and Gaza. Though conflict, limited mobility, and political instability affect both areas, the situation in Gaza has deteriorated significantly in recent years, especially after the wars with Israel of 2008-09 and 2014, causing destruction to health infrastructure, supply shortages, and a lack of medical personnel. The West Bank situation aligns more with that of the stable states in this review, whereas Gaza is more similar to the fragile states, affected by prolonged conflict.

Health System

The political history and geography of the West Bank and Gaza have influenced the development of the health system. The Palestinian Authority took over responsibility for the health system in 1994. Because the Israeli occupation limits Palestinians' mobility within and between the West Bank and Gaza, the two areas have developed two parallel health systems that function, for the most part, independently of each other (Giacaman, Abdul-Rahim, and Wick 2003; WHO 2014). The public sector is dominated by the MOH, established in 1994, which provides regulation, oversight, and service delivery at all levels. In addition, the Military Medical Service under the Ministry of Interior runs 21 clinics that serve security forces personnel and their families (WHO and World Bank 2016). The Palestinian Authority's MOH is responsible for regulating and supervision of the provision of health care in the West Bank and Gaza, but Hamas has effectively taken over supervision of the health system in Gaza since they were elected in 2006.

The private sector includes a variety of for-profit and non-profit primary health care centers, hospitals, specialty clinics, and pharmacies. UNRWA is the largest nonprofit provider, serving Palestinian refugees in the West Bank and Gaza, but the private sector also includes other NGOs and for-profit providers.

In recent years, the MOH, UNRWA, WHO, NGOs, and other partners have focused on promoting the family health approach, in which patients receive more integrated services from a coordinated team of physicians, nurses, dieticians, laboratory technicians, and others. The NGO sector is more advanced than the public sector in family health (WHO 2016). UNRWA in particular has successfully implemented the family health approach and also increased overall efficiency through establishing an electronic medical records system.

Referrals to facilities outside of the West Bank and Gaza are an important feature of the health system as access to specialty care, particularly for cancer and complex surgeries is limited. The majority of patients are referred to public or private facilities within the West Bank, Gaza, or East Jerusalem, particularly to two non-profit hospitals, Augusta Victoria and Makassed. Between 15 and 20 percent of referrals are to other countries—Israel, Jordan, and Egypt (WHO 2014).

Both the public and private sectors promote prevention of NCDs and provide NCD treatment. The MOH spends 80 percent of its budget on NCD prevention and treatment (Ministry of Health 2016). It has a dedicated NCD unit, a National NCD Action Plan, and is constructing a new cancer hospital in the West Bank. The private sector is an important player in provision of NCD services. Augusta Victoria Hospital in East Jerusalem is the premier cancer treatment center for Palestinians, some of whom are referred to the King Hussein Cancer Center in Jordan. UNRWA offers laboratory services and provides chronic NCD care for patients with diabetes and hypertension. The Palestinian NGO Juzoor for Health and Social Development is working with UNRWA and MOH clinics to develop standards and improve protocols and guidelines for screening, diagnosis, and treatment of diabetes, hypertension, and related complications (Juzoor for Health and Social Development 2017).

Health Financing

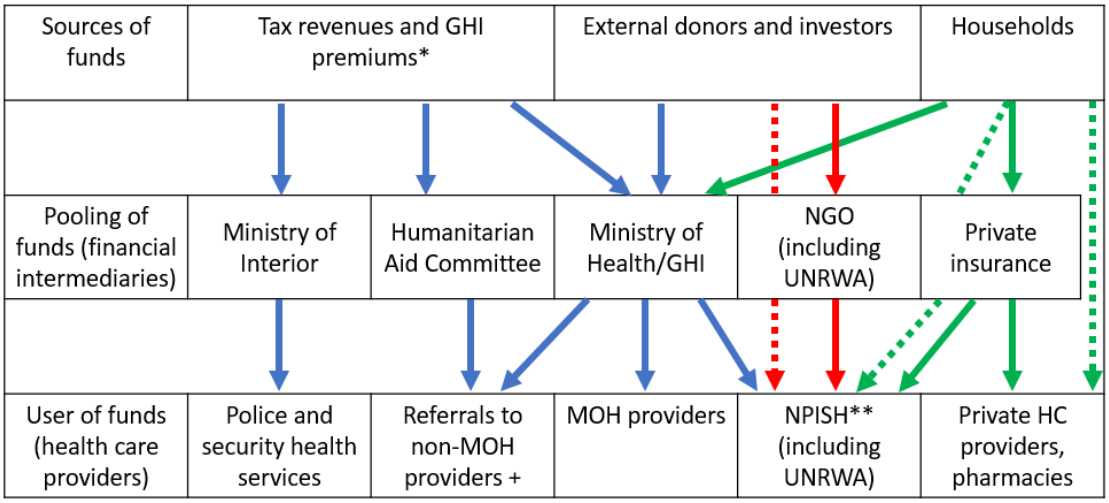
Per capita health spending in the West Bank and Gaza is relatively high compared to other countries of similar income in the MENA. In 2016, per capita health spending exceeded $300 and constituted more than 10 percent of the country's GDP. This was due to the acute conflicts that had severe repercussions on the health infrastructure and to health system inefficiencies and overreliance on service provision outside the country (WHO and World Bank 2016). **THE per capita grew from $126 in 2000 to $294 in 2012 and $305 in 2014, a 142 percent increase** (World Bank 2016a).

According to a recent World Bank report (World Bank 2016a), the increase in THE was driven by three factors:

- Increases in the wage bill for the health workforce;
- Large increases in the number and cost of referrals to non-MOH health care providers;
- High prices for drugs in the West Bank and Gaza compared with international benchmark prices

In the West Bank and Gaza, sources of funds for health are varied and fall into three broad categories: i) a variety of taxes (e.g., income, value-added, and sin taxes) collected by the Ministry of Finance (MOF), which also collects the Government Health Insurance (GHI) premiums paid by public sector employees, ii) external donors and investors, and iii) households. It is worth noting the public sector's high reliance on unpredictable and fluctuating donor contributions and assistance (World Bank 2016a). Figure 17 provides an overview of the West Bank and Gaza's health financing structure; Table 7.2 shows sources of funding.

Figure 17. West Bank and Gaza Health Financing Structure



Source: Adapted World Bank 2009.
* The MOF collects GHI premiums for government workers in the West Bank and Gaza, and the Government of Israel collects premiums from Palestinian workers employed in the formal sector in Israel.
+ These include NPISH and private providers in the West Bank and Gaza as well as in Israel, Egypt, and Jordan.
** Nonprofit organizations serving households

Table 7.2: Sources of Funding, West Bank and Gaza (%)

Source of Funding	2012	2013
Government	38.7	43.3
Private insurance	2.3	2.2
Households OOP expenditure	39.8	37.7
External funding	0.9	1

Source: Ministry of Health, National Health Accounts 2013

OOP spending accounts for 38-40 percent of THE in 2012-2013 (World Bank 2016a).

Expenditures on pharmaceuticals and health products accounted for 39 percent of all OOP spending. Another large expenditure category driving OOP expenditures is curative care, which was 39 percent of OOP expenditures in 2012 (World Bank 2016a).

Population Coverage

Around 82 percent of the Palestinian population living in the West Bank (including East Jerusalem) and the Gaza Strip are covered by some form of prepayment arrangement. Over 90 percent of the covered population is covered by either the GHI scheme or UNRWA, and there is significant overlap between the two. Around 32 percent of the covered population has double (or sometimes triple) coverage. Other coverage mechanisms include NGOs and private health insurance schemes, with the latter covering around 2 percent of the population (WHO and World Bank 2016).

The equity of a health financing system depends on how the burden of health expenditures is shared across different socioeconomic and demographic groups. A study conducted in 2009 found that 11.8 percent of surveyed households fell into poverty in 1998 due to health care payments, and 12.5 percent of households entered poverty for the same reason in 2006. (Mataria et al. 2010). **The rise in the incidence of catastrophic health expenditures cases has been attributed, at least partly, to political and economic instability since 2000 and to people's dwindling confidence in the quality of services at the MOH facilities.** It also is indicative of the health system's limited capacity to extend adequate financial protection to all Palestinians, despite the overall increase in public health expenditures.

Purchasing and Payment Methods

Government providers—both hospitals and primary care centers—are paid through rigid and historic line item budgets, and civil service employees are paid a salary according to civil service rules. There is no systematic approach for the allocation of the MOH budget to hospitals and health centers. Facilities are allocated staff according to the government's hiring ceilings. Facilities also receive supplies and petty cash based on facility director requests. Petty cash disbursements, for example, are approved once the facility director has used the previous petty cash disbursement. In other words, there are no individual budgets for each facility and no annual ceiling, but rather a common budget open to all health facilities. Under this system, health facilities have the incentive to spend more as long as they can obtain additional funds regardless of the output level. The extent to which such a system is more responsive to patients' health needs and whether it is more prone to moral hazard is however not clear.

Hospitals get an annual budget, which is unrelated to their performance and salaries are not assigned based on individual productivity. Furthermore, salaries are often not paid on time due to the high reliance on irregular donor contributions. The inconsistencies between the approved and actual expenditures hinder recurrent expenditure planning and medium-term investment prospects (World Bank 2016a). Unpredictable revenues from the MOF weaken the MOH's credibility as a purchaser of services (from other service providers) and medical supplies (e.g., drugs and disposables) (World Bank 2016a).

Furthermore, the practice of transferring to the MOF copayments collected by government providers as well as any extra revenue received by the government health sector offers the providers no incentive for saving and efficiently using resources (WHO and World Bank 2016).

Insured patients in need of a service that is not available in government facilities may be referred to nongovernment facilities inside Palestine or abroad—typically to hospitals in East Jerusalem, Israel, Egypt, or Jordan. **Referrals outside the MOH reached 61,635 in 2013 and represented the second highest budget line item at the MOH, after salaries.** Oncology and hematology care account for the largest financial burden of referrals, followed by specialized surgeries such as neurosurgery and cardiac surgery. Referrals to local hospitals within

Palestine remain the most common, with 82 percent of cases referred to private hospitals and nongovernmental hospitals in the West Bank, Gaza, and East Jerusalem. The East Jerusalem hospitals received approximately 27,000 referrals in 2013, approximately 44 percent of total referrals. Services provided through treatment abroad are usually paid by fee-for-service, a payment method that encourages providers to overtreat patients and, if it is not capped, significantly contributes to escalating health spending. In summary, the health financing system in Palestine is characterized by "passive purchasing with dominant provider payment methods that have shown to yield inefficiency, poor quality, and limited access to care" (WHO and World Bank 2016).

Recently, with the World Bank support, the MOH initiated a process of improving contracting with private hospitals using a competitive bidding process based on price, quality standards and general service availability (World Bank 2016a). USAID is currently supporting the MOH to review and revise the referral system.

Benefits Package

In the West Bank and Gaza, the publicly financed benefits package is broad and the GHI scheme is expected to virtually cover all services except for a specified set of services such as organ transplants and road and work injuries (Awawda and Abu-Zaineh 2017). The two major issues that stem from this are the variation in service coverage and the burden of treatment abroad.

There are many differences in the services provided in the benefits package under the various publicly financed schemes (WHO and World Bank 2016). The lack of quality health care, especially at the tertiary level, results in transferring a large number of patients for treatment abroad in Jordan, Egypt, and Israel. This has caused a significant drain of health sector resources and imposed a large financial burden on patients and their families. Over the last decade, the number and cost of referrals has increased dramatically. Between 2000 and 2013, expenditure on referrals increased from $8 million to $52 million, and currently it corresponds to 48 percent of non-salary public health spending (World Bank 2016a). The pattern of referrals has been changing as well, as NCDs now account for the majority of referral expenditures. Between 2000 and 2013, the number of referrals from the West Bank to Israel nearly quadrupled and in the same period, the number of referrals from Gaza to Israel increased by 37 percent. In the last decade, Israeli hospitals in Jerusalem have played an important role in providing services to referral patients. A recent study by the World Bank indicated that this shift in referral pattern in recent years is driven by a number of factors, including (i) mobility restrictions imposed by Israel (checkpoints, separating wall, and siege on Gaza Strip; (ii) perceived quality of care and cost concerns; and (iii) the social value attributed to hospitals in East Jerusalem as resilient Palestinian institutions (World Bank 2016a). The USAID-funded Palestinian Health Capacity project, implemented by IntraHealth, is working on streamlining referrals between the West Bank and Gaza and Israel by providing support on cost containment measures, new contractual arrangements, regulation and communication tools, monitoring and evaluation, transparency, and optimization of referrals and payment methods. Table 7.3 provides a summary of findings and implications for health system financing performance in the West Bank and Gaza.

Table 7.3: Summary of Findings and Implications for Health System Financing Performance, West Bank and Gaza

Topic	Findings	Consequences for HS performance
Health expenditures	- THE has been rising rapidly since 2000 - THE as a percent of GDP is very high	- Unsustainable trends - Drivers of cost escalation point to inefficiency and inequity - Narrow and constrained fiscal space
Financial risk protection	- OOP expenditures: around 40 percent of THE	- Inadequate financial risk protection - Relative high rates of catastrophic/impoverishing health expenditure, particularly among the poor and vulnerable population
Revenue raising mechanisms	Revenue collection mechanisms are fragmented and fluctuating	Financing system is “unfair”
Pooling mechanisms	- Highly fragmented with significant level of OOP payments - Overlapping coverage	- Inefficiency and inequity in service delivery - Inequity in access to/utilization of care
Purchasing (provider payment mechanisms)	- Passive purchasing: historical line item budgets and salaries - GHI revenues are just put into the MOH budget and paid out as line items to government providers	- Does not reward good quality or health outcomes - No incentives for health promotion and disease prevention - Incentive system does not promote efficiency, quality, or access
Benefit design	- Different benefit packages for different schemes and population groups - GHI benefit package generous and poorly delineated and managed	- Inequity in access to needed health care (Abu-Zaineh 2011) - Strategic “shopping” by users of care - Incentive to hospitalize patients - Difficult to control costs - Lack of transparency and accountability - Expensive out of country referrals

Source: Adapted from WHO and World Bank 2016

Health System Reforms

Due to a narrow fluctuating fiscal space and complex political situation, various reforms are under consideration to overcome several structural and contextual factors (WHO and World Bank 2016) and to move toward UHC. According to the WHO and World Bank 2016 report, addressing the overlapping coverage issue and establishing a Strategic Purchasing Authority to ensure that sufficient resources for health are mobilized and used efficiently is necessary, including for external referrals. From the service delivery perspective, introducing the family practice approach to ensure that every individual gets the quality care they need in an integrated and efficient manner is essential. This will require strengthening other health system components including governance, health workforce, medicines and technology, and information systems. The reform process needs to be led by the MOH but involve relevant ministries, civil society organizations, the private sector, and international stakeholders. In addition, a capacity-building exercise that facilitates experience sharing of what does and does not work in a context like the one in the West Bank and Gaza is necessary to acknowledge the unique circumstances of protracted unresolved conflict and periodic acute emergency in which health policy needs to be formulated.

Private Health Sector

Policy and Governance

The National Health Strategy (2017-2022) and Hospital Sector Master Plan, which is in development, both prioritize better coordination of service provision between different sectors and providers, but these have not been implemented yet. Oversight of the private sector is limited, and there is no accreditation system for public or private providers, but developing an accreditation body is a priority in the National Health Strategy. **Key informants stated that the role of the MOH is sometimes unclear, as it focuses more on its role of service provider than a regulator or oversight body. This can result in competition, rather than collaboration, between the public and private sectors.**

NGOs, such as Juzoor for Health and Social Development, work with the MOH in developing standards for care and curricula for continuing medical education. Individual medical facilities have obtained accreditation and started continuing medical education programs. For example, Makassed Hospital and Augusta Victoria hospitals were the first Palestinian hospitals accredited by the U.S.-based Joint Commission International, and they have their own continuing medical education program, particularly for nurses. Five other Palestinian hospitals have since received accreditation from the Joint Commission International.

Perceptions of public-private collaboration differ. Some key informants thought that collaboration and complementarity between the public and private sectors were strong, while others stated that public-private collaboration is limited. The West Bank and Gaza do not have a legal and regulatory framework to facilitate public-private engagement. However, there seems to be good coordination between the public and private sector for referrals of Palestinian patients to private hospitals, such as Makassed, Augusta Victoria, and Al-Najjah, for services not available in the public sector, such as oncology, nephrology, hematology, and various surgeries. The public sector also pays for patients to receive certain private sector services that are not available in the public sector and has agreements with some private providers. But delays in payments from the MOH cause frustration among private providers and facilities. As mentioned earlier, the Palestinian Health Capacity project, run by Intrahealth, has

worked extensively on streamlining and standardizing referrals between the Palestinian MOH facilities, private Palestinian facilities, and Israeli facilities (Intrahealth 2017).

The public and private sectors collaborate in the Palestinian Health Policy Forum, which in recent years has been promoting localization of services, meaning more referrals within the Palestinian health system and a reduction in referrals to Israeli health facilities. NGOs such as Al-Juzoor for Health and Development are also part of many MOH thematic groups that include both the public and private sectors, including those for breastfeeding, NCDs, and mental health. Syndicates exist for each cadre, and both private and public providers are required to be members as part of the licensing process. The syndicates include the Doctors' Association, Nursing Association, and Pharmacists Association, which play a role in regulation and quality control for their respective cadres.

Service Delivery

Data on service use are limited, but show that the private sector is an important source of family planning and MCH services in the West Bank and Gaza. MICS data from 2014 shows that 74 percent of modern method uses obtained their method from a private source, with UNRWA facilities the most commonly reported source, followed by other private facilities (MICS 2014; see Palestinian CBS, UNICEF, and UNFPA 2015). Use of private sector sources for modern methods was similar across wealth quintiles, slightly higher in the lowest wealth quintile (79 percent) than in the highest (74 percent). Over 99 percent of women delivered in a health facility, approximately two-thirds in the public sector (61 percent) and one-third in the private sector (36 percent). The wealthy use the private sector more often for delivery; private sector facility delivery was more common in the highest wealth quintile (63 percent) than the lowest (18 percent). The private sector is also an important provider of child health services. Of children with ARI symptoms, 72 percent were taken for treatment outside of the home (Assaf et al. 2017). Among those who were taken for treatment, 62 percent chose a private source and 31 percent chose a public source, which 3 percent went to both the public and private sectors (Table 7.4). Private sector use for child ARI symptoms was high across wealth quintiles, slightly more common (69 percent) in the highest quintile than in the lowest (62 percent) (MICS 2014).

Table 7.4: Sources of MCH and FP Care, West Bank and Gaza

Indicator	Private	Public	Both	Other
Source of modern methods of contraception (percent of women of reproductive age currently using modern contraception)	74	21	--	5
Place of delivery (percent of women who gave birth in health facility 2 years prior to survey)	36	61	--	3
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	62	28	3	7

Source: UNICEF 2014

As of 2016, there are 760 primary health care centers, 608 in the West Bank and 152 in Gaza. In the West Bank, 41 percent of the centers are private, with the majority run by UNRWA or NGOs. A greater proportion of the centers in Gaza are private (68 percent), and mostly run by UNRWA or NGOs. There are 80 hospitals, 50 in the West Bank and 30 in Gaza. These MOH estimates do not include private for-profit providers.

The NGO sector is very strong in the West Bank and Gaza, as many NGOs were operating before 1994 when the Palestinian Authority and MOH were established. NGOs deliver primary, secondary, and tertiary services for underserved and vulnerable populations in the West Bank and Gaza. Many NGOs developed to fill gaps after the start of the Israeli occupation in 1948 but their role has decreased since the formation of the Palestinian Authority and its MOH in 1994. Key NGOs include UNRWA, the Palestinian Medical Relief Society, Palestinian Red Crescent Society (PRCS), and for Health and Development. They provide services in all health areas. The PRCS is the main provider of emergency services and operates 144 ambulances (PRCS 2017).

The private for-profit sector includes private hospitals, clinics, and doctors' offices, and there is overlap between public and private providers (Manenti et al. 2016). **Dual practice is legal and common, as public sector salaries are low, but may lead to competition between the public and private sectors** if providers refer patients to their private clinics, which are more lucrative (Alaref et al. 2017). One obstacle to accessing care in the West Bank and Gaza is dual practice and short opening hours in the public sector. Public sector facilities are only open from 8am to 1pm or 3pm, and then providers go to their private clinics, which results in a shortage of public services.

East Jerusalem is home to two non-profit hospitals that provide important secondary and tertiary care to Palestinians, Makassed and Augusta Victoria. They are known for high-quality specialized treatment including cardiac surgery, cardiology, and specialized surgeries. However, Palestinian patients from the West Bank and Gaza must obtain Israeli permission to travel to these hospitals, which limits access.

In order to better publicize information about where to access public and private services, the Ministry of Local Government in partnership with GIZ launched *geomolg,* which maps information on local resources, including schools, government offices, and hospitals. The WHO and Public Health institute are currently collaborating to map health providers, public and private, in the West Bank, Gaza, and East Jerusalem and will produce GIS maps of results.

Refugees

There are 809,738 registered Palestinian refugees in the West Bank and 1.3 million in Gaza. UNRWA is the main provider of health services to Palestinian refugees and runs 43 primary health facilities in the West Bank and 22 in Gaza. UNRWA provides primary care, maternal health services, dental services, laboratory tests, x-rays, care for physical and mental trauma, family planning, pharmacies, and NCD services for diabetes and hypertension. For specialized services, such as oncology, UNRWA may refer patients and cover services from private for-profit and nonprofit providers.

Fragile States

Iraq

The Republic of Iraq has experienced steady population growth in the past decade, going from 29 million in 2008 to over 36 million in 2017 (UNPD 2017). The Iraqi population is largely young and urban: 60 percent of people are under the age of 25 (UNPD 2017) and 70 percent live in urban areas (World Bank 2016).

Since 2008 and before, Iraq has been devastated by cycles of war and violence, refugee crises, and the brutal expansion of the militant group self-proclaimed as the Islamic State of Iraq and the Levant or ISIL (USIP 2017). **However, Haider al-Abadi, prime minister since 2014, is largely seen as a successful leader, and the military's victories over ISIL have improved security** (Jiyad 2017). The situation as measured in the Fragile States Index improved between 2007 and 2014 and has since declined (The Fund for Peace 2017). Iraq established a new constitution in 2005 and has since held successive elections for its Council of Representatives. Corruption, sectarianism, and violence render governance weak (USIP 2017).

The Kurdistan Regional Government is the authority of the Kurdistan region in Iraq's three northern governorates of Dahuk, Erbil, and Sulaymaniyah (BBC 2017; Al Jazeera 2011). The regional government also has de facto control in parts of the territory bordering these governorates, recently reclaimed from ISIL (Kaplan and Mardini 2017). Kurds make up approximately 20 percent of the population of Iraq (BBC 2017b).

Low oil prices and the escalating conflict with ISIL have harmed economic growth in Iraq since 2014, though increasing oil production and an improved security situation fueled some growth in 2016-2017 (McEneaney 2016; World Bank 2017a; World Bank 2017b). Iraq is an upper middle-income country (World Bank 2016) with a GNI per capita (Atlas method) of $5,430 in 2016 (World Bank 2016). The economy is resource-based—oil revenues make up 99 percent of export revenue and 90 percent of federal revenue (Al-Khatteeb 2015)—and largely state-run. The public sector is bloated, providing 43 percent of all jobs (Cordesman 2015) and spending 70 percent of the state's budget on their salaries (McEneaney 2016). **The private sector in Iraq has a very limited role (WHO 2013). Iraq rates 165th out of 190 countries in the World Bank's Doing Business Index, which is very low but the highest among the fragile states surveyed (World Bank 2017c).**

Health Status

Iraq's health and humanitarian crisis is among the largest and most complex in the world and civilians have borne the brunt of the suffering (The Lancet 2015; Safeguarding Health in Conflict Coalition 2017). **As of June 2017, there are 11 million people in need of humanitarian assistance and 3.4 million IDPs** (UNOCHA 2017). There is controversy with regard to casualty figures over the past 14 years because many deaths are unrecorded (Physicians for Social Responsibility et al. 2015). According to a household survey of deaths from war-related causes between 2003 and 2011, "war and occupation directly and indirectly" killed approximately a half-million Iraqis, though this may be an underestimate (Vergano 2013), and injured another half million (Crawford 2013).

Iraq faces a triple burden of disease: communicable and non-communicable diseases as well as the trauma and psychosocial effects of longstanding fragility, conflict, and violence.

Iraq's health indicators present a complex picture: some have improved in recent years while others have worsened (Table 8.1). Health status in different parts of the country may change quickly depending on the intensity and other effects of the conflict. Moreover, because data collection is challenging amid the conflict, available data may not include less secure areas of the country. The mCPR dropped from 38.7 percent to 35.5 percent between 2006 and 2011 (Assaf et al. 2017) and only 49.6 percent of women had four or more antenatal care visits as of 2011. While the percentage of women who delivered in a health facility was one of the lowest in the region in 2011 (76.6 percent), it had increased substantially from 62.6 percent in 2006; and under-five mortality rates dropped from 41 to 37 live births between 2006 and 2011 (Assaf et al. 2017).

Table 8.1: Key Health Indicators, Iraq

	2006-2008	2011-2015
Life expectancy at birth (years)*	68.2	69.6
Maternal mortality ratio (modeled estimate, per 100,000 live births)**	--	50
Infant mortality rate (per 1,000 live births)*	31.4	26.7
Under-5 mortality rate (per 1,000 live births)*	38.6	32.0
Total fertility rate (births per woman)***	4.3	4.5
mCPR (percent of women ages 15-49)***	38.7	35.5

Sources: * World Bank 2017; ** WHO 2017; *** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

NCDs account for 62 percent of total deaths in Iraq (WHO 2014), an increase from 44 percent in 2013 (WHO 2013). Among NCDs, the leading cause of death is cardiovascular diseases (33 percent) followed by other NCDs (12 percent) (WHO 2014). In Iraqi Kurdistan, premature coronary artery disease, which is alarmingly high, was determined to be largely related to the clustering of cardiovascular risk factors (Mohammad, Jehangeer, and Shaikhow 2015). With regard to tobacco smoking, prevalence among men (38 percent) seems much higher than among women, but there may be some underreporting among women due to social factors. **Mental health challenges are the fourth largest cause of ill health in Iraqis over five years of age, the most commonly experienced disorders being anxiety and depression** (MSF 2012).

According to the NCDs Risk Factors 2015 STEPS Survey, most respondents sought medical counsel for NCDs in the private sector (WHO 2015). Public primary health care (PHC) centers delivered about a quarter of screening and early detection for hypertension,

diabetes, vision problems, and breast cancer. The WHO and the Ministry of Health (MOH) are together looking into improving the national cancer registry (WHO 2016). As of 2016, there are 10 cancer centers in Iraq. Main challenges to further progress are caused by the ongoing instability, including the lack of sufficient infrastructure, technology, health workers, and training programs (Al Ghazi 2016).

Box 4. Mental Health Needs in Iraq

As of 2013, there was widespread prevalence of mental illness in Iraq (35.5 percent) and the treatment gap was as high as 94 percent (WHO 2013). Among Iraqis over the age of 5, mental health disorders are the fourth leading cause of ill health (MSF 2012). The 2007-2008 Iraq Mental Health Survey showed that 14 percent of respondents suffered from an anxiety disorder and 7 percent from major depressive disorder, but only 2 percent had received treatment within the last year (Alhasnawi et al. 2009). Results told that treatment was generally inadequate and patients often dropped out early. Moreover, these results may be an underestimate, since the survey did not go into areas deemed to be too dangerous (Alhasnawi et al. 2009).

MSF and the MoH are collaborating on expanding access to psychological counselling and integrating mental health care into the Iraqi health system (MSF 2012). Psychological counselling services have been initiated in two hospitals; the intent is to replicate the model throughout Iraq and to integrate counselling into community-based PHC services. It is also important to promote public awareness of mental health, which can contribute to reducing stigma, and to encourage those struggling to seek the care they need (Medicins Sans Frontieres 2012).

Health System

Iraq's health system—among the best in the MENA prior to 1991—has crumbled over the past three decades of war and sanctions (Skelton 2013; Schweitzer 2017). As of 2013, main challenges faced by the Iraqi health system include access to and quality of services, the use of hospitals and specialists rather than PHC, shortages of medicines, damaged infrastructure, limited funding, and limited human resources for health (HRH) (WHO 2013; Schweitzer 2017).

The MOH is the main provider of health services and the private sector provides curative care (WHO 2013). There are disparities in public sector services across governorates and between rural and urban populations, **especially due to conflict, which makes certain areas difficult to access and limits mobility of people and supplies** (WHO 2013). **As of 2008, the MOH reported that family planning services were offered in less than 5 percent of PHC centers and family planning commodities were rarely available except at private pharmacies, often at high costs** (WHO 2013).

The MOH has a leading role in strategic health planning, development, and management. In 2015, the MOH adopted a 2014-2023 national health policy to support achievement of national goals, reduce barriers to access, and improve the quality of services (El Maghraby 2015). However, standard-setting, quality control, regulation, and implementation of policy and regulation is relatively weak (WHO 2013).

The lack of HRH poses a challenge in Iraq. The public finances dedicated to HRH are comparatively low (WHO 2013). HRH face the militarization of health care and have been increasingly targeted by patients and their families, gangs, or opposition forces. HRH continue

to flee; in the last two months of 2015 alone, over 330 specialists fled the country (Schweitzer 2017). Those who remain are overwhelmed.

Health Financing

The central government plays a dominant role in health planning, regulation, delivery and financing. Health care is financed through a combination of general government revenues and OOP payments. Although the government finances most health sector expenditure (almost 60 percent in recent years), OOP spending remains high with 40 percent in 2008 and 38 percent in 2014. According to key informants, the share is even higher in recent years (El Maghraby 2016). GGHE as a share of GGE was relatively stable at 12 to 14 percent between 2000 and 2014, while GGHE as a percent of GDP remained stable at 3 to 4 percent between 2000 and 2014 (WHO 2017). Iraq's health expenditure indicators are found in Table 8.3.

The private insurance market is underdeveloped, while health insurance for the general population is non-existent. Drugs and medical devices represent the top budget item of government health expenditures. Health expenditure per capita increased from $119 in 2000 to $242 in 2008 and reached $305 in 2014 (WHO 2017). External funding was minimal in Iraq until the last decade when it increased substantially due to war, armed conflict, displaced populations, and refugees.

Table 8.2: Health Expenditure Indicators, Iraq, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	119.5	242.6	305.3
THE as a percent of Gross Domestic Product (GDP)	5	6	7
General Government Health Expenditure (GGHE) as a percent of GDP	3	3	4
GGHE as a percent of THE	55	54	57
GGHE as a percent of General Government Expenditure (GGE)	12	12	14
Social Security Funds as a percent of GGHE	-	-	-
Out-of-Pocket (OOP) Expenditure as a percent of THE	36	40	38
Private Health Expenditure (PvtHE) as a percent of THE	45	46	43

Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	80	87	87
Private Insurance as a percent of PvtHE	18	11	10

Source: WHO Global Health Expenditure Database 2017

Before 2003, almost all services provided by PHC centers and hospitals were free of charge except for consultations at “public” clinics or “insurance” clinics, which operate in the afternoons and charge low fees to patients. In the 1990s, a self-financing system was introduced and implemented until 2003. The user charges were lowest in PHC centers, somewhat higher in popular clinics, and significantly higher in hospitals. In PHC centers, patients paid on a fee-for-service basis, predominantly for drugs and supplies. Limited government funding was earmarked for preventive care and public health activities. The rest of system was self-financed, meaning that government paid for HRH salaries and facility maintenance, but users paid for most drugs and supplies (Farag et al. 2004). This system resulted in a large burden on the patients, because most of the revenue came from OOP payments.

After 2003, in an attempt to institute UHC, the MOF was to cover all salaries, operating expenditures, and pharmaceuticals. The system was mainly funded by general government revenues (Telyukov 2003). In the last ten years, due to the intense conflicts and damages to health infrastucture, thousands of Iraqis travel to Beirut or Amman each year for weeks or months to seek lifesaving medical and surgical treatment (Dewachi 2013). This has a high cost, particularly for people with chronic diseases or cancer. Many patients have had to sell properties and belongings, or have borrowed money to cover such high expenses (Skelton 2013).

In recent years, the Iraqi authorities have been pursuing a fiscal consolidation effort to reduce spending to be in line with available resources but also taking into account the country’s fragile security, political, and social situation. Social spending, including health, has declined, but spending for wages and pensions has been maintained to protect the social safety net (Gobat and Kostial 2016). Most health spending is allocated to emergencies and to the humanitarian crisis. Because of the ongoing violence and the fragmentation of territory and autonomy enjoyed by Kurdistan in Iraq, no estimate of national health expenditure is available.

Private Health Sector

The significance of the Iraqi private health sector is partly due to the prevalence of dual practice (WHO 2013), which is legal. The private sector expanded in an unregulated fashion, which led to substantial rises in the costs of care that have put millions of Iraqis at risk of catastrophic expenditures (WHO 2006). Concentrated in large urban centers, the private sector mainly provides maternal care, secondary and tertiary care, diagnostics, and pharmaceutical commodities. According to key informants, more Iraqis have been seeking care in the private sector since mid-2014, when the economy decelerated and access to care in the public sector was reduced.

Policy and Governance

While regulations exist for overseeing the private health sector, they are largely not implemented. The Department of Inspection of Non-governmental Health Facilities, part of the MOH Directorate General of Inspection, is responsible for overseeing and monitoring service

delivery in the private sector (WHO 2006). Private hospitals are licensed and monitored by the MOH (WHO 2006). Different syndicates are responsible for regulating aspects of the sector such as physicians and pharmacies. However, uncertainty and lack of clarity around monitoring guidelines has thwarted the syndicates' monitoring of private clinics and pharmacies, so as of 2006 the MOH included these in its monitoring activities as well (WHO 2006). According to key informants, **pharmacies do not require a prescription from a physician to provide medication.**

The public and private sectors face the same health information reporting requirements (WHO 2006) and there is a national database of private providers that is updated when providers and facilities are licensed. There is a relicensing process (consisting of submitting a form and paying a membership fee), but it does not include any Continuing Medical Education (CME) requirements.

According to key informants, there are currently no formal mechanisms for PPPs and the private sector is not contracted by the public to deliver services. In its National Health Policy (2014-2023), the MOH highlights the importance of supporting and partnering with the private sector, but does not offer specific guidance regarding PPPs (MOH 2014). The only area of interaction is in the referral of patients from the private to the public sector, but the referral process is still not properly described and practiced. There are hybrid programs in Iraqi Kurdistan that are loosely referred to as PPPs, designed to improve use of public infrastructure and incentivize physicians to provide more care in the public sector (Anthony et al. 2014).

Regulation in Iraqi Kurdistan is slightly more enforced than in Iraq. However, according to key informants, there are approximately 3,000 illegal drug shops in northern rural areas where regulations are not enforced.

Service Delivery

Although the public sector is dominant, the private sector is a significant source of care for family planning and child health services. As shown in Table 8.4, **90 percent of modern contraceptive users obtain their method in the private sector and private pharmacies are the primary source of modern contraception across wealth quintiles** (UNICEF 2011). The MICS 2011 survey only provides information about sources of care for family planning and child health services. These data points present a limited—but important—view of the private sector's role in the health system. Although overall, a slightly higher proportion of Iraqi caregivers sought care for children with ARI symptoms in the public sector (44 percent), 43 percent sought care in the private sector, and 8 percent sought care in both sectors. Moreover, the single most common source for ARI care was private physicians (approximately one-third), followed by government hospitals.

With the exception of family planning, care seeking in the private sector was significantly more common for Iraqis in the highest wealth quintile than the lowest. While use of private facilities for delivery was low overall, it was 24 percent in the highest wealth quintile compared to 5 percent in the lowest. Among caregivers seeking treatment for children with ARI symptoms, 72 percent in the highest wealth quintile sought care from private sources compared to 45 percent in the lowest.

Table 8.3: Sources of MCH and FP Care, Iraq

Indicator	Private	Public	Both	Other
Source of modern methods of contraception (percent of women of reproductive age currently using modern contraception)	90	8	--	2
Place of delivery (percent of women who gave birth in health facility 2 years prior to survey)	11	89	--	--
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	43	44	8	3

Source: UNICEF 2011

According to key informants, there are an estimated 8,000 licensed private outpatient clinics in Iraq. There are about 5,000 private pharmacies and 10,000 pharmacists. As of 2010 there were a total of 92 private hospitals, many of them small in size (WHO 2013), but current estimates place that figure at only 21. This is in line with the findings of a 2003-2012 survey that found that the average number of private hospitals per 100,000 people declined in central and southern Iraq (Cetorelli and Shabila 2014). Private hospitals are located predominantly in Baghdad and other urban centers. Referral networks in the private sector are fragmented or nonexistent. Private providers rarely refer patients to the local PHC center for ongoing care.

While the number of private hospitals declined in central and southern Iraq, in Iraqi Kurdistan, this number grew (Cetorelli and Shabila 2014). There are 2,100 private outpatient clinics in Iraqi Kurdistan. Physicians work mainly in three settings: small clinics, larger multi-physician clinics, or in the growing private hospital sector (Anthony et al. 2014). As compared to the public sector, private hospitals are generally smaller and charge high expenses (Anthony et al. 2014).

Before the recent crisis in 2014, the Iraqi government discouraged the participation of NGOs; hence, local NGOs have very limited experience in health service delivery. International NGOs currently operating in Iraq include the IMC, which provides PHC care and basic reproductive health services in camps for refugees and IDPs and conducts mobile outreach in Iraqi Kurdistan and South Central Iraq (IMC 2017). MSF is working with the government on a mental health initiative as mentioned in Box 4.

Refugees and IDPs

The most recent cycles of displacement in Iraq began in 2003 (CDC et al. 2014). As of 2007, approximately 2 million Iraqis had fled the country (Tyson 2007). As ISIL conquered territory in 2013 and 2014 and the Iraqi government and its allies launched military campaigns to retake the territory, more Iraqis fled or became internally displaced (UNHCR 2014; 2016). Refugees reported being subjected to atrocities by ISIL, including arson, kidnapping, and public threats (UNHCR 2014). Substantial internal displacement continued in 2016 due to conflict (UNHCR 2016).

Within Iraq, it is estimated that there are over 5,326,166 people of concern in 2016 (UNHCR 2016). As of December 2015, the Internal Displacement Monitoring Centre (IDMC) estimated, in line with UNHCR, that at least 3.3 million Iraqis had been internally displaced from January 2014 to present (IDMC 2013-2017). Furthermore, over 1 million IDPs had not returned to their homes after the sectarian conflict that ended in 2008, and there is a lack of credible data regarding displacement prior to 2003 (IDMC 2013-2017).

As of 2016 there are over 1 million Syrian refugees in Iraq, almost all of whom (97 percent) live in Iraqi Kurdistan (UNHCR 2016). In 2007, UNHCR ensured access to PHC for refugees and IDPs in accessible areas in Iraq. UNHCR's efforts included launching a clinic in one refugee camp, conducting mobile outreach in another, distributing hygiene and sanitary kits to female refugees, and helping facilities maintain and repair infrastructure.

Libya

Libya had a population of 6.2 million people in 2015, 46 percent of whom were under 25 (UNPD 2017). 90 percent of the population lives on 10 percent of the land area in the coastal north (Library of Congress 2011).

Libya has experienced the most severe critical worsening in the 2007-2017 decade among countries in the MENA according to the Fragile States Index (The Fund for Peace 2017). The country has experienced two civil wars since the uprising against Muammar al-Qaddafi in 2011; the second war is ongoing. There are two opposing parliaments, three government structures, and numerous independent militias including ISIL. The Government of National Accord is the interim government established by U.N.-sponsored peace talks in 2015 with the intention to replace the other two governments (BBC 2017).

Libya ranks 188th of 190 countries in the World Bank's Doing Business Index, the worst score of the fragile states surveyed (World Bank 2017b). Libya is classified as an upper middle-income country (World Bank 2017a) and was among the wealthiest countries in Africa prior to the political instability of 2011. Its GNI per capita (Atlas method) of $4,730 in 2011 (World Bank 2017a) has plummeted since then. Its economy is almost wholly dependent on revenues from oil and gas, although policies under al-Qaddafi attempted to spur agricultural and industrial development. The warring groups are fighting for control of the oil terminals and inflicting damage on the country's oil infrastructure. The economy has suffered from recession as a result of the war and the decline in oil prices; estimated real GDP fell to less than half of its pre-2011 level in 2016 (World Bank 2017c).

Health Status

In the decades prior to the start of civil war, Libya's health indicators had been steady or improving. As depicted in Table 9.1, life expectancy at birth was 71.8 years in 2008 and 2015 and the maternal mortality ratio was 9 per 100,000 live births over the same period. The infant mortality rate dropped from 16.1 per 1,000 live births in 2008 to 11.5 in 2015, while the under-5 mortality rate dropped from 18.8 to 13.4 per 1,000 live births. Data on mCPR is out of date, but the rate was 20.4 in 2007 (World Bank 2017a).

Table 9.1: Key Health Indicators, Libya

	2007–2008	2015
Life expectancy at birth (years)	71.8	71.8
Maternal mortality ratio (modeled estimate, per 100,000 live births)	9	9
Infant mortality rate (per 1,000 live births)	16.1	11.5
Under-5 mortality rate (per 1,000 live births)	18.8	13.4
Total fertility rate (births per woman)	2.4	2.3

mCPR (percent of women ages 15-49)	20.4	--

Source: World Bank 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

Data have been scarce since the outbreak of the second civil war in 2014, but conflict may be reversing the health progress of recent decades. The war has killed thousands and injured thousands more (WHO 2016a). There is lack of consensus on the number of casualties; estimates vary depending on the source. For instance, with regard to the 2011 uprising, rebel officials first believed casualties numbered 50,000; they later revised that figure to 25,000 dead and 4,000 missing (Black 2013). In 2013, Miftah Duwadi, the Deputy Minister of Martyrs and Missing Persons, stated that 4,700 rebels had died in the 2011 uprising and 2,100 were missing, and the figures on the opposing side looked similar (Black 2013).

There are approximately 2.4 million people in need of protection and humanitarian assistance and almost 1.9 million in need of health services in Libya (WHO 2016a). The health system's state of crisis has led to an increase in serious illnesses, a decrease in vaccination coverage, and an increase in maternal mortality (MSF 2016). The possibility of outbreaks of infectious diseases such as measles and polio is increasing (WHO 2015). There are an estimated 250,000 refugees, asylum seekers, and migrants in Libya who face limited access to food and health services and poor living conditions, and 435,000 IDPs (WHO 2016a). Access to health services has become increasingly limited since 2011. Patients have been targeted and attacked (Safeguarding Health in Conflict Coalition 2017). People living in areas under the control of ISIL have limited or no access to care, and some report that hospitals lack any doctors, nurses, and medications (Safeguarding Health in Conflict Coalition 2017).

NCDs account for approximately 78 percent of total deaths in Libya (WHO 2014). Cardiovascular diseases are the leading cause of death (43 percent) followed by cancers (14 percent). Over the past two decades, the prevalence and incidence of NCDs has increased markedly (WHO 2010). Main risk factors were high blood pressure (35.7 percent in 2008), obesity (27.8 percent in 2008), and tobacco smoking (23 percent in 2011) (WHO 2014). As of 2013, there were only 12 psychiatrists in Libya and mental health care was largely concentrated in psychiatric hospitals in Tripoli and Benghazi (WHO 2013). Also as of 2013, the MOH and WHO were collaborating on expanding community-based health care in Libya, including to underserved areas (WHO 2013). Libya does not have a national policy or strategy to mitigate NCDs, or national guidelines or standards for managing them (WHO 2014). Libya also lacks an NCD surveillance and monitoring system for reporting against global NCD targets (WHO 2014).

Health System

Libya's health system before 2014 was relatively functional but heavily reliant on foreign workers (Safeguarding Health in Conflict Coalition 2017). The government provided free health care to all citizens through the General People's Committee for Health and Environment (GPCHE), the army, and the National Oil Company (WHO 2010). In 2010, Libya had 37 hospital beds per 10,000 people, very high by international standards (Benamer 2012). The public sector had specialized units and equipment concentrated in Tripoli and Benghazi (WHO 2010). There were many public institutions of learning including nine medical schools and 14 nursing schools (Benamer 2012). However, the public sector faced challenges, including the lack of evidence and credible data; low quality of care and productivity; dearth of primary care facilities; dire need for mental health services (there were only 14 psychiatrists serving the entire population in 2012); referrals for treatment abroad; high prevalence of HIV among drug-injecting users (87

percent in Tripoli); lack of efficient management; ambiguous MOH Policy; and weak response to NCDs (WHO 2010).

Amid the ongoing civil war, Libya's health system is severely under-capacitated. Using revenues generated through oil production, a unified Libya could fund the recovery of its health system without heavy reliance on donors. **The main issue is not funding, but rather stability and governance.** In 2016, the WHO assessed 98 hospitals and found that only four operated above 75 percent capacity, 27 operated below 25 percent capacity, and 16 were closed due to conflict-related damage (Safeguarding Health in Conflict Coalition 2017). The health facilities that are functional struggle to treat the high number patients with diminishing resources (WHO 2016a). Many health facilities are not functional because part or all of the facility was damaged or the facility lacks staff, water, and/or electricity. Health personnel began fleeing the country in 2011; over 80 percent of nursing staff were evacuated in 2014 (Safeguarding Health in Conflict Coalition 2017; WHO 2016b). In 2011, 1,200 nurses worked in Tripoli's main hospital; only 250 remain (Safeguarding Health in Conflict Coalition 2017). Hospitals, laboratories, blood banks, and other health facilities struggle to remain open as they face chronic shortages of essential medicines and supplies (Marschang and Hussain 2016; WHO 2016b). Most medical warehouses in eastern Libya have been destroyed or are only partially functional, including the main warehouse in Benghazi (WHO 2016b). In particular, there is a shortage of insulin and of dialysis equipment (MSF 2016). From 2014 through early 2016, there were 37 health-related attacks that resulted in 59 deaths and 65 injuries (Marschang and Hussain 2016). The south of Libya in particular, neglected before the revolution, is under-capacitated.

Health Financing

Trends and Challenges

In March 2009 the Government of Libya issued a decree on developing a health system based on universal coverage through social health insurance schemes, welfare funds, and private insurance (WHO 2015). Given high oil revenue (El Taguri 2007), the funding source of the health system was mainly government revenue. Creation of a social health insurance scheme for public sector and formal sector employees was discussed but never materialized. The sources of funding for private sector service delivery were households and government revenue for contracting out services. The country received no external funds as development aid from any source of any kind, except some very limited contributions of UN agencies to health. Libya's health expenditure indicators are found in Table 9.3.

Table 9.2. Health Expenditure Indicators, Libya, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	245	317	371
THE as a percent of Gross Domestic Product (GDP)	3	2	5
General Government Health Expenditure (GGHE) as a percent of GDP	2	1	4

GGHE as a percent of THE	49	68	74
GGHE as a percent of General Government Expenditure (GGE)	6	4	5
Private Health Expenditure (PvtHE) as a percent of THE	51	32	26
Out-of-Pocket (OOP) Expenditure as a percent of THE	51	32	26
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	100	100	100

Source: WHO Global Health Expenditure Database 2017

Three major reasons explained pre-war increases in health expenditures. The first reason is the shift in the epidemiological profile of the population. Over the past 20 years, the prevalence and incidence of NCDs have increased significantly (WHO 2010). A lack of local qualified health professionals to address these health issues has required the hiring of expatriates. For example, the majority of the qualified nursing staff in 2010 were not Libyan (WHO 2010).

The second reason was that Libya had a health system that was curative rather than preventive. It increasingly used imported sophisticated health technologies and expensive pharmaceutical products and medical devices. Libya trained many health care workers but the effort proved inefficient and ineffective due to poor human resource management, severe attrition, outdated education and training programs, misapplied skills, absenteeism, and lack of support and supervision. All of these phenomena also drained financial resources (Harvard and NATO 2013).

The third reason was the rapid growth of the use of the private sector in Libya and abroad particularly for chronic and cardiovascular and cancer treatments (WHO 2010). The private sector offered 103 hospitals and clinics (more than 2,000 beds), mostly located in urban areas (WHO 2010). Health services were weak and did not meet the needs of the population, resulting in distrust of the system despite some achievements on MCH. Many Libyans sought treatment abroad, mainly in Tunisia. In 2007, the total amount of money Libyans spent on medical tourism was estimated to be $100–200 million per year ($16–32 per capita) (El Taguri 2007).

The sources of funding for the private health sector (private clinics, hospitals, and other service providers) are households and government contracting out services. Most government hospitals have the authority to contract private contractors for some services (building upkeep, cleaning, security, catering, and maintenance work) as well as medical imaging and laboratory services (WHO 2010).

Payment Methods

In the public sector, the flow of funds is not linked to performance. It is based on a rigid system of line item budgeting built on historical trends, and number of staff and/or beds. The government payment system provides a flat budget to its entities. As mentioned above, public hospitals have some authority to contract private providers for logistics and maintenance

functions as well as for select services such as laboratory and radiology services, dialysis, and cancer treatments (WHO 2010). However, the information system and incentives in place do not permit any kind of performance-based functioning and financing. In the private for-profit sector, payments are OOP, so fee-for-service is the dominant method of payment with very limited regulation (WHO 2010, 2014).

The Effects of Conflict on Health Financing

Since 2011, Libya's economy and health financing have been heavily impacted by war, political instability, and low oil prices. Over 3 million people across Libya have been affected by this situation including IDPs, refugees, asylum-seekers, and migrants. The health needs of the affected population stand out in terms of scope, scale, and severity. The health care system has deteriorated to the point of collapse, leading to an increase in serious illnesses and diseases and the reappearance of some communicable diseases. In addition, hospitals are struggling to cope with the number of patients and dwindling resources, including a shortage of staff and essential medicines and supplies (WHO 2016a). Most foreign health care workers have fled the country. As a result, an estimated 1.9 million people in Libya require humanitarian aid to meet their basic health care needs (WHO 2016b).

The main issue in Libya is not a lack of funding but rather social, political, and physical insecurity. The political transition has not been easy and Libya is still struggling to form a centralized, well-managed state. The major risk for Libya is continued low-intensity conflict, which will slowly erode the existing national governance architecture and the rebuilding of a functioning health system.

Promising debates and consensus-building meetings on how to re-engineer the health system have already started to propose major directions to take and reforms to consider including the following (El Oakley et al. 2013):

- Forming and empowering a supreme council for health chaired by the highest possible government authority, preferably the Prime Minister, to supervise the National Health Care Strategy, which addresses the short- and long-term plans of the health care system
- Amending the dated and imperfect health system laws and restructure the MOH so that the three functions of the health care system are separated under the following independent bodies: national health service and regional health authorities, health care finance, and a clinical governance body
- Encouraging a culture of accountability and transparency in the health sector
- Enhancing PPPs and encouraging MOH to buy cost-effective services from the private sector and to use finance to encourage high quality services, using case-mix and diagnosis-related groups (DRGs)
- Providing universal access to free basic and preventive health care to all Libyans
- Motivating staff through recognition of excellence and performance-based promotions
- Attracting Libyans working abroad to return to work in their homeland

Private Health Sector

In 2010, the WHO characterized the Libyan private health sector as "emerging" albeit with a limited role (WHO 2010). In the late 1980s, the government enacted reforms that shifted the health system toward more private ownership (Otman and Karlsberg 2007). The private sector grew due to several factors, mostly because patients perceived that it offered better services and equipment than the public sector (Otman and Karlsberg 2007).

Policy and Governance

Before 2011, the GPCHE regulated the private sector (WHO 2010). There is no regulatory framework for governing the private sector, but there were regulatory mechanisms that applied prior to the conflict. For instance, there is a 2007 law that describes the stipulations of contracting with the public sector (Bälz 2012). In the late 2000s, prior to the outbreak of conflict, the government engaged in partnership with and promoted the private sector. In 2007, the government approved the establishment of the Libyan Company for Investment in and Operation of Medical Facilities (a mechanism for investment owned by sovereign wealth funds and private entities) and contracted it to manage several state-owned medical institutions in Tripoli and Benghazi (Bälz 2012). **The WHO is working with the MOH on a regulatory framework for the private sector; however, political fragmentation prevents consensus.**

It is difficult to distinguish between the public and private sectors because dual practice is prevalent in Libya, especially now as the public sector struggles with a tremendous financing gap. The Medical Services Department at the MOH is in charge of licensing medical practitioners (Bälz 2012), but it is not a transparent body. There are very few checks and balances before licenses are granted and limited government oversight once a practitioner is licensed. The general Health Law governs the establishment and operation of health facilities and the practice of medicine (Bälz 2012). It is unknown to what extent these and other rules are enforced and how they will change depending on the governing authority.

There is minimal oversight and regulation of pharmacies. Pharmacies are licensed by the Pharmacy Department of the MOH. Regarding pricing control, the MOH declared in 2011 that the 2008 price cap continues to apply (Bälz 2012) but enforcement of regulations in the present circumstances is weak. There are regulations for importing goods: the manufacturer of the goods must be registered with the MOH, and only Libyan nationals are allowed to import goods for the purpose of trade (Bälz 2012).

Regarding information reporting, the GPCHE was responsible for collecting data from all facilities and reporting on national health data (WHO 2010). Additionally, the National Centre for Infectious Diseases Control reported on communicable diseases (WHO 2010). However, prior to the conflict, information reporting was inadequate in Libya. Areas for improvement indicated prior to the conflict included moving from paper-based to electronic reporting of health data (WHO 2010). Amid the conflict, information reporting is a significant challenge. The WHO's 2016 humanitarian response plan includes strengthening information-sharing mechanisms.

Service Delivery

The Libyan private health sector mostly provides curative care including child care, obstetrics and gynecology services, treatment of NCDs such as oncology and dialysis, surgical trauma care, and care for war-related injuries. The private sector provides preventive care to a lesser degree; examples include immunizing newborns who are born in private sector clinics or hospitals. As of 2010, the private sector offered 103 hospitals and clinics (totaling more than 2,000 beds), mostly located in urban areas (Tripoli, Benghazi, Musrata, and Alzawea) (WHO 2010). Also in the private sector were 415 outpatient clinics, 297 dental clinics, almost 2000 pharmacies, and 311 laboratories (WHO 2010).

Pharmacies play a major role in the Libyan health system. It is common for people who cannot afford care from private service providers to go to pharmacies, which often play the role of service providers. Even some people who may have the means to go elsewhere prefer to

seek care in pharmacies, including patients seeking treatment for chronic care, such as diabetes patients seeking insulin.

The private sector presence in Libya has been greatly weakened by the conflict and insecure environment. The private sector suffers from the HRH crisis, as many hospitals were managed by expatriates who have left the country. The public sector is reaching out to the private sector to supplement services that the public is unable to provide; **care-seekers such as trauma patients are directed to private hospitals that have trauma care equipment, often forcing them to make catastrophic expenditures. Some U.N. agencies working in Libya also outsource certain types of complex treatment to private hospitals.**

There are many NGOs working in Libya to provide food, protection, shelter, and other basic humanitarian services. The WHO currently works with two NGOs in Benghazi and Sabha that have brought in HRH and executed effective service delivery. According to key informants, the WHO and ICRC with the MOH as a key partner support mobile outreach services such as a package of PHC services, medicines, and supplies. The government wants to extend mobile outreach to cover a larger area, but lacks the funding. The WHO is working on four additional mobile clinics in hard-to-reach areas. Furthermore, the WHO is investing in institutional capacity so that Libya will better be able to deliver humanitarian response.

Refugees

Libya is both a destination country for migrants and refugees and a portal to Europe through the Mediterranean Sea (Sakuma and Meloni 2016) **The vulnerable refugee and migrant populations face many barriers, from lack of basic services to human rights violations including capture by smugglers, human trafficking, torture, and death** (UNHCR 2017b, MSF 2016). The largest flow of migrants in Africa is through Libya, and crossings through the central Mediterranean jumped by more than four-fold after 2013 (Sakuma and Meloni 2016). The population of concern reached 797,260 in April 2017 (UNHCR 2017a). There are approximately 250,000 refugees, asylum seekers, and migrants in the country, although this number is in flux (WHO 2016a). There are 435,000 IDPs in Libya (WHO 2016a). Out of the 40,112 refugees and asylum seekers who are registered with UNHCR, 20,320 are Syrian, 6,063 are Palestinian, and 4,763 are Eritrean, followed by smaller numbers of other nationalities (UNHCR 2017a).

Refugee and migrant communities face limited access to health care amid the current crisis. Few international organizations support conflict-affected populations in Libya (IMC 2017). The IMC has been in-country since shortly after conflict broke out providing emergency medical services nationwide, training health workers, and delivering essential medical commodities (IMC 2017). The IMC is one of three organizations that has brought expatriates back to Libya since the conflict intensified in 2014 (IMC 2017). UNHCR provides primary health care to refugees and asylum seekers in Tripoli and in detention facilities through the IMC. MSF also provides care in detention facilities and opened a clinic in the town of Misrata to address the health needs of refugee and migrant communities (MSF 2016). A partner of UNHCR provides psychosocial support in Tripoli.

Syria

The Syrian Arab Republic is embroiled in a brutal, complex civil war that has created one of the most dire humanitarian crises in the world (World Bank 2016; The Fund for Peace 2017). In 2011, protests erupted against Syrian President Bashar al-Assad, sparking conflict between government and opposition forces (BBC 2016). Opposition militias formed in response and by 2012 the country was in full-scale civil war (Al Jazeera 2017).

Syria's population has declined from 21 million in 2010 to 18.7 million in 2015 (UNPD 2017) **and over 5 million people have fled the country after the start of the conflict**. Fifty-eight percent of the population is under 25 (UNPD 2017). Unemployment swelled from 14.9 percent in 2011 to 57.7 percent at the end of 2014. Eighty percent of Syrians live in poverty as a direct result of the war (The Guardian 2015).

Syria is a lower middle-income country (World Bank 2017a) that prior to the civil war was transitioning from a socialist to a social market economy (Haddad 2017). As oil production declined, the government established more market-friendly policies in order to improve the environment for business, although the state maintained wide regulatory control (Haddad 2017). Real GDP increased from 2000 to 2010 propelled mostly by non-oil sectors (Gobat and Kostial 2016). As of 2007, GNI per capita (Atlas method) was $1,840 (World Bank 2017a). **From 2010 to 2016, Syria's economy contracted by an estimated 57 percent** (Gobat and Kostial 2016), **with damage widespread across sectors** (World Bank 2016). GDP losses between 2011 and 2016 ($226 billion) amount to approximately four times the 2010 GDP (World Bank 2017c). Syria ranks 173rd out of 190 in the World Bank's Doing Business Index (World Bank 2017b).

Syria's health indicators had been improving in recent decades until the start of the civil war in 2011.
Photo credit: Turjoy Chowdhury

Health Status

Syria's health indicators had been improving in recent decades until the start of the civil war in 2011. Since 2011, these improvements have begun to reverse. Life expectancy at birth, which had been steadily rising, declined from 73.8 years to 70.3 years between 2008 and 2015 (Table 10.1). The maternal mortality ratio, which had declined since at least the 1990s, rose from 51 per 100,000 live births in 2008 to 68 in 2015. Infant and under-5 mortality have remained relatively steady between 2008 and 2015 according to World Bank data, but data on conflict casualties suggests otherwise. Given the challenges of collecting data during conflict, it is difficult to know how representative recent health data are. Estimates of the mCPR vary by source, but the most recent MICS survey in 2006 (UNICEF et al. 2006) estimated it at 45.1 percent (Assaf et al. 2017).

Data on key health indicators is inconsistent as the conflict has made it difficult to gather reliable, national data. The World Bank estimates that life expectancy at birth was 72.3 years in 2010 and 70.3 in 2015 (World Bank 2017a) but a U.N.-backed report states life expectancy at birth was 75.9 years in 2010 and reached 55.7 years at the end of 2014—a difference of 20 years (The Guardian 2015). Since the conflict erupted, the maternal mortality ratio has steadily increased from 49 per 100,000 live births in 2010 to 68 per 100,000 live births in 2015 (World Bank 2017a). The war has directly resulted in at least 10,000 child deaths as of 2014, though many more have been injured or affected by the breakdown of health services (Save the Children 2014). In 2016 at least 652 children were killed, a 20 percent increase from 2015 (UNICEF 2017).

Table 10.1: Key Health Indicators, Syria

	2008	2015
Life expectancy at birth (years)	73.8	70.3
Maternal mortality ratio (modeled estimate, per 100,000 live births)	51	68
Infant mortality rate (per 1,000 live births)	14.5	14.2
Under-5 mortality rate (per 1,000 live births)	16.9	17.4
Total fertility rate (births per woman)	3.3	3.0

Source: World Bank 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

Prior to the civil war and humanitarian crisis, the health profile of the Syrian population reflected an epidemiological transition from communicable diseases to NCDs and health indicators were improving on the whole (Kherallah et al. 2012). The epidemiological profile of the Syrian population in the early 2010s showed a country in transition from communicable diseases to NCDs (Kherallah et al. 2012). Since 2011, rising morbidity and mortality, mass displacement, sieges and blockades of humanitarian assistance, and repeated attacks have had a devastating impact (Safeguarding Health in Conflict Coalition 2017). **The war has resulted in between 400,000 and 470,000 casualties as of 2016** (World Bank 2017c) **and 1.2 million injured** (World Bank 2016). More than half of the 2010 population is estimated to have been forcibly displaced (World Bank 2017c). 5.5 million Syrian refugees have registered with the UNHCR, and there are likely more who are unregistered (UNHCR 2017b). According to the UNHCR, Syria has largest number of IDPs in the world (UNHCR 2016b); though estimates of the number of IDPs vary, they range from 6.5 million (UNHCR 2016b) to 7.6 million as of 2016 (World Bank 2016). Over 13 million people in need of humanitarian assistance (UNHCR 2017a; UNOCHA 2017). Moreover, many of the war's effects on demographics and health are unknown and difficult to estimate. For instance, fragility, conflict, and violence affects life expectancy, but so too it effects fertility rates (World Bank 2017c).

Outbreaks of infectious disease have risen since the start of the conflict. After eradicating polio in 1995, Syria has had two polio outbreaks since the start of the conflict, in 2013 and 2017 (Al Moujahed et al. 2017; WHO 2017). The WHO estimates that

routine immunization coverage dropped from 93 percent in 2008 to 66 percent in 2015 (WHO and UNICEF 2017). Outbreaks of diseases including measles, hepatitis A, leishmaniasis, poliomyelitis, meningitis, and scabies (Sharara and Kanj 2014) have increased in prevalence and further strain health service delivery.

NCDs are widespread in Syria and among Syrian refugee populations in neighboring countries (Coutts et al. 2015). NCDs account for approximately 46 percent of total deaths in Syria, with cardiovascular diseases accounting for 28 percent (WHO 2014a). Prior to the crisis, Syria had the highest numbers of cigarette smoking in the Arab world (Coutts et al. 2015).

Health System

Prior to the conflict, the Syrian Ministry of Health (MOH) was the main provider of health services and provided care to all citizens at no cost (WHO 2006). The health system was organized at multiple levels, from the village level of largely rural health centers to the provincial level of urban health centers and hospitals (WHO 2006). Ambulances, blood banks, and drug distribution were regulated at the national level (WHO 2006). Teaching and advanced hospitals and medical care entities were concentrated in the cities of Damascus and Aleppo (Kherallah et al. 2016). Public providers were managed by four bodies: the MOH, the Ministry of Higher Education, the Ministry of Defense, and the Ministry of Social Affairs and Labor (WHO 2006). The government established health policy, but the lack of management skills and competent human resources hindered implementation (WHO 2006).

In 2006, the WHO assessed that Syria had enough health facilities and human resources overall and care was inexpensive compared to other countries in the region (WHO 2006). **As of 2006, Syria had a strong and accessible primary care network; 95 percent of the rural population had access to primary health care** (WHO 2006). However, the health system faced challenges, such the lack of a clear health policy and full-time staff, the lack of resources allocated to the health sector, and inequitable geographical distribution of resources (WHO 2006). Dual practice was prevalent: government salaries for physicians tended to be low, so doctors employed in the public sector were legally allowed to operate a separate practice in the private sector (WHO 2006).

The pre-war health system has collapsed. As of 2015, the three main health systems or networks in Syria are the government-run system, a system administered by local independent medical councils and NGOs, and one run by ISIL (Coutts et al. 2015). The war has caused large-scale destruction to hospital buildings and equipment, unpredictable water and electricity supplies and a lack of medicines and consumables caused by fragile or absent supply chains. As mentioned earlier, health workers and infrastructure have been systematically targeted throughout the war and the health system is suffering the consequences of a mass HRH exodus. Those who remain work in very challenging environments where they are unable to provide the standard of care that they did before the war.

Syria is facing an HRH crisis. The types of injuries common in conflict, such as those from shrapnel, barrel bombs, burns, building collapses, and incendiary weapons is different from those seen in non-conflict settings, and there is a shortage of providers with appropriate skills (Rubenstein et al. 2015). The challenging setting coupled with the exodus of skilled doctors and systematic targeting of health workers has led to pressure on junior staff to act beyond their capabilities and imposed significant psychological strain. For instance, medical students, nurses, or pharmacists are forced to work as trauma surgeons or anesthetic technicians (Rubenstein et al. 2015). In addition, providers working in conflict under extreme conditions are subject to stress and traumatic experiences that lead to anxiety,

Box 5. Cancer Care in the Syrian Conflict

There is little data on current cancer care in Syria, but one report depicts a severe shortage of services. The only hospitals that possess the capacity and equipment to provide care for cancer patients in Syria are in areas under government control, areas that many Syrians cannot enter safely due to the war. Conflict has caused damage to infrastructure and shortages of medicines and supplies, and a lack of oncologists. The number of new Syrians who will need cancer treatment this year was estimated by the MoH to be 25,000, but could easily be up to three times that number. Cancer treatment is supposed to be provided for free to patients in the public sector, but medications are often unavailable due to shortages, and sometimes not free due to budget cuts. Those who must procure medicine or supplies on their own seek it from private pharmacies or on informal markets, but in the current economic environment, a single course of chemo can cost one year's salary for an average Syrian. For chronically ill patients in opposition-held areas, the waiting list to cross into Turkey to access care is months long. Among the long-term impacts of the war may be increasing rates of cancer in the Syrian populations exposed to the carcinogenic materials used in the war. There are reports of rising cancer rates in Eastern Ghouta, the site of chemical attacks.

Source: Hogan 2017.

depression, and exhaustion (Attar 2013). **Despite the high prevalence of NCDs, Syria's national response to NCDs prior to the conflict was minimal and conflict has disrupted it further**. Syria had a large pharmaceutical industry prior to the war, but among the drugs and commodities it still imported as of 2006 were oncology products and insulin to treat NCDs, as well as vaccines and injected hormones (WHO 2006). Among the indicators assessed by the WHO, the Syrian government lacked all but two (WHO 2014a). There is currently a substantial gap in knowledge regarding NCDs in Syrian populations because data are scarce (Coutts et al. 2015).

Since 2011, barriers have increased for NCDs patients. Amidst the violent conflict in which immediately life-threating injuries take precedence, care for NCDs patients has taken a backseat, which harms NCD patients in the long term (Kherallah et al. 2012). As of 2012, approximately half of chronically ill Syrians in the country were forced to interrupt their care (Kherallah et al. 2012). 200,000 chronically ill people had died as of 2014 (Hogan 2017).

In conflict-affected areas, there has been a decentralization of dialysis services, with smaller units run by staff who are not always medically trained, receiving only on-the-job training and lacking specialized equipment. Pre-conflict, it was estimated that there were 226 patients per million requiring dialysis in Aleppo (Sekkarie et al. 2015). This, alongside movement restrictions, violence, and the inability to maintain the equipment, has contributed to the mortality of these patients (Sekkarie et al. 2015).

Before the conflict, mental health care was not widely available in Syria, with 70 psychiatrists and two public psychiatric hospitals serving the entire population, and there was extensive stigma towards mental illness (WHO-EMRO 2013). There are few robust data from either public or private hospitals before the conflict owing to a number of factors, including lack of accountability, poor health information systems, and lack of staff to trained use the existing systems (Ahmad et al. 2014). As a result of the conflict, it is estimated that more than 350,000 people suffer from severe mental health disorders and over 2 million are affected by mild-to-moderate mental health problems, including anxiety and depression (UNHCR 2014); however, there is insufficient mental health and psychosocial support clinicians to provide care. Addressing the current and future health needs of these populations is hampered by the lack of

sound epidemiological data such as population surveys to determine the current burden of illness (Okasha, Karam, and Okasha 2012).

Health Financing

In Syria, THE per capita is one of the lowest in the region and it has tended to decline over years (from $88 in 2008 to $67 in 2014) (Table 10.3). The same trend is observed for THE/GDP, which went from 5 percent in 2000 to 3 percent in 2014, and for GGHE/GGE, which declined from 7 percent in 2000 and 2008 to 5 percent in 2014. In contrast, the share of OOP expenditure remained high between 2000 and 2014, more than 50 percent of THE. GGHE increased slightly as a share of THE in the same period. There is no private insurance funding and very little external funding for the period covered by the WHO Global Helath Expenditure database. It is highly likely that data on health financing have undergone many changes in recent years due to the state of conflict and its many effects on the economy, institutions, and populations.

Table 10.2: Health Expenditure Indicators, Syria, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	58	88	67
THE as a percent of Gross Domestic Product (GDP)	5	3	3
General Government Health Expenditure (GGHE) as a percent of GDP	2	2	2
GGHE as a percent of THE	40	47	46
GGHE as a percent of General Government Expenditure (GGE)	7	7	5
Social Security Funds as a percent of GGHE	-	-	-
Out-of-Pocket (OOP) Expenditure as a percent of THE	60	53	54
Private Health Expenditure (PvtHE) as a percent of THE	60	53	54
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	100	100	100
Private Insurance as a percent of PvtHE	-	-	-

External Resources on Health as a percent of THE	-	0.9	0.7

Source: WHO Global Health Expenditure Database 2017

Box 6. Teachers Association Health Insurance Scheme

An illustrative example of a professional association scheme is the Teachers Association Health Insurance System, which has reached a reasonable risk pool size (almost 20 percent of workers in the public sector are teachers) and achieved effective management throughout the years. The Teachers Association created the scheme and made affiliation mandatory for all employees working in the Ministry of Education (MoEd) and the Ministry of Higher Education (MoHE). Although the ministries do not manage the scheme, it receives financial support from both ministries' budgets. The teachers' health benefit scheme is a countrywide system offering decentralized presence and services for beneficiaries. Additionally, it has developed a clearly designed benefit package and elaborated a hierarchical provider network all over the country (providers owned and operated by the Teachers Association). Meanwhile, the teachers' scheme has established a series of contract models, forms, and other standards for the various tasks and operations that have to be tackled in health insurance. Similar endeavors existed at the Port Authority, the Damascus electricity company, etc. (Schwefel 2008).

Health Financing Before the Conflict and War

Before the conflict in Syria, health care spending was mainly financed through two sources: the government budget and OOP payments from citizens. Public expenditure and private spending each accounted for about 50 percent of the total (WHO 2006). The state's general revenue financed the public sector and the funding was channeled through various departments and public enterprises to directly provide, or make accessible, a wide range of primary, secondary, and tertiary health care.

There are three major types of financing agents: the public sector, the professional associations, and households. The public sector refers to the expenditures of various ministries, and it includes expenditures of state-owned companies, mainly funded by the state budget through general taxes. Professional associations are funded by contributions from employers and employees, which in turn finance mostly private providers. In some specific cases, professional associations also finance services provided by the public sector or by health services they own. The third major pathway is direct household funding; the greater part of this consists of payments made directly to private sector health care providers (private clinics, hospitals, and pharmacies) without any financial intermediation, and to some extent to the public sector through the payment of user fees and other charges (WHO 2006).

Health services provided by MOH facilities are financed by two sources: the budget from the MOH (centrally managed) and the budget from the Ministry of Local Affairs (at the governorate level and managed under Governors' supervision). The two budgets are supposed to be complementary as the budget from the Ministry of Local Affairs covers only construction, renovations, non-biomedical equipment, and drugs other than those for national public health

programs. MOH funds are meant to provide staff, equipment, maintenance, training, and public health programs.

Professional associations were very active in managing funds and providing services. Given the limitations in the public sector, some public institutions have set up internal cooperative funds and have contracted with various health-related associations to provide services for their employees. The funds are financed through monthly contributions from members (deducted from their salaries). The member may also pay upfront and be reimbursed.

A large portion, if not all, of state-run and state-owned companies and enterprises administer benefit schemes for employees and a variable number of dependents (Schwefel 2008). The main benefits covered by the corporate health insurance schemes include laboratory services and hospital care (lodging and surgery), as well as drugs, which are covered at 50–100 percent of the process charged in most schemes. The patient is free to select the provider from a list often provided by the unions and professional associations. The insurance scheme pays the providers either through the associations every three months or directly. It is important to note that in many schemes, there is a limit on the annual number of claims per patient (e.g., eight annual invoices each not exceeding 300 Syrian pounds in the case of the coverage offered by the General Establishment of Water and Sewers) (Schwefel 2008).

Private health insurance was offered by only seven companies to high-income groups that were able and willing to afford relatively high premiums for health protection. Private health insurance companies paid providers using a fee-for-service mechanism complying with a regulatory framework that mandated all plans and providers to adhere to the MOH schedule. Provider contracts and fees are individually negotiated between the insurance company and each health care facility. In 2005, the population coverage of private health insurance in Syria was estimated between 0.7 and 1.5 million people, and the market size was about $200 million (Schwefel 2008).

OOP expenditure has always been an important source of funding in Syria. There are two main types of OOP payments. The first one is direct payment by the users to pay for private health care services and drugs. The second one is copayment to government health providers made for diagnostic procedures, outpatient visits, and inpatient services.

OOP payment is the dominant source of revenue for the private sector (90 percent), the remaining share comes from donations. For NGOs such as the Red Crescent Hospital, 60 percent of revenues come from patient copayments and 40 percent from grants and donations. The usual mode of payment in the private sector is cash (WHO 2006).

Purchasing and Payment Methods

In terms of provider payment methods, salaries and capitation fees (lump sums) paid to physicians contracted to deliver primary care services are the only exceptions from the fee-for-service payment used in public companies' health benefit schemes. Revenue for public hospitals is drawn from the central government and the municipal authorities, together. These revenues come as block grants from the government. There is no established procedure or explicit criteria for reviewing the basis for funding allocations from public sources. There are no incentives for good technical and financial performance (WHO 2006). Payment mechanisms related to productivity or control of costs do not exist. Public sector health workers are paid a monthly salary as per national pay scale in correspondence with the qualifications, degree of management responsibility, and years of experience. The salary does not depend upon performance such as quality, quantity, type of service, or number of patients treated. There are no clear financial incentives for health workers to increase productivity and provide cost-

effective treatments. The very low salary level for the health professionals is one of the biggest concerns of the MOH, and most of the physicians supplement their salary by working in private clinics and hospitals (dual practice).

Tentative changes in the payment methods have been introduced since 2006 to provide more autonomy to some public hospitals and also to increase significantly the salaries of the heath workers (WHO 2006).

Health Financing Reforms

In 2003, an ambitious health reform effort, funded by the European Union, was launched as a part of the tenth five-year plan. It was supported by the Health Sector Modernization Program (HSMP) to advise the Government of Syria on health financing including health insurance. HSMP expanded the discussion on health insurance and convened interagency cooperation between ministries and existing health benefit and insurance schemes around a proposed test of health insurance in two pilot governorates in 2005.

Various roadmap activities were undertaken, including the drafting of a detailed plan for implementing health insurance, estimates were made of the overall costs of health insurance, and a plan was made for the needed preparatory steps. Unfortunately, there was a gap between these preparations and implementation. In early 2007, since no decision had been made by the Cabinet regarding health insurance, the HSMP work on health financing and health insurance was stopped by the MOH (Schwefel 2008).

Effects of the Conflict on Health Financing

Plagued by war, political instability, and low oil prices, since 2011 Syria's economy and health financing are heavily impacted. Civil war has left Syria's economy in ruins. The devastation and chaos have inflicted a heavy human cost and caused enormous damage to the economy. The social and economic impacts of the conflict are large and growing. The lack of sustained access to health care, education, housing, and food have exacerbated the impact of the conflict and pushed millions of people into unemployment and poverty. Economic policy has focused on protecting the areas under the control of the government and maintaining the military's fighting capacity. With the escalating cost of the war compounded by a collapse in oil prices, the fiscal situation is dire in the near absence of a consistent flow of oil and tax revenues. The severe decline in oil receipts and disruptions of trade has placed even more pressure on Syria's external balances, resulting in the rapid depletion of its international reserves. The government continues to prioritize spending on the military and emergencies.

The high intensity conflict has resulted in worsening the previous trends in terms of decline of public funding and increase of OOP payments. However, the evidence of this is anecdotal and not documented by any reliable sources because of the conflict context and the dismantling of existing data collection and information systems. Because the economy has contracted by as much as 60 percent since the conflict began in 2011 (BBC 2015), the health infrastructure is devastated and public administration functioning has deteriorated, OOP payment in the public and private sector became the dominant source of funding.

It is estimated that 55 percent of the public hospitals and 49 percent of the health community centers are closed or only partially functional. The health infrastructure still in place are in critical condition since it is difficult to access electricity, fuel, and drinking water. In addition, more than 658 people who used to work in these structures have been killed since the beginning of the crisis. Of the Syrian medical personnel, only about 45 percent are left and active in the country.

This is due to the massive migration, which leaves a great gap of available personnel and specialists able to respond to the growing demand for care. The lack of midwives, among others, is an example that illustrates the collapse of the country's health system. There are about 300,000 pregnant women each year who are not able to receive appropriate prenatal care. From the beginning of the Syrian Civil War in 2011 to 2013, life expectancy in Syria fell by six years. Infant deaths in the country rose by 9.1 percent over the same period.

External support from donors and international agencies has never been significant in Syria (mainly from U.N. agencies and representing less than 1 percent of public expenditures before the war according to WHO 2006 report) and it has also dramatically fallen as a number of organizations have either scaled back their projects and activities or withdrawn from the country. Even funding for the humanitarian response has been a significant challenge (EU-ECHO 2017) but external funding has increased in recent years and is aiming to respond to emergency crises throughout the country, working from all humanitarian hubs. For example, almost half of the European Commission's humanitarian assistance goes to immediate lifesaving and emergency humanitarian operations. In addition, the assistance includes the provision of safe drinking water, sanitation and hygiene, provision of food, child protection activities, and emergency items (EU-ECHO 2017).

Altogether, these funding reductions in combination with other factors (inflation, reduction of imports of medicines, depreciation of the Syrian currency, increase in transportation, insurance and maintenance costs, reduced supply of electricity and water, high unemployment. food insecurity) have contributed to major challenges for public health service delivery and to a major health disaster for the population since 2012.

Private Health Sector

Prior to the conflict, the public sector was the main source of health care but the private sector was well established (WHO 2006). The Syrian private health sector grew in the late 1990s and early 2000s, especially around the urban centers of Damascus, Aleppo, and Homs, where the population was concentrated. During this time, the government reduced its health expenditures and modernized the health sector, and began to actively engage the private sector through contracting private providers to provide services at all levels, creating policy for PPPs, and introducing minimal private health insurance schemes (Sen and al Faisal 2012; World Bank 2017c; WHO 2006).

Policy and Governance

The Syrian MOH and professional associations are responsible for regulating the private sector but enforcement and coordination are limited, resulting in a largely unregulated private sector (WHO 2014b; WHO 2006). Dual practice enabled the growth of the private sector; it also led to inequities in treatment and competition between the sectors (WHO 2006). As of 2012, the private sector had continued to expand mostly unregulated; this led to inequitable service delivery among geographical regions (Kherallah et al. 2012). As of 2006, private health facilities were mandated by law to report data on a monthly basis (WHO 2006).

Public-private partnerships exist mainly in the form of the public sector outsourcing non-clinical services, such as infrastructure and equipment maintenance, security, catering, and cleaning (Siddiqui, Masud, and Sabri 2006). There is little political support or policy structure to support these contracts and mechanisms for monitoring quality of contracted services are limited (Siddiqui, Masud, and Sabri 2006). However, PPPs in the hospital sector were growing before the war, and the government had started to promote increased efficiency in

hospital services and costs through granting “autonomy” from the MOH to some public hospitals. Autonomous hospitals had control over their own financial and administrative matters, allowing them freedom in areas such as staff recruitment, contracting with the private sector for services, and determining whether to charge fees for certain services (WHO 2006).

The government established a law in 2001 that allowed private universities in Syria, and as of 2006 there were two private faculties of medicine located outside of Damascus and Tartous (WHO 2006). There were no operational residency programs in any non-state hospitals as of 2006 (WHO 2006). At this time, there was a projected need for an accreditation body within Syria. The Syrian Ministry of Higher Education does not offer accreditation for training institutions in Syria (WHO 2006).

Service Delivery

Prior to the conflict, only 5 percent of primary health care clinics were private and these were mostly in urban areas. In addition, Syria had a total of 376 private hospitals that accounted for 28 percent of hospital beds, where most patients paid for services out of pocket (WHO 2014b; WHO 2006). The private sector provided 25 percent of curative services as of 2006 (WHO 2006). As of the mid-2000s, Syria lacked a formal referral system, but had indicated establishing one as a priority (WHO 2006). Patients who could afford to accessed the full spectrum of health services in the private health sector (WHO 2006). Patients especially went to the private sector for outpatient care (Sen and Al Faisal 2012). **Syria had a large, private pharmaceutical industry before the war, covering 90 percent of national needs as well as exporting to other countries** (WHO 2006). Eighty-eight percent of pharmaceutical manufacturers were found in the private sector (WHO 2006).

There are few recent nationally representative health surveys from Syria. According to the most recent MICS survey in 2006, the private sector was a significant source of care for family planning and MCH regardless of wealth quintile (UNICEF et al. 2006). In their most recent pregnancy in the two years prior to the survey, 85 percent of women had four or more antenatal care visits. Of those, 82 percent chose private sector sources (Table 10.4). Fifty-six percent of women who delivered in a health facility chose a private facility. Sixty-nine percent of children under 5 who had ARI symptoms were taken to private providers. Use of the private sector was less frequent, though still significant, in the lowest wealth quintile. Seventy-three percent of women in the lowest wealth quintile chose a private source of care, compared to 89 percent in the highest quintile. Of women who delivered in a health facility, the majority of women in the highest wealth quintile chose a private facility for delivery (77 percent) whereas only 38 percent of those in the poorest quintile did. For ARI care, 81 percent of children in the highest wealth quintile used a private sector source, compared to 70 percent in the poorest quintile.

Table 10.3: Source of MCH and FP Care, Syria

Indicator	Private	Public	Both	Other
Source of antenatal care (percent of women who had any antenatal care visits during their most recent pregnancy in 2 years prior to survey)	82	19	--	2

Place of delivery (percent of women who gave birth in health facility 5 years prior to survey)	56	44	--	--
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	69	22	7	2

Source: UNICEF et al. 2006

Among the weaknesses in the private sector were quality of care and efficient use of resources (WHO 2006). The private sector was increasingly preferred by the middle class in Syria as a result of perceived better quality and shorter wait times (Sen and Al Faisal 2012), but data to validate these perceptions was scarce.

Since the start of the conflict in 2011, the role of the private sector, particularly NGOs, has increased in response to the deterioration of the pre-war system. Many international organizations and NGOs cooperate under the Whole-of-Syria Health Cluster, providing support to 185 organizations working in Syria to in order to plan and coordinate health assistance, improve service delivery, and monitor performance (Whole of Syria Health Cluster 2017).

Approximately one-quarter of Syrians live in areas that are difficult to reach or under siege, and the WHO supports around 70 NGO partners to provide services in these areas (WHO 2016). The WHO also supports inter-agency convoys to deliver medical supplies to the most difficult to reach areas. But government forces often obstruct access to these areas, deny or do not respond to requests to deliver services in these areas, and confiscate supplies—they removed medical supplies from approximately 75 percent of these convoys (WHO 2016).

The situation varies greatly in different parts of the country. According to interviews with NGO staff, some formerly public primary health care facilities in rebel-controlled areas remain open but they are now funded by international or local NGOs, or even privately funded by area residents. NGOs such as the IRC sometimes pay health worker salaries and conduct web-based remote trainings to keep health care facilities open and build health worker capacity. Shortages of medicines, supplies, and personnel are common. For example, the WHO identified only one psychiatric clinic in all of Syria as of 2016 (WHO 2016).

Mental health needs are increasing, and there are conflicting reports about availability of mental health services. Staff of one large NGO reported that mental health is a big gap, that there is a lack of awareness of conflict-related mental health issues and few trained mental health providers in Syria. However, the WHO reported that availability of mental health services has increased since the conflict began. According to the WHO, before 2011, mental health care was provided only in hospitals in two urban areas, but it is now available in an increasing number of health centers. The WHO is training workers in primary health care facilities in its Mental Health Gap Action program (mhGAP), a tool for providing mental health services in resource-limited settings (WHO 2016).

Yemen

The population of the Republic of Yemen has grown from 23.6 million in 2010 to nearly 27 million in 2015 (UNPD 2017). As of 2015, 40 percent of the population was under the age of 15 (UNPD 2017). Sixty-four percent of Yemenis live in rural areas (UNPD 2017).

Yemen is one of the most severe fragile situations in the world (The Fund for Peace 2017) **and is currently close to a massive famine** (World Bank 2017c). Yemen has undergone several changes of government since 2011 and has been in a state of civil war since 2014. The north of the country has been under the control of the group Ansar Allah, or the Houthis, since they captured the capital, Sana'a, in 2014-2015. The south remains under the control of Abdrabbuh Mansour Hadi, who became the second President of Yemen in 2012 when former President Ali Abdullah Saleh was forced to step down.

Yemen is a lower middle-income country and one of the least-developed countries in the world (UNDP 2016). Its GNI per capita (Atlas method) is $1,040 (World Bank 2017a). Prior to the civil war, its economy depended on oil and gas and thus revenues fluctuated with the global market (WHO 2014b), but the economy was becoming more diversified (Schmitz 2012) through a government reform program. Now, the intensifying civil war has disrupted the economy and devastated infrastructure (World Bank 2017c). Amid this instability, the business climate is precarious. Yemen ranks 179th out of 190 countries in the World Bank's Doing Business Index (World Bank 2017b).

About half of Yemen's population lives in conflict-affected areas (World Bank 2017d).

Photo credit: Rod Waddington

Health Status

Yemen faces major challenges to improve the health status of its population. About half of the population lives in conflict-affected areas (World Bank 2017d). Poverty, food insecurity, the flow of refugees, cultural barriers to women's education, and the government's limited capacity and resources are major contributing factors to poor health outcomes (Qirbi and Ismail 2017).

Before the conflict escalated in 2014-2015, Yemen's health indicators were some of the lowest in the region, though they had shown steady improvement since 1990. For example, in 2015 the maternal mortality rate was 385 deaths per 100,000 live births, a decline from 417 in 2008 (Table 11.1), but high compared to the regional average of 81 (World Bank 2017a). The mCPR in 2013 was 29.2 percent nationally (Assaf et al. 2017). 42.4 percent of children under 5 received all basic vaccinations (Assaf et al. 2017).

Table 11.1: Key Health Indicators, Yemen

	2006–2008	2013–2015
Life expectancy at birth (years)*	62.9	64.7

Maternal mortality ratio (modeled estimate, per 100,000 live births)*	417	385
Infant mortality rate (per 1,000 live births)*	47.2	43.2
Under-5 mortality rate (per 1,000 live births)*	77.0	53.0
Total fertility rate (births per woman)**	5.2	4.4
mCPR (percent of women ages 15-49)**	24.9	29.2

Sources: * World Bank 2017; ** Assaf et al. 2017. Note that numbers in the 2013-2015 column are not from that range of years, but are from varying points of time within that range. Numbers are from different years depending on source.

The war in Yemen has caused a humanitarian disaster on a wide scale. While political instability began in 2011, March 2015 marked a fundamental shift in the conflict with increased violence. Since then, rates of mortality, injury, and food insecurity have risen and Yemen has seen the first decline in life expectancy and increase in child and maternal mortality since 1990 (Qirbi and Ismail 2017). Over 10,000 civilians have been killed and 40,000 wounded (United Nations 2017), while 2.8 million are internally displaced (World Bank 2017d). An estimated 24 million Yemenis are food insecure and 3.3 million are malnourished (World Bank 2017d). Infectious diseases such as malaria are widespread (Safeguarding Health in Conflict Coalition 2017). A second cholera epidemic broke out on April 27, 2017 (WHO 2017b) and UNICEF feared that within the month of June 2017 the total number of cholera cases could quadruple to 300,000 (Gladstone 2017).

The burden of communicable diseases is still higher in Yemen than in most countries in the MENA. However, NCDs are a concern, especially in urban areas, where refugee communities are relocating in growing numbers (Amara and Ajunid 2014). NCDs account for approximately 39 percent of total deaths in Yemen (WHO 2014a) with cardiovascular diseases accounting for 21 percent.

Health System

Yemen's health system, fragile before the war, has collapsed. Before the conflict, the public health system provided free emergency medical care in hospitals as well as the medicines needed to treat many common NCDs (such as diabetes and hypertension) and infectious diseases (such as tuberculosis and leishmaniosis). However, the conflict quickly weakened the health system through attacks on hospitals, power cuts, disruption of medical supply chains, and rising gasoline prices (Radman 2017). Currently, over half of Yemen's population lacks access to basic health care. Barriers to access include violence, costs of reaching facilities, lack of functioning medical facilities, and a lack of beds at facilities that are functional (Radman 2017). Only 45 percent of medical facilities are functioning and they face severe shortages of equipment, commodities, and health workers. Of the functioning facilities, two-fifths have the ability to diagnose and treat infectious diseases and provide care for injuries and basic laboratory services (Safeguarding Health in Conflict Coalition 2017). Imports of medicine have dropped by two-thirds since the start of the war (UNOCHA 2017).

As of 2014, Yemen had no national systems response to NCDs (WHO 2014a). NCD programming is one of the largest gaps in the humanitarian community in Yemen and elsewhere, as acute life-saving interventions take precedence. The WHO's Health Resources Availability Mapping System (HeRAMS) found that NCD-related health services, including dialysis for kidney failure, are only available in 21 percent of health facilities nationally (WHO 2017a). The state-run Al Hudaydah Renal Dialysis Centre is one of 28 dialysis centers that struggles to function. Shortages of staff and supplies make it difficult for this center to accommodate increasing patient volume. Medical technology and equipment often breaks down and causes further delay (WHO 2017a). Cancer treatment also faces challenges. The National Oncology Center faces severe medicine shortages due to the ongoing conflict and thousands of cancer patients resort to seeking medicines on the black market for higher prices or are forced to forgo treatment (Reuters Staff 2017).

Health Financing

Yemen health expenditures are some of the lowest in the MENA. THE per capita increased from $25 in 2000 to $70 in 2008 and $80 in 2014 (Table 11.3) but is low compared to other countries in the region. Financing for health prior to the severe conflict reveals a fragmented system heavily reliant on private, OOP spending (Qirbi and Ismail 2017). Despite the fact that THE as a percent of GDP grew over the years (4 percent in 2000, 5 percent in 2008, and 6 percent in 2014), health remains a relatively low priority in government spending: GGHE as a percent of THE and as a percent of GGE decreased between 2008 and 2014. More revealing and problematic is the percentage of OOP payments compared to THE: 43 percent in 2000, 68 percent in 2008, and 76 percent in 2014 (WHO 2017d). This could be explained by the rapid expansion of the private sector, the absence of any kind of stable formal health insurance, and the sharp decrease of both the GGHE as a percentage of THE (54 percent in 2000, 31 percent in 2008, and 23 percent in 2014) and of the GGHE as a percentage of the GDP (2 percent in 2000 and 2008, and 1.2 percent in 2014). These figures show that the contribution of government funding to THE has significantly declined. In 2016, the budget of the Ministry of Public Health and Population (MoPHP) was approximately 3.5 percent of the total government budget (WHO 2017d), a clear indication of the low priority given to health. Government officials at many levels rely on donor-funded projects to carry out activities and cover operating costs of national programs, such as on MCH, HIV/AIDS, and immunization.

Table 11.2: Health Expenditure Indicators, Yemen, 2000–2014

Health Expenditure Indicators	2000	2008	2014
Total Health Expenditure (THE) per capita in current US$	25	70	80
THE as a percent of Gross Domestic Product (GDP)	4	5	6
General Government Health Expenditure (GGHE) as a percent of GDP	2	2	1.2
GGHE as a percent of THE	54	31	23
GGHE as a percent of General Government Expenditure (GGE)	8	4	4

Out-of-Pocket (OOP) Expenditure as a percent of THE	43	68	76
Private Health Expenditure (PvtHE) as a percent of Total Health Expenditure (THE)	46	69	77
Out-of-Pocket (OOP) Expenditure as a percent of PvtHE	95	99	99
Private Insurance as a percent of PvtHE	2	1	1
External Resources on Health as a percent of THE	7.9	2.9	6.4

Source: WHO Global Health Expenditure Database 2017

Purchasing and Payment Methods

Since the majority of payments are out of pocket, fee-for-service is the dominant method of payment. Most OOP contributions in Yemen are in the form of flat-rate user charges for inpatient and outpatient services. Small-scale employment-based or informal health financing schemes emerged during the 2000s, but they were limited in scope, covering less than 5 percent of the total population (Holst and Gericke 2012).

In the public sector, the flow of funds is not linked to performance. It is based on a rigid line item budgeting built on historical trends and on negotiations of scare resources between central and local authorities and administrators.

Effects of the Conflict on Health Financing

The high-intensity conflict has worsened previous trends in declining public health funding and increasing OOP payments in both public and private health services. At the same time that OOP payments are rising, the economy has crashed, and people lack the resources to pay for health care. Real GDP per capita decreased from $518 per person in 2014 to about $290 per person in 2016 (MoPIC 2016). External support from donors and international agencies, which used to support many health programs, has also dramatically fallen as many donors and international organizations have scaled back their projects or withdrawn from the country for security reasons (Qirbi and Ismail 2017). Even funding for the humanitarian response has been a challenge. For example, the 2016 WHO Yemen Humanitarian Response Plan received only 24 percent of total requested funding (WHO 2017c). These funding reductions in combination with other factors related to the conflict have contributed to major challenges for public health service delivery and to a health disaster for the population.

Private Health Sector

The private health sector in Yemen is largely concentrated in the cities; for instance, there are several private hospitals in the capital, Sana'a. Many of the private hospitals were built by donors such as Saudi Arabia or China. The private sector, expanding since the 1990s, played an important role in service delivery prior to the conflict (WHO 2014b). Although mistrust existed between the public and private sectors, the government encouraged investment to expand the private sector and address gaps in public provision (WHO 2014b). Compared to the public sector, many considered the private sector to be more straightforward and agile (WHO 2014b). The medical community in Yemen is small, mostly Yemeni, and familiar. Referrals between the

public and private sectors are common. People who seek care in the private sector are generally those who can afford it and who reside in an area where private facilities exist.

Since political unrest began in 2011 and the start of the civil war in 2014, investment in the private health sector, from both for-profit and nonprofit sources, has declined severely given security concerns. However, quality is better in the private sector than in the public sector because the former has more equipment and resources. Given the intensity of the conflict in Yemen, it seems unlikely that the private health sector will expand in the near future, but understanding what private sector resources existed prior to the conflict is important to eventual rebuilding.

Policy and Governance

Even before the conflict, the decentralized Yemeni administrative system lacked clear division of responsibilities and had minimal mechanisms for coordination (WHO 2014b). The administrative system was decentralized, placing district health management teams and governorate health offices in charge of regulating the private sector (WHO 2014b). There are regulations for governing the private health sector in Yemen, but enforcement is limited and they are not up-to-date (WHO 2014b). Many laws and regulations lack processes for implementation, which led to problems in oversight. There was no government regulation of dual practice or the informal health sector, and it was difficult to distinguish between the public and private sectors because dual practice was very common (WHO 2014b). Quality and pricing control and the regulation of the informal sector were weak (WHO 2014b) and have only been further weakened by the conflict.

The General Department of Private Health Institutions at the MoPHP licenses private health facilities. The General Medical Council, under the Prime Minister's office, is in charge of developing medical training requirements and issuing provider licenses. Syndicates, or professional associations, play a role in licensing and responding to complaints about providers. However, internal discord regarding politics and personal interests have limited the role of syndicates in governance (WHO 2014b).

The National Health Strategy 2010-2025 established a vision for the MoPHP that included implementing quality standards and better delineating its role in regulating the private sector. The strategy highlighted the importance of clear channels for public-private partnerships and most recommendations included the private sector (WHO 2014b). Due to the political unrest and new government in 2011, the strategy was replaced with the Transitional Program for Stabilization and Development, which highlights the government's willingness to partner with the private sector (WHO 2014b).

Service Delivery

Poverty and lack of resources hindered care seeking in the private sector (WHO 2014b), yet the private sector, particularly pharmacies, is still a significant source of care for family planning and child health services. According to the 2013 DHS (MoPHP et al. 2015), the private sector was a key source of modern contraception as of 2013, when 46 percent of women who used modern contraception obtained the methods from the private sector (Table 11.4), with pharmacies being the most common source (DHS 2013). The private sector played a smaller role in deliveries. In 2013, the majority of women (69 percent) delivered at home. Only a third of women delivered in a health facility, and of those who did, 37 percent went to the private sector (DHS 2013).

The majority of caregivers chose private sector sources, mainly pharmacies, for treatment of diarrhea and ARI symptoms in children under 5. Fifty-eight percent of caregivers of children under 5 with diarrhea sought treatment outside the home, and of those, 63 percent went to the private sector. For ARI symptoms in children under 5, 64 percent of caregivers sought treatment outside the home, and, of those, 68 percent went to the private sector. Use of the private sector was common regardless of wealth quintile. Of caregivers who sought treatment outside the home for child diarrhea, 62 percent of caregivers in the lowest wealth quintile and 73 percent of caregivers in the highest wealth quintile went to the private sector. Similarly, of caregivers who sought treatment for child ARI symptoms, 59 percent from the lowest quintile and 83 percent from the highest quintile chose a private sector source (DHS 2013).

Table 11.2: Sources of MCH and FP Care, Yemen

Indicator	Private	Public	Both	Other
Source of modern methods of contraception (percent of women of reproductive age currently using modern contraception)	46	53	--	1
Place of delivery (percent of women who gave birth in health facility 5 years prior to survey)	37	63	--	0
Diarrhea treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for diarrhea)	63	31	3	3
ARI treatment for children under 5 (percent of children 0-59 months who sought treatment outside home for ARI symptoms)	68	28	1	3

Source: DHS (MoPHP et al. 2015)

The key challenge faced in Yemen is the lack of HRH. In certain districts, there is not one doctor available. Even before the conflict, the public sector had difficulty retaining staff, mainly as a result of low wages, and many providers moved to the private sector or left the country (WHO 2014b). Since the conflict began, the brain drain from Yemen has worsened. Civil servants including medical staff have not received salaries since August 2016 (MSF 2017). Amnesty International reported that at least three hospitals in Taiz governorate were shut down after anti-Houthi forces threatened staff (Safeguarding Health in Conflict Coalition 2017). As of October 2016, 13 health workers had been killed and 31 injured (WHO 2017c). Most foreign health workers have been evacuated. Identification, training and promotion of HRH is essential to rebuilding the health system in Yemen.

There is a breakdown and lack of resources in both the public and private sectors that affects service delivery. For instance, a patient going to a private hospital for a routine surgery (such as appendix removal) must bring all equipment with them for the patient and the surgeon, including all surgical equipment, gauze, gowns, etc. The same is true for women delivering babies. Moreover, getting med icines into the country from outside has become very challenging and

the quality of medicines has decreased. Public pharmacies are out of stock and the prices at private pharmacies are unaffordable; prices have risen to the point where the international market is cheaper than the local market.

Currently, more than 114 humanitarian organizations work in Yemen and deliver life-saving and life-sustaining assistance across the county (UNFPA 2016). Some United Nations and international agencies are maintaining their activities providing local and remote support from outside of the country. The European Union has committed more than EUR 60 million in support of the Yemeni health sector. Before 2015, aid from the European Union focused on training for nearly 7,200 providers in the areas of maternal and neonatal care, emergency obstetric care, and health administration services. Currently, the focus is training hospital staff to perform rapid and effective mass-casualty triage following bomb blasts or other conflict-related activities (EPOS 2017). The United Nations Population Fund and other donors run mobile clinics to reach patients who cannot access health facilities and provide services including reproductive health and nutrition counseling (UNFPA 2017).

In the **north**, controlled by the Houthis, donor funds intended to support the public sector are all filtered through NGOs; no funding is provided to the Houthi-run government. NGOs in the north may or may not be able to address the crisis in HRH by paying public medical staff; it depends on the proclivity of the district health office and the governorate. In the north (and quite possibly in the south as well) the health system was very informal, and international NGOs had to devote substantial resources to making sure local partners were not fraudulent.

Box 7. Collaboration between International and Local Private Sector:

- The private sector is interested in working with the international community as it is a reliable source of funding. The NGO community is playing an in-between role, trying to support the public sector by acquiring some resources from the private sector.
- In a program supporting secondary and tertiary care for refugees, the IMC and UNHCR used facilities in the private health sector. For instance, there were many cases in which HIV-positive patients were not accepted at public hospitals, so the IMC sought care in the private sector and incurred high costs. The IMC went to the private sector for certain other emergencies and referrals as well.
- In general, the IMC procured equipment from the private sector (local vendors).
- The IMC worked with district health offices in the north on trainings. The offices usually had the knowledge but not the resources needed to do the trainings.

Refugees

There are currently over 2 million IDPs and over one million returnees in Yemen (UNHCR 2017a; UNHCR 2017b). As of May 2017, 279,480 refugees and asylum seekers are registered. There have been 15,948 new arrivals to Yemen since January 2017 (UNHCR 2017c). UNHCR health support includes primary care, pharmacy, reproductive health, HIV/AIDS, mental health, and cholera. The organization refers people with chronic medical conditions and emergency

cases to hospitals (UNHCR 2017b). The vast majority of refugees in Yemen are Somalis, many of whom have recently begun to ask UNHCR to support their return to Somalia in light of the intensifying conflict (UNHCR 2017c).

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