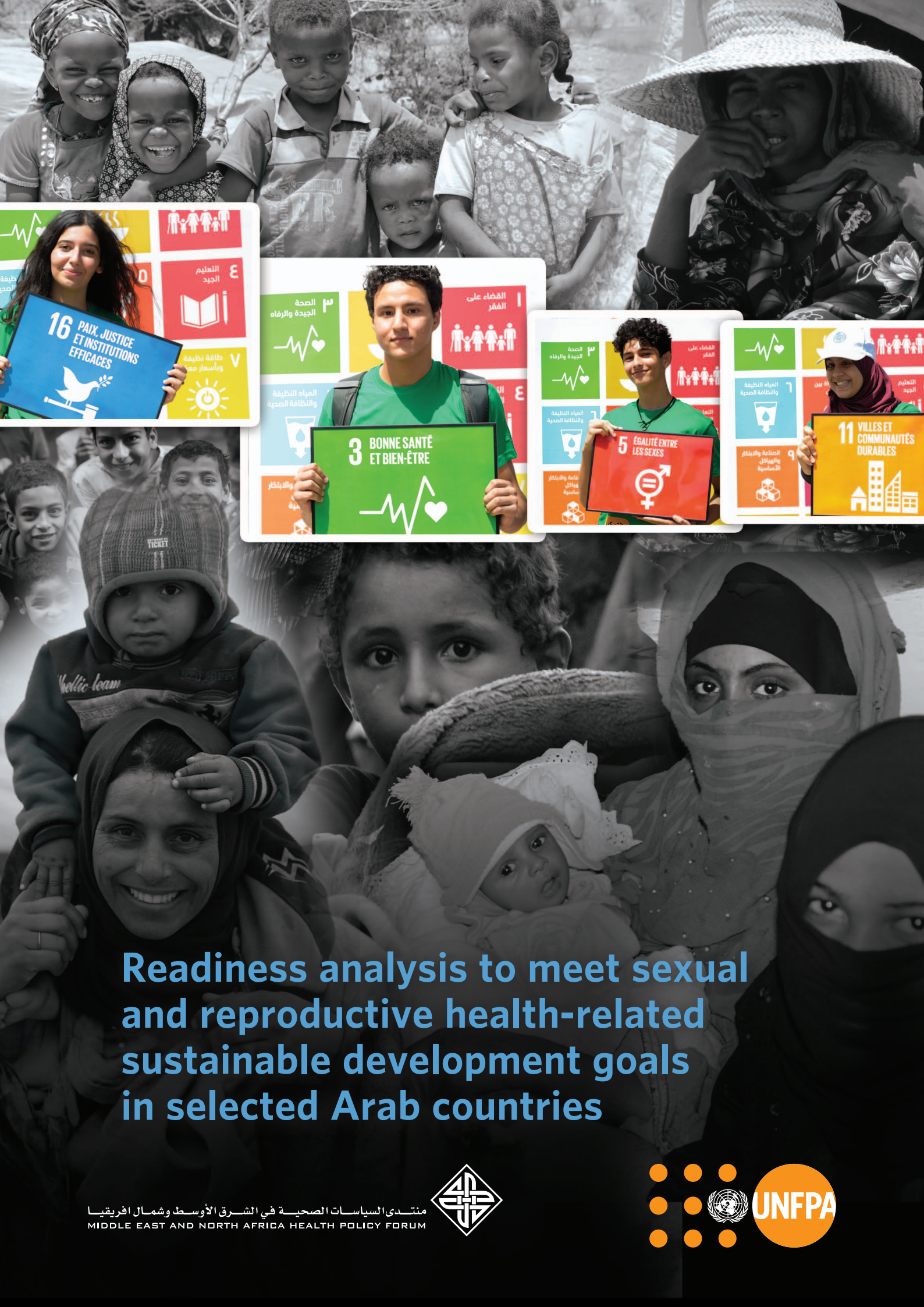

Readiness analysis to meet sexual and reproductive health-related sustainable development goals in selected Arab countries

منتدى السياسات الصحية في الشرق الأوسط وشمال افريقيا
MIDDLE EAST AND NORTH AFRICA HEALTH POLICY FORUM

UNFPA

Disclaimer

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Dr. Maha El Rabbat
Executive Director
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In the post-2015 era, the global development agenda adopted a set of sustainable development goals (SDGs) for poverty eradication, inclusiveness and equity, environmental protection, and social development. Under sexual and reproductive health (SRH), the international community aims to ensure universal access to SRH services, to improve the provision of family planning services, and to integrate SRH into national and regional strategies, policies, and programs. Readiness and timely actions are a prerequisite to face the challenges to achieve the SDGs.

The MENA Health Policy Forum (HPF), under a cooperation agreement with the United Nations Population Fund - ASRO, supported developing a report on the assessment of readiness to meet SRH-related SDGs in selected Arab countries. By assessing health system readiness for achieving SDGs related to SRH, the current report is an attempt to help countries sharpen their plans and set their priorities. The report was a result of collective efforts from a large group of experts.

It is my hope that this report will serve as a call to action to all stakeholders to join forces to accelerate their country's readiness for facing the challenges to meet SRH-related SDGs.

Magued Osman,
Lead Author

Contents

List of Tables

List of Figures

Acronyms

ASRO	Arab States Regional Office (of UNFPA)
DHS	Demographic and Health Survey
EDHS	Egypt Demographic and Health Survey
FGM	Female genital mutilation
GP	General practitioner
HIO	Health Insurance Organization (Egypt)
HIV/AIDS	Human immunodeficiency virus infection/acquired immune deficiency syndrome
HRH	Human resources for health
ICPD	International Conference on Population and Development
JPFHS	Jordanian Population and Family Health Survey
M&E	Monitoring and evaluation
MDG	Millennium Development Goal
MENA	Middle East and North Africa
MMR	Maternal mortality ratio
MCH	Maternal and child health
MOH	Ministry of Health (Jordan, Morocco, Saudi Arabia)
MOHP	Ministry of Health and Population (Egypt)
NGO	Nongovernmental organization
PAPFAM	Pan Arab Family Health Survey
PHC	Primary health care
RHS	Reproductive health services
RMNCH	Reproductive, maternal, neonatal, and child health
RMS	Royal Medical Services (Jordan)
SARA	Service availability and readiness assessment
SDG	Sustainable Development Goal
SDH	Social determinants of health
SRH	Sexual and reproductive health
SoWMy	State of the World Midwifery Report
STI	Sexually transmitted infection
TFR	Total fertility rate
UHC	Universal health coverage
UNFPA	United Nations Population Fund
WHO	World Health Organization

Executive Summary

Background

The global development agenda shifted toward a set of Sustainable Development Goals (SDGs) in the post-2015 era. These include poverty eradication, inclusiveness and equity, environmental protection, and social development.

Health care and associated services are part of the third, fifth, and tenth SDGs, strengthening their position in the future development agenda and highlighting their importance. More specifically under sexual and reproductive health (SRH), the international community aims to ensure universal access to SRH services to reduce the global maternal mortality ratio (MMR), improve the provision of family planning services alongside information and awareness about them, and integrate SRH into national and regional strategies, policies, and programs. All of the aforementioned fall under the umbrella of universal health coverage (UHC), which promotes greater health coverage, inclusivity, quality of service, and financial protection.

The purpose of the report is to develop a readiness assessment tool and to assess health system readiness for achieving SDGs related to SRH in selected countries in the Arab States region. Four Arab countries were included in the assessment: Egypt, Jordan, Saudi Arabia, and Morocco. In addition to their ability to represent the diversity of Arab countries, these countries were specifically selected because they have or are undertaking health reforms and have achieved or were on track to meet the Millennium Development Goals (MDGs) to varying degrees.

Methodology

A standardized data collection tool was developed to analyze the four countries' readiness for achieving the SRH-related targets of the SDGs. The tool was used to analyze health services, the health workforce, health equity, information gaps, and challenges facing the achievement of SRH-related SDGs by 2030.

A set of targets related to SRH care services, including family planning, information, and violence against women, was identified. Readiness to achieve each target was assessed separately to pinpoint the most significant challenges facing each country.

Projections for the estimated number of births and number of women of reproductive age by 2030 were derived for each country according to different fertility scenarios. Basic reproductive services needed to achieve the SRH-related SDGs were then estimated.

Achieving the SRH-related SDGs

By 2030 the four countries are expected to achieve target 3.1 (half the maternal mortality ratio) and target 3.2 (end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births).

A challenge facing the four countries is in ending AIDS among subpopulations at risk (target 3.3), especially regarding prevention of mother-to-child transmission of HIV, HIV

counselling and testing, and control of sexually transmitted infections (STIs).

Adolescent health seems to represent a challenge to all four countries, a situation that might be aggravated given the high percentage of youth in their population structures.

Readiness to achieve UHC (target 3.8) varies among countries. The assessment suggests that the target is achievable in Saudi Arabia and to a lesser extent in Jordan, but represents a challenge in Egypt and Morocco.

Eliminating domestic and sexual violence against women represents a challenge in all four countries. Eliminating child, early, and forced marriage is considered highly challenging in Saudi Arabia, less challenging in Egypt and Morocco, and minimally challenging in Jordan. Female genital mutilation (FGM) seems to continue to be a challenge facing Egypt only and is not practiced in the other three countries.

Achievement of SRH-related SDGs should be planned such that countries continuously examine their population projections and plan their health services and human resources needs accordingly. This should be done using different scenarios that maximize the utilization of resources and mitigate the expected risks.

Health system accessibility and coverage

UHC is a crucial step to overcoming the current challenges and shortcomings facing today's health systems. These include health system fragmentation, the predominance of the unregulated private and nongovernmental sectors, wide disparities and inequities in health, and weak health system governance. It is recommended to start at the policy level with a clear vision and roadmap for a stepwise UHC based on educated priority setting and evidence-based processes.

Implementation of compulsory Social Health Insurance with a comprehensive package including SRH care services is a successful way to achieve UHC. This will improve service coverage, equity, and quality and will protect poor and disadvantaged populations from financial hardship due to disproportionate expenditure on health.

Regulating private and nongovernmental (civil society) health providers and ensuring that service provision is compliant with Ministries of Health standards and guidelines are of utmost importance, as this is the source of service provision for a large proportion of the population in the four countries under study.

Investing in and further strengthening primary health care (PHC) and the role of family physicians are also crucial.

Health workforce

Generally speaking, the health workforce must be: planned for based on existing and projected needs; increased in number; more specialized; strengthened with a better skills mix; and motivated with different forms of incentives. Innovative approaches to utilize the existing human capital and to partner with the private and nongovernmental health workforce are needed.

The current skill mix of Egypt's health workforce may not adequately respond to increasing health care demands. Innovative approaches for optimizing the benefits of the current workforce structure are greatly needed. For example, in Upper Egypt, where physicians' availability is lowest, experienced nursing staff could be trained to perform basic health procedures once appropriate training and legal

frameworks are in place. Positive and negative methods for incentivizing the workforce should be sought. Structuring a payment system with performance-based incentives for providers has been shown to be successful at improving quality of care.

Investing in human resources for health (HRH) is a strategic necessity in Jordan to attain quality health care services and contribute to the population's social welfare and development. Drafting and implementing short- and long-term human resources plans is a necessity, with particular emphasis on the expansion of academic and vocational training focused on key specialties such as midwifery, nursing, and family medicine, and the gender-based, culture-sensitive distribution of such human resources.

Morocco needs to make more efforts to redistribute the number of public service staff, reduce gender inequalities, better devolve administrative functions, and improve performance. The extension of some hospital care exacerbates Morocco's deficit in human resources, currently estimated at more than 6,000 physicians and over 9,000 nurses.

Health equity

Equity in health outcomes is a major challenge facing all four countries. The problem is multifaceted and relates to the lack of a clear vision, health workforce shortages, limited resources, and/or insufficient governance mechanisms in place. It is also related to external factors such as forced in-migration, as in the case of Jordan. A wide range of strategies and action plans need to be designed to ensure the goal that "No one is left behind." Interventions should be country-specific and should not ignore reprioritization of public spending, out-of-the-box solutions, a stronger role for civil society, decentralization, development of better health information systems, and better use of technology.

To monitor reductions in inequity requires development of regional and community-based SRH indicators that consider disparities in SRH outcomes based on residence, education, geographic region, gender, wealth, ethnic group, displacement status, and disability. Key performance indicators should be developed to monitor disparities as an outcome in itself.

Information gap analysis

The country assessments reflect information gaps that must be bridged to allow governments to monitor and evaluate SRH-related SDG achievements on a regular basis. The absence or irregularity of household-based health surveys is a real challenge. Regular surveys (such as Demographic and Health Surveys/DHS and the Pan Arab Family Health Survey/PAPFAM) should be revisited to capture data related to currently uncovered categories, such as unmarried women and adolescents. Data need to be collected and analyzed in a way that allows for subnational disaggregation to the lowest administrative unit.

A paradigm shift must be introduced to collect data on a regular basis on phenomena that are considered taboo, such as HIV/AIDS and violence against women.

Health registries must be built and effective use made of data to inform decision makers and to develop evidence-based policies.

Challenges

Health system fragmentation and wide disparities in health service management, financing, and provision are major challenges facing all four countries. These require urgent and comprehensive health system reform.

Another common challenge is the shift toward increasing private practice without a clear vision on how to integrate the private sector in achieving public health goals. This process might reduce the chance of achieving the SDGs while "leaving no one behind."

In addition, each country has specific challenges. These should be taken into consideration as well as they might slow achievement of the SDGs. Country-specific challenges might put unique pressure on health services and on the workforce and might impede attainment of health equity.

In **Egypt**, the stalled fertility observed between 1995 and 2005 increased the total fertility rate (TFR) to 3.5 children per woman of reproductive age in 2014 compared to a TFR of 3.0 in 2008. This trend translated into an increase in the number of births from 1.85 million live births in 2006 to 2.6 million live births in 2012. The 40 percent increase in six years generated several short-term implications for health services and workforce resources, including increased demand for maternal and child health (MCH) services. The long-term implications are numerous, and include a greater need for adolescent reproductive health services and information. The list of implications goes beyond SRH and presents a challenge to other SDGs, especially those related to poverty, education, job creation, and environment. Another challenge facing Egypt is FGM. Despite its reduced incidence, the practice might continue due to Egypt's conservative culture and lack of awareness. The economic hardship Egypt is currently facing might affect public spending on social programs, including MCH and adolescent health services, human resources, and information.

In **Jordan**, rather than natural population growth, external factors are the real challenge impeding achievement of SRH outcomes. Regional instability has always affected the country, which has received several waves of refugees, starting in 1948. With every wave, Jordan hosted several hundred thousand migrants from neighboring countries. This forced and unplanned migration caused high rates of population growth and generated considerable pressure on the health system (especially on health services provided to citizens, infrastructure, and health institutions), particularly in the public sector. Given Jordan's limited financial and natural resources, this influx of refugees has negatively impacted the country's social, economic, and health development. Since 2012, the large number of Syrian refugees has burdened the health system, especially in the Northern Governorates, where they are concentrated. A serious impact on Jordan's public sector health system is expected due to lack of funding, lack of health care human resources, and lack of necessary facilities to provide health services for Syrian refugees. The challenge extends to serious STIs such as HIV/AIDs, as a number of AIDS cases have been recorded among Syrian refugees. Rising rates of early marriage, mainly among Syrian refugees and the displaced, also hinder attainment of SRH-related SDGs in Jordan.

Morocco's main challenge to achieving the SRH-related SDGs relates to inequity in health outcomes. This could be addressed by enhancing health coverage in rural areas and among marginalized segments of the population. The huge deficit in the national budget balance benefits the private sector and the middle and wealthy classes. The poor segments of the population continue to spend

a greater share of their income on health, creating a vicious cycle of poverty. Another challenge facing Morocco is access to family planning services and information by unmarried women and youth, especially girls. Reducing the incidence of early marriage and adolescent fertility is a third challenge that must be addressed to enable the country to achieve the SRH-related SDGs by 2030.

Over the last few decades, **Kingdom of Saudi Arabia** has witnessed tremendous growth in the availability of accessible, comprehensive, and quality medical services. However, improvement in social determinants of health (SDH) has been much slower. Early marriage, early pregnancy, and the negative perception of reproductive health and family planning programs are related to SDH and might slow the country's potential to achieve SRH-related SDG targets by 2030.

Despite a significant improvement in Saudi Arabia's health system, data coverage is a real challenge affecting monitoring and evaluation (M&E) of SRH-related SDGs. Lack of data coverage manifests in several aspects, including: lack of household health surveys, which precludes production of many health indicators; lack of health data provided by other public providers (military health facilities, security forces health facilities, and social insurance); and lack of data on health outcome disparities due to nationality, income, education, disability, and ethnicity. In addition to age and location, data on a wider range of characteristics (e.g., wealth, education, disability, ethnicity, and marital status) are needed to better assess and manage disparities within and across the country's administrative regions. These data would enable Saudi Arabia to better assess which populations are being left behind. Some "wish list" indicators will require investment in entirely new data collection efforts, as well as development of common definitions and data collection methodologies. Data on gender issues including marriage patterns and violence against women are of particular relevance.

1. Introduction

In recent decades, important strides have been made to advance sexual and reproductive health (SRH), with horizons pushed in knowledge, health, and science and technology. Nevertheless, major challenges continue to impede progress in many areas essential for universal access to health services and in the results of related outcomes, as evidenced by the mixed status of the achievement of Millennium Development Goals (MDGs) by 2015.

Many of the obstacles to the attainment of the MDGs are well known, and much was gleaned from the successes and failures of the past 15 years of development policy. Among these lessons is that specific issues cannot be tackled without dealing with root causes such as poverty and inequity. The global community thus mobilized efforts toward a new paradigm of development based on a set of common values, the Sustainable Development Goals (SDGs). The SDGs offer an ambitious plan that is rights-based, population-centered, and inclusive, and seeks to harness all national resources, particularly human resources, to achieve development objectives in a decade and a half. The agenda represented by the SDGs places SRH at its core by acknowledging SRH issues as targets of development. For example, the SDGs call for achieving universal access to SRH services, reducing maternal mortality rates, and ending the HIV/AIDS epidemic by 2030.

Movements such as the Arab Spring reflect people's demands for participation and a fair share of the fruits of prosperity. A range of tailored policies, global agendas, and international conventions exist that can offer a foundation and framework for advancement. But the gulf between these pieces of legislation (laws, policies, and regulations) as they exist on paper and their implementation and reality on the ground is massive, directly and indirectly affecting the SRH related outcomes. The obstacles to gender equality and women's inclusion, empowerment, and participation are multiple and mutually reinforcing, encompassing sociocultural norms, unequal gender power relationships, resource and capacity constraints, and unfavorable legal environments.

Political transitions and social, economic, and environmental shifts hold new opportunities, but also pose challenges to progress, with implications for health and universal access to quality essential services. Addressing them not only calls for targeted programs, but also dictates that all multidimensional efforts consider the needs, demands, and capacities of health systems to function. Questioning countries' transformational capabilities and readiness given their current financial hardships is a must. Recognizing the existence and nature of the interconnected challenges ahead is necessary, but what is essential is to take proactive, effective steps to overcome the root and structural barriers. In seeking to mitigate negative trends and sustain global development for SRH, the universal mandate of the post-2015 sustainable development agenda is dependent on health system strengthening, particularly on human resource capacities and availability and accessibility of quality services, thus leading to a paradigm shift based on broader concepts.

Universal access to quality SRH services is a prerequisite of a well-functioning health system. The health system should have the "capacity and resilience" to deliver as required, which is known as "system readiness." This

includes different components, such as availability, affordability, and acceptability. As well, countries strengthening their SRH components and services should undertake this within the framework of strengthening their primary health care (PHC) system with the interlinked "building blocks for health systems," as defined by the World Health Organization (WHO), namely: Service Delivery; Human Resources; Health Information; Medicines and Technologies; Health Financing; and Leadership and Governance.

Regional context

According to the 1994 International Conference on Population and Development (ICPD) and more recent reviews, universal access to SRH remains an unmet goal. Although most countries of the Arab region adopted the ICPD agenda, its implementation of some components was hampered for many reasons, among which are inadequate financial resources and weak system capacities.

The Arab States increasingly stand at a crossroads between maintaining and building on what has been achieved and reforming what requires change. Similarly, they are in a transitional phase, looking into the future by renewing their commitment to fulfilling the SDGs. Many challenges that confront the Middle East and North Africa (MENA) region create obstacles for SRH integration and expansion of available services.

Arab countries share some commonalities but also show marked diversity. Their economies vary from among the poorest to the richest in the world. Although they have achieved progress in health outcomes, differences and inequalities in achievement are evident between and within countries in the region.

The post-2015 agenda for development

In its quest to achieve and build on the MDGs, the global development agenda shifted toward the new set of SDGs in the post-2015 era. These include poverty eradication, inclusiveness and equity, environmental protection, and social development.

Health care and associated services' inclusion in the third, fifth, and tenth SDGs strengthens their position in the future developmental agenda and highlights their importance. More specifically under SRH, the international community aims to ensure universal access to SRH services to reduce the global maternal mortality ratio (MMR), improve the provision of family planning services alongside information and awareness about them, and integrate SRH into national and regional strategies, policies, and programs. All of the aforementioned fall under the umbrella of universal health coverage (UHC), which promotes greater health coverage, inclusivity, quality of service, and financial protection.

Five features make the 2030 SDG agenda transformative and render the SDGs different from the MDGs. For example, the 2030 agenda is (WHO 2016c):

- Wider in scope, tackling all sectors of government and development, including addressing the economic, environmental, and social determinants of health (SDH);
- Integrated and indivisible, with goals and targets interlinked and interdependent, requiring strong policy coherence both vertically and horizontally and a commitment to multisectoral ways of working;

- Global in nature and therefore relevant to all countries (developed and developing), while considering different national realities, capacities, and levels of development;
- Focused on equity and committed to reaching marginalized subpopulations; and
- Inclusive, since achieving the targets and goals depends on partnership.

Such a transformative agenda requires efforts that are beyond "business as usual." Achieving the SDGs by 2030 depends on strong political commitment, national ownership and governance, robust planning and a delivery mechanism, financing, the development of strategic partnerships, and engagement with stakeholders and citizens, as well as an accountability mechanism. The 2030 agenda, including health and well-being, needs to be integrated into national development and national health strategies and plans. A broad range of partners should be engaged in the context of intersectoral and interagency action, and national targets will need to be established. Adequate data, information, and resources will be required, together with effective mechanisms for establishing appropriate accountability, reporting, follow-up, and review processes.

The SDGs reflect strong commitment to public health. Health and well-being are seen as an outcome, a determinant, and an enabler of the SDGs. It is recognized that investment in health contributes to sustainable economic growth, social development, environmental protection, and poverty and inequality reduction. Improved health will depend on successful implementation of many of the targets in all SDGs. This requires strong whole-of-government and whole-of-society action for health and well-being.

World leaders adopted 17 goals as an integrated global development agenda for 2030. The health agenda is outlined in Goal 3 "Ensure healthy lives and promote well-being for all at all ages" and mainstreamed in Goal 5 "Achieve gender equality and empower all women and girls" and in Goal 10 "Reduce inequality within and among countries."

Goal 3 includes 14 targets. Among these, the following five are most closely related to SRH:

- Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.
- Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
- Target 3.7: By 2030, ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.
- Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
- In addition, Goal 5 on gender equality and women's empowerment includes:
- Target 5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.

- Target 5.3: Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.
- Target 5.6: Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.

The lessons learned from the MDGs showed that achieving developmental goals at the national level only is not enough, and that addressing inequality should not be ignored in the post-2015 developmental agenda. Goal 10, which advocates for reducing inequality within and among countries, implies that the above-mentioned targets should be achieved for all segments of the population irrespective of age, sex, economic status, place of residence, disability, race, ethnicity, origin, or religion. "Health for all" is a principle that should always be considered a cornerstone in providing all health services, in the spirit of "No one is left behind."

Current project

Global movements since the 1994 ICPD mandate have wielded a strong influence on the field of SRH in Arab countries. Despite the variable progress made in MDG achievement, Arab countries are at a critical juncture to ensure universal access to SRH services. Indeed, less attention was given to MDG5b (universal access to SRH) compared to the efforts made with respect to MDG5a (reduce the MMR).

The United Nations Population Fund (UNFPA) works to ensure advancement of SRH worldwide. UNFPA's work with governments, other UN agencies, nongovernmental organizations (NGOs), and donors has led to comprehensive efforts to ensure universal access to SRH care. In this project, the MENA Health Policy Forum (HPF), under an implementation agreement with the UNFPA Arab States Regional Office (ASRO), seeks to address SRH in Arab States as a developmental priority in the post-2015 period. In its capacity as a regional think tank with policy and research expertise, the MENA HPF commissioned a study to assess health system readiness to achieve SRH-related SDGs in four Arab countries: Egypt, Jordan, Morocco, and Saudi Arabia.

This report presents the results of that study. The assessment identifies gaps in health services, workforce, and information. The results are expected to help countries adapt successfully to the new integrated vision for SRH as adopted in the SDGs. Although the four selected countries are all in the Arab States region, they provide a rich diversity in terms of population size, level of human development, and economic situation. They are also in different stages of demographic and epidemiological transition. Furthermore, they face different challenges in their journey to achieve the SDGs by 2030.

Such diversity makes the results of the report relevant to a wider range of countries than just those studied. The results might be applicable to countries with similar health ecosystems and/or with similar political, developmental, and health challenges. In addition, the methodology developed in this report can be applied to other countries with minor modifications.

An efficient health system is essential for the support of SRH/UHC. This assessment focuses on the accessibility and coverage of integrated SRH services and the needed health workforce as part of improved coverage of SRH service delivery. Understanding the current state

of the aforementioned themes is necessary to allow countries to identify specific challenges, gaps, and bottlenecks that need to be addressed and then monitored to be further strengthened. Specifically, the study designs a standardized methodology for data collection, assessment, and analysis that is then applied in the four study countries. The methodology includes (see section 2 for details):

- Assessing data availability and collecting data
- Creating a framework for assessment
- Identifying gaps and bottlenecks
- Suggesting measures for improvement, by country and collectively, and
- Compiling and assessing current and expected future changes in health care supply and demand, by country and collectively.

Regional consultants developed a standardized assessment tool based on a literature review and previous experience in the region. Experts in the studied countries drafted their national reports on the basis of literature reviews, desk reviews, and interviews with key informants and stakeholders (sections 3–6 summarize the findings).

This regional report compiles data from the four national reports. It presents a gap analysis (section 7), summarizes country-specific challenges (section 8), discusses limitations to the study (section 9), and ends with a list of recommendations (section 10).

2. Methodology

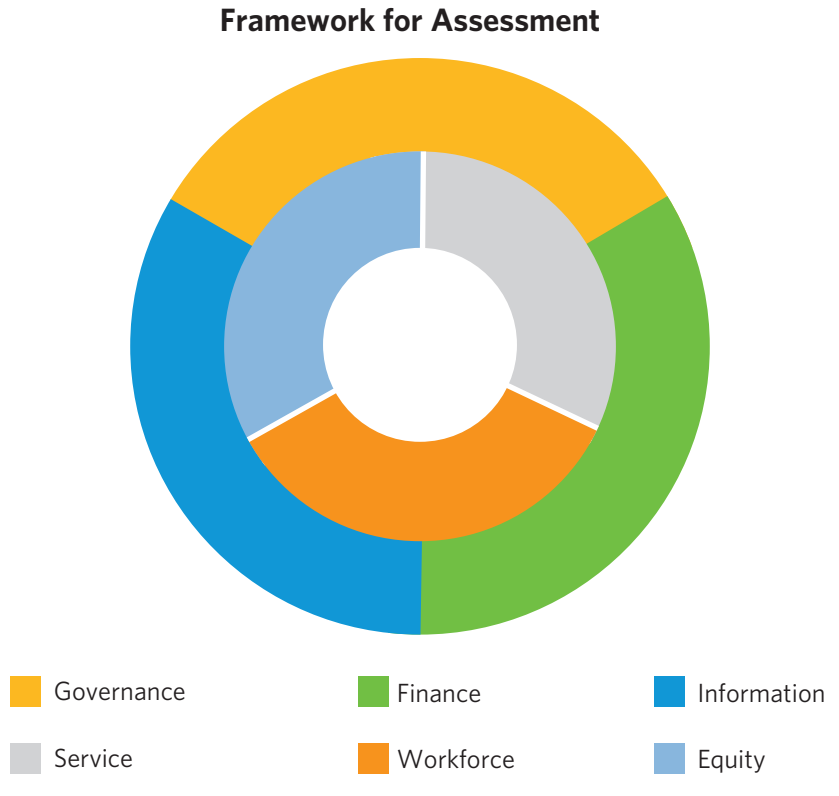
To assess health system readiness for achieving SRH-related SDGs in the four countries, a team of national experts in each country was assigned to conduct the assessment. To standardize the process and allow for cross-country comparison, a regional consultant developed a tool for data collection and discussed the tool with the national teams. The tool benefitted from international and local resources, such as *The State of the World Midwifery Report* (SoWMy) *2014* (UNFPA 2015) and the *service availability and readiness assessment (SARA) methodology* (WHO 2015) to guide the drafting of the national reports. The regional consultant also provided a guidance document to the national consultants in two expert meetings: a workshop held in Amman, Jordan (August 18–19, 2016) at which all principal investigators participated in finalizing the tool; and a second workshop held in Cairo, Egypt (December 29, 2016) to discuss preliminary results.

Targets and indicators related to the SDGs were reviewed. Indicators reflecting SRH were identified and integrated within the tool. Finally, a set of population projections for 2030 was developed to guide policy makers in assessing readiness to achieve SRH-related SDGs within the context of population dynamics expected to take place in the coming years.

Data collection tools

Figure 1 presents the conceptual framework that guided development of the assessment's data collection tools.

Figure 1: Framework to assess health system readiness for achieving SRH-related SDGs by 2030



A set of six instruments was designed to assess different aspects related to health system readiness for provision of SRH services in any given country (see Appendix A):

- Instrument A – Country profile: Main socioeconomic indicators, including health indicators, health policies, major sources of health and population data, and baseline assessment of targets.
- Instrument B – Health services:1 Detailed description and analysis of accessibility and coverage of health system, minimum benefits package, infrastructure and planning models, and norms for coverage.
- Instrument C – Health workforce: Detailed description and analysis of availability of workforce, roles and responsibilities, education, and capacity building.
- Instrument D – Relative challenges facing achievement of SRH-related SDGs by 2030: Teams' overall subjective assessment based on ranking targets according to the relative challenges they pose to the country.
- Instrument E – Health equity: Current situation of health equity in the country and challenges facing the country to achieve "Health for all" and "No one left behind." Levels of aggregation suggested for each indicator include but are not limited to gender, age, wealth/income, place of residence, and disability. The source of inequality can be country-specific and can be modified to consider any marginalized segment of the population, such as by race, ethnicity, origin, or religion.
- Instrument F – Information gap analysis: Assessment of information on health and development in the country, and challenges facing the country to report on SDGs.

Indicators

To conduct specific assessments, the instruments were focused on the SRH targets formulated in the set of indicators suggested in the post-2015 development agenda. This limited the assessment to the indicators that measure targets 3.1, 3.2, 3.3, 3.7, 3.8, and 5.3 (Table 1).

Table 1: Targets and Indicators for SRH-related SDGs

Target	Indicator	Tier[2]
Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.	3.1.1: Maternal mortality ratio	II
	3.1.2: Proportion of births attended by skilled health personnel	I
Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.	3.2.1: Under-five mortality rate	I
	3.2.2: Neonatal mortality rate	I

1 Instruments B and C are based on the questionnaire of *The State of World Midwifery Report 2014* (UNFPA 2015).

2 Definition as of April 20, 2017: Tier 1: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 percent of countries and of the population in every region where the indicator is relevant. Tier 2: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries. Tier 3: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested. Source: https://unstats.un.org/sdgs/files/Tier%20Classification%20of%20SDG%20Indicators_2020%April%20 2017_web.pdf

Target	Indicator	Tier[1]
Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.[3]	3.3.1: Number of new HIV infections per 1,000 uninfected	II
	3.3.4: Hepatitis B incidence per 100,000	II
Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.	3.7.1: Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	I
	3.7.2: Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	II
Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.	3.8.1: Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access, among the general and the most disadvantaged population)	III
	3.8.2: Number covered by health insurance or a public health system per 1,000	II
5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	II
	5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence	II
Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.	5.3.1: Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18	II
	5.3.2: Proportion of girls and women aged 15–49 years who have undergone female genital mutilation/cutting	II
5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	II
	5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education	III

Appendix B provides a full definition of each indicator.

3 Country-specific.

Population projections by country and the expected impact on SRH

The 2015 revision of the World Population Prospects issued by the United Nations Population Division, Department of Economic and Social Affairs provides sets of population projections for all countries of the world. The projections are calculated according to several scenarios reflecting different levels of future fertility (Table 2).

The medium fertility variant is considered the most likely scenario for population between 2015 and 2030 and is used in the current study. However, the high variant scenario cannot be totally excluded, especially in Egypt where the current level of the total fertility rate (TFR) (3.5 children per woman) is closer to that of the high variant scenario. According to the medium scenario, the TFR will decrease in the four countries, but only Morocco is expected to reach replacement level by 2030. The accuracy of the projections depends on whether the fertility, mortality, and migration assumptions are met during the period of projections. Projections should be robust if only minor deviations from the assumptions take place and should be revised if major deviations occur during the period of projection. New future censuses should be compared with projected results and modified accordingly. For example, the results of Jordan's 2016 census on migration provides a solid basis for more accurate projections. Similarly, Egypt's 2017 census will help in assessing whether its population will follow the high or medium fertility scenario.

Table 2: Total fertility rates used to project population under low, medium, and high fertility variants by country, 2015–2030

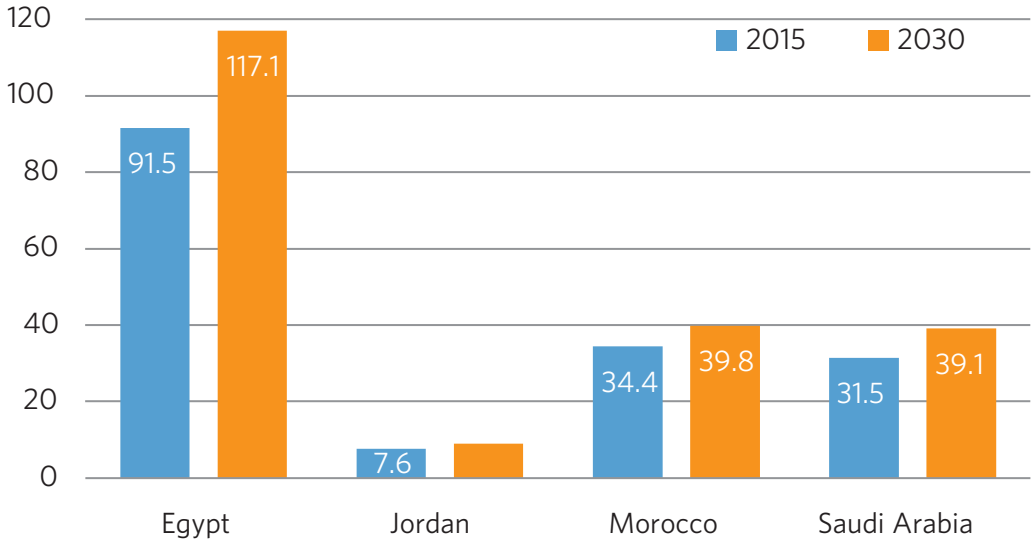
	Variant	2015–2020	2020–2025	2025–2030
Egypt	Low	2.91	2.58	2.32
	Med	3.16	2.98	2.82
	High	3.41	3.38	3.32
Jordan	Low	2.95	2.54	2.24
	Med	3.20	2.94	2.74
	High	3.41	3.38	3.32
Morocco	Low	2.13	1.84	1.63
	Med	2.38	2.24	2.13
	High	2.63	2.64	2.63
KSA	Low	2.34	1.99	1.73
	Med	2.59	2.39	2.23
	High	2.84	2.79	2.73

Population projections based on the medium variant show that the total population will increase from 2015 to 2030 by 28 percent in Egypt, 20 percent in Jordan, 16 percent in Morocco, and 24 percent in Saudi Arabia (Table 3). The average annual population growth rate is 1.7 percent, 1.2 percent, 1.0 percent, and 1.5 percent in the four countries, respectively.

Table 3: Population projections by country, 2015 to 2030, medium fertility variant

	Egypt	Jordan	Morocco	KSA
(Total Population (000s				
2015	91,508	7,595	34,378	31,540
2020	100,518	8,167	36,444	34,366
2025	108,939	8,547	38,255	36,847
2030	117,102	9,109	39,787	39,132
increase 2015–2030 %	28	20	16	24
(%) Average annual growth rate	1.66	1.22	0.98	1.45

Figure 2: Projected total population (millions) by country, 2015 and 2030



Number of pregnancies is an important predictor of needs for SRH services and the associated workforce. The number of births can be a proxy for the number of pregnancies. Table 4 summarizes the projected number of births in the five-year intervals 2015–2020, 2020–2025, and 2025–2030 for the four countries under different fertility scenarios. As illustrated in Figure 3, Figure 4, Figure 5, and Figure 6, the difference between the low and high scenarios widens over time in Egypt, Jordan, Morocco, and Saudi Arabia, respectively. The fact that the level of certainty decreases with time necessitates periodic revisions of the projections based on recent fertility trends.

Figure 8 allows for a cross-country comparison of the gap between different fertility variants. In both Egypt and Jordan, the high variant scenario results in 8 percent more births than the medium variant scenario in the period 2015–2020. The gap reaches 11 percent in Morocco and 10 percent

in Saudi Arabia. In the longer term, the gap widens to reach 18 percent in Egypt and Jordan, 23 percent in Morocco, and 22 percent in Saudi Arabia in the period 2025–2030, indicating that the results are sensitive to fertility levels.

Table 4: Projected number of births (000s) under different fertility scenarios by country

Fertility scenario	Years	Egypt	Jordan	Morocco	Saudi Arabia
Low variant	2020–2015	11,109	905	3,028	2,760
	2025–2020	10,090	810	2,618	2,470
	2030–2025	9,598	745	2,300	2,266
Medium variant	2020–2015	12,063	982	3,383	3,054
	2025–2020	11,657	937	3,186	2,966
	2030–2025	11,666	911	3,005	2,920
High variant	2020–2015	13,017	1,059	3,739	3,349
	2025–2020	13,224	1,065	3,755	3,462
	2030–2025	13,734	1,078	3,709	3,574

Figure 3: Projected number of births (millions) in Egypt under low, medium, and high variant scenarios, 2015–2030

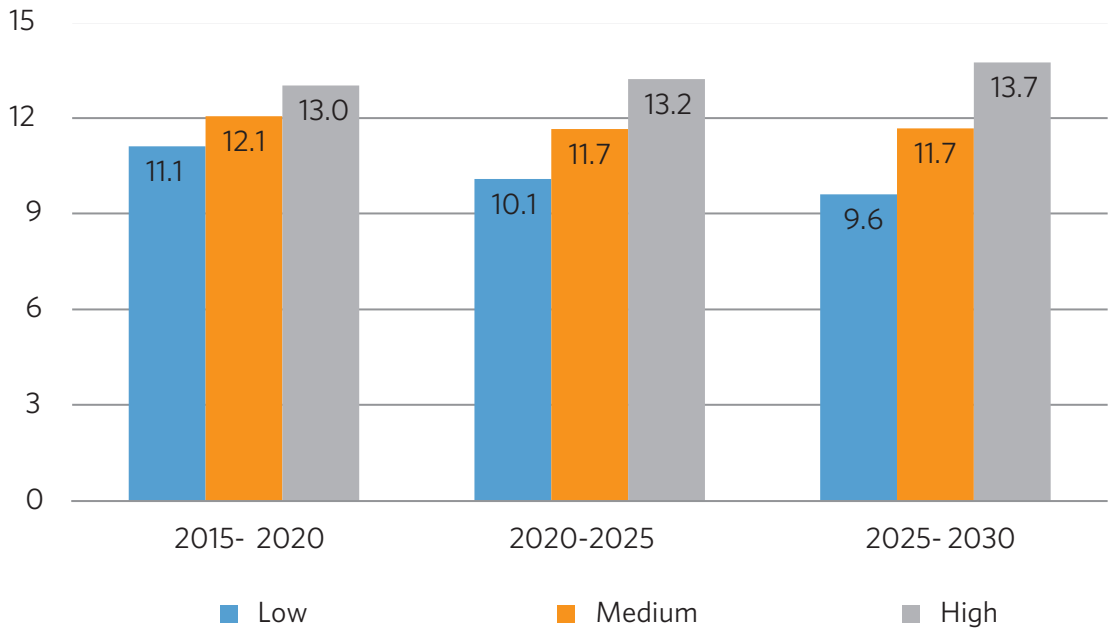


Figure 4: Projected number of births (millions) in Jordan under low, medium, and high variant scenarios, 2015-2030

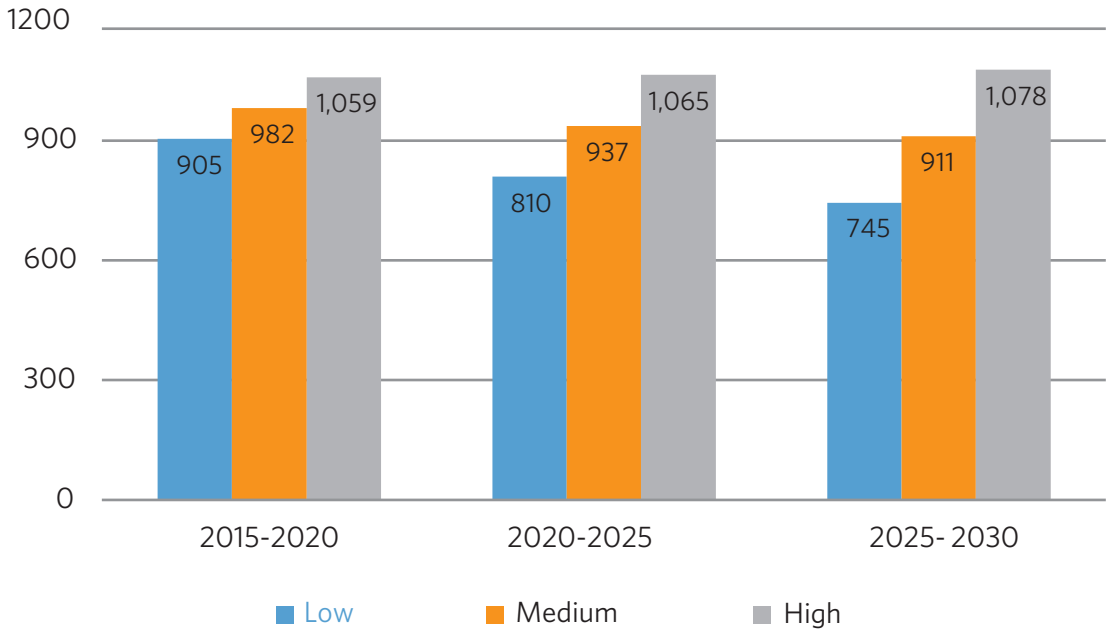


Figure 5: Projected number of births (millions) in Morocco under low, medium, and high variant scenarios, 2015-2030

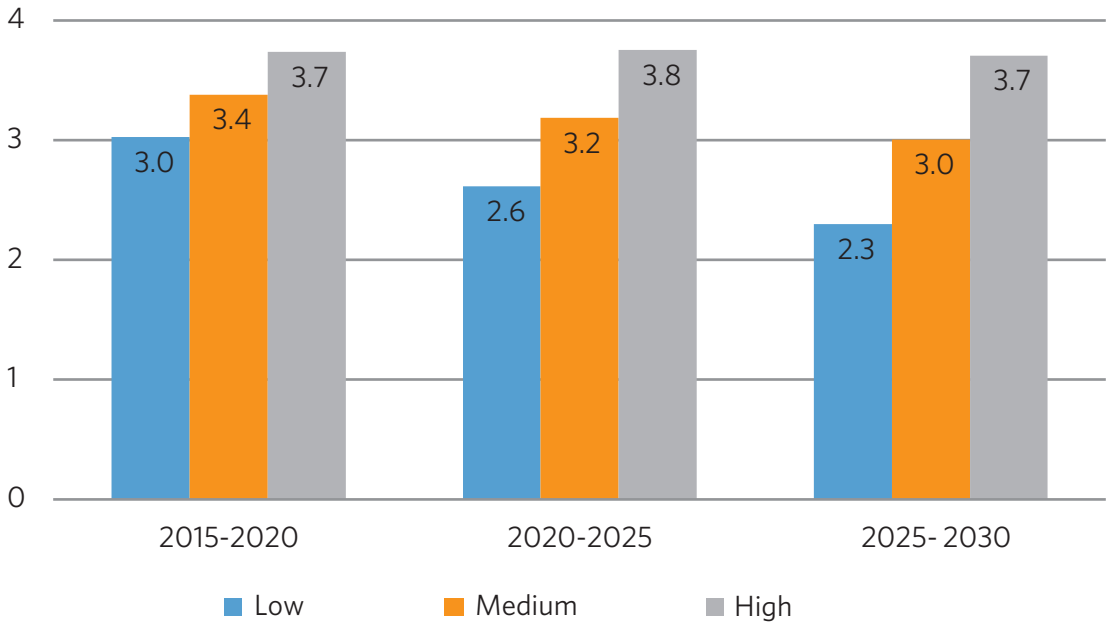
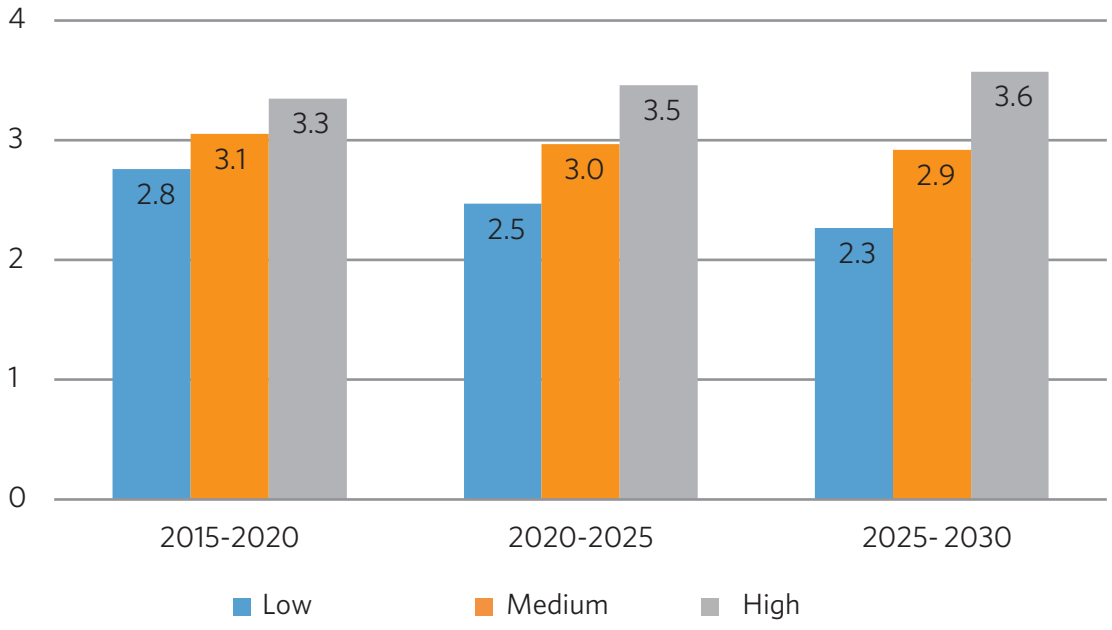


Figure 6: Projected number of births (millions) in Saudi Arabia under low, medium, and high variant scenarios, 2015–2030



Planning for the health services and workforce needed to achieve the SRH-related SDG targets requires understanding of the detailed age structure that corresponds to targeted subpopulations. Table 5 summarizes by country for 2020, 2025, and 2030 the projected subpopulations of: (1) women of reproductive age (15–49); (2) children under 5; (3) youth (age 15–24); and (4) adolescents (age 15–19).

Between 2015 and 2030, the number of all women of reproductive age[4] is expected to increase by 28 percent in Egypt, 20 percent in Jordan, 8 percent in Morocco, and 23 percent in Saudi Arabia. Thus, extra resources will be needed to address the health coverage of SRH. On the other hand, the number of children below five will decrease in the four countries by 2030, releasing the pressure on child care; the decrease ranges from 5 percent in Egypt to 14 percent in Morocco.

Due to population dynamics, the youth bulge will continue to increase in Egypt, Jordan, and Saudi Arabia. Their projected number of youth aged 15–24 will increase by 35 percent, 17 percent, and 28 percent, respectively, creating a challenging situation not only for health service delivery but also for the economy at large, especially in terms of job creation. Due to population momentum, the growing number of adolescents will also require extra resources to address adolescents' problems in the four countries: the number of adolescents is estimated to increase by 53 percent in Egypt, 18 percent in Jordan, 12 percent in Morocco, and 25 percent in Saudi Arabia. The total number of adolescents in the four countries combined will reach more than 19 million, an increase of more than 5 million adolescents between 2015 and 2030.

4 Population projections provide figures for all women, not only for currently married women of reproductive age. An estimate of the latter, which is used in several fertility indicators, needs more assumptions about the future nuptiality trend in each country.

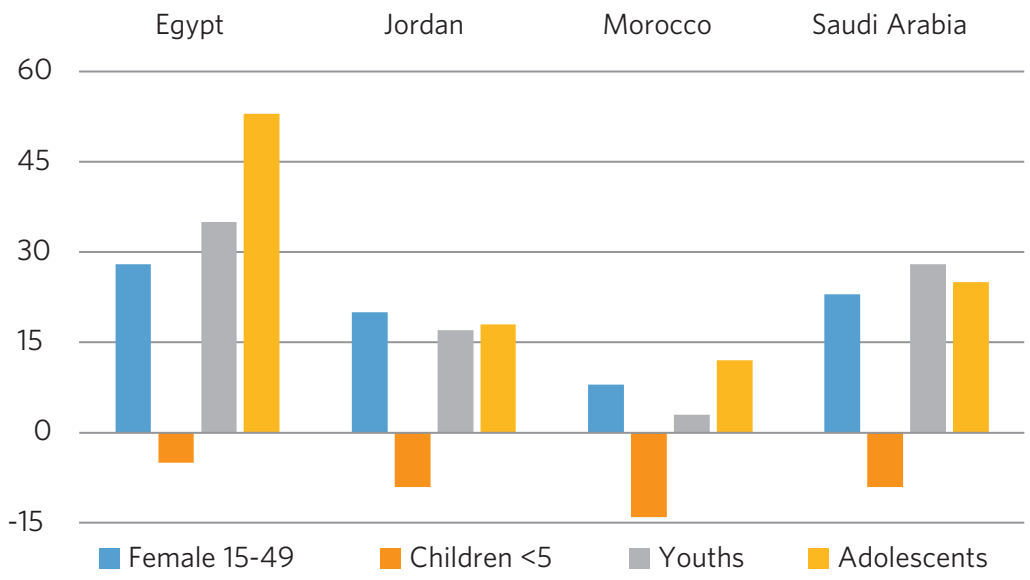
With different expected burdens on health services across countries due to demographic changes, it might be interesting to examine the relative burden resulting from different subpopulations within each country. In Egypt and Morocco, the adolescent population has the highest expected increase among the four selected subpopulations. In Jordan, the highest relative increase is expected to occur among women of reproductive age, while in Saudi Arabia, the highest relative increase is expected to occur among youth.

Table 5: Population projections (000s) for selected subpopulations by country, 2015–2030

Saudi Arabia	Morocco	Jordan	Egypt	
Women of reproductive age (15–49)				
7,658	9,364	1,949	23,090	2015
8,441	9,557	2,097	24,941	2020
9,021	9,809	2,184	26,965	2025
9,427	10,083	2,338	29,618	2030
23	8	20	28	% Increase 2015–2030
1.4	0.5	1.2	1.7	Average annual growth rate (%)
Children under 5				
3,161	3,421	980	12,116	2015
3,020	3,293	951	11,845	2020
2,934	3,119	905	11,477	2025
2,891	2,950	893	11,506	2030
-9	-14	-9	-5	% Increase 2015–2030
-0.6	-1.0	-0.6	-0.3	Average annual growth rate (%)
Youth (15–24)				
4,930	6,081	1,442	15,844	2015
5,361	5,678	1,517	16,367	2020
5,946	5,723	1,569	18,026	2025
6,292	6,252	1,690	21,408	2030
28	3	17	35	% Increase 2015–2030
1.6	0.2	1.1	2.0	Average annual growth rate (%)
Adolescents (15–19)				
2,531	2,975	756	7,862	2015
2,757	2,799	791	8,618	2020
3,099	3,017	821	9,523	2025
3,155	3,327	888	12,000	2030
25	12	18	53	% increase 2015–2030
1.5	0.7	1.1	2.9	Average annual growth rate (%)

Note: Calculations are based on medium variant scenario.

Figure 7: Percent change in the size of selected subpopulations by country between 2015 and 2030



These projections clearly demonstrate that the country assessments should be tailored to reveal the existing gaps in matters related to SRH-related SDGs. They also alert national teams to examine whether the countries under review have taken proactive steps to account for the expected growth in selected subpopulations, such as women of reproductive age and adolescents, and the associated implications and related resources that will be needed to cope with the increasing SRH-related demands.

County reports

A team of experts was selected to prepare each country report. Each team was responsible for collecting data in a participatory way and for writing a country report that provided substantive insights and narratives to the collected data. To standardize the procedure, an outline for the country report and guidelines were developed and discussed with all country teams (see Appendix C). The next four sections present a summary of these national reports.

3. Country-Level Health and Development Profiles

Overview of indicators

Table 6 presents an overview of the findings of the indicators of development and health outcomes in the four study countries.

Table 6: Indicators on development and health by country

Indicator	Year	Egypt	Jordan	Morocco	Saudi Arabia
Total population (millions)	2016	93.4	7.7	34.8	32.2
Average annual rate of population change (%)	2010–06	2.2	2.9	1.4	2.3
Total population aged 10, female (000)	2016	875	85	288	291
Population aged 10–24 (%)	2016	26	30	25	24
Population aged 0–14 (%)	2016	33	35	27	28
Population aged 15–64 (%)	2016	61	61	67	69
Population aged 65 and older (%)	2016	5	4	6	3
Dependency ratio	2016	63.3	64.1	50.3	45.6
Life expectancy at birth (years), 2015–20	Male	70	73	74	74
	Female	74	76	76	76
Total fertility rate, per woman	2015–20	3.2	3.2	2.4	2.6
Maternal mortality ratio (MMR)	2015	33	58	121	12
Range of MMR uncertainty (UI 80%), lower estimate	2015	26	44	93	7
Range of MMR uncertainty (UI 80%), upper estimate	2015	39	75	142	20
Births attended by skilled health personnel (%)	2006–15	92	100	74	98
Adolescent birth rate per 1,000 women aged 15–19	2006–15	56	26	32	7
Contraceptive prevalence rate, women aged 15–49, any method (%)	2016	60	62	69	38
Contraceptive prevalence rate, women aged 15–49, modern method (%)	2016	58	43	58	31
Unmet need for family planning rate, women aged 15–49 (%)	2016	12	12	10	24
Proportion of demand satisfied, women aged 15–49 (%)	2016	83	84	88	61
Proportion of demand satisfied with modern methods, women aged 15–49 (%)	2016	81	58	75	51
Adjusted primary school enrolment, net % of primary school-age children, 1999–15	Male	99	88	99	98
	Female	99	87	99	95
Gender parity index, primary education	1999–15	1.01	0.99	1	0.97
Secondary school enrolment, net % of secondary school-age children, 2000–15	Male	81	83	59	82
	Female	82	88	53	79
Gender parity index, secondary education	2000–15	1.01	1.06	0.9	0.95

Source: UNFPA (https://www.unfpa.org/world-population-dashboard).

Table 6 illustrates key background characteristics of the four study countries, particularly those related to reproductive, maternal, neonatal, and child health (RMNCH). Comparing countries illuminates their different challenges. Higher fertility rates and a younger age structure in Egypt and Jordan reflect higher dependency ratios (63 in Egypt and 64 in Jordan versus 50 in Morocco and 46 in Saudi Arabia). In addition to the challenge of higher fertility, in Egypt the adolescent birth rate (56 per 1,000 women) is significantly higher than in Jordan (26 per 1,000), Morocco (32 per 1,000), and Saudi Arabia (7 per 1,000). Morocco has a significantly higher MMR (121 per 100,000 women) than the other three countries, coupled with a lower percentage of births attended by skilled health personnel (74 percent). Compared to Egypt, Jordan, and Morocco, Saudi Arabia has a much lower contraceptive prevalence rate and a much higher unmet need for family planning services.

Health policies by country

The current section provides a description of the policy framework related to health in the four countries under review. All countries have health and SRH strategies but with variable commitments, as shown by the accompanying policies and strategies.

Egypt's health policies

In 2014 Egypt passed its new constitution, which provides a roadmap for all laws, regulations, and strategic directions developed thereafter. The constitution has several articles that are connected directly and indirectly to health. The discussion below outlines the ones related to health and health determinants.

According to Article 18, "Every citizen has the right to health and to comprehensive health care which complies with quality standards. The State shall maintain and support public health facilities that provide health services to the people, and shall enhance their efficiency and their equitable geographical distribution. The State shall allocate a percentage of government spending to health equivalent to at least 3% of Gross National Product (GNP), which shall gradually increase to comply with international standards. The State shall establish a comprehensive health insurance system covering all diseases for all Egyptians; and the Law shall regulate citizens' contribution to or exemption from its subscriptions based on their income rates. Refusing to provide any form of medical treatment to any human in emergency or life-threatening situations is a crime. The State shall improve the conditions of physicians, nursing staff, and health sector workers. All health facilities as well as health-related products, materials and means of advertisement shall be subject to State control. The State shall encourage the participation of private and non-governmental sectors in providing health care services according to the Law."

The constitution included other progressive articles related to children's rights, women's equality, women's protection, and rights of the handicapped and elderly. With such strong commitment, Egypt has the constitutional umbrella to provide "Health for all" and "Leave no one behind." A number of policies and legislations were drafted to reflect the rights-based approach articulated in the constitution, including:

- Sustainable Development Strategy–Egypt 2030, which includes a health component (National Health Strategy 2030)
- Strategy for Reduction of Early Marriage
- Strategy to Eliminate FGM

- Communicable Diseases National Strategy
- National Population and Development Strategy
- Reproductive Health National Strategy
- National Strategy for Childhood and Motherhood (draft)
- National HIV/AIDs Program

In addition, the Child Law includes a set of articles promoting children's health and well-being and prohibiting all forms of violence, including child marriage and female genital mutilation (FGM).

Jordan's health policies

The Government of Jordan is committed to making health services available and accessible to all. Health objectives, policies, plans, and financial allocations are integrated and addressed in the following national policies and plans:

- Jordan National Agenda 2007–2017: This document established the guidelines for Jordan's comprehensive development for the 10-year period from 2007 to 2017, and represented a national consensus on the aspirations and ambitions of Jordanians. Health is central in the three key areas of the Agenda's initiatives:
  - Stimulation of economic development and improvement of security and social welfare including health.
  - Basic rights and freedoms with access to health care as a basic right for all Jordanians.
  - Services, infrastructure, and economic sectors including access to adequate health care services.
- National Human Resources for Health Observatory Annual Report, 2014: Prepared by the Higher Health Council in 2013. In Jordan, about 14 stakeholders are involved in human resources for health (HRH) governance functions, including parliament, government, professional associations, academics, the international community, and customer representatives. The report outlined main HRH challenges and endorsed policy and legislative interventions that were proposed earlier by the National Agenda.
- National Reproductive Health/Family Planning Strategy, 2013–2017: In collaboration with all related stakeholders, the Higher Population Council developed this strategy with the aim of contributing to achieving the Demographic Dividend (DD) by 2030.
- The National Health Strategy 2015–2019: The most recently available health-specific policy, developed by the Higher Health Council, (1) addresses the challenges in Jordan's health sector, and (2) plans for health services to ensure equal access to and premium service for all citizens, including SRH.

Although all the above-mentioned policies and plans called for more cooperation and proposed nearly the same broad corrective actions, none specifically addressed how the country will unify and improve data generation and information systems, including data flow and ownership. Monitoring is limited to gathering information from implementing partners, without validating information or checking accountability. Even those partners working in the same area of concern have their own implementation approaches, mechanisms, time schedules, and data and report-generation methodology.

No policy document addressing child, forced, and early marriage could be obtained by the Jordan national team, but statistical data about registered cases and the rates of such cases among Jordanians, Syrian refugees, and others displaced in the community are available at the facility level. Regular sources of national data are lacking. Such data can inform policies and plans to be developed in the near future to achieve the SRH-related SDG targets.

A draft Family Protection Law is currently under discussion in the parliament. Jordan's Ministry of Planning is committed to achievement of SDGs, but this commitment is not fully translated into operational policies for related government services and legislation. Administrative legislation to integrate maternal and child health (MCH) services into general practice services as well accompanying administrative and financial legislation need to be developed and activated. Policies should be put in place to contract out service provision in areas where service is either lacking or where the appropriate gender or specialization is not available.

Government budget allocations to reproductive health services (RHS) should be specific to such services, including items defined for development and training of health workforce and services in addition to other health determinant-related institutions, such as the Ministry of Social Development and the Ministry of Education. Health human resources production should coordinate its plans to cater for the provision of PHC practitioners who can support the increased needs of SRH and ensure UHC. In coordination with the Social Security Corporation, Jordan's government is in the process of developing a policy to ensure coverage of the largest segment of the population in a national health insurance plan.

The latest version of the Civil Law indicated 18 years as the minimum age of marriage. However, several violations occur due to social circumstances. The presence of Syrian refugees has magnified the problem for economic and social considerations. The Ministry of Health (MOH) has a separate budget item for contraceptives, but no similar specific items exist for SRH workforce training, medications, technologies, or services.

Morocco's health policies

Morocco has developed some key policies to address SRH-related challenges, as follows:

- Health Sector Strategy (2012–2016): Defines the objectives, strategies, and actions with a budget for the main SRH priorities.
- Action Plan for the Reduction of Maternal and Neonatal Mortality 2012–2016: The strategy for reducing maternal and neonatal mortality is a high priority that benefited from significant political and financial support for achieving the MDGs by 2015. To accompany this strategy, a decision was taken to provide free deliveries and caesarean sections at the national level with interesting results in accessibility. The quality of care is still supported by pilot projects and experiences, and no real strategy or national plan is in place to manage quality.
- National AIDS Plan 2012–2016: A strategic priority with an action plan and significant support from the Global Fund.
- Legislating age of marriage: Family code (2004, articles 19, 20, 21 and 22): Despite the existence of a law on a minimum age of marriage of 18, the rate of early marriage is still high (18.7 percent), as is the adolescent fertility rate (32 per 1,000 women) and no real policy or national plan is in place to reduce this phenomenon.

- A new strategy for detection and management of cervical cancer and breast cancer was developed and supported at national level in recent years.
- Violence Against Women Strategy: Part of a multisectoral strategy with input from several departments (Health, Social Affairs, Justice, police, and NGOs).

Health coverage and reducing barriers to financial access are the subject of high-level political debate and important political decisions to cover the poor. A social security scheme was adopted and implemented in two ways: (1) medical coverage for public and private employees, funded by contributions from the employee and employer; and (2) medical coverage for the poor, funded by the state and local authorities. This scheme currently covers over 60 percent of the population, but coverage of the poor still faces many difficulties, especially in funding.

Monitoring and evaluation (M&E) of all of these policies is mainly based on the indicators provided by the census, the Pan Arab Family Health Survey (PAPFAM) survey (conducted every five years), information systems, and specific and thematic studies and surveys.

Saudi Arabia's health policies

The vision of Saudi Arabia's Ministry of Health (MOH) is to improve the equitability, standards, availability, and quality of health care, according to its business strategy and five-year operational plan. The MOH is in the process of introducing e-Health to address the vision. Current policies, national plans, and legislation in place for organizing, delivering, and monitoring SRH services in Saudi Arabia include:

- The Ministry of Health Strategic Plan (2010–2020), including a National Human Resources for Health (HRH) Plan.
- Guidelines for Obstetrics and Gynecology Practice in Saudi Arabia (2010–2019). No written strategy is in place for FGM as it is thought that the practice no longer exists.
- The National Youth Strategy (NYS), a shared project between the Ministry of Economy and Planning and the United Nations Development Programme office in Saudi Arabia. In January 2013, the *Shura* Council endorsed the NYS, opening the door for actual implementation.
- A National Population Strategy (Demographic Policy Bill) was presented to parliament (*Shura* Council) in December 2014 and is still under processing. The Strategy has a component of reproductive health and family planning.
- Other relevant policies, strategies, or roadmap documents relate to noncommunicable diseases and HIV, among others.

4. Assessment of Health Services Readiness

Minimum benefits package

All countries under study cover SRH services in one way or another. A comprehensive minimum benefit package for RMNCH services was reported in all four countries. Countries have adopted and scaled up a package of services for implementation and achievement of UHC, targeting the main causes of child and maternal deaths. The package is based on global cost-effective and evidence-based interventions and is delivered in an integrated way. The RMNCH package includes: improving family planning services to address unmet needs and minimize the discontinuation rate; antenatal care services; prevention of mother-to-child transmission of HIV; skilled attendance at birth; improvement in care and quality of free-of-charge services for obstetric and neonatal emergency; and perinatal care services to reduce perinatal and neonatal mortality.

In addition to the above, **Egypt's** package includes maternal and neonatal death audit and verbal autopsy, postnatal care services, premarital counseling, and combat of FGM. Provision of breast self-examination education and early detection of breast cancer services were recently integrated and provided to all women attending family planning clinics at the Ministry of Health and Population (MOHP). Egypt's child health care package targets the main causes of under-5 mortality using a set of interventions implemented under the umbrella of the Integrated Management of Childhood Illness Strategy (IMCI). All Egyptian children under five and women are provided with free MCH services at PHC facilities and in all public hospitals.

Jordan's package similarly has a set of evidence-based interventions and extends to cover children under the age of six, in addition to breastfeeding promotion and premarital screening. Caesarean section for maternal/fetal indication is included in the package. Comprehensiveness and quality of newborn health care services have received significant attention and support from the Ministry of Health's (MOH) highest level and the benefit package was widened to include more comprehensive health care services. According to the civil insurance law, all Jordanians holding a national identity number, regardless of their insurance status, qualify for free-of-charge health services for mothers and children under the age of six at all MOH facilities. In addition, MOH provides free PHC services for Syrian refugees, including RMNCH services. The cost of breast cancer screening and early detection is covered by public insurance for public beneficiaries.

Morocco's current minimum package for RMNCH is well-defined and encompasses most basic services. Mothers and children under five are provided MCH services free of charge, and vaginal deliveries and caesarean sections are also free, which enhances accessibility to health care services. In recent years, a large-scale effort was conducted to screen and manage cervical and breast cancer.

In **Kingdom of Saudi Arabia**, a basic package of RMNCH services is integrated and delivered in a wide network of PHC centers. All publicly funded health facilities provide free RMNCH care for Saudis. However, expatriates constitute a sizeable proportion of the population (about 20 percent). Some expatriates have no or limited eligibility and access to free medical services including SRH services. Illegal aliens,

especially in the western region and southern part of the country, present an additional challenge.

Lacking or poorly implemented in all four countries are some essential services, such as surgical methods for family planning, safe abortion, interventions for smoking cessation, screening and managing HIV, and initiating prophylactic antiretroviral therapy for babies exposed to HIV, as well as the use of surfactant to prevent respiratory distress syndrome in preterm babies.

HIV/AIDS

All four countries have National Strategic Plans on HIV/AIDS, but these services are still not properly integrated in the SRH package. The specific needs of women and children require enhanced attention, particularly in the areas of medical treatment, psycho-social support, and prevention of mother-to-child transmission. Provider-initiated counseling and testing services are crucial to educate mothers about risk behaviors and to offer confidential testing for HIV.

This service has been introduced in selected antenatal care clinics in **Egypt** and needs to be scaled up to ensure detection of HIV-positive cases and prevent transmission to newborns. To achieve that, health care workers need to be trained on provider-initiated counseling and testing, on means of support to women identified as HIV-positive, and on how to refer them to appropriate HIV services. Currently, 12 Voluntary Counseling and Testing (VCT) Clinics are present in Egypt and provide testing, counseling, and antiretroviral therapy.

Jordan's HIV/AIDS program is among the responsibilities of the Communicable Disease Directorate/National AIDS Program (NAP), which includes an active case reporting mechanism for all health care providers in the Kingdom. Moreover, regular reporting is requested from HIV focal points in the 12 health directorates and from VCT centers distributed all over the Kingdom. Positive cases are reported confidentially and referred to the central communicable diseases department and the NAP at MOH.

Morocco's National Strategic Plan for HIV/AIDS is in place and HIV screening is currently implemented in 764 MOH facilities, including PHC facilities, 52 tuberculosis and respiratory diseases diagnosis centers (CDTMR), 34 birthing centers, and 10 maternity hospitals.

Kingdom of Saudi Arabia's health authority includes mandatory testing for HIV, Hepatitis B, and, Hepatitis C viruses in its premarital screening program. Epidemiologically, their inclusion was justified, as their prevalence and distribution are poorly understood in the population. Some Saudi citizens are covered by the National Health Insurance Plan.

Infrastructure and planning models

In all four study countries, Ministries of Health are the main providers of RMNCH services. This is accomplished through a wide network of PHC facilities and different types of hospitals providing natal and postnatal care services.

Health services in **Egypt** are provided by three major sectors: government, semi-governmental, and private. The government sector (MOHP) manages PHC centers and units, general hospitals, district hospitals, and integrated hospitals. The semi-governmental sector is composed of organizations partially controlled by MOHP; it includes the Health Insurance Organization (HIO), the Curative Care Organization (CCO), and the Teaching Hospitals and Institutes Organization (THO).

MOHP provides 30–35 percent of services, the Ministry of Higher Education 30 percent, and the private sector 30 percent, while other ministries and the HIO provide approximately 10 percent. A network of 5,314 PHC facilities (61 percent of which implement a family health model) provide MCH services. Family planning services are provided through 5,217 fixed clinics and 599 mobile clinics, while youth-friendly services are provided through 12 clinics all over Egypt. This PHC network allows for more than 95 percent geographical coverage of the population. In addition, secondary and tertiary levels of care are provided through a network of 659 public health facilities, of which 521 are affiliated with MOHP. Natal and postnatal care are provided in nearly 90 percent of these hospitals.

The private sector includes for-profit and nonprofit organizations and covers private pharmacies, private doctors, and private clinics and hospitals of all sizes. The number of beds in the public sector represented nearly three-quarters of the total number of beds in 2014 and there are 15 beds for every 10,000 Egyptians (CAPMAS 2016).

Jordan's public health services are provided through a broad network of public hospitals and health centers across the country. This includes the MOH, Royal Medical Services (RMS), and Jordan and King Abdullah University Hospitals. PHC services are primarily provided by MOH's 675 centers distributed throughout the country. Centers are classified into three levels according to the service package provided: comprehensive, primary, and peripheral. Primary-level reproductive/family planning and child health care services are provided by 460 centers. RMS has 11 primary health care centers (8 comprehensive and 3 primary) that provide limited reproductive and PHC services. Reproductive morbidities including reproductive tract infections/ sexually transmitted infections (STIs) are managed at PHC clinics, especially at the 99 comprehensive centers. Health providers at PHC centers are authorized to refer patients for surgical methods (tubal ligation), which are carried out only at hospitals. RH services are also provided through Jordan Family Planning Association (an NGO) clinics (widely spread all over the country), Nour Al Hussain Foundation clinics, United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) health centers, and Jordan Health Aid Society clinics.

Jordan has 104 public hospitals, of which 31 are affiliated with MOH. A limited number of public specialized/referral hospitals (3 MOH, 2 RMS, and the University Hospitals) provide routine and advanced RMNCH care services. The remaining are provincial; the majority provide general secondary health care services, including RMNCH, and refer complicated cases to the specialized hospitals. Hospital utilization in 2015 was 14 hospital beds/10,000 population compared to 18 in 2011 (MOH 2015). No specific data exist to describe the percentage of RHS conditions among these hospital beds.

Youth services are not provided through specially designed clinics. Projections for the needed health facilities based on the projected population growth were conducted a few years ago and the MOH's Planning Directorate was trained on how to use the projection model as a planning tool. Despite acknowledging the relevance of this planning tool, high turnover of Ministers of Health and top-level positions precluded its sustained use.

Morocco's public sector is the major provider (70 percent) of RMNCH care services. Services are delivered through a network of 2,800 health centers. Around 550 health centers in urban areas and 420 health centers in rural areas have delivery units. Only 30 percent of the delivery units offer the whole

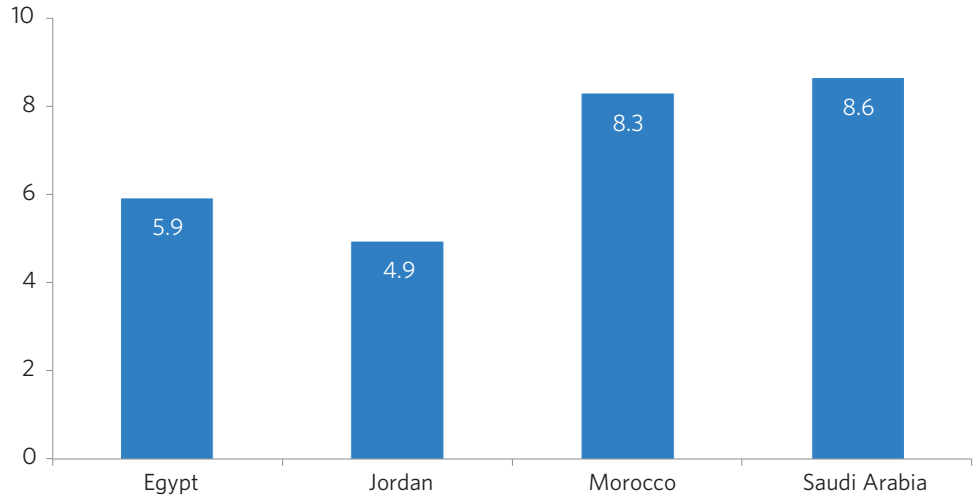
set of basic emergency obstetric and neonatal care. The first referral level of care consists of 150 hospitals located in 75 provinces. Each hospital has a maternity section that offers obstetric and neonatal care and emergency obstetric care, mainly transfusions and caesarean sections. Approximately 100 hospitals are referral maternity hospitals. The majority of maternity hospitals offer obstetric care functions, including emergency blood transfusion and caesarean sections. Each of the country's 12 regions have general or specialized regional hospitals. Some regions have a university hospital, which represents the third referral level. MCH services are available in these hospitals, but not on a large scale.

Youth services are limited. Only 30 centers provide consultations specific for youth; greater availability of services in health centers throughout the country is needed.

Disparities in access to health care provision are evident between the provinces and communities, as 25 percent of the population lives beyond 10 km of a health facility. As a result, a "Health Map Act" was enacted in 2014 with a regional plan for the provision of care. The "Health Map" is part of a regional scheme for providing care that defines infrastructure standards; it is managed by national and regional commissions. The infrastructure is based on well-defined geographical areas with urban health centers that cover between 25,000–50,000 inhabitants and rural health centers that cover between 7,000–25,000 inhabitants.

In **Kingdom of Saudi Arabia**, the MOH is the main provider of health services (60 percent); 20 percent of services are provided by military facilities; and 20 percent are provided by the private sector. Despite the relatively high expenditure on health care in Saudi Arabia, its health system remains highly centralized in the main cities, with its primary focus on secondary and tertiary care rather than primary care. In addition, this pluralistic system of health care is poorly regulated by the MOH. This is aggravated by the country's movement toward privatization of health services. Different RHS care services are provided by different types of public health facilities. From the highest level of care to the lowest, these include: referral hospitals, specialist hospitals, provincial hospitals, district hospitals, PHCs, health posts, and outreach posts. PHC centers are fairly accessible – more than 2,736 PHC centers are distributed throughout the country, providing most of the recommended basic RHS care services, with 98 percent coverage of mothers and children. Maternity care is provided in nearly all public hospitals (291/305).

Figure 8: Number of PHC facilities per 10,000 population by country



Norms for coverage

Analysis of coverage of key services revealed high coverage in the countries under study. For example, in Egypt, antenatal care coverage of at least one visit was reported to be available in 90.3 percent of cases and the percent of pregnant women making at least four follow-up visits was 83 percent. In Jordan, 99.6 percent of births are attended by skilled health personnel. Even within Syrian refugee camps, during 2014/2015, more than 5,000 births were delivered under the direct supervision and attendance of skilled health personnel, with zero mortality reported.[5] In Morocco, the proportion of births attended by skilled health personnel is reported to be 73.6 percent. Nearly all births in Saudi Arabia are attended by skilled health personnel (99 percent).

The study reveals that inequities in health service provision and in health outcomes are one of the major challenges facing all four countries. In Egypt, many of the country's health system-related indicators show wide disparity when examined at the governorates level, such as the under-5 mortality rate. For example, the under-5 mortality rate significantly reduced to 27/1,000 live births at the national level, but the governorate-level rates are widely variable, with many governorates reaching up to 50 deaths/1,000 live births (EDHS 2014). Similarly, a review of Morocco's national information system showed wide disparities in health outcomes, as demonstrated in the gaps in infant mortality and neonatal mortality rates in the richest 40 percent population and the poorest 40 percent population, as well as between urban and rural areas (MOH 2011). The 2012 Jordanian Population and Family Health Survey (JPFHS) data provide another example of inequity in health service coverage: nationwide, 12 percent of married women of reproductive age have an unmet need for family planning; the rate for similar women living in the South Ma'an Governorate is 14 percent, while 17 percent of women in the lowest wealth quintile have an unmet need for family planning (JPFHS 2012). Similarly, inequity is evident among the uneducated – the unmet need for family planning is higher among women with no education (17 percent) than for women with higher education (10 percent).

Assessment of health care delivery revealed the increasing predominance of the private sector in the provision of key RMNCH services. This is an alarming finding that should be carefully analyzed. Deteriorating quality of care and absence of effective governance systems, particularly at the level of PHC centers, are major underlying factors that should be promptly addressed. Private sector providers are the principal source of antenatal care in Egypt. Eight in ten women receive antenatal care from a private provider. Slightly more than 60 percent of babies are delivered in a private facility and nearly two-thirds of cesarean sections are conducted in the private sector (65 percent). In Jordan about half of deliveries take place in private hospitals. In addition, according to the results of the 2012 JPFHS in Jordan, the overall contraceptive prevalence rate is 61 percent and the private sector is the source of 56 percent of modern family planning methods utilized. In Morocco, 77 percent of women have at least one antenatal care visit; 33 percent of these visits are in private facilities. Moving RHS toward the private sector might increase out-of-pocket spending on health and implies the need to improve the public sector's governance function (and to finance this function), which will in turn require more resources. At the same time, this calls strongly for improved quality of RHS care at public and NGO facilities.

5 The expected number of maternal mortality deaths is expected to be 3 cases if the MMR within Syrian refugee camps is equivalent to the national ratio in Jordan, which is 58 per 100,000.

Health insurance coverage and schemes share many similarities and challenges across the four countries. **Egypt** has had a system of health insurance since the 1960s; it covers specific sectors of the population such as employees, female-headed households, children under five, and school children. In 2013, Prim-ministerial decree (N 470) was issued to start implementation of the "Covering the Poor Program" in four governorates in Upper Egypt. This project was conducted as an initial step toward implementation of a National Social Health Insurance. The program provides a package of preventive, primary, and secondary as well as emergency and ambulance services. This program is consistent in principle with the Program for Treatment on the State Expense (PTES), which also targets the poor and disadvantaged population. However, the package provided in the PTES is primarily for curative services and for diseases with catastrophic expenses. The existing health insurance covers nearly 56 percent of the population. The 2014 Egypt Demographic and Health Survey (EDHS) results indicate that only 8 percent of ever-married women age 15–49 are covered by any type of health insurance. Remarkable disparities persist among the different geographical areas, with the highest coverage rate reported in Urban and Frontier Governorates (78 percent and 72 percent, respectively) and the lowest in Upper Egypt Governorates (55.5 percent) (Health Insurance Organization 2016).

According to Jordan's 2015 census, only 52 percent of the country's population is covered by health insurance (66.6 percent Jordanians and 25 percent non-Jordanians). Of Jordanians living in the Middle Region Governorates (including Amman, which has the biggest population, reaching 4 million people), 50.2 percent have health insurance, while the percentage is higher in all other governorates. For instance, in other Middle Region Governorates including Balqa, coverage is 76 percent, while Zarqa is 56 percent and Madaba is 79 percent; much higher rates exist for the less populated South Governorates such as Karak (93 percent), Tafileh (94 percent), Maan (88 percent), and Aqaba (77 percent). Only 25.3 percent of non-Jordanians are insured, with significant geographic disparity: coverage is highest in the Northern Governorates of Jarash and Mafraq (63.4 percent and 58.9 percent) and lowest in the Middle Region Governorates of Amman and Balqa (16.4 percent and 16.8 percent).

Given its limited resources and relatively high growth rate of 3.1 percent during the last few years, Jordan has not been able to achieve the goal of "Health for all." The Jordanian government will be even more challenged to maintain even the current suboptimal level of coverage given the exceptionally high growth population rate of 18 percent among non-Jordanians. The population projection of 9 million in 2030 was surpassed by around a half million people in 2015. This puts huge pressure on the existing infrastructure and might adversely affect the country's reproductive health indicators and thus timely attainment of the SDGs.

Morocco's population is covered by two major health insurance plans. The Compulsory Disease Insurance (AMO) covers all employees in the public and private sector (over 9 million) and RAMED (Sickness Insurance Scheme for Economically Deprived) covers the poorest part of the population not covered by the AMO (around 9 million). The AMO, the RAMED, and other specific plans currently cover more than 19 million people, or 57 percent of the population. The RAMED allows access only to public health facilities and does not guarantee the availability of all health services, medicines, or other health benefits.

In **Kingdom of Saudi Arabia**, due to rapid population increase, the government adopted

a health insurance policy to reduce its financial burden and improve health standards. The Council of Cooperative Health Insurance was established in August 1999 with the aim of providing health care to all non-Saudi residents in the Kingdom.

Overall assessment of health services for achieving SRH

To be able to make a statement about the overall situation of health services in the different countries and to enable comparisons, a tool was developed to help countries set priorities, identify gaps, and allocate resources (in the planning process for achieving the SRH-related SDGs). The methodology was based on the overall assessment conducted by each country team. The team was asked to rank the identified SDG targets based on the relative level of challenge the country faces to achieve those targets by 2030. The ranking exercise was repeated according to each of three dimensions: (1) health service, (2) health workforce, and (3) health equity.

To allow for comparable results across countries, the team was asked to give a score ranging from 0 to 10, where "10" reflects the highest challenge and "0" reflects the lowest challenge facing the country. It is worth noting that the country teams based their scoring on the analysis of data gathered in addition to their personal expertise in the RHS area. This exercise was applied for each of the three dimensions. To properly identify the degree of challenge, country teams were asked to minimize repetition in scores by not using the same score more than three times within each dimension.

The results of each country team's assessment are compiled in a scorecard format to illustrate a regional perspective (Table 7). All four countries are expected to achieve target 3.1 (reduce the maternal mortality ratio by two third in 2030) and target 3.2 (end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births).

On the other hand, and despite the low prevalence of the AIDS epidemic in these countries, the challenge lies in the prevention of mother-to-child transmission of HIV, HIV counseling and testing, and STI control.

With regard to ensuring universal access to SRH services, the analysis shows that providing modern family planning methods and counseling is achievable by 2030. On the other hand, adolescent health seems to represent a challenge to all countries, a situation that might be aggravated given the young population structure of the four countries. Making information on SRH available for dissemination seems to pose a challenge in Egypt but not in the other three countries.

The ability to achieve UHC (target 3.8) varies among countries. In relation to RHS services and information, the target implies financial risk protection, access to quality essential RHS health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all. Despite the lack of specific data on RHS health insurance, the existing general health insurance data can be taken as a proxy indicator of this target. The overall assessment by country teams indicates that the target may be achievable in Saudi Arabia and to a lesser extent in Jordan, but represents a challenge in Egypt and Morocco.

Goal 5 on gender equality and women empowerment includes target 5.3, "Eliminate all harmful practices, such as child, early, and forced marriage and female genital mutilation."

The analysis indicates that eliminating child, early, and forced marriage is considered highly challenging in Kingdom of Saudi Arabia, less challenging in Egypt and Morocco, and minimally challenging in Jordan. Eliminating domestic sexual violence against women is a challenge in all four countries. FGM is a challenge facing only Egypt and is not applicable to the other three countries.

Table 7: Prioritization of challenges in achieving SRH-related SDG targets by 2030 due to health services, by country

Target	Subtarget	Egypt	Jordan	Morocco	Saudi Arabia
3.1	Antenatal care	2	3	4	1
	Obstetric care	4	4	7	3
3.2	Newborn care	6	3	7	4
	Immunization	1	2	1	0
	Child preventative and curative care	3	4	2	2
3.3	Prevention of mother-to-child transmission of HIV	7	7	4	7
	HIV counselling and testing	10	8	5	8
	HIV treatment	5	4	3	5
	HIV care and support	5	6	6	9
	Sexually transmitted infections control	7	7	5	10
3.7	Providing modern family planning methods	1	2	1	1
	Family planning counselling	5	2	1	4
	Information on sexual and reproductive health available for dissemination	7	3	5	0
	Adolescent health	8	8	9	6
3.8	Achieve universal health coverage of essential services	9	6	9	2
5.2	Eliminate physical, sexual or psychological violence against girls and women	7	8	9	8
5.3	Eliminate child, early and forced marriage	6	2	10	10
	Eliminate female genital mutilation	6	NA	NA	NA
5.6	Women making own informed decisions regarding SRH	6	6	6	6
	Laws and regulations that guarantee full and equal access for all to SRH care, information and education	9	7	8	9

Note: Red refers to highly challenging, white refers to challenging to some extent, green refers to not challenging, and NA refers to not applicable. Challenges are ranked from 0 to 10: "10" reflects the highest challenge and "0" reflects the lowest challenge.

5. Assessment of Health Workforce Readiness

Availability of workforce

Egypt's workforce readiness

Egypt's health sector has rich human resources. According to the latest MOHP statistics in 2014, the public sector labor force is estimated at 72,900 physicians (8.4 doctors per 10,000 population), 29,300 pharmacists (3 pharmacists per 10,000 population), 14,600 dentists (1.7 dentists per 10,000 population), and 126,200 nurses (14.5 nurses per 10,000 population) (CAPMAS 2016). The health workforce in Egypt has shortages and weaknesses in certain specialties, including midwives, community nurses, family physicians, and PHC doctors. High staff turnover particularly at the PHC level together with the absence of effective retention policies are major challenges facing the medical workforce in Egypt. The annual supply of medical workforce was estimated to be 10,500 physicians, 5,000 dentists, 8,800 pharmacists, and 11,000 nurses in 2015. There are 14,973 general practitioners (GPs) working at PHC facilities, which have shortages in many important specialties including midwives and family medicine doctors. The annual supply of family physicians is around 100 per year, while more than 5,000 PHC facilities require staffing with at least one qualified family medicine doctor.

Furthermore, human resources in Egypt suffer from inadequate undergraduate as well as postgraduate education. This is particularly evident in nursing and midwifery – approximately 80 percent of the nursing workforce in Egypt are graduates of a three-year high school nursing program (WHO 2014). Serious inequities persist in the number of available human resources among the various regions (WHO 2016a). Substantial variations arise in the geographic distribution of health human resources, with Upper Egypt and remote areas relatively underserved. In addition, analysis of workforce roles and responsibilities reveals a heavy reliance on specialists (obstetricians) to perform most RMNCH care services. Therefore, task shifting is necessary, particularly where physicians' availability is lowest; experienced nursing staff could be trained to perform basic health procedures to improve health outcomes after appropriate training and legal frameworks are in place (World Bank 2015).

Jordan's workforce readiness

Jordan seems to have a sufficient density of health care providers at the national level. Its health personnel rate per 10,000 population was among the highest in the region until 2015. This has been challenged by the unexpected increase in population size due to the influx of refugees and the immigration of health workers to the Gulf region for financial purposes. Migration dynamics seem to have played an important role in reducing the health personnel rate per 10,000 population. The percentage of those leaving the workforce in the last year for reasons other than death and retirement was estimated to be 2.7 percent for midwives and nurses and 5 percent for medical doctors.

Undergraduate medical, dentistry, and paramedical higher education in Jordan are provided at the four main public universities. The MOH and RMS provide practical training for medical and nursing students. Paramedical university education is accredited in four public

universities and four private universities. This includes a four-year academic program for Baccalaureate nursing and midwifery degrees. For Associate nursing and midwifery degrees, three years of education are provided at six public and community colleges. The demand for paramedical graduates is still more than the supply, and all graduates are usually employed within one year of graduation.

Although current auxiliary staff roles and responsibilities are much more supportive to RHS care services compared to those in other countries, the MOH needs to expand the package of services provided by such staff, particularly given the ongoing influx of Syrian refugees and the associated increased demand for a medical workforce. GPs' current workload is not suitable for the increased demand and the Schools of Medicine do not formally produce midwives. Legislation must be in place to allow midwives to support physicians in performing certain procedures (such as IUD insertion) given the lack of female doctors. This will allow for more cultural sensitivity in certain areas of the country.

Morocco's workforce readiness

Morocco is among the countries suffering from acute shortages in HRH. The MOH is the third largest employer, with a workforce of 50,000 employees (8 percent), of which 26,500 are nurses and 12,500 are doctors. Each year about 1,000 doctors graduate and 70–80 percent are recruited by the MOH. However, only 50 obstetricians graduate each year, nearly two-thirds of whom are recruited in the public sector. Moreover, more than half of those working in the public sector leave before the tenth year of recruitment. The total number of obstetricians and pediatricians is insufficient (about 300 in each specialty practice throughout the hospitals' network). The underlying factors include insufficient production of a medical workforce, specialists' preference to work in large cities, and specialists' high rate of departure (due to retirement or resignation to work in the private sector).

The workforce departures (retirement and resignations to the private sector) are constantly growing while recruitment numbers are stagnant, creating an imbalance between departures and arrivals. Medical specialists' training capacity is limited by the state budget, as is recruitment capacity. For example, medical staff needs for 2021 were estimated to be 300 gynecologists, 300 pediatricians, 300 anesthetists, and 1,000 midwives. These numbers can be neither trained nor recruited given the actual available budget. Furthermore, around 600,000 deliveries are currently made per year (10 percent of which are caesarean sections), but only 300 obstetricians are available in the public sector.

Morocco currently has 4,000 midwives and graduates 600 more every year (over 80 percent are recruited by the MOH). There are around 10,000 auxiliary nurses and every year another 1,200 graduate (about 50 percent are recruited by the MOH). The analysis of staff roles and responsibilities identifies gaps similar to those highlighted in Egypt and Jordan: expansion of auxiliary staff roles is mandatory to support quality RMNCH care services. For example, midwives are not permitted to support some simple emergency obstetric procedures such as administration of magnesium sulfate, antibiotics, or anti-hypertensive drugs. This constraint is on top of poor allocation of human resources. For example, the 2012–2016 strategic plan set a minimum standard of two midwives per unit. Consequently, some facilities (delivery homes) with a low patient flow rate have an abundance of staff, while other facilities with a high rate of deliveries (maternity hospitals) experience shortages.

Kingdom of Saudi Arabia's workforce readiness

In Saudi Arabia, integration is an important tool for successful implementation of a comprehensive health program. Achieving such integration was one of the specific objectives of the MCH Programme. In addition to training MCH workers, other important tools of MCH/PHC integration included: organization, supervision, continuing education, data management, and health systems research.

More than 3,000 GPs work in PHC in Kingdom of Saudi Arabia; a total of 1,898 obstetricians/ gynecologists work at MOH hospitals (286 consultants, 807 specialists, and 805 residents); and 175 obstetricians/ gynecologists work at PHCs. The total number of midwives is 1,090, most of whom are Saudis (90 percent), but the projected need is 3,812 midwives (i.e., nearly 3.5 times the available workforce). This projection covers auxiliary midwives, nurse midwives, and auxiliary-nurse midwives, who are currently unavailable in the health system.

More midwives are needed, and urgent mechanisms through which the current shortage of midwives can be rectified should be considered. This aim might be achieved via in-service training of nurses who have taken an interest in midwifery, establishment of schools of midwifery in three or four cities, and creation of departments of midwifery within schools of nursing wherein clear career paths are supported. Additionally, financial incentives for becoming a midwife should be strongly considered.

The functions and roles of health care professionals (HCPs) should be enhanced by ensuring that enough HCPs well trained in handling the different aspects of SRH are available to assist all women (and their husbands) in making better-informed decisions on contraception, breastfeeding, and other SRH matters. Capacity building of HCPs is needed at the primary care and specialty care levels. Furthermore, a multisectoral approach is required, with specific guidelines, clear roles, and a collaborative approach for all stakeholders (religious bodies, education leaders, opinion leaders, legislators, sociologists, social workers, psychologists, NGOs, the media, and the police) in the management of domestic violence and early and forced marriage.

Overall assessment of health workforce for achieving SRH

Table 8 presents the results of the overall assessment of health workforce by country. None of the four countries are expected to face a lack of health workforce that would represent a challenge to achieving target 3.1 (reduce the global maternal mortality ratio to less than 70 per 100,000 live births) or target 3.2 (end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births) by 2030.

On the other hand, reducing the incidence of AIDS in the four countries requires preventing mother-to-child transmission of HIV, HIV counselling and testing, and STI control.

With regard to ensuring universal access to SRH care services (target 3.7), the analysis shows that providing modern family planning methods and counseling are achievable by 2030. On the other hand, adolescent health seems to represent a challenge to all four countries, a situation that might be aggravated given their young population structures. Making information on SRH available for dissemination is considered a challenge in Egypt but not in the other three countries.

Achieving UHC (target 3.8) varies among countries. The target implies financial risk protection, access to quality essential health care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all. The assessment of country teams indicates that the target is achievable in Saudi Arabia and to a lesser extent in Jordan, but represents a challenge in Egypt and Morocco.

Goal 5 on gender equality and women's empowerment includes target 5.3, "Eliminate all harmful practices, such as child, early, and forced marriage and female genital mutilation." The analysis indicates that eliminating child, early, and forced marriage is considered highly challenging in Kingdom of Saudi Arabia, less challenging in Egypt and Morocco, and minimally challenging in Jordan. Eliminating domestic sexual violence against women is a challenge in all four countries to varying extents. FGM is a challenge facing only Egypt and is not practiced in the other three countries.

Table 8: Prioritization of challenges in achieving SRH-related SDG targets by 2030 due to health workforce, by country

Target	Subtarget	Egypt	Jordan	Morocco	Saudi Arabia
3.1	Antenatal care	4	2	4	1
	Obstetric care	5	4	8	3
3.2	Newborn care	5	3	9	6
	Immunization	2	2	2	0
	Child preventative and curative care	5	3	3	4
3.3	Prevention of mother-to-child transmission of HIV	7	6	5	7
	HIV counselling and testing	8	7	4	8
	HIV treatment	6	6	5	5
	HIV care and support	6	6	7	9
	Sexually transmitted infections control	7	7	8	10
3.7	Providing modern family planning methods	3	4	1	3
	Family planning counselling	3	3	1	6
	Information on sexual and reproductive health available for dissemination	7	4	2	0
	Adolescent health	8	7	7	9
3.8	Achieve universal health coverage of essential services	9	6	10	2
5.2	Eliminate physical, sexual or psychological violence against girls and women	7	7	8	8
5.3	Eliminate child, early and forced marriage	4	2	9	10
	Eliminate female genital mutilation	6	NA	NA	NA
5.6	Women making own informed decisions regarding SRH	6	6	6	6
	Laws and regulations that guarantee full and equal access for all to SRH care, information and education	9	7	8	8

Note: Red refers to highly challenging, white refers to challenging to some extent, green refers to not challenging, and NA refers to not applicable. Challenges are ranked from 0 to 10: "10" reflects the highest challenge and "0" reflects the lowest challenge.

Table 9 illustrates specific challenges facing each country. The table shows the degree of commonality across countries and can be used to identify them in a scorecard format. This tool can effectively communicate priorities to policy makers and the media.

Table 9: Scorecard of health workforce challenges by country

Challenge	Egypt	Jordan	Morocco	Saudi Arabia
Lack of or ineffective human resources strategic planning				
Notable mal-distribution of health care workers, or inequitable distribution				
Ineffective retention policies and high staff turnover				
Poor remuneration of staff and dual practice due to poor incentives in the public sector				
Centralized decision making in human resources management				
Chronic absenteeism				
Poor quality and comprehensiveness of the education and training of medical and paramedical staff as well as pre- and in-service training				
Weak human resources information system, especially for the private sector				
Limited practice of family medicine specialty				
The absence of the Higher Health Council role in drawing up health education policy				

Note: Red refers to highly challenging issues, yellow refers to issues that are challenging to some extent, and green refers to issues that are not challenging.

Relationship between health services and health workforce

The scores of the overall assessment of challenge level to achieve SRH-related SDGs regarding health services were compared to those of the overall assessment of the workforce (Table 10).[6] The pairs of scores were highly correlated. The coefficient of determination (R^2) between the two sets of scores was 0.81 for Egypt, 0.78 for Jordan, 0.73 for Morocco, and 0.89 for Saudi Arabia.[7] Such high association suggests similar levels of challenges in both services and workforce. Figure 9 illustrates the relationship of the pairs of challenge rating for service and workforce for each of the targets of the SRH-related SDGs, for each country. All show a strong association between service and workforce, with two exceptions. First, no association was evident in Morocco

6 Analysis included target belonging to Goal 3 only as target 5.3 was not applicable to all countries.

7 The coefficient of determination is an estimate of the percent of variability in health services that can be explained by the health workforce.

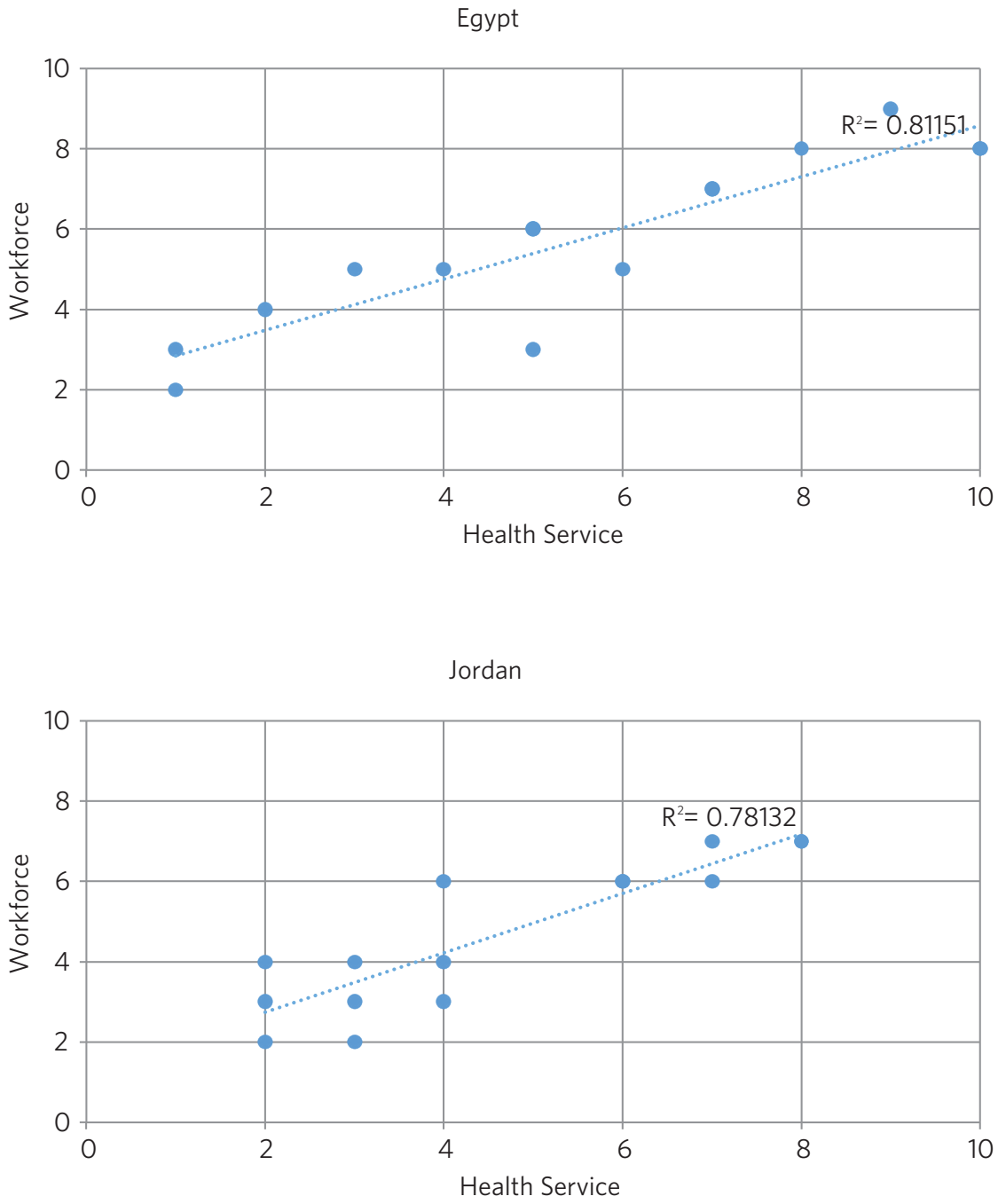
regarding "disseminating information on SRH" and "sexually transmitted infections control"; both subtargets were scored "5" for service while the scores for workforce were "2" for the former and "8" for the latter, showing that workforce is a challenge to achieving STI control by 2030 but not for disseminating information on SRH. Second, a similar discrepancy was found in Kingdom of Saudi Arabia for "adolescent health," in that workforce was perceived as more of a challenge than health services.

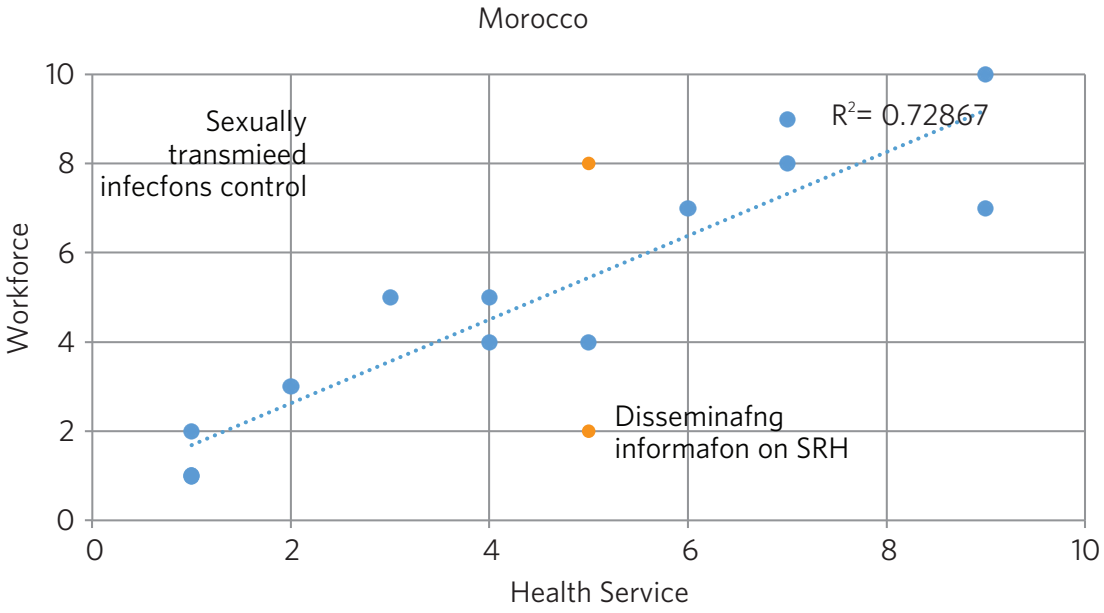
Table 10: Scores of overall challenge's level facing countries in achieving of SRH-related SDG targets by 2030, by country, due to health services and health workforce

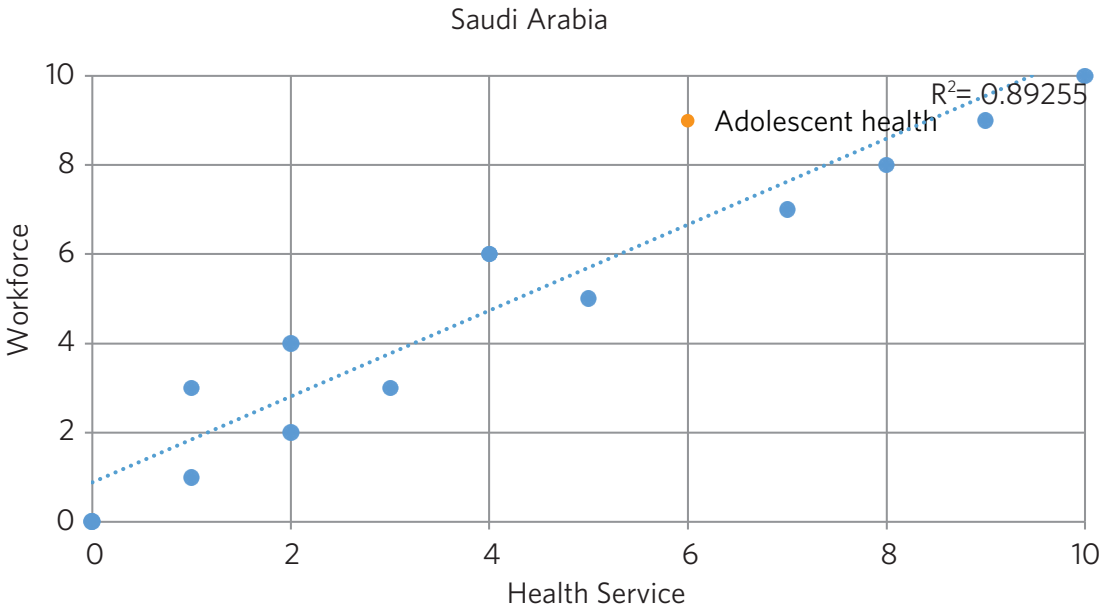
Target	Sub-target	Egypt		Jordan		Morocco		Saudi Arabia	
		S	W	S	W	S	W	S	W
3.1	Antenatal care	2	4	3	2	4	4	1	1
	Obstetric care	4	5	4	4	7	8	3	3
3.2	Newborn care	6	5	3	3	7	9	4	6
	Immunization	1	2	2	2	1	2	0	0
	Child care	3	5	4	3	2	3	2	4
3.3	Prevention of mother-to-child HIV transmission	10	8	7	6	4	5	7	7
	HIV counselling /testing	10	8	8	7	5	4	8	8
	HIV treatment	5	6	4	6	3	5	5	5
	HIV care and support	5	6	6	6	6	7	9	9
	Sexually transmitted infections control	7	7	7	7	5	8	10	10
3.7	Providing modern family planning methods	1	3	2	4	1	1	1	3
	Family planning counseling	5	3	2	3	1	1	4	6
	Disseminating information on SRH	7	7	3	4	5	2	0	0
	Adolescent health	8	8	8	7	9	7	6	9
3.8	Achieve UHC of essential services	9	9	6	6	9	10	2	2
5.2	Eliminate gender based violence	7	7	8	7	9	8	8	8
5.3		6	4	2	2	10	9	10	10
		6	4						
5.6	Women making own informed decisions regarding SRH	6	6	6	6	6	6	6	6
	Laws and regulations that guarantee full and equal access for all to SRH care, information and education	9	9	7	7	8	8	8	8
Minimum score		1	2	2	2	1	1	0	0
Maximum score		10	9	8	7	9	10	10	10

Note: Challenges are ranked from 0 to 10: "10" reflects the highest challenge and "0" reflects the lowest challenge. Sdenotes health services; W denotes health workforce.

Figure 9: Association between health service and workforce challenges in achieving SRH-related SDG targets by 2030, by country







Workforce projections

The purpose of workforce projections is to rationalize policy options based on a financially feasible picture of the future in which the expected supply of health workforce matches the requirements for staff within the overall health service plans. The process of simulation is the major tool for assessing the potential impact of various changes on the future health workforce (WHO 2010). A number of health workforce projection models exist, including freely available

tools for computer-aided applications. Each of these models start from a specification of existing services and staff and build a case for the future, but with different approaches to how future staff requirements and supply are to be determined. The appeal of using such models is their potential for exploring options about the future. Examples of these models are:

1) WHO's workforce supply and requirements projection model: a software package designed to support the long-range planning of health personnel (WHO 2010).

2) The WHO Western Pacific Regional Office, Regional Training Centre (WPRO/RTC) health workforce planning model: a computer-based workbook outlining a step-by-step process for producing a workforce plan (Dewdney 2001).

3) The United Nations Development Programme's integrated health model: a spreadsheet application developed in the context of supporting countries to estimate the resource requirements for achieving the health-related MDGs (UNDP 2008).

A recent contribution by WHO (The Global Strategy on Human Resources for Health: Workforce 2030) set out the policy agenda to ensure a workforce that is fit for purpose to attain the targets of the SDGs (WHO 2016b). Twelve key population health indicators identified by WHO and the World Bank as proxies of health needs for UHC and the health targets of the SDGs were selected: family planning, antenatal care coverage, skilled birth attendance, DTP3 (diphtheria–tetanus–pertussis) immunization, tobacco smoking, potable water, sanitation, antiretroviral therapy, tuberculosis treatment, cataract surgery, diabetes, and hypertension treatment.

In 2013 (latest available data), the global health workforce was over 43 million. The supply projections, based on current trends and under the assumptions made in the model, point to significant growth (55 percent), leading to an aggregate number by 2030 of 67.3 million health workers. Globally, the needs-based shortage of health care workers in 2013 is estimated to be about 17.4 million, of which almost 2.6 million are doctors, approximately 9 million are nurses and midwives, and the remainder represent all other health worker cadres.

The total number of health workers needed to reach the SDG threshold in the East Mediterranean Region is estimated at 4.2 million for 2013 and forecasted as 5.7 million for 2030. This means that an increase of 34 percent is needed to achieve the SDGs. The current study estimated the current shortage in health workforce at 1.7 million. The current (as of 2013) shortage is disaggregated into 244,000 physicians, 867,000 nurses and midwives, and 601,000 other cadres. The results are calculated for all health goals, not only for the SRH-related SDGs, and for the whole East Mediterranean Region. Country data were not accessible and the regional figures can only be an indication that the region is facing a workforce shortage that might hinder its ability to achieve the SRH-related SDGs. However, assessments at the country level might differ.

Another important recent contribution is the *2014 State of World's Midwifery Report* (SoWMy) (UNFPA 2015). Midwifery is a key element of sexual, reproductive, maternal, and newborn health (SRMNH) care and is defined as the health services and health workforce needed to support and care for women and newborns, including SRH and especially pregnancy, labor, and postnatal care. The evidence and analysis in *SoWMy 2014* is structured by the four domains that determine

whether a health system and its health workforce are providing effective coverage: availability, accessibility, acceptability, and quality.

Based on the number of annual pregnancies, *SoWMy 2014* provides an estimate of a set of indicators reflecting expected SRMNH needs. The report estimates the extent to which the workforce is able to deliver SRMNH services for all women and newborns who need them, and also provides "Estimates and projections to 2030" under a variety of scenarios. The analysis covers 73 low- and middle-income countries (including Egypt and Morocco, but not Jordan and Saudi Arabia). Results for Egypt and Morocco translate the number of pregnancies in each country into four health needs: pre-pregnancy family planning visits, antenatal routine visits, skilled birth attendance, and postpartum and postnatal routine visits (Table 11). Met need is estimated at 35 percent in Egypt and 67 percent in Morocco.

Table 11: Met need based on the number of pregnancies in Egypt and Morocco, 2012

		Egypt	Morocco
Number of pregnancies 2012		2,588,000	1,094,000
Current annual (needs (2012	Pre-pregnancy family planning visits	38,393,000	15,430,000
	Antenatal routine visits	10,351,000	4,377,000
	Skilled birth attendance	1,907,000	754,000
	Postpartum and postnatal routine visits	7,628,000	3,015,000
	Estimated met need	35%	67%

Source: UNFPA 2015.

Health workforce was simulated using a set of "What if" scenarios to illustrate the potential impact of policy decisions and to demonstrate the changes in met need that could be realized through four different policy options: reducing the number of pregnancies per year; increasing the supply of midwives, nurses; and physicians; improving efficiency; and reducing voluntary attrition in the health workforce. Table 12 summarizes the met need level under different scenarios for Egypt and Morocco.

Table 12: Met need for pregnancy, birth, and postpartum/postnatal care in Egypt and Morocco by 2030 under different scenarios

Scenario	Egypt	Morocco
1: Business as usual	54%	98%
2: Midwife, nurse, and physician graduates doubled by 2030	100%	98%
3: Efficiency improved by 2% per year until 2030	77%	98%
4: Attrition halved in Maternal & Neonatal Health full-time equivalents in the next 5 years	79%	98%

Source: UNFPA 2015.

Results

Building on the models and tools used to project health workforce needs, the quantitative assessment of health workforce needs to achieve the SRH-related SDGs by 2030 adopted the following procedure:

1) Projections of health workforce needs consider the population projections of the four countries developed by the UN Division of Population.[8] The medium variant scenario is used to project health workforce need. Since the selected variant might have a crucial impact on the results, a sensitivity analysis is conducted to compare the impact of following a higher fertility (high variant) or a lower fertility (low variant) trajectory. Two outputs of the projections (projected annual number of births and projected number of women of reproductive age) are considered as the main predictors for SRH needs. The analysis depends on the projected births for three time intervals: 2015–2020, 2020–2025, and 2025–2030 and the annual projected number of women of reproductive age.

2) Norms were developed in *SoWMy 2014* (UNFPA 2015) to estimate the annual number of visits, the antenatal routine visits, and the postpartum and postnatal routine visits based on the annual number of births and the number of women in reproductive age. These norms are applied to the projected number of births and number of women of reproductive age projected for the four countries.

3) Based on these norms, annual pre-pregnancy family planning visits (Table 13), annual antenatal routine visits (Table 13), and annual postpartum and postnatal routine visits (Table 15) were estimated for the four countries according to the three fertility scenarios: high, medium, and low variant.

Table 13: Annual pre-pregnancy family planning visits (000s)

Fertility variant	Period	Egypt	Jordan	Morocco	Saudi Arabia
Low	2015–2020	33,327	2,715	9,084	8,280
	2020–2025	30,270	2,430	7,854	7,410
	2025–2030	28,794	2,235	6,900	6,798
Medium	2015–2020	36,189	2,946	10,149	9,162
	2020–2025	34,971	2,811	9,558	8,898
	2025–2030	34,998	2,733	9,015	8,760
High	2015–2020	39,051	3,177	11,217	10,047
	2020–2025	39,672	3,195	11,265	10,386
	2025–2030	41,202	3,234	11,127	10,722

8 A full description of the projections is included in section 2.

Table 14: Annual antenatal routine visits (000s)

Fertility variant	Period	Egypt	Jordan	Morocco	Saudi Arabia
Low	2015–2020	8,887	724	2,422	2,208
	2020–2025	8,072	648	2,094	1,976
	2025–2030	7,678	596	1,840	1,813
Medium	2015–2020	9,650	786	2,706	2,443
	2020–2025	9,326	750	2,549	2,373
	2025–2030	9,333	729	2,404	2,336
High	2015–2020	10,414	847	2,991	2,679
	2020–2025	10,579	852	3,004	2,770
	2025–2030	10,987	862	2,967	2,859

Table 15: Annual postpartum and postnatal routine visits (000s)

Fertility variant	Period	Egypt	Jordan	Morocco	Saudi Arabia
Low	2020–2015	6,665	543	1,817	1,656
	2025–2020	6,054	486	1,571	1,482
	2030–2025	5,759	447	1,380	1,360
Medium	2020–2015	7,238	589	2,030	1,832
	2025–2020	6,994	562	1,912	1,780
	2030–2025	7,000	547	1,803	1,752
High	2020–2015	7,810	635	2,243	2,009
	2025–2020	7,934	639	2,253	2,077
	2030–2025	8,240	647	2,225	2,144

The results listed in these three tables can be used to assess countries' readiness to achieve the SRH-related SDG targets. However, a more comprehensive approach that goes beyond health services should take into consideration the needs required to achieve other targets related to violence against women and adolescent health.

6. Assessment of Health Equity Readiness

One important element in evaluating whether a country is successful in achieving health outcomes is achieving the target for all subpopulations. Reducing disparities means actualizing the "No one left behind" slogan. Achieving a target at the national level is not enough, since the target might have not been achieved by disadvantaged subpopulations. Potential sources of disparities considered in the analysis are gaps in wealth/income, gender, geography, and physical condition (due to disability).

Health equity and social determinants are acknowledged as critical components of the post-2015 sustainable development global agenda and of the push toward progressive achievement of UHC. If health inequities are to be reduced, both SDH and UHC need to be addressed in an integrated and systematic manner. SDH are the conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels. SDH are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between countries.

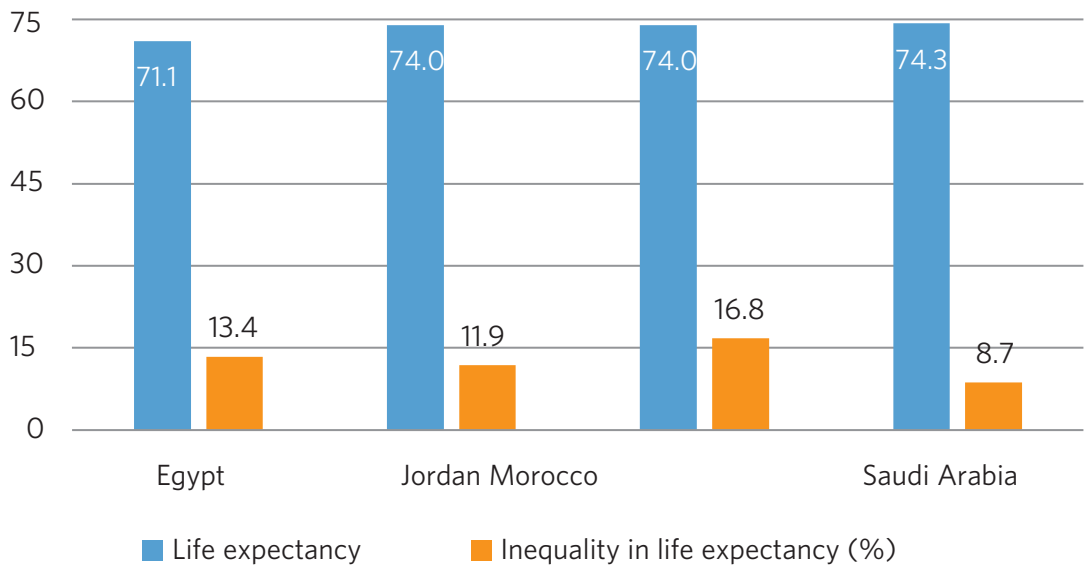
High levels of inequality exist in the distribution of health services, access to health services, and the burden of ill health according to socioeconomic status or geographical status, including unfair burden of out-of-pocket expenses and a high proportion of catastrophic household spending on health. Well-performing health systems can help tackle SDH and improve health equity.

UHC implies that all people have access, without discrimination, to nationally determined sets of the needed promotive, preventive, curative, and rehabilitative basic health services and essential, safe, affordable, effective, and quality medicines. At the same time, it ensures that the use of these services does not expose users to financial hardship, with a special emphasis on poor, vulnerable, and marginalized segments of the population. For UHC to be equitable and meaningful, several SDH must be addressed on the pathway, including at the levels of differential socioeconomic position, exposure to risk factors, vulnerability to diseases and health conditions, health outcomes, and consequences of diseases and health conditions.[9]

An independent assessment of health equity is published in the UNDP *Human Development Report* (UNDP 2016). The 2016 report disseminates data on life expectancy as well as an index reflecting inequality in life expectancy. The index is based on the distribution of expected length of life using data from life tables estimated using the Atkinson inequality index. Inequality in life expectancy varies from 8.7 percent in Saudi Arabia to 16.8 percent in Morocco (Figure 10).

9 http://www.who.int/social_determinants/advocacy/UN_Platform_FINAL.pdf?ua=1

Figure 10: Life expectancy and inequality in life expectancy by country, 2014



Source: UNDP (2016).

Many examples of health outcomes show a significant gap between affluent and marginalized segments of the population. In many cases, the risk of death among the marginalized group is double the risk of death among the affluent group. This applies to infant mortality in Egypt when comparing the richest 20 percent and poorest 20 percent, and to maternal mortality in Morocco when comparing urban areas to rural areas.

Data describing inequality in health outcomes are scarce. However, women and adolescent girls belonging to marginalized subpopulations, including forced migrants, would certainly be most affected because of early marriage, illiteracy, lack of information, and lack of empowerment. They are the first victims of unwanted pregnancies, abortions, violence, and the feminization of early incidence of AIDS. This is compounded by an absence of or poor health coverage and financial inaccessibility. Strategies for SRH might not meet the targets set for 2030 if health policies are not inclusive enough to "Leave no one behind."

Table 16 summarizes the results of the overall assessment of the degree of challenge presented by health equity. Equity in achieving target 3.1 (reduce the global maternal mortality ratio to less than 70 per 100,000 live births) and target 3.2 (end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births) by 2030 does not present a challenge to Egypt, Jordan, and Saudi Arabia.

On the other hand, equity in achieving UHC (target 3.8) is expected to be highly challenging in Egypt, Jordan, and Morocco. Equity in adolescent health will challenge Egypt, Morocco, and Saudi Arabia. Jordan and Saudi Arabia share the same high challenge in equity in achieving targets related to HIV prevention, counseling, and treatment, while Egypt and Morocco face a higher level of challenge in eliminating child marriage and violence against women for all subpopulations, especially less affluent groups.

The analysis indicates that eliminating all sort of violence against all women and girls is a challenge in all four countries. Eliminating child, early, and forced marriage is considered highly

challenging in Saudi Arabia, less challenging in Egypt and Morocco, and minimally challenging in Jordan. FGM is a challenge facing only Egypt as it is not practiced in the other three countries. Universal access to SRH and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences is a challenge facing the four countries especially for specific segments of the population. The challenges is not only in having laws and regulations, but in applying them in a way that guarantees full and equal access to women and men aged 15 years and older to SRH care, information, and education. If these laws and regulations are successfully applied, more women will be able to make their own informed decisions regarding contraceptive use and reproductive health care.

Table 16: Prioritization of challenges in achieving SRH-related SDG targets by 2030 due to health equity, by country

Target	Subtarget	Egypt	Jordan	Morocco	Saudi Arabia
3.1	Antenatal care	5	2	8	0
	Obstetric care	6	4	9	0
3.2	Newborn care	7	3	9	1
	Immunization	2	2	5	1
	Child preventative and curative care	7	3	6	1
3.3	Prevention of mother-to-child transmission of HIV	7	8	7	5
	HIV counselling and testing	6	9	8	6
	HIV treatment	6	6	7	4
	HIV care and support	5	7	5	8
	Sexually transmitted infections control	5	7	8	10
3.7	Providing modern family planning methods	3	3	3	2
	Family planning counselling	4	2	4	2
	Information on sexual and reproductive health available for dissemination	4	4	7	3
	Adolescent health	8	6	9	9
3.8	Achieve universal health coverage of essential services	9	7	10	0
5.2	Eliminate physical, sexual or psychological violence against girls and women	9	6	10	10
5.3	Eliminate child, early and forced marriage	8	5	10	8
	Eliminate female genital mutilation	8	NA	NA	NA
5.6	Women making own informed decisions regarding SRH	4	6	5	7
	Laws and regulations that guarantee full and equal access for all to SRH care, information and education	8	6	8	8

Note: Red refers to highly challenging, white refers to challenging to some extent, green refers to not challenging, and NA refers to not applicable. Challenges are ranked from 0 to 10: "10" reflects the highest challenge and "0" reflects the lowest challenge.

7. Information Gap Analysis

A perfect information ecosystem that can effectively produce data that can be used to monitor and evaluate health outcomes related to the SRH-related SDGs should include the following components:

- Census data collected every decade with a high level of coverage and accuracy, especially for marginalized areas. Sampling frames based on the census and its updates should be made available for conducting household surveys.
- System of vital statistics with a high level of coverage and accuracy that produces data on births by age of mother, parity, and characteristics of parents; and deaths by age and cause of death.
- Registry for important health diseases including HIV/AIDS.
- Household surveys that produce social, population, and health indicators including marriage patterns, fertility and its determinants, family planning use, MCH including nutrition, adolescent health, and violence against women.
- Special studies on quality of health services.

All indicators produced in the four countries conform with international definitions and use the same method of calculation. The level of disaggregation varies by country and by indicator. "Health for all" and "No one left behind" principles will not be properly monitored unless indicators are disaggregated to reflect disparities attributed to different sources of inequality. This is particularly challenging for indicators such as the MMR, rate of coverage of essential services, and rate of health insurance coverage.

The following needs were reported at the country level:

- Integrate unmarried people in data collection, in strategies, and in programs.
- Strengthen the National Health Information System to ensure quality, consistency, and integration of the private sector and other public institutions providing health services (military, police, universities, insurance) at least for some key indicators (all four countries).
- Strengthen vital registrations to provide periodic, accurate, and comprehensive information on marriages, births, and deaths (Egypt, Morocco, and Saudi Arabia).
- Produce more regular health account reports every five years (Morocco).
- Ensure appropriate systems and adequate capability to collect and disseminate related national health data and indicators (all four countries).
- Assess and manage disparities within and across countries to include (in addition to age and location) a wider range of characteristics (e.g., wealth, education, disability, ethnicity, and marital status). This will help governments and researchers to better assess which populations are being left behind (Saudi Arabia and Morocco).
- Produce regular data on health outcomes for migrants (Jordan).

8. Country-Specific Challenges

The four countries covered in the report have specific challenges that should be taken into consideration as these challenges might slow their achievement of the SDGs. These country-specific challenges might put more pressure on health services and the workforce and might impede achievement of health equity.

Egypt's challenges

In Egypt, the stalled fertility observed between 1995 and 2005 increased the TFR to 3.5 children per woman of reproductive age in 2014 compared to a TFR of 3.0 in 2008. This trend translated into an increase in the number of births from 1.85 million live births in 2006 to 2.6 million live births in 2012. The 40 percent increase in six years generated several short-term implications for health services and workforce resources, including increased demands to respond to a higher need for MCH services. This increase in birth rate along with a decrease in death rate due to the general improvement in health status will also impact other services, such as education and protection, both of which are considered among SDH. The long-term implications are numerous and include adolescents' reproductive health. The list of implications goes beyond SRH and presents a challenge to other MDGs, especially those related to poverty, education, job creation, and the environment.

Another challenge facing Egypt is FGM. Despite the improvement in the incidence of this practice, it might continue due to Egypt's conservative culture and lack of awareness. The country's current economic hardship might also affect public spending on social programs, including those for maternal, child, and adolescent health.

Health system fragmentation and wide disparities in health service management, financing, and provision are major challenges that require urgent and comprehensive health system reform. This is directly reflected in the current provision of SRH services, which are underfunded and understaffed in many areas across Egypt.

Jordan's challenges

Besides the slow reduction in the TFR noted over the past 10 years, external factors are the real challenge facing the country in achieving SRH outcomes. Regional instability has always affected the country, which has received several waves of refugees over the last few decades. Three waves of refugees in 1948, 2003, and 2013 brought over a million refugees and migrants from neighboring countries. This forced, unplanned displacement caused high rates of population growth and generated considerable pressure on Jordan's health system, especially on health services provided to citizens, infrastructure, and health institutions, particularly in the public sector. Given Jordan's limited financial and natural resources, this population influx has negatively impacted the country's social, economic, and health development.

Since 2012, the large number of Syrian refugees has burdened the health system, especially in the Northern Governorates, where Syrian refugees are concentrated. The MOH provides

free PHC services for Syrian refugees who live inside or outside the camps, such as immunization, reproductive health, health controls on foodstuffs, monitoring of infectious and communicable diseases, monitoring epidemics, recording of injuries and registration of births and deaths, as well as supplying camp hospitals' needs for blood, serum, proper control and disposal of medical waste, food control, hygiene, and water and sanitation.

The refugee problem brings other consequences, such as an increase in early marriages among refugees and host country citizens. And evidence shows that the spread of communicable diseases among Syrian refugees is much larger than among Jordanians. The number of AIDS cases recorded among Syrian refugees is expected to add an additional challenge to SRH in Jordan.

Morocco's challenges

Morocco's main challenge to achieving the SRH-related SDGs is to address equity in health outcomes by enhancing health coverage in rural areas and for isolated populations. The huge deficit in the overall budget balance benefits the private sector and the middle and wealthy classes. The poorer classes continue to spend disproportionately more money directly on health, creating a vicious cycle of poverty. Another challenge is access to family planning services and information by unmarried women and youth, especially young girls. Reducing the incidence of early marriage and adolescent fertility is a third challenge that needs to be addressed to enable the country to achieve SRH-related SDGs by 2030.

Saudi Arabia's challenges

Despite significant improvement in Saudi Arabia's health system, data coverage is still a real challenge facing M&E of the SRH-related SDGs. Lack of data coverage is manifested in several aspects, including: lack of household health surveys, precluding production of many health indicators; lack of health data provided by military health facilities, security forces health facilities, social insurance, and the private sector; and lack of data on disparities in health outcomes based on gender, nationality, income, education, disability, and ethnicity.

9. Limitations of the Study

Four key limitations need to be taken into consideration when evaluating the study results:

- Assessment of readiness was based on a mix of objective and subjective responses. Subjective responses can be considered a proxy of readiness related to aspects that are not easily measurable. Several forms were tested and modified to improve the instrument. However, this does not guarantee the reliability of scores when the tool is applied to another group of respondents. Using the metrics developed in this study to compare countries' performance does not fully reflect the context of each country. However, setting priorities and evaluating the challenge levels associated with each SRH target might be of great benefit for health planning.

- Population projections used in the study followed the UN Population Division, World Population Perspectives 2015 approaches. The median variant was selected as the most likely scenario of population growth between 2015 and 2030. Deviations from the assumptions of the projections might make the results less realistic. Dramatic changes in the level and/or pattern of fertility, mortality, morbidity, nuptiality, and migration would require a revision of the estimates.

- The assessment was conducted given the current economic and political conditions in the four countries and was probably influenced by a "business as usual" scenario. Any significant changes in the ecosystem, whether positive or negative, will impact achievement of the SDGs. Changes in available resources, in level of governance, and in social stability are examples of factors that might speed or slow achievement of the SDGs.

- Externalities and risks such as regional instability or future estimates of inflows of migrants were not taken into consideration in the country assessments.

10. Conclusions and Recommendations

Strengthening of the health systems in the four countries warrants special attention. The analysis identified gaps that affect service delivery and coverage, although with variations among the countries reviewed. The main conclusions are summarized by area of assessment.

Achieving the SRH-related SDGs by 2030

- All four countries are expected to achieve target 3.1 (reduce the global maternal mortality ratio to less than 70 per 100,000 live births) and target 3.2 (end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births) by 2030.
- A challenge perceived by consultants in all four countries is dealing with AIDS (target 3.3), especially regarding prevention of mother-to-child transmission of HIV, HIV counseling and testing, and STI control.
- Adolescent health represents a challenge to all countries, a situation that might be aggravated given the young population structure of the four countries.
- Making information on SRH available for dissemination is considered a challenge in Egypt but not in the other three countries.
- Ability to achieve UHC (target 3.8) varies among countries. The target implies financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all. The assessment indicates that the target is achievable in Saudi Arabia and to a lesser extent in Jordan, but represents a challenge in Egypt and Morocco.
- Eliminating child, early, and forced marriage is considered highly challenging in Saudi Arabia, less challenging in Egypt and Morocco, and minimally challenging in Jordan, except among Syrian refugees. Eliminating domestic sexual violence against women is a challenge in all four countries. FGM is a challenge facing only Egypt as it is not practiced in the other three countries.

Health services

- UHC is a crucial step to overcome the current challenges and shortcomings facing the health system. These include health system fragmentation, the predominance of the unregulated private sector, wide disparities and inequities in health, and a lack of health system governance. It is recommended to start at the policy level with a clear vision and roadmap for a stepwise UHC based on educated priority setting and evidence-based processes. This step requires activating existing relevant legislation, updating old legislation, and developing new legislation as appropriate for different countries.
- The implementation of a compulsory Social Health Insurance with a comprehensive package including SRH care services is

a successful way to achieve UHC. This will improve service coverage, equity, and quality and will protect poor and disadvantaged population groups from financial hardship due to expenditure on health.

- Regulating the private sector and ensuring that service provision is compliant with Ministries of Health standards and guidelines are of utmost importance, as the private sector is the source of service provision for a large proportion of the population in the countries under study. Existing legislation in public health laws and policies should be enforced. The role of parliaments in observing government enforcement of the legislation is of utmost importance.

- Investing in and further strengthening PHC and the role of family physicians are crucial.

Workforce

The data for the four countries under review indicate that the health workforce needs strengthening, although the situation varies across countries. Shortages are either expressed in sheer numbers and specialties, or in the inappropriate distribution of human resources in certain specialties or areas of need, or in lack of quality training and service provision, especially regarding RHS-relevant skills. Determinants of health workforce adequacy depend on current and expected demographic changes in the population size and structure, among other factors. All actions taken or suggested should consider true reform of the PHC workforce, the urban/rural distribution, skills training, and governance and accountability.

- The current skill mix and distribution of Egypt's health workforce may not adequately respond to increasing health care demands. Innovative approaches for optimizing the benefits of the current workforce structure are greatly needed. For example, in Upper Egypt, where physicians' availability is lowest, experienced nursing staff could be trained to perform basic health procedures once appropriate training and legal frameworks are put in place. Positive and negative methods for incentivizing the workforce should be sought. Structuring a payment system with performance-based incentives for providers has been shown to be successful at improving quality of care.

- Investing in HRH is a strategic necessity in Jordan to attain quality health care services and contribute to population social welfare and development. Drafting and implementing short- and long-term human resources plans is a necessity, with particular emphasis on the expansion of academic and vocational training focused on key specialties such as midwifery, nursing, and family medicine.

- Morocco must make further efforts to redistribute its public service staff, reduce gender inequalities, better devolve administrative functions, and improve performance. The extension of some hospital care exacerbates its human resources deficit, currently estimated at more than 6,000 physicians and over 9,000 nurses.

- In all countries, a strategy of contracting out the needed health workforce from existing NGOs or private providers in remote areas or in areas where needed gender or specialty is lacking is another option to be explored. Existing legislation could be revised to accommodate innovative options to cater for the lack or mal-distribution of needed health human resources.

Equity

- Equity in health outcomes is a major challenge facing all four countries. The problem is multifaceted and relates to lack of vision, shortage of workforce, lack of resources, and/or bad governance. It can also relate to external factors such as forced in-migration as in the case of Jordan. A wide range of action plans needs to be designed to ensure "No one is left behind." Those action plans should be country-specific and should not ignore reprioritizing public spending, out-of-the-box solutions, a stronger role for civil society, decentralization, better health information systems, and better use of technology.
- Accountability in health should not be based on national-level indicators only but should consider disparities in health outcomes according to residence, geographic region, gender, wealth, ethnic group, residence status (residents versus the displaced), and disability. Key performance indicators should be developed to monitor disparities as an outcome in itself.

Information

- The country assessments reflect information gaps that need to be bridged to allow governments to monitor and evaluate SRH-related SDG achievements on a regular basis. The absence or irregularity of household-based health surveys is a real challenge. Regular surveys (DHS and PAPFAM) need to be revised to collect more data on information relevant to unmarried women and adolescents.
- A paradigm shift must be introduced to collect data on a regular basis on phenomena that are considered taboo, such as HIV/AIDS and violence against children and women.
- Health registries need to be built and rigorous quantitative analysis should be developed on the national and local levels to inform decision makers and to develop evidence-based policies.

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APPENDIXES

Appendix A: Standardized Methodology for Data Collection

Background:

MENA HPF and UNFPA/ASRO developed a standard instrument to assess the readiness of health systems to achieve the sexual and reproductive health (SRH) targets included in the Sustainable Development Goals (SDGs) in four Arab countries (Egypt, Jordan, Morocco, and Saudi Arabia). The purpose of the instrument is to collect data that help countries identify gaps related to the availability, accessibility, acceptability, and quality of SRH-related services and workforce. The instrument also evaluates health equity and assesses the information needed to report successfully on achieving the SDGs.

Instructions:

The most recent available data should be used in the assessment.

Detailed responses and contextual information are highly recommended.

If a question cannot be answered, please state the reason (why?); this is a finding in itself. At all times, mention segregated data to indicate inequalities.

Relying on official national data sources and national surveys and UN estimates can be an alternative if data are not available.

For subjective responses, it is strongly advised to depend on a participatory approach for a more comprehensive assessment.

The Instrument:

The instrument includes six modules to cover different aspects related to the readiness of the health system for provision of SRH services in the country.

Module A	**Country profile & baseline assessment of targets**
	Module A.1 Country profile
	Module A.2 Health policies
	Module A.3 Baseline indicators
	Module A.4 Major sources of health & population data
	Module A.5 Data coverage
Module B	**Accessibility & coverage of health system**
	Module B.1 Minimum benefits package
	Module B.2 Infrastructure and planning models
	Module B.3 Norms for coverage
	Module B.4 Overall assessment of coverage
Module C	**Health workforce availability**
	Module C.1 Availability of workforce
	Module C.2 Roles and responsibility
	Module C.3 Education and capacity building
	Module C.4 Overall assessment of workforce
Module D	**Health equity**
Module E	**Relative challenges facing achieving SRH-SDGs by 2030**
Module F	**Information gap analysis**

Module A.

The purpose of Module A is to reflect the country profile, to describe health policies, to provide a baseline for indicators reflecting the achievement level of the different targets of the SDGs, and to document sources of data.

Module A.1 Country profile

	Question	Value	Year
101	Total Population		
102	Female Population		
	Age structure:		
103a	< 5		
103b	5-14		
103c	15-29		
103d	30-49		
103e	50-59		
103f	60+		
104	Average household size		
105	Number of females in reproductive age (15-49)		
106	Number of currently married females in reproductive age (15-19)		
107	Number of females above 50		
108	Number of births		
109	Number of deaths		
110	Number of infant mortality		
111	Number of child mortality		
112	Number of maternal mortality		
113	Contraceptive prevalence rate		
114	Unmet need (%)		
115	Early marriage (% married below 15 and below 18)		
116	Early motherhood (% pregnant before 18)		
117	FGM (% Proportion of women aged < 20 years who have undergone female genital mutilation/cutting)		
118	Number of disabled		
119	Average monthly household expenditure		
120	Average monthly household expenditure on food		
121	Average monthly household out-of-pocket expenditure on health		
122	Extreme poverty (% living in extreme poverty less than $1.25 per day)		
123	Poverty (% living in poverty less than $2 per day)		

Module A.2 Policies

List all policies, national plans, and legislation currently in place for organizing, delivering, and monitoring SRH services.

	National health plan
124	Enter the name of the document
125	Year of publication of the document
126	Period of time covered by the document
127	Are the plans outlined in this document fully costed?
	National Maternal and Newborn Health (MNH) plan/strategy/roadmap
128	Enter the name of the document
129	Year of publication of the document
130	Period of time covered by the document
131	Are the plans outlined in this document fully costed?
	National human resources for health (HRH) plan
132	Enter the name of the document
133	Year of publication of the document
134	Period of time covered by the document
135	Are the plans outlined in this document fully costed?
	Early marriage strategy
136	Enter the name of the document
137	Year of publication of the document
138	Period of time covered by the document
139	Are the plans outlined in this document fully costed?
	Female Genital Mutation (FGM) strategy
140	Enter the name of the document
141	Year of publication of the document
142	Period of time covered by the document
143	Are the plans outlined in this document fully costed?
	Other relevant policies, strategies or roadmap (communicable diseases / HIV / sex education / ...)
144	Enter the name of the document
145	Year of publication of the document
146	Period of time covered by the document
147	Are the plans outlined in this document fully costed?

148	Do any of the existing policies specifically address how the country will improve the data, information systems, monitoring, and accountability of RMNH care services?	☐ Yes ☐ No
149	If yes, please state which policy/ies includes this information	
150	If yes, briefly summarize the plan here	
151	Do any of the existing policies specifically address how the country will continuously improve the quality of its RMNH care?	☐ Yes ☐ No
	If yes, please state which policy/ies includes this information	
153	If yes, briefly summarize the plan here	
154	Do any of the existing policies specifically address how the country will reduce or remove financial, geographical, and other barriers to accessing RMNH care?	☐ Yes ☐ No
155	If yes, please state which policy/ies includes this information	
156	If yes, briefly summarize the plan here	
157	Do any of the existing policies specifically address how the country will increase access to RMNH care for vulnerable and disadvantaged groups, e.g., those living in remote areas, adolescents, minority groups, those living in poverty?	☐ Yes ☐ No
158	If yes, please state which policy/ies includes this information	
159	If yes, briefly summarize the plan here	
160	Do any of the existing policies specifically address how the country will deliver RMNH care that is sensitive to social, cultural and traditional needs, e.g., in relation to age, gender. Etc.?	☐ Yes ☐ No
161	If yes, please state which policy/ies includes this information	
162	If yes, briefly summarize the plan here	
163	Are the RMNH workforce targets in the national human resources for health plan based on or linked to RMNH service coverage targets in the national MNH/Health plans?	☐ Yes ☐ No
164	If yes, please state which policy/ies includes this information	
165	If yes, briefly summarize the plan here	

Module A.3 Baseline Indicators

Please fill the estimate of the indicators for last available year, explain disparities, and identify the source of the indicator using the following form:

	Indicator	Value	Year	Sources of disparities[1]	Source of data
166	3.1.1: Maternal mortality ratio[2]				
167	3.1.2: Proportion of births attended by skilled health personnel				
168	3.2.1: Under-five mortality rate[5]				
169	3.2.2: Neonatal mortality rate[5]				
170	3.3.1: Number of new HIV infections per 1,000 uninfected				
171	3.3.4: Hepatitis B incidence per 100,000				
172	3.7.1: Proportion of women of reproductive age with unmet need for modern family planning methods				
173	3.7.2: Adolescent birth rate per 1,000 women in that age group				
174	3.8.1: Coverage of essential health services				
175	3.8.2: Proportion covered by health insurance or a public health system per 1,000				
176	Proportion of women and girls aged 15 years and older subjected to physical, sexual, or psychological violence in the previous 12 months by form of violence				
177	5.3.1: Proportion of women aged 20-24 years who were married before age 15 and before age 18				
178	5.3.2: Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting				
179	5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding contraceptive use and reproductive health care				
180	5.6.2 Availability of laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education				

1 Identify disparities: geographical, poverty, race, ethnic.

2 Including cause of death.

Module A.4 Major National Sources of Reproductive Health and Population Data

		Last available year	Periodicity	Availability of micro data
181	Census			☐ Yes ☐ No
182	Household survey			☐ Yes ☐ No
183	Health survey			☐ Yes ☐ No
184	Health expenditure survey			☐ Yes ☐ No
185	MICS			☐ Yes ☐ No
186	Other (specify)			
187	Other (specify)			

Module A.5 Data Coverage

Describe the coverage of the data on health services provided (Ministry of Health only, Ministry of Health + other government and/or semi-government).

Describe health providers profile and give an approximate estimate of the share of each of the different providers (government, semi-government, private, ...) for all health services and for SRH services.

Module B.

The objective of Module B is to assess health system readiness in terms of primary health care (PHC) and related health services coverage and accessibility in the country and whether it is adequate to achieve the targets of the SDGs.

Module B.1 Minimum Benefits Package

This section explores the minimum benefits package for reproductive maternal and newborn health services. We list the recommended essential interventions for RMNH care developed by the World Health Organization and the Partnership for Maternal, Newborn and Child Health to explore which of the core interventions are included in each country's minimum benefits package.

No	Question	Please highlight
201	Does your country have a minimum guaranteed benefits package for RMNH?	☐ Yes (continue) ☐ No (go to question 208)
202	Which of these core pre-pregnancy interventions are included in your minimum guaranteed benefits package?	
a)	Family planning (advice, hormonal and barrier methods) enlist	☐ Yes ☐ No
b)	Family planning (surgical methods)	☐ Yes ☐ No
c)	Prevention and management of sexually transmitted infections, HIV	☐ Yes ☐ No
d)	Folic acid fortification/ supplementation to prevent neural tube defects	☐ Yes ☐ No
203	Which of these core antenatal interventions are included in your minimum guaranteed benefits package?	
a)	Iron and folic acid supplementation	☐ Yes ☐ No
b)	Tetanus vaccination	☐ Yes ☐ No
c)	Prevention and management of sexually transmitted infections and HIV, including with antiretroviral medicines	☐ Yes ☐ No
d)	Calcium supplementation to prevent hypertension (high blood pressure)	☐ Yes ☐ No
e)	Interventions for cessation of smoking	☐ Yes ☐ No
f)	Screening for and treatment of syphilis	☐ Yes ☐ No
g)	Low dose aspirin to prevent pre-eclampsia	☐ Yes ☐ No
h)	Antihypertensive drugs (to treat high blood pressure)	☐ Yes ☐ No
i)	Magnesium sulphate for eclampsia	☐ Yes ☐ No
j)	Antibiotics for preterm prelabor rupture of membranes	☐ Yes ☐ No
k)	Corticosteroids to prevent respiratory distress syndrome in preterm babies	☐ Yes ☐ No
l)	Safe abortion	☐ Yes ☐ No
m)	Post-abortion care	☐ Yes ☐ No
n)	Reduce malpresentation at term with External Cephalic Version	☐ Yes ☐ No
o)	Induction of labor to manage prelabor rupture of membranes at term (initiate labor)	☐ Yes ☐ No
204	Which of these core childbirth interventions are included in your minimum guaranteed benefits package?	
a)	Prophylactic uterotonics to prevent postpartum hemorrhage (excessive bleeding after birth)	☐ Yes ☐ No
b)	Manage postpartum hemorrhage using uterine massage and uterotonics	☐ Yes ☐ No
c)	Social support during childbirth	☐ Yes ☐ No
d)	Active management of third stage of labor (to deliver the placenta) to prevent postpartum hemorrhage (*as above plus controlled cord traction)*	☐ Yes ☐ No
e)	Management of postpartum hemorrhage (*as above plus manual removal of placenta)*	☐ Yes ☐ No

No	Question	Please highlight
f)	Screen and manage HIV (if not already tested)	☐ Yes ☐ No
g)	Caesarean section for maternal/fetal indication (to save the life of the mother/baby)	☐ Yes ☐ No
h)	Prophylactic antibiotic for caesarean section	☐ Yes ☐ No
i)	Induction of labor for prolonged pregnancy (initiate labor)	☐ Yes ☐ No
j)	Management of postpartum hemorrhage *(as above plus surgical procedures)*	☐ Yes ☐ No
205	Which of these core postnatal (mother) interventions are included in your minimum guaranteed benefits package?	
a)	Family planning advice and contraceptives	☐ Yes ☐ No
b)	Nutrition counselling	☐ Yes ☐ No
c)	Screen for and initiate or continue antiretroviral therapy for HIV	☐ Yes ☐ No
d)	Treat maternal anemia	☐ Yes ☐ No
e)	Detect and manage postpartum sepsis (serious infections after birth)	☐ Yes ☐ No
206	Which of these core postnatal (newborn) interventions are included in your minimum guaranteed benefits package?	
a)	Immediate thermal care (to keep the baby warm)	☐ Yes ☐ No
b)	Initiation of early breastfeeding (within the first hour)	☐ Yes ☐ No
c)	Hygienic cord and skin care	☐ Yes ☐ No
d)	Neonatal resuscitation with bag and mask (by professional health workers for babies who do not breathe at birth)	☐ Yes ☐ No
e)	Kangaroo mother care for preterm (premature) and for less than 2000g babies	☐ Yes ☐ No
f)	Extra support for feeding small and preterm babies	☐ Yes ☐ No
g)	Management of newborns with jaundice ("yellow" newborns)	☐ Yes ☐ No
h)	Initiate prophylactic antiretroviral therapy for babies exposed to HIV	☐ Yes ☐ No
i)	Presumptive antibiotic therapy for newborns at risk of bacterial infection	☐ Yes ☐ No
j)	Use of surfactant (respiratory medication) to prevent respiratory distress syndrome in preterm babies	☐ Yes ☐ No
k)	Continuous positive airway pressure (CPAP) to manage babies with respiratory distress syndrome	☐ Yes ☐ No
207	Are there any other services (not listed above) that are included in the minimum guaranteed benefits package?	☐ Yes ☐ No — If yes, please state which additional services are included here
208	Are there any reproductive health services addressed to women and maternal morbidity?	
209	Are there any other comments that you wish to make regarding RMNH policies in your country?	

Module B.2 Reproductive, Maternal and Newborn Health (RMNH) Infrastructure and Planning Models

Please think about all the publicly funded health facilities in your country, and whether or not they provide RMNH care. Emphasize PHC and referral essential services. We are interested in the structure of the health facility system in your country, and in the number of different types of facilities and how they are distributed geographically. Concentrate on 2015 data or latest available.

No.	Question	Source of data & year	Health facility type1	Health facility type 2	Health facility type 3	Health facility type 4	Health facility type 5	Health facility type 6
210	Please list all types of public health facilities that exist in your country, from the highest level of care to the lowest (e.g., referral/ specialist hospital, provincial hospital, district hospital, primary health center, health post, outreach post). Use a separate column for each type of facility							
211	When planning decisions are made, how many people would each facility be expected to serve?							
212	Total number of this type of health facility							
213	How many are designated to carry out ANC? Actual utilization numbers							
214	How many are designated to carry out deliveries? Actual utilization numbers							
215	How many are designated to provide Basic Emergency Obstetric and Neonatal Care (BEmONC)? Actual utilization numbers							
216	How many are designated to provide Comprehensive Emergency Obstetric and Neonatal Care (CEmONC)? Actual utilization numbers							
217	How many are designated to provide neonatal and child care Actual utilization numbers							

No.	Question	Source of data & year	Health facility type1	Health facility type 2	Health facility type 3	Health facility type 4	Health facility type 5	Health facility type 6
218	How many, are designated to provide family planning services: a) Family planning methods b) Family planning counseling c) Information on sexual and reproductive health Actual utilization numbers							
219	How many are designated to provide youth-friendly services Actual utilization numbers							
220	How many are designated to prevent: a) Mother-to-child transmission of HIV/AIDS and management b) HIV counseling and testing c) HIV treatment d) Prevention and control of sexually transmitted diseases Actual utilization numbers							
221	On what basis does the government plan to allocate RMNH PHC services to different geographic areas?							
222	When the government plans how to allocate the RMNH PHC services to different geographical areas, does it make these decisions according to population level, the type of facilities that exist in that area, or based on other assumptions and projection models?							
223	When the government plans how to allocate the RMNH workforce to different geographical areas, does it make these decisions according to population level, the type of facilities that exist in that area, or based on other workforce assumptions and projection models?	1 ☐ Population level (please answer question 224 then go to question 226) 2 ☐ Type of facilities (please answer question 225 then go to question 226) 3 ☐ Both (please answer questions 224and 225 then go to question 226) 4 ☐ Other (please explain on the right and then go to question 226)					If 'other,' please explain here, then go to 226	

No	Question	Enter a number in each box. Leave rows blank if cadre does not exist in your country					
224	On what basis does the government plan how many RMNH workers to allocate to a particular geographical area?		Enter number of RMNH workers (full-time equivalent)		Enter size of population		
		a) Midwives		per		population	
		b) Auxiliary midwives		per		population	
		c) Nurse-midwives		per		population	
		d) Auxiliary nurse-midwives		per		population	
		e) Physicians (general)		per		population	
		f) Physicians (ob/gyn)		per		population	
		g) Other health professionals		per		population	
		h) Other MNH cadres		per		population	
225	When planning, how many RMNH workers are allocated to each type of health facility? (full-time equivalent.)		Health facility type1	Health facility type 2	Health facility type 3	Health facility type 4	Health facility type 5	Health facility type 6
		a) Number of midwives						
		b) Number of auxiliary midwives						
		c) Number of nurse-midwives						
		d) Number of auxiliary nurse-midwives						
		e) Number of physicians (general)						
		f) Number of physicians (ob/gyn)						
		g) Number of other health professionals						
		h) Number of other MNH cadres						
226	Is there any other comment that you wish to make about the current coverage of MNH facilities in your country, or plans for expanding coverage in the future?							

Module B.3 Overall Assessment of SRH Services

The purpose of this module is to provide an overall assessment of the current situation related to readiness of the health system in terms of service availability, accessibility, acceptability, and quality. For each target the consultant is requested to assess on a scale from 1 to 5[3] the likelihood of achieving the targets of the SDGs given the demographic and epidemiological transition expected in the country and the "business-as-usual scenario" of increase in coverage and workforce. Finally, the consultant is requested to list actions needed to achieve the target if she/he believes that given the business-as-usual scenario" the country is not likely to achieve it. A participatory approach is highly recommended in this module.

Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

		Assessment (1 to 5)
227	Availability of antenatal care services in your country at the present time.	
227a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
227b	If not likely to be achieved given the "business-as-usual scenario" what are the actions[4] that need to be taken to achieve this target with respect to health services availability?	
		Assessment (1 to 5)
228	Availability of obstetric care services in your country at the present time.	
228a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
228b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

		Assessment (1 to 5)
229	Availability of newborn care services in your country at the present time.	
229a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
229b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

3 1 refers to the lowest level and 5 refers to the highest level.

4 Should be evidence based.

		Assessment (1 to 5)
230	Availability of immunization services in your country at the present time.	
230a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
230b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
231	Availability of child preventative and curative care services in your country at the present time.	
231a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
231b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.[5]

		Assessment (1 to 5)
232	Availability of prevention of mother-to-child transmission of HIV services in your country at the present time.	
232a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
232b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
233	Availability of HIV counselling and testing services in your country at the present time.	
233a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
233b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
234	Availability of HIV treatment services in your country at the present time.	
234a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
234b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

5 Country-specific

		Assessment (1 to 5)
235	Availability of HIV care and support services in your country at the present time.	
235a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
235b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
236	Availability of sexually transmitted infections control services in your country at the present time.	
236a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
236b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.

		Assessment (1 to 5)
237	Availability of providing modern family planning methods in your country at the present time.	
237a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
237b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
238	Availability of family planning counselling services in your country at the present time.	
238a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
238b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
239	Availability of information on sexual and reproductive health available for dissemination in your country at the present time.	
239a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
239b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
240	Availability of adolescent health services in your country at the present time.	
240a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
240b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

		Assessment (1 to 5)
241	Availability of services needed to achieve universal health coverage of essential services.	
241a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
241b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Target 5.2 Eliminate all forms of violence against all women and girls including trafficking and sexual and other types of exploitation

		Assessment (1 to 5)
242	Availability of services needed to eliminate all forms of violence against all women and girls including trafficking and sexual and other types of exploitation in your country at the present time.	
242a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
242b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.

		Assessment (1 to 5)
243	Availability of services needed to eliminate child, early, and forced marriage in your country at the present time.	
243a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
243b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	
		Assessment (1 to 5)
244	Availability of services needed to eliminate female genital mutilation in your country at the present time.	
244a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
244b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the PoA of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences.

		Assessment (1 to 5)
245	Availability of services needed to ensure universal access to sexual and reproductive health and reproductive rights in your country at the present time.	
245a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
245b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Module C. Reproductive, Maternal and Newborn Health (RMNH) Workforce

The objective of Module C is to assess whether the health workforce is adequate to achieve each of the targets of the SDGs. The assessment should address recruitment, development, training, and retention of the health workforce. For each target, a number of issues are suggested to be covered in the country report. However, the consultant can add other issues of relevance.

Module C.1 Availability of Workforce

This section explores the availability of professional and other health workers who provide maternal and newborn health (MNH) care. This information should be available at the Directorate of Human Resources for Health (or equivalent) at the Ministry of Health. Many countries have annual reports on the composition of the health workforce. Other sources of information may include Demographic and Health Survey (DHS) and country-specific surveys, payroll, professional registries, and labor market assessments. Please provide responses based on 2015 data, or where these are not available, use the most recent available data and specify the year the data are from. If data are not available, please do not leave boxes blank, but instead write in 'unknown.' It is important to adopt the concept of full-time equivalent (FTE) when reporting on workforce[7] working in MNH.

Please start by listing all cadres of health professionals and associate professionals engaged in the provision of MNH care, including: midwives, auxiliary midwives, nurses with midwifery competencies (nurse-midwives), auxiliary nurse-midwives, physicians (general), physicians (ob/gyn specialists), and other health professionals (e.g., advanced associate clinicians and associate clinicians who provide MNH care). Please include all such health professionals, whether they work in the private sector or public sector. Please complete a separate column in the table[7] for each cadre.

6 FTE is the number of hours worked by one person in a full-time job. It is usually used when converting the hours worked by several part-time employees into the equivalent number of full-time workers, which can be useful when making comparison between different countries or workplaces.

7 The table follows the titles and coding of the ILO's International Standard Classification of Occupations (ISCO), as utilized by the World Health Organization to ensure standardized reporting across all countries.

No.	Question		Source of data & year	Midwives	Auxiliary midwives	Nurse-midwives	Auxiliary nurse-midwives	Physicians (general)	Physicians (ob/gyn)	Other health professionals
301	Name of this cadre (if different from the name in the column heading). Please write 'n/a' if this cadre does not exist in your country.									
302	What are the minimum entry requirements to train as this cadre, e.g., age, high school qualifications?									
303	How many years of study are required to qualify as this cadre?									
304	Overall, what percentage of its available working hours does this cadre spend on providing maternal and newborn health (MNH) care?									
305	How many workers in this cadre are currently engaged in providing MNH care in your country?									
306	Of these, how many are:	Aged under 30?								
307		Aged 30-39?								
308		Aged 40-49?								
309		Aged 50+?								
310	Of these, how many are:	Female?								
311	What is the statutory retirement age for this cadre? (If there is no statutory retirement age, please write in 'none.')									
312	What is the gross monthly starting salary for this cadre (in local currency, excluding incentives or 'top-ups')?									
313	Approximately what percentage of this cadre left the workforce in the last year for reasons other than death or reaching statutory retirement age?									

This section explores the availability of all other cadres of health workers who provide parts of the continuum of MNH care to pregnant women, new mothers, and newborns, that are not captured in the professional and other professional categories above; e.g., community health workers, HIV/AIDS counsellors, etc. Again, this information should be available at the Directorate of Human Resources for Health (or equivalent) at the Ministry of Health.

Please complete a separate column in the table for each cadre of other health workers who provide parts of the continuum of MNH care.

No.	Question	Source of data & year	Cadre 8	Cadre 9	Cadre 10	Cadre 11	Cadre 12	Cadre 13	Cadre 14
314	Name of this cadre								
315	What is the relevant ISCO code for this type of health worker?								
316	What are the entry requirements to train as this cadre, e.g., age, high school qualifications?								
317	How many years of study are required to qualify as this cadre?								
318	Overall, what percentage of its available working hours does this cadre spend on providing maternal and newborn health (MNH) care?								
319	How many workers in this cadre are currently engaged in providing MNH care in this country?								

Module C.2 Roles and Responsibility

In 2004, WHO, FIGO, and ICM established a list of roles and responsibilities for health professionals involved in MNH care. These roles and responsibilities are presented below. For each one, please indicate if it is part of the official role of each cadre of health professional (whether or not they actually do it), to enable cross-country comparison of the roles and responsibilities of different MNH cadres. This information should be taken from job descriptions/scopes of practice for these cadres, which should be available from the Directorate of Human Resources for Health or the Directorate of RMNCH (or equivalent) at the Ministry of Health.

Please indicate whether or not the following tasks are part of the officially recognized roles and responsibilities of this cadre. Mark Y for yes and N for no.

No	Question	Midwives	Auxiliary midwives	Nurse-midwives	Auxiliary nurse-midwives	Physicians (general)	Physicians (ob/gyn)	Other health professionals
320	Communicating effectively cross-culturally in order to be able to provide holistic "women-centered" care							
321	In pregnancy care, taking a detailed history by asking relevant questions, assessing individual needs, giving appropriate advice and guidance, calculating the expected date of delivery, and performing specific screening tests as required, including voluntary counselling and testing for HIV							
322	Assisting pregnant women and their families in making a plan for birth							
323	Educating women (and their families and others supporting pregnant women) in self-care during pregnancy, childbirth, and the postnatal period							
324	Identifying illnesses and conditions detrimental to health during pregnancy, performing first-line management (including performance of lifesaving procedures when needed), and making arrangements for effective referral							
325	Performing vaginal examination, ensuring the woman's and health professional's own safety							
326	Identifying the onset of labor							
327	Monitoring maternal and fetal well-being during labor and providing supportive care							
328	Recording maternal and fetal well-being on a partograph and identifying maternal and fetal distress and taking appropriate action, including referral where required							
329	Identifying delayed progress in labor and taking appropriate action, including referral where appropriate							

330	Managing a normal vaginal delivery							
331	Managing the third stage of labor actively (including: using oxytocic drugs, clamping and cutting the cord, and applying controlled cord traction)							
332	Assessing the newborn at birth and giving immediate care							
333	Identifying any life-threatening conditions in the newborn and taking essential lifesaving measures, including, where necessary, active resuscitation as a component of the management of birth asphyxia, and referral where appropriate							
334	Identifying hemorrhage and hypertension in labor, providing first-line management (including lifesaving skills in emergency obstetric care where needed), and, if required, making an effective referral							
335	Providing postnatal care to women and their newborn infants and post-abortion care where necessary							
336	Assisting women and their newborns in initiating and establishing exclusive breastfeeding, including educating women and their families and other helpers in maintaining successful breastfeeding							
337	Identifying illnesses and conditions detrimental to the health of women and/or their newborns in the postnatal period, applying first-line management (including the performance of lifesaving procedures when needed), and, if required, making arrangements for effective referral							
338	Supervising nonskilled attendants, including TBAs where they exist, in order to ensure that the care they provide during pregnancy, childbirth, and early postpartum period is of sound quality, and ensuring continuous training of nonskilled attendants							

339	Providing advice on postpartum family planning and birth spacing							
340	Educating women (and their families) on how to prevent sexually transmitted infections including HIV							
341	Collecting and reporting relevant data and collaborating in data analysis and case audits							
342	Promoting an ethos of shared responsibility and partnership with individual women, their family members/supporters, and the community for the care of women and newborns throughout pregnancy, childbirth, and the postnatal period							
343	Please list all sources of the information provided in your responses to questions 320-342							
344	The above roles and responsibilities relate to the official role of each cadre of health professional. In many countries, health workers may also perform roles that are not part of their official job description (e.g., in the absence of other health professionals, or in emergencies). Please give examples if health workers in your country perform roles outside of their official job description.				If this never happens in your country, please write 'never happens.'			

Please also ensure that you have attached all the available documents as part of the responses to the questions above including:

☐ Where available, one or more document(s) showing the number of MNH care providers in each cadre

☐ Any articles or reports published about any cadres of MNH care provider in the country

Module C.3 Education and Capacity Building

This section of the questionnaire explores the education system and early career paths for MNH professionals and associate professionals, and contextual information that will help us understand how the education system works in your country.

Please include information about all education, whether it is provided in the public sector or the private sector.

			Cadre						
No	**Question**		**Midwives**	**Auxiliary midwives**	**Nurse-midwives**	**Auxiliary nurse-midwives**	**Physicians (general)**	**Physicians (ob/gyn)**	**Other health professionals**
345	Across all schools, how many students have enrolled in each of the following years?	a) 2013							
		b) 2014							
		c) 2015							
346	Across all schools, how many unfilled student places are there in the year group that enrolled in 2012?								
347	Across all schools, how many students have graduated in each of the following years?	a) 2013							
		b) 2014							
		c) 2015							
348	Thinking of the group of students that graduated in 2015, what percentage of those who originally enrolled did not graduate as anticipated?								
349	Typically, what percentage of graduates are employed in the provision of RMNH care within one year of graduation?								

350	Is there a national standard curriculum for this cadre? Provide e-link if available.		1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue) 3 ☐ No (answer question 351 then go to question 354	1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue) 3 ☐ No (answer question 351 then go to question 354)	1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue) 3 ☐ No (answer question 351then go to question 354)	1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue) 3 ☐ No (answer question 351 then go to question 354)	1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue) 3 ☐ No (answer question 351then go to question 354)	1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue) 3 ☐ No (answer question 351 then go to question 354)	1 ☐ Yes, and all schools follow it (go to question 352) 2 ☐ Yes, but not all schools follow it (continue)
351	Are there national standards that are used to assess the quality of the nonstandard curricula and education provided?		☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
352	When was the standard curriculum last updated? Please enter month and year.								
353	According to this standard curriculum, what is the minimum number of supervised births each student must complete before graduation?								
354	Across all schools, how many students are expected to enroll in each of the following years (by increasing capacity of schools or increasing number of schools)? If no projections have been made, please enter 'no projections.'	a) 2017							
		b) 2022							

Module C.4 Overall Assessment of Workforce

The purpose of this module is to provide an overall assessment of the current situation related to readiness of the health system in terms of workforce. For each target the consultant is requested to assess on a scale from 1 to 5 the likelihood of achieving the targets of the SDGs given the demographic and epidemiological transition expected in the country and the "business-as-usual scenario" of increase in coverage and workforce. Finally, the consultant is requested to list actions needed to achieve the target if she/he believes that given the "business-as-usual scenario" the country is not likely to achieve it. A participatory approach is highly recommended in this module.

Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

		Assessment (1 to 5)
355	Availability of antenatal care services workforce in your country at the present time.	
355a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
355b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
356	Availability of obstetric care services workforce in your country at the present time.	
356a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
356b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

		Assessment (1 to 5)
357	Availability of newborn care services workforce in your country at the present time.	
357a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
357b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
358	Availability of immunization services workforce in your country at the present time.	
358a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
358b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

		Assessment (1 to 5)
359	Availability of child preventative and curative care services workforce in your country at the present time.	
359a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
359b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases[8].

		Assessment (1 to 5)
360	Availability of prevention of mother-to-child transmission of HIV services workforce in your country at the present time.	
360a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
360b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
361	Availability of HIV counselling and testing services workforce in your country at the present time.	
361a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
361b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
362	Availability of HIV treatment services workforce in your country at the present time.	
362a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
362b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
363	Availability of HIV care and support services workforce in your country at the present time.	
363a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
363b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

8 Diseases not related to SRH will not be considered

		Assessment (1 to 5)
364	Availability of sexually transmitted infections control workforce in your country at the present time.	
364a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
364b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.

		Assessment (1 to 5)
365	Availability of workforce providing modern family planning methods in your country at the present time.	
365a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
365a	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
366	Availability of family planning counselling services workforce in your country at the present time.	
366a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
366b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
367	Availability of workforce working on disseminating information on sexual and reproductive health in your country at the present time.	
367a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
367b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	
		Assessment (1 to 5)
368	Availability of adolescent health services workforce in your country at the present time.	
368a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
368b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

		Assessment (1 to 5)
369	Availability of workforce needed to achieve universal health coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access, among the general and the most disadvantaged population.	
369a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
369b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 5.2 Eliminate all forms of violence against all women and girls including trafficking and sexual and other types of exploitation

		Assessment (1 to 5)
370	Availability of workforce needed to eliminate all forms of violence against all women and girls including trafficking and sexual and other types of exploitation in your country at the present time.	
370a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
370b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.

		Assessment (1 to 5)
371	Availability of workforce needed to eliminate female genital mutilation in your country at the present time.	
371a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
371b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health workforce availability?	

Target 5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the PoA of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences.

		Assessment (1 to 5)
372	Availability of workforce needed to ensure universal access to sexual and reproductive health and reproductive rights in your country at the present time.	
372a	Likelihood of achieving the target by 2030 given the "business-as-usual scenario."	
372b	If not likely to be achieved given the "business-as-usual scenario," what are the actions that need to be taken to achieve this target with respect to health service availability?	

Module D Health Equity

As explained earlier, one important element in evaluating whether a country was successful in achieving a health outcome is achieving the target for all subpopulations. Reducing disparities is materializing the "no one left behind" slogan. For each target, the consultant is requested to assess the likelihood of achieving the target among subpopulations. Gaps considered in the analysis are wealth/income gap, gender gap, geographical gap, and physical gap (due to disability.) The consultant is requested to give an assessment of how likely the disparity can be significantly reduced among the subpopulations. The assessment should be implemented on a scale from 1 to 5, where 1 refers to extremely difficult to achieve and 5 refers to extremely easy to achieve. [18]

	Target	Source of disparity			
		Wealth	Gender	Geographical	disability
401	Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.				
402	Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.				
403	Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases[9].				
404	Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.				

9 Country-specific

405	Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.				
406	5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.				
407	Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.				
408	Target 5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the PoA of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences.				

If the score is below 4 for any target, identify:

The main challenges and

The most effective actions to be taken to overcome these challenges.

Module E. Relative challenges Facing Achieving SRH-SDGs by 2030

Identify your assessment for each indicator by giving a score from 0 to 10 for each indicator. The purpose is to assess the relative challenge for each indicator within each column (work column by column).

For the first column give a score for each indicator reflecting to what extent health service is a challenge to achieve the goal. Score 10 for the highest challenge and 0 for the lowest challenge.

For the second column give a score for each indicator reflecting to what extent health workforce is a challenge to achieve the goal. Score 10 for the highest challenge and 0 for the lowest challenge.

For the third column give a score for each indicator reflecting to what extent health equity is a challenge to achieve the goal. Score 10 for the highest challenge and 0 for the lowest challenge.

Try not to repeat any number within each column more than 3 times.

Goal	Target	Service	Workforce	Equity
3.1	Antenatal care.			
	Obstetric care.			
3.2	Newborn care.			
	Immunization.			
	Child preventative and curative care.			

3.3	Prevention of mother-to-child transmission of HIV.			
	HIV counselling and testing.			
	HIV treatment.			
	HIV care and support.			
	Sexually transmitted infections control.			
3.7	Providing modern family planning methods.			
	Family planning counselling.			
	Information on sexual and reproductive health available for dissemination.			
	Adolescent health.			
3.8	Achieve universal health coverage of essential services.			
5.2	Eliminate all sort of violence against all girls & women.			
5.3	Eliminate child, early, and forced marriage.			
	Eliminate female genital mutilation.			
5.6	Ensure universal access to sexual and reproductive health and reproductive rights.			

Module F. Information Gap Analysis

In Module E, the country consultant is requested to report on the availability and plausibility of reporting periodically and systematically on the SDGs using the set of indicators listed in Table 2. It is suggested that the consultant comment for each indicator on the following items:

Conformity with definition and method of calculation: Does the available indicator follow the definition and the method of calculation explained in section IV? If no, explain.

Highest possible disaggregation level: "Health for All" and "No One Left Behind" principles are real challenges facing societies. It is extremely important to report indicators segregated by all sources of inequality. In Table 2, five sources of inequality are mentioned. Consultants are requested to identify the availability of segregated indicators and are encouraged to identify other sources of disparity that are country-specific. It is highly recommended that the segregated indicators be sensitive to disparity in health outcomes that exist in the country.

Source of data: For each indicator, the consultant is requested to describe the source of data that will be used to calculate the indicator.

Coverage: For each indicator, the consultant is requested to identify the level of coverage of the general population of the country.

Quality: For each indicator, the consultant is requested to assess the quality of the data (good, fair, poor).

Periodicity: For each indicator, the consultant is requested to identify the periodicity of producing data used to calculate the indicator.

Information gaps: For each indicator, the consultant is requested to suggest measures to bridge gaps, improve quality, and complete coverage. In addition to specific recommendations related to each indicator, general recommendations are welcomed to address how to bridge information gaps.

Indicator 3.1.1: Maternal mortality ratio
601. Conformity with definition and method of calculation. 602. Highest possible disaggregation level. 603. Source of data. 604. Coverage. 605. Quality. 606. Periodicity. 607. Information gaps.
Indicator 3.1.2: Proportion of births attended by skilled health personnel
608. Conformity with definition and method of calculation. 609. Highest possible disaggregation level. 610. Source of data. 611. Coverage. 612. Quality. 613. Periodicity. 614. Information gaps.
Indicator 3.2.1: Under-five mortality rate
615. Conformity with definition and method of calculation. 616. Highest possible disaggregation level. 617. Source of data. 618. Coverage. 619. Quality. 620. Periodicity. 621. Information gaps.
Indicator 3.2.2: Neonatal mortality rate
622. Conformity with definition and method of calculation. 623. Highest possible disaggregation level. 624. Source of data. 625. Coverage. 626. Quality. 627. Periodicity. 628. Information gaps.
Indicator 3.3.1: Number of new HIV infections per 1,000 uninfected
629. Conformity with definition and method of calculation. 630. Highest possible disaggregation level. 631. Source of data. 632. Coverage. 633. Quality. 634. Periodicity. 635. Information gaps.
Indicator 3.3.4: Hepatitis B incidence per 100,000

636. Conformity with definition and method of calculation.
637. Highest possible disaggregation level.
638. Source of data.
639. Coverage.
640. Quality.
641. Periodicity.
642. Information gaps.

Indicator 3.3.5: Number of people requiring interventions against neglected tropical diseases

643. Conformity with definition and method of calculation.
644. Highest possible disaggregation level.
645. Source of data.
646. Coverage.
647. Quality.
648. Periodicity.
649. Information gaps.

Indicator 3.7.1: Proportion of women of reproductive age with unmet need for modern family planning methods

650. Conformity with definition and method of calculation.
651. Highest possible disaggregation level.
652. Source of data.
653. Coverage.
654. Quality.
655. Periodicity.
656. Information gaps.

Indicator 3.7.2: Adolescent birth rate per 1,000 women in that age group

657. Conformity with definition and method of calculation.
658. Highest possible disaggregation level.
659. Source of data.
660. Coverage.
661. Quality.
662. Periodicity.
663. Information gaps.

Indicator 3.8.1: Coverage of essential health services

664. Conformity with definition and method of calculation.
665. Highest possible disaggregation level.
666. Source of data.
667. Coverage.
668. Quality.
669. Periodicity.
670. Information gaps.

Indicator 3.8.2: Proportion covered by health insurance or a public health system per 1,000

671. Conformity with definition and method of calculation.
672. Highest possible disaggregation level.
673. Source of data.
674. Coverage.
675. Quality.
676. Periodicity.
677. Information gaps.

Indicator 5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age

601. Conformity with definition and method of calculation.
602. Highest possible disaggregation level.
603. Source of data.
604. Coverage.
605. Quality.
606. Periodicity.
607. Information gaps.

Indicator 5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence

601. Conformity with definition and method of calculation.
602. Highest possible disaggregation level.
603. Source of data.
604. Coverage.
605. Quality.
606. Periodicity.
607. Information gaps.

Indicator 5.3.1: Proportion of women aged 20-24 years who were married before age 15 and before age 18

601. Conformity with definition and method of calculation.
602. Highest possible disaggregation level.
603. Source of data.
604. Coverage.
605. Quality.
606. Periodicity.
607. Information gaps.

Indicator 5.3.2 Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age

608. Conformity with definition and method of calculation.
609. Highest possible disaggregation level.
610. Source of data.
611. Coverage.
612. Quality.
613. Periodicity.
614. Information gaps.

Indicator 5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding contraceptive use and reproductive health care

615. Conformity with definition and method of calculation.
616. Highest possible disaggregation level.
617. Source of data.
618. Coverage.
619. Quality.
620. Periodicity.
621. Information gaps.

Indicator 5.6.2 Availability of laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education

622. Conformity with definition and method of calculation.
623. Highest possible disaggregation level.
624. Source of data.
625. Coverage.
626. Quality.
627. Periodicity.
628. Information gaps.

Characteristics of respondent(s):

Was the questionnaire filled by one consultant or more than one?

If the questionnaire was filled by one consultant, did he/she consult with other individuals regarding the questions related to subjective assessment (module B.4, C.4, D, and E)?

Appendix B: Definition of Indicators

Indicator 3.1.1: Maternal mortality ratio

Definition: The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, expressed per 100,000 live births, for a specified time period.

Calculation: The maternal mortality ratio can be calculated by dividing recorded (or estimated) maternal deaths by total recorded (or estimated) live births in the same period and multiplying by 100,000. Measurement requires information on pregnancy status, timing of death (during pregnancy, childbirth, or within 42 days of termination of pregnancy), and cause of death. The maternal mortality ratio can be calculated directly from data collected through vital registration systems, household surveys, or other sources. Data quality problems often arise, particularly related to the underreporting and misclassification of maternal deaths. Therefore, data are often adjusted to take these data quality issues into account. Because maternal mortality is a relatively rare event, large sample sizes are needed if household surveys are used to identify recent maternal deaths in the household (e.g., last year). This may still result in estimates with large confidence intervals, limiting the usefulness for cross country or over time comparisons. To reduce sample size requirements, the sisterhood method used in the Demographic and Health Survey (DHS) and multiple indicator surveys (MICS4) measures maternal mortality by asking respondents about the survival of sisters. It should be noted that the sisterhood method results in pregnancy related mortality: regardless of the cause of death, all deaths occurring during pregnancy, birth, or the six weeks following the termination of the pregnancy are included in the numerator of the maternal mortality ratio. Censuses have also included questions about maternal deaths with variable success. Reproductive Age Mortality Studies (RAMOS) is a special study that uses varied sources, depending on the context, to identify all deaths of women of reproductive age and ascertain which of these deaths are maternal or pregnancy related.

Indicator 3.1.2: Proportion of births attended by skilled health personnel

Definition: Percentage of live births attended by skilled health personnel (doctors, nurses, or midwives) during a specified time period.

Calculation: Definition of skilled birth attendant varies between countries. The percentage of births attended by skilled health personnel is calculated as the number of births attended by skilled health personnel (doctors, nurses, or midwives) expressed as a percentage of the total number of births in the same period. Births attended by skilled health personnel = (number of births attended by skilled health personnel)/(total number of live births) x 100. In household surveys such as the DHS, MICS, and RHS, the respondent is asked about each live birth and who helped during delivery for a period up to five years before the interview. Service/facility records could be used where a high proportion of births occur in health facilities and are therefore recorded.

Indicator 3.2.1: Under-five mortality rate

Definition: The probability of a child born in a specific year or period dying before reaching the age of five years, if subject to age-specific mortality rates of that period, expressed per 1,000 live births. The under five mortality rate as defined here is, strictly speaking, not a rate (i.e., the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as a rate per 1,000 live births.

Calculation: The most frequently used methods using the above mentioned data sources are as follows:

Civil registration: Number of deaths at age 0–5 and population of the same age are used to calculate death rates that are then converted into age specific probability of dying.

Census and surveys: An indirect method is used based on questions to each woman of reproductive age as to how many children she has ever given birth to and how many are still alive. The Brass method and model life tables are then used to obtain an estimate of under five and infant mortality rates. Census often includes questions on household deaths in the last 12 months, which can be used to calculate mortality estimates.

Surveys: A direct method is used based on birth history – a series of detailed questions on each child a woman has given birth to during her lifetime. Neonatal, post neonatal, infant, child, and under five mortality estimates can be derived from the full birth history module.

Indicator 3.2.2: Neonatal mortality rate

Definition: Probability that a child born in a specific year or period will die during the first 28 completed days of life if subject to age specific mortality rates of that period, expressed per 1,000 live births. Neonatal deaths (deaths among live births during the first 28 completed days of life) may be subdivided into early neonatal deaths, occurring during the first 7 days of life, and late neonatal deaths, occurring after the 7th day but before the 28th completed day of life.

Calculation: Data from civil registration: The number of live births and the number of neonatal deaths are used to calculate age-specific rates. This system provides annual data. Data from household surveys: Calculations are based on full birth history, whereby women are asked for the date of birth of each of their children, whether each child is still alive, and if not, the age at death.

Indicator 3.3.1: Number of new HIV infections per 1,000 uninfected population, by sex, age, and key populations

Definition: Number of new HIV infections per 1,000 person years among the uninfected population. The incidence rate is the number of new cases per population at risk in a given time period.

Calculation: Longitudinal data on individuals are the best source of data but are rarely available for large populations. Special diagnostic tests in surveys or from health facilities can be used to obtain data on HIV incidence. HIV incidence can also be modelled using the Spectrum software.

Indicator 3.3.4: Hepatitis B incidence per 100,000

Definition: The number of new hepatitis B infections per 100,000 in a given year is estimated from the prevalence of total antibodies against hepatitis B core antigen (Total anti HBc) and hepatitis B surface antigen (HBsAg) positive among children five years of age, adjusted for sampling design.

Calculation: Total anti HBc reflect cumulated incidence in the first five years of life while HBsAg reflect chronic infections that may evolve toward chronic liver diseases. The sample of the serological survey must be drawn from the specific geographic region to be verified. For example, if the purpose is to estimate national transmission of HBV (including mother to child transmission) then the sampling should be geographically representative of the population. Convenience sampling is not appropriate. The sample size should be adequate to show with 95% confidence HBsAg prevalence of less than 1% with a precision of ± 0.5%. The target age is five years old. Sampling four- to six-year-olds may be appropriate. The serological survey is cross-sectional and therefore a point estimate in time. The shorter time periods of data collection are therefore preferred. Data on HBV birth dose exposure and B3 completion are drawn from official records. Where these are not available, testing for HBsAb may be considered for the serological survey. This is less preferable as it is more costly, but can also be done in addition. Specimen collection and transportation should be appropriate to minimize bias though specimen degradation in rural and remote areas. Where possible, it is advantageous to collect blood specimens for ELISA laboratory testing because the accuracy (sensitivity and specificity) is higher than for rapid tests. However, in some locations only rapid tests will be available, hence test selection is resource dependent. This should be considered in designing overall study methodology. When an appropriate sampling strategy and size are used and quality testing assays and laboratory procedures are employed, the HBsAg prevalence in the serological survey should be representative of the incidence of childhood HBV transmission in the specific geographic region (or country) in this age group.

Indicator 3.7.1: Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods

Definition: Percentage of women of reproductive age (15-49 years) who are sexually active and who have their need for family planning satisfied with modern methods.

Calculation: Household surveys include a series of questions to measure modern contraceptive prevalence rate and demand for family planning. Total demand for family planning is defined as the sum of the number of women of reproductive age (15–49 years) who are married and who are currently using, or whose sexual partner is currently using, at least one contraceptive method, and the unmet need for family planning. Unmet need for family planning is the proportion of married women of reproductive age (15–49 years) who are fecund and sexually active but who are not using any method of contraception (modern or traditional), and report not wanting any more children or wanting to delay the birth of their next child for at least two years. Included are: (i) all pregnant whose pregnancies were unwanted or mistimed at the time of conception; (ii) all postpartum amenorrhoeic women who are not using family planning and whose last birth was

unwanted or mistimed; (iii) all fecund women who are neither pregnant nor postpartum amenorrhoeic, and who either do not want any more children (want to limit family size), or who wish to postpone the birth of a child for at least two years, or do not know when or if they want another child (want to space births), but are not using any contraceptive method.

Indicator 3.7.2: Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group

Definition: Annual number of births to women aged 15–19 years per 1,000 women in that age group. It is also referred to as the age specific fertility rate for women aged 15–19 years.

Calculation: The adolescent birth rate is generally computed as a ratio. The numerator is the number of live births to women aged 15–19 years, and the denominator is an estimate of exposure to childbearing by women aged 15–19 years. The numerator and the denominator are calculated differently for civil registration and survey and census data.

Civil registration: In the case of civil registration the numerator is the registered number of live births born to women aged 15–19 years during a given year, and the denominator is the estimated or enumerated population of women aged 15–19 years.

Survey data: In the case of survey data, the adolescent birth rate is generally computed on the basis of retrospective birth histories. The numerator refers to births to women who were 15–19 years of age at the time of the birth during a reference period before the interview, and the denominator to person years lived between the ages of 15 and 19 years by the interviewed women during the same reference period. Whenever possible, the reference period corresponds to the five years preceding the survey. The reported observation year corresponds to the middle of the reference period. For some surveys, no retrospective birth histories are available and the estimate is based on the date of last birth or the number of births in the 12 months preceding the survey.

Census data: With census data, the adolescent birth rate is generally computed on the basis of the date of last birth or the number of births in the 12 months preceding the enumeration. The census provides both the numerator and the denominator for the rates. In some cases, the rates based on censuses are adjusted for under registration based on indirect methods of estimation. For some countries with no other reliable data, the own children method of indirect estimation provides estimates of the adolescent birth rate for a number of years before the census.[1] If numbers are available, adolescent fertility at ages under 15 years can also be computed.

Indicator 3.8.1: Coverage of essential health services

Definition: Coverage of essential health services is defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn, and child health, infectious diseases, noncommunicable diseases, and service capacity and access, among the general and the most disadvantaged population. Tracer interventions for promotion and prevention services include: family planning coverage (need satisfied), antenatal care (at least four visits), vaccination, non use of tobacco, improved water source, adequate sanitation, and other locally relevant coverage

1 http://mdgs.un.org/unsd/mdg/Metadata.aspx, accessed 19 October 2009.

indicators. Tracer interventions for treatment services include: skilled birth attendance, antiretroviral therapy, tuberculosis treatment (case detection and treatment success), hypertension treatment, diabetes treatment, pneumonia treatment in children, and other locally relevant indicators.

Calculation: Universal health coverage (UHC) means that people receive the services they need, without incurring financial hardship. Countries progressively realize UHC according to their level of development, epidemiological situation, health system, and people's expectations. The indicators ideally cover promotion, prevention, treatment, rehabilitation, and palliation. There are a number of indicators that all countries implement, such as immunization coverage or skilled attendance at birth, that can be used for a summary measure of progress at global, regional, and country levels. Countries will also create their own set of indicators to track progress toward UHC, however. The selection of indicators is based on the initial framework, and was applied in the global report published in 2015 by WHO and the World Bank. This provides a basis for further improvements working alongside countries.

Indicator 3.8.2: Percent of people covered by health insurance or a public health system

Definition: Number of individuals covered by health insurance or supported by a public health system per 1,000 individuals.

Calculation: The indicator should reflect all kinds of health insurance and all public health systems. It can be calculated from nationally representative household surveys, from national databases, or from registries.

Indicator 5.2.1: Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age

Definition: The different forms of violence included in the indicator are defined as follows:

1) Physical violence consists of acts aimed at physically hurting the victim and include, but are not limited to, pushing, grabbing, twisting the arm, pulling the hair, slapping, kicking, biting or hitting with the fist or object, trying to strangle or suffocate, burning or scalding on purpose, or threatening or attacking with some sort of weapon, gun, or knife.

2) Sexual violence is defined as any sort of harmful or unwanted sexual behavior that is imposed on someone. It includes acts of abusive sexual contact, forced engagement in sexual acts, attempted or completed sexual acts without consent, incest, sexual harassment, etc. In intimate partner relationships, experiencing sexual violence is commonly defined as being forced to have sexual intercourse, having sexual intercourse out of fear for what the partner might do, and/or being forced to do something sexual that the woman considers humiliating or degrading.

3) Psychological violence includes a range of behaviors that encompasses acts of emotional abuse and controlling behavior. These often coexist with acts of physical and sexual violence by intimate partners and are acts of violence in themselves.

Calculation: This indicator calls for disaggregation by form of violence and by age group and yields the following subindicators for each form of violence:

Number of ever partnered women and girls (15 +) who experienced violence by a current or former intimate partner in the previous 12 months x 100 divided by the Number of ever partnered women and girls (15+).

Indicator 5.3.1: Proportion of women aged 20–24 years who were married before age 15 and before age 18

Definition: Proportion of women aged 20 to 24 years who were first married by age 18. It is calculated by dividing the number of women aged 20–24 who were first married by age 18 by the total number of women aged 20–24 in the population. A similar indicator is also calculated for first marrying before 15.

Calculation: Household surveys such as the UNICEF-supported MICS and DHS have been collecting data on this indicator in low- and middle-income countries since the late 1980s. Such data can be also collected through national censuses or other national household surveys.

Indicator 5.3.2: Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/ cutting, by age

Definition: Proportion of girls and women aged 15 to 49 years who have undergone female genital mutilation/cutting (FGM/C) is calculated by dividing the number of girls and women aged 15–49 who have undergone FGM/C by the total number of girls and women aged 15–49 in the population.

Calculation: Household surveys such as the UNICEF-supported MICS and DHS have been collecting data on this indicator in low- and middle-income countries since the late 1980s. Such data can be also collected through other national household surveys. There are existing tools and mechanisms for data collection that countries have implemented to monitor the situation with regard to this indicator. The modules used to collect information on the circumcision status of girls aged 0–14 and women aged 15–49 in the DHS and MICS have been fully harmonized.

Indicator 5.6.1: Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

Definition: The indicator measures specific decisions by women (aged 15–49) on their own sexuality and reproduction. Interviewees will have to provide a "yes" answer to all three questions to count as a woman who makes her own sexual and reproductive decisions. The first question looks at the ability to say no to sexual intercourse as a critical condition of sexual autonomy. The second question measures the woman's decision concerning using or not using contraception. The third question measures the woman's decision about obtaining sexual and reproductive healthcare for herself.

The three questions are as follows:

1) Whether a woman can say no to her husband/partner if she does not want to have sexual intercourse

2) Whether using contraception or not using contraception has been mainly the woman's decision

3) Whether a woman can make a decision about sexual and reproductive healthcare for herself

Calculation: The number of women currently married women (15–49) saying yes to all three questions X 100 divided by the number of women of reproductive age 15–49. Indicator will be measured through DHS and MICS.

Indicator 5.6.2: Availability of laws and regulations that guarantee women aged 15–49 access to sexual and reproductive health care, information and education

Definition: Legal/regulatory frameworks covered by this indicator include laws and regulations that explicitly guarantee:

1) Access to SRH services without third party authorization (from the spouse, guardian, parents, or others);
2) Access to SRH services without restrictions in terms of age and marital status;
3) Access by adolescents to SRH information and education.

Calculation: Whether the country has the proper legal/regulatory frameworks.

Sources:

Metadata for Goal 3 indicators:

https://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-3.pdf

Metadata for Goal 5 indicators:

https://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-5.pdf

Appendix C: Outline of Country Report and Guidelines

Executive Summary

1) Introduction, including background, objective and methodology

2) Country profile and baseline assessment of targets
   Country profile
   Health policies
   Baseline indicators
   Major sources of health and population data

3) Accessibility and coverage of health system
   Minimum benefits package
   Infrastructure and planning models
   Norms for coverage
   Overall assessment of coverage
   Conclusions and recommendations

4) Health workforce availability
   Availability of workforce
   Roles and responsibility
   Education and capacity building
   Overall assessment of workforce
   Conclusions and recommendations

5) Health equity
   Current situation of health equity in the country
   Challenges facing the country to achieve "health for all" and "no one left behind"
   Conclusions and recommendations

6) Governance
   Areas of improvements in governance to achieve health for all, to increase the level of equity in health outcome, and to make health service delivery more efficient and effective

7) Finance
   Financial aspects related to achieve universal coverage of SRH

8) Information gap analysis
   Assessment of information on health and development in the country
   Challenges facing the country to report on SDGs
   Conclusions and recommendations

9) Country-specific challenges

10) Conclusions and recommendations including gaps, bottlenecks, priorities, projections, and specific actions to be taken to improve readiness for achieving SDGs

11) References

12) Appendices including documents, glossary, and questionnaire

Guidelines for Country Report

In addition to filling the instrument, each consultant is expected to produce a country report. The purpose of the country report is to provide an analytic perspective of the challenges facing the country in achieving the Sustainable Development Goals (SDGs) and to suggest recommendations to overcome those challenges. The following guidelines are suggested:

1) The country report should be evidence-based and should rely on recent data.

2) The purpose is to end up with a country

report that reflects health system readiness, which requires that different countries use the standardized methodology developed in this document. However, this should not prevent raising country-specific issues and challenges related to the country health system or to the political regional or national situation.

3) Equity is a challenge that should not be underestimated. It is defined as the absence of systematic or potentially remediable differences in health status, access to health care and health-enhancing environments, and treatment for one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically within the country. The consultant should provide a comprehensive assessment of the action needed to reach equity in health outcomes in her/his country.

4) Future projections till 2030 to assess supply of and demand for service coverage and workforce should be addressed to give a clear understanding of expected gaps and help develop strategies to achieve the SDGs.

5) In many cases, socioeconomic and cultural aspects create real obstacles that hinder the achievement of health outcomes. These aspects should not be ignored in the analysis. Achieving targets related to HIV, female genital mutilation, and early marriage are examples.

6) Health workforce availability heavily depends on social, cultural, and legal aspects in the ecosystem of the society, so such aspects should not be ignored in the analysis.

7) Good governance is a prerequisite to achieve health outcomes and to achieve health equity. The consultant should address issues related to governance whenever appropriate.

8) As the availability of financial resources is crucial to implement programs needed to achieve the SDGs, this angle should not be ignored in the analysis.

9) Financial risk protection (FRP) is an important angle in universal health coverage, however, this is mainly applicable to health care for chronic diseases. Even though FRP is not heavily linked to SRH, it is useful to describe the FRP situation in the country, especially for disadvantaged groups.

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The United Nations reproductive health and rights agency

Ensuring reproductive rights for all