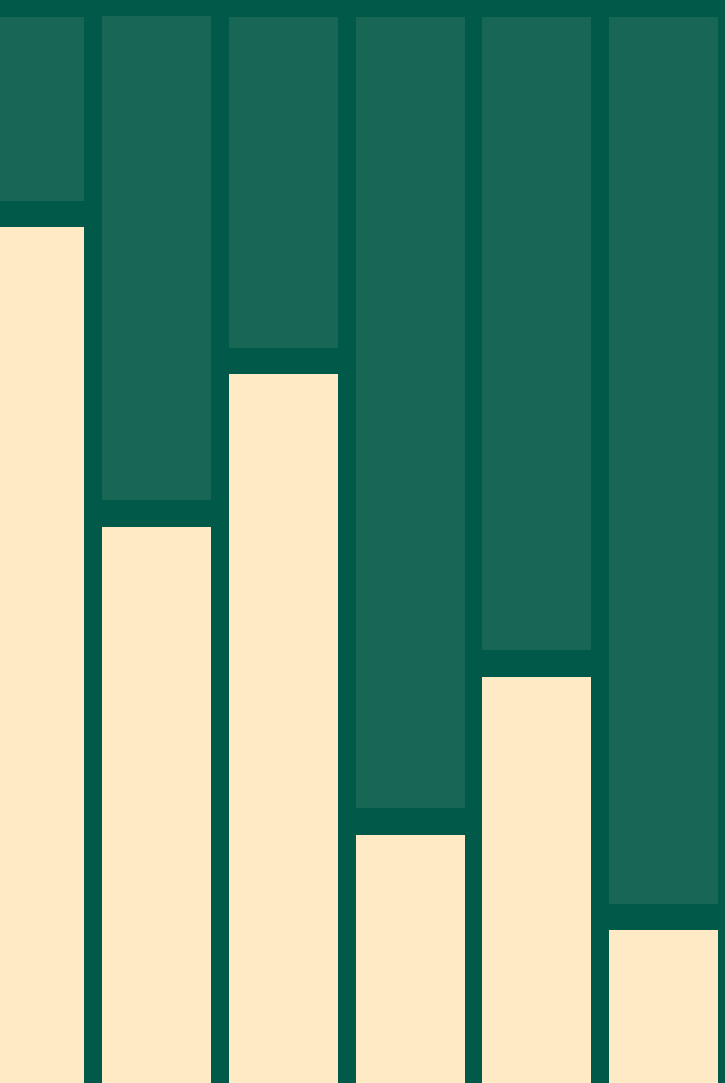
WHO-EM/WRH/081/E

Framework for monitoring and evaluation of reproductive health programmes in the Eastern Mediterranean Region



World Health Organization
Regional Office for the Eastern Mediterranean

WHO-EM/WRH/081/E

Framework for monitoring and evaluation of reproductive health programmes in the Eastern Mediterranean Region

World Health Organization
Regional Office for the Eastern Mediterranean

WHO Library Cataloguing in Publication Data

World Health Organization. Regional Office for the Eastern Mediterranean

Framework for monitoring and evaluation of reproductive health programmes in the Eastern Mediterranean Region / World Health Organization. Regional Office for the Eastern Mediterranean

p.

WHO-EM/WRH/081/E

1. Reproductive Health Services - Eastern Mediterranean Region 2. Regional Medical Programs 3. Program Evaluation 4. Program Development - methods I. Title II. Regional Office for the Eastern Mediterranean

(NLM Classification: WQ 200)

Document WHO-EM/WRH/081/E

Printed by WHO Regional Office for the Eastern Mediterranean, Cairo

Contents

1. Introduction

The first WHO Global Reproductive Health Strategy adopted by the 57th World Health Assembly in May 2004 (resolution WHA57.12) aims to accelerate progress in achieving universal access to sexual and reproductive health, and targets five core elements:

- Improving antenatal, delivery, postpartum and newborn care
- Providing high quality services for family planning, including infertility services;
- Eliminating unsafe abortion
- Combating sexually transmitted infections, including HIV, reproductive tract infections, cervical cancer and other gynaecological morbidities
- Promoting sexual health.

The strategy proposes key action areas to accelerate progress, namely:

- Strengthening the health systems capacity
- Improving information for priority-setting
- Mobilizing political will
- Creating supportive legislative and regulatory frameworks
- Strengthening monitoring, evaluation and accountability.

In resolution 57.12, the Health Assembly urged governments "to make reproductive and sexual health an integral part of national planning and budgeting". WHO global reproductive health strategy provides directions for the governments to accelerate the progress towards attainment of international development goals and targets related to sexual and reproductive health.

In the WHO Eastern Mediterranean Region, two consecutive resolutions were adopted to complement and accelerate implementation of the global reproductive health strategy in the Region. In October 2004, the WHO Regional Committee for the Eastern Mediterranean adopted resolution EM/RC51/R.4 Moving towards the Millennium Development Goals: investing in maternal and child health, in which it urged Member States they had not already achieved the targets of the Millennium Development Goals (MDGs)[1] for improvement of maternal and child health, to strengthen existing national surveillance systems to monitor maternal and child mortality and morbidity trends and establish national maternal mortality committees to review and monitor maternal deaths. In October 2007, the Regional Committee adopted resolution EM/RC54/R.2, which aimed at ensuring universal coverage of the existing cost-effective interventions and improving the quality of vital registration and other relevant information and auditing systems in order to provide reliable data on maternal, neonatal and child health indicators and to monitor progress.

2. Situation in the Eastern Mediterranean Region

The unmet need for safe pregnancy and childbirth, family planning and prevention and control of sexually transmitted infections, including HIV/AIDS, economically and socially affect the most active segments of the population. sexual and reproductive ill health account for a high proportion of the disease burden among individuals, families and communities and has broad impact on social and economic development in the Region.

Eight countries of the Region have significantly lagged behind in progress to achieve Millennium Development Goals 4 and 5 and cumulatively contribute over 95% of total maternal and child deaths in the Region. Yet information on the major determinants of reproductive morbidity and mortality throughout the lifespan is still inadequate to enable evidence-based planning, implementation and evaluation of reproductive health programmes in the Region.

The WHO Regional Office for the Eastern Mediterranean aims to strengthen the technical capacity in countries of the Region and obtain relevant and reliable data and information to monitor, evaluate and advise national reproductive health programmes in Member States. Developing a Region-specific framework for monitoring and evaluation of reproductive health programmes is a first step towards achieving this goal.

3. Methodology

The framework for monitoring and evaluation of reproductive health programmes in the Eastern Mediterranean Region was developed jointly with WHO headquarters with emphasis on achieving harmonization and consistency with the WHO global reproductive health monitoring framework. The main objective of the framework is to facilitate evaluation of reproductive health programmes in the Region and improve the quality of services and the overall situation in this area.

Selection of appropriate indicators for monitoring and evaluation of reproductive health programmes in the Region was guided by: the WHO global reproductive health strategy targets; the new MDG framework, which incorporates one additional target for Goal 5 (achieve, by 2015, universal access to reproductive health) along with four related indicators (contraceptive prevalence rate; adolescent birth rate; antenatal care coverage; and unmet need for family planning) adopted at the 62nd General Assembly of the United Nations in 2007; the proposed framework of indicators within the report on "national-level monitoring of the achievement of universal access to reproductive health" recently published by WHO and UNFPA; and the outcome of an intercountry workshop on strengthening reproductive health monitoring and evaluation, held in Cairo, Egypt, from 29 March to 1 April 2009.

Countries of the Region are classified into two groups according to their progress towards achieving Goal 5:

Group 1: Countries with unfavourable reproductive health indicators

Afghanistan, Djibouti, Iraq, Morocco, Pakistan, Somalia Sudan, Yemen.

Group 2: Countries with intermediate to advanced reproductive health indicators:

Bahrain, Egypt, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates

All identified policy and programme indicators are classified into two categories to measure both health systems (inputs, processes and outputs) and public health status (outcome/impact). Initially, a comprehensive list of 31 indicators was developed only for countries with unfavourable reproductive health situations. Seven additional indicators, relevant to country situations in the second group, were added to the initial list to make a total of 38 indicators for this group. As a next step, the list of selected indicators was examined against the capacity of existing sources of reliable information and the feasibility of obtaining and communicating this data. This resulted in reducing the number of selected indicators to 27 indicators for the countries in Group 1 and 34 (27+7) indicators for the countries in Group 2. However, for equity and ethical considerations, countries in Group 1 are encouraged to collect and report information on the full list of 34 monitoring indicators by including the seven additional indicators. The final comprehensive list of indicators selected for monitoring reproductive health programmes in countries of the Region (including indicator definition, measure and data source) is provided in Section 4.

The framework for evaluation of reproductive health programmes is presented in Section 5.

The framework recognizes the importance and role of the broader health system context in implementation of the WHO global reproductive health strategy and organizes health system and health status indicators around seven core structural areas:

- Financing
- Human resources and medical commodities
- Delivery of reproductive health care
- Improving of information and evidence-based priority setting
- Mobilizing political will
- Creating supportive legislative and regulatory frameworks
- Monitoring, evaluation and accountability.

The framework provides a logical agenda and draws attention to different key aspects of policy and programme areas including policy and regulations, financing, infrastructure and access to services, and quality and utilization of services, that must work satisfactorily and in synergy to achieve the desired end results at the programme and population levels.

The framework is designed to help diagnose reproductive health priority issues at the country level and enable assessment of progress towards attainment of Goal 5 and intermediate targets. It facilitates both the conduct of a routine annual reproductive health programme monitoring (use Section 4), and comprehensive assessment of the national reproductive health strategy and programme implementation (use Section 5). This exercise requires appropriate planning and resource allocation.

The indicator descriptions identify a variety of data sources, including programme and population-based records and government documents that are recommended for the conduct of the process of monitoring and evaluation. However, it is well acknowledged that in some countries reliable and valid data for certain indicators, or the desired level of disaggregation, may not be available.

In conclusion, the framework offers standardization for the process of monitoring and evaluation of reproductive health programmes with the following purposes: a) strengthening reproductive health service delivery in a given country; b) monitoring progress towards achieving Goal 5; c) evaluating national reproductive health strategy and programme implementation; and d) making useful comparisons across countries, while interpreting the results in a country-specific socioeconomic and cultural context.

4. Reproductive health programme monitoring indicators in the Region

No	Indicator	Category	Definition	Measure		Data source
				Numerator	**Denominator**	
1	**Maternal mortality ratio (MMR)**	Impact	The number of maternal deaths per 100 000 live births	All maternal deaths occurring in a period (usually a year) x 100 000	Total number of live births occurring in the same period	a) Vital registration; b) health facility-based data; c) population-based surveys or surveillance
2	**% Deliveries attended by skilled attendant**[1]	Service use	The percentage of births attended by a skilled attendant	Birth attended by skilled attendant during a specified period x 100	Total number of live birth during the same period	a) Health information system; b) population based survey data
3	**% Pregnant women attended at least 4 antenatal care visits by skilled attendant**	Service use	The percentage of pregnant women attended at least 4 antenatal care visits, related to pregnancy, by skilled attendant	Number of pregnant women attended at least 4 antenatal care visits, during their pregnancy, by skilled attendant, during a specified period x 100	Total number of live births during the same period	a) Health information system; b) population based survey data
4	**Contraceptive prevalence rate**	Outcome	The percentage of women of reproductive age, 15–49 years, who are using (or whose partner is using) a contraceptive method at a given point in time	Number of women of reproductive age, 15–49 years, who are using (or whose partner is using) a contraceptive method at a given point in time	Total number of women of reproductive age, 15-49 years, at the same point in time	Population-based survey data
5	**Unmet need for family planning**	Access/ demand	The percentage of currently married women aged 15–49 years, who do not want any more children during the next two years but are not currently using any method of contraception	*Not applicable*[2]	*Not applicable*	Population-based survey data

[1] **Skilled attendant** – "an accredited health professional-such as a midwife, doctor or nurse-who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns". *Making pregnancy safer: the critical role of the skilled attendant*. A joint statement by WHO, ICM and FIGO. MPS/RHR/WHO Geneva, 2004.

[2] **Formula for calculating unmet need for contraception** is specifically defined in a particular survey methodology.

No	Indicator	Category	Definition	Measure		Data source
				Numerator	**Denominator**	
6	**Adolescent birth rate**	Impact	Number of live births per 1000 women aged 15–19 years	Total number of live births occurred to women aged 15–19 years in a specified period (usually a year) x 1000	Total number of women aged 15–19 years in the same period	a) Vital registration; b) health facility-based data; c) population-based surveys or surveillance; d) census
7	**Neonatal mortality rate**	Impact	Number of infant deaths up to 28 days after delivery per 1000 live birth	Total number of infant deaths occurred up to 28 days after delivery in a specified period (usually a year) x 1000	The total number of live births in the same period	a) Vital registration; b) population-based surveys or surveillance
8	**Perinatal[3] mortality rate**	Impact	The number of perinatal deaths per 1000 total births	Total number of perinatal deaths in a specified period (usually a year) x 1000	The total number of births in the same period	a) Vital registration; b) population-based surveys or surveillance
9	**% Live births with low birth weight**	Outcome	The percentage of live born babies who weigh less than 2500 grams	Number of live born babies who weigh less than 2500 grams. in a specified period (usually a year) 100	Total number of live births in the same period	a) Health information system; b) population-based survey data
10	**% Deliveries in health facilities**	Service use	The percentage of deliveries occurring in the health facilities	Number of deliveries occurred in the health facility in a specified period (usually a year) x 100	Total number of deliveries occurred in a same period	a) Vital registration; b) population-based surveys or surveillance
11	**% Caesarean section**	Service use	Caesarean section deliveries as percentage of all deliveries	Total number of C-sections in a specified period (usually a year) x 100	Total number of deliveries in the same period	a) Health information system; b) population-based survey data
12	**Prevalence of anaemia in pregnant women**	Outcome	The percentage of pregnant women (screened for haemoglobin levels) with haemoglobin levels below 110g/l	Number of pregnant women (screened for haemoglobin levels), who have levels below 110g/l during a specified period (usually a year) x 100	Total number of pregnant women screened for haemoglobin levels during the same period	a) Health information system; b) population-based survey data
13	**Total fertility rate**	Impact	The number of births a woman would have by the end of her reproductive life if she experienced the currently prevailing age-specific fertility rates (ASFR) from age 15 to 49 years	Sum of the seven ASFRs (for 5-year age groups: 15–19; 20–24; 25–29; 30–34; 35–39; 40–4; 45–49) x 5	1000	a) Vital registration; b) population census data; c) population-based surveys

[3] **The perinatal period** commences at 22 completed weeks (154 days) of gestation and ends at seven completed days after birth.

No	Indicator	Category	Definition	Measure		Data source
				Numerator	**Denominator**	
14*	**% Pregnant women attending antenatal clinics tested for syphilis** *Selective for certain countries*	Service use	Percentage of pregnant women aged 15–24 years attending antenatal care clinics tested for syphilis	Number of pregnant women aged 15–24 years attending antenatal care clinics tested for syphilis during a specific period x 100	Total number of pregnant women aged 15–24 years attending antenatal care clinics during the same period	a) Health information system; b) population-based survey data
15	**% Pregnant women received tetanus vaccination**	Service use	Percentage of pregnant women who received tetanus vaccination	Number of pregnant women who received tetanus vaccination in a specified period x 100	Total number of pregnant women in the same period	a) Health information system; b) population based survey data.
16	**% Obstetric and gynaecological admissions owing to abortion (spontaneous or induced) related complications**	Outcome	Percentage of obstetric and gynaecological (OB/GYN) admissions owing to abortion (spontaneous or induced) related complications, among all OB/GYN admissions	Number of obstetric and gynaecological admissions owing to abortion (spontaneous or induced) related complications in a specified period x 100	Total number of obstetric and gynaecological admissions in the same period	a) Health information system; b) population-based survey data
17	**% Women knowing at least three risk factors/ danger signals of pregnancy-related complications**	Process	Percentage of pregnant women knowing at least three risk factors/warning signs of pregnancy-related complications	Number of pregnant women knowing at least three risk factors/warning signs of pregnancy-related complications in a specified period x 100	Total number of pregnant women in the same period	Population based survey data
18	**% Women knowing at least three risk factors/ danger signals of delivery-related complications** (*in the countries with lower rates of institutional deliveries*)	Process	Percentage of pregnant women knowing at least three risk factors/ danger signals of delivery-related complications	Number of pregnant women knowing at least three risk factors/ danger signals of delivery-related complications in a specified period x 100	Total number of pregnant women in the same period	Population based survey data
19	**% Government expenditure directed towards reproductive health**	Input	Percentage of government expenditure spent on reproductive health (out of total government health expenditure)	Amount of government expenditure spent on reproductive health in a specified period x 100	Amount of total government expenditure on health during the same period	Administrative records
20	**Number of facilities with functioning basic**	Input	Number of facilities with functioning	Number of facilities with functioning BEOC	Total population	Health information system data (*for numerator*); and

No	Indicator	Category	Definition	Measure		Data source
				Numerator	**Denominator**	
	essential obstetric care[4] per 500 000 population		basic essential obstetric care (BEOC) per 500 000 population	x 500 000		census data (*for denominator*)
21	**Number of facilities with functioning comprehensive essential obstetric care[5] per 500 000 population**	Input	Number of facilities with functioning comprehensive essential obstetric care (CEOC) per 500 000 population	Number of facilities with functioning CEOC x 500 000	Total population	Health information system data (*for numerator*); and census data (*for denominator*)
22	**Number of skilled birth attendants[6] per 1000 population**	Input	Number of skilled birth attendants per 1000 population	Number of skilled birth attendants x 1000	Total population	Health information system data (*for numerator*); and Census data (*for denominator*)
23	**% Midwives who received evidence-based reproductive health, including family planning, in-service training in a given year**	Input	Percentage of midwives (at primary and/or secondary level of care) who received evidence-based reproductive health, including family planning, in-service training in a given year	Number of midwives who received evidence-based reproductive health, including family planning, in-service training in a given year x 100	Total number of midwives who were scheduled to receive in-service training in the same year	a) Administrative records b) Special survey
24	**Notification of maternal deaths is mandatory**	Input	Notification of maternal deaths is mandatory (Yes/No)	Not applicable	Not applicable	Policy documents
25	**% Primary health care facilities providing at least 3 modern family planning methods**	Input	Percentage of primary health care facilities have sufficient stock and providing at least 3 modern family planning	Number of primary health care facilities providing at least 3 modern family planning methods x 100	Total number of primary health care facilities	a) Administrative records b) Population-based survey data

[4] A **basic emergency obstetric care** facility is one that performs all of the following seven services: administration of parenteral antibiotics, oxytocics and anticonvulsants; manual removal of the placenta; removal of retained products (e.g. manual vacuum aspiration); assisted vaginal delivery (vacuum extraction or forceps); and perform besic neonatal resuscitation (e.g. with bag and mask). WHO/UNFPA/UNICEF/AMDD, *Monitoring emergency obstetric care*. Geneva, WHO, 2009.

[5] A **comprehensive emergency obstetric care** facility is one that performs surgery (Caesarean-section) and blood transfusion in addition to all seven BEOC services. WHO/UNFPA/UNICEF/AMDD, *Monitoring emergency obstetric care*. Geneva, WHO, 2009.

[6] WHO defines a skilled attendant as "an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns". *Making Pregnancy Safer: the critical role of the skilled attendant*. A joint statement by WHO, ICM and FIGO. Geneva, World Health Organization, 2004.

No	Indicator	Category	Definition	Measure		Data source
				Numerator	**Denominator**	
			methods			
26	**% Women reporting to have undergone female genital mutilation (FGM) disaggregated by age groups** *(only for: Djibouti, Egypt, Somalia, Sudan and Yemen)*	Outcome	Percentage of women of reproductive age, 15–49 years, who report to have undergone female genital mutilation disaggregated by 5-year age groups (i.e. 15–19; 20–24; 25–29; 30–34; 35-39; 40–4; 45–49) in a specified period	Number of women of reproductive age 15–49 years who report to have undergone female genital mutilation disaggregated by 5-year age groups in a specified period x 100	Total number of women of reproductive age, 15–49 years, disaggregated by 5-year age groups in the same period	Population-based survey
27	**% Health service delivery points providing necessary medical and psychological services for women with FGM** *(only for: Djibouti, Egypt, Somalia, Sudan and Yemen)*	Input	Percentage of health service delivery points providing necessary medical and psychological services for women with FGM	Number of health service delivery points providing necessary medical and psychological services for women with FGM in a specified period x 100	Total number of health service delivery points in the same period	a) Administrative records b) Special survey data
ADDITIONAL INDICATORS (FOR COUNTRIES IN GROUP 2)						
28	**Existence of policy on cervical cancer screening**	Input	Existence of policy on cervical cancer screening (Yes/No)	Not applicable	Not applicable	Policy documents.
29	**Existence of policy on breast cancer screening**	Input	Existence of policy on breast cancer screening (Yes/No)	Not applicable	Not applicable	Policy documents.
30	**% Reproductive health service providers trained in youth-friendly[7] service provision**	Input	Percentage of reproductive health service providers trained in youth-friendly service provision	Number of reproductive health service providers trained in youth-friendly service provision in a specified period x 100	Total number of reproductive health service providers in the same period	a) Administrative records b) Special survey data
31	**% Reproductive health service delivery points providing youth-friendly services**	Input/ process	Percentage of reproductive health service delivery points providing youth friendly services	Number of reproductive health service delivery points providing youth friendly services in a specified period x 100	Total number of reproductive health service delivery points in the same period	a) Administrative records b) Special survey data

[7] Illustrative characteristics of youth-friendly services include: providers trained in youth reproductive health issues and communication; respectful, non-judgmental attitude; confidentiality and privacy; convenient hours/location; comfortable, non-threatening environment; affordable fees; community involvement/support; youth participation. http://search.fhi.org/cgi-bin/MsmGo.exe?grab_id=107699760&extra_arg=&page+id=2775&host_id=18query=youthfriendly&hiwrd=YOUTHFRIENDLY+

No	Indicator	Category	Definition	Measure		Data source
				Numerator	**Denominator**	
32	**% Women of reproductive age, 15–49 years, screened for cervical cancer during the past five years**	Outcome	Percentage of women of reproductive age, 15–49 years, screened for cervical cancer during the past five years	Number of women of reproductive age, 15–49 years, screened for cervical cancer during the past five years x 100	Total number of women of reproductive age, 15–49 years, during the past five years	a) Administrative records b) Population-based survey data
33	**Prevalence of infertility in women**	Outcome	The percentage of women of reproductive age, 15–49 years, at risk of becoming pregnant (not pregnant, sexually active, not using contraception, and not lactating) who report trying for a pregnancy for two years or more	Number of women of reproductive age, 15–49 years, risk of becoming pregnant (not pregnant, sexually active, not using contraception, and not lactating) who report trying unsuccessfully for a pregnancy for two years or more x 100	Total number of women of reproductive age, 15–49 years, in the same period	Population-based survey data
34*****	**% Young men and women age 15–24 years OR "at risk" groups who have correct comprehensive knowledge on HIV prevention**	Outcome	Percentage of young men and women age 15–24 years OR "at risk" groups who correctly identify the ways of HIV transmission and reject major misconceptions about HIV transmission	Number of young men and women age 15–24 years OR "at risk" groups who correctly identify the ways of HIV transmission and reject major misconceptions about HIV transmission x 100	Total number of young men and women age 15–24 years OR "at risk" groups in interest	Population-based survey data

*May come under the responsibility of national HIV/AIDS programmes

5. Reproductive health programme evaluation framework

Core areas	Input and process indicators		Output, outcome and impact indicators
	Policy, regulations and strategies	**Resources, services, commodities and programmes**	
Financing	Is reproductive health (with special emphasis on maternal and neonatal health component, especially in countries which have poor record of progress to MDGs 4 and 5) explicitly reflected in national health sector plans? Are principles of equity (i.e. adolescents, gender and disadvantaged groups) appropriately reflected in the policies and programmes governing financing of reproductive health care delivery? (*Selective for certain countries*) Is reproductive health included in proposals to major international donor institutions? Are reproductive health service indicators included in the national health accounts framework?	% government budget allocated to health care % government health budget allocated to reproductive health, disaggregated by service delivery, infrastructure and commodity security % government health expenditure directed to reproductive health, disaggregated by service delivery, infrastructure and commodity security % International donor funding out of total reproductive health expenditures, disaggregated by service, infrastructure and commodity security % reproductive health expenditures allocated to reduce financial barriers to utilization of reproductive health care services by adolescents, young adults and other disadvantaged population groups Reproductive health related financial indicators are calculated during national health expenditure reviews Cost-effectiveness and financial sustainability analyses of reproductive health programmes are conducted regularly	
Human resources and medical commodities	Is there a national strategy and legislation (i.e. certification and licensing) in place to regulate the competence and quantity of reproductive health service providers? Is there legislation in place that governs pre-service and in-service training and continued medical education programmes in reproductive health? Is there a strategy with sufficient resources (i.e. evidence-based curricula, human resources, training materials, supportive supervision framework and adequate funding) in place to address the training (pre and in-service) needs of reproductive health service providers?	Number of midwives per 1000 population; % Midwives who received evidence-based reproductive health, including family planning, in-service training % Health providers trained in youth-friendly service provision Number of facilities with functioning basic essential obstetric care per 500 000 population Number of facilities with functioning comprehensive essential obstetric care per 500 000 population % Primary health care facilities have stock and providing at least 3 modern family planning methods % Traditional birth attendants who have upgraded knowledge, skills and tools for decision making on timely	% Pregnant women attended at least 4 antenatal care visits by skilled attendant % Pregnant women attending antenatal clinics tested for syphilis - Selective for certain countries % Deliveries attended by skilled attendant % Deliveries in health facilities % Pregnant women received tetanus vaccination Maternal mortality ratio Contraceptive prevalence rate Neonatal mortality rate Perinatal mortality rate C-section as percentage of all

Core areas	Input and process indicators		Output, outcome and impact indicators
	Policy, regulations and strategies	**Resources, services, commodities and programmes**	
	Is there a strategy in place to monitor practices and address the needs (i.e. knowledge, skills, tools for decision making on timely referrals) of health care providers outside the formal sector e.g. traditional birth attendants? Are reproductive health commodities included in essential medicines list?	referral of cases to appropriate providers Reproductive health services are integrated into primary health care services[8] Health care worker's work environment (i.e. facility; medical commodities, supplies and communication; conditions of employment; and supervision) are conducive to follow adopted evidence-based service guidelines and clinical protocols and refer complicated cases Resources (i.e. human, communication, transport and financial) are available to assure timely referral delivery Quality of care is evaluated using data generated through routine health information system, operations research and surveys Community-based and operations research is conducted to identify barriers in the use of reproductive health services % Health service delivery points providing youth-friendly services % Health service delivery points providing necessary medical and psychological services for women with FGM *(only for: Djibouti, Egypt, Somalia, Sudan and Yemen)*	deliveries Adolescent birth rate % Women reporting to have undergone female genital mutilation (FGM) disaggregated by age groups – (only for: Djibouti, Egypt, Somalia, Sudan and Yemen)
Delivery of reproductive health care	Are principles of equity (i.e. adolescents, gender and disadvantaged groups) reflected in the policies and programmes governing delivery of reproductive health care? Do national evidence-based guidelines and clinical service protocols exist for major areas, with priority attention to maternal and neonatal health and family planning components? Is there a regulation and functioning referral system between levels of health care delivery? Are there a strategy and mechanisms to understand and address cultural values and practices that could influence reproductive ill-health (e.g. female genital mutilation) or care-seeking behaviour? Is there a strategy in place to address high turnover rate in rural and hard-to-work areas? Is community-based and operations research used in planning reproductive health services?		
Improving information and evidence-based priority- setting	Are there established procedures and well functioning mechanism for registration, communication and analysis of data on population reproductive health status, its determinants and functioning of reproductive health care services at local and national level? Is there an established procedure for participatory (i.e. involving community representatives) priority-setting that is informed by relevant data?	Reproductive health service management decisions are made based on health information system and survey data, and recommendations obtained through operations research Notification of maternal deaths is mandatory Reproductive health indicators are collected and reported routinely There is an established and well functioning reproductive health	% change in skilled attendance during pregnancy, childbirth and post-partum period % change in utilization of reproductive health services % decrease in unmet need for family planning and other reproductive health services

[8] Selected reproductive health services are included into the basic health benefit package and provided at primary health care level. Providers are trained and equipped, including commodities, to deliver reproductive health services.

Core areas	Input and process indicators		Output, outcome and impact indicators
	Policy, regulations and strategies	**Resources, services, commodities and programmes**	
	Is there an established coordination mechanism between government bodies responsible for data collection and analysis? Is there an established coordination mechanism between government ministries and health related institutions for sharing available reproductive health related data for evidence-based priority setting? Are census and population based health surveys conducted regularly?	commodity logistics management information system on a national and local levels	
Mobilizing political will	Is reproductive health, as a key component of public health and national development, sufficiently reflected in the poverty reduction strategy paper? Is there an established country coordination mechanism to coordinate relevant concerned constituencies (government bodies, local and international non-governmental organizations, professional organizations, community and religious leaders) in development and monitoring of implementation of national reproductive health strategy? Is maternal and neonatal health initiative given a priority attention in implementation of national reproductive health strategy, especially in countries, which have poor record of progress to achieving MDGs 4 and 5? Is there a strategy in place to channel scientific evidence, on importance of reproductive health for development, to target audience (e.g. government ministries, political leaders and parties, professional organizations, religious and community leaders, human rights groups, etc)?	Mass media and other direct communication channels (advocacy campaigns, sports activities, health walks, etc.) are used to highlight the central importance of reproductive health in public health and development with specific focus on: maternal and neonatal health, adolescent reproductive health, family planning and harmful practices to reproductive health	
Creating supportive legislative and regulatory frameworks	Is there a legislation and national strategy to ensure universal access to reproductive health care? Is there a national reproductive health commodity security strategy? Are there functioning regulatory and accountability mechanisms (i.e. performance standards, quality control, certification, licensing and accreditation) for reproductive health service delivery by public, nongovernmental organizations and private sector? Is there an established effective legislation and strategy (e.g. licensing and accreditation, quality control, incentives, professional organization and ethics committees) to promote and monitor evidence-based clinical practices both in	Evidence-based minimum package of maternal and neonatal health services is defined Evidence-based guidelines and clinical protocols for reproductive health services are adopted and practiced both at primary and specialty care levels Strategy is implemented for abandonment of FGM *(only for: Djibouti, Egypt, Somalia, Sudan and Yemen)*	% Women of reproductive age 15–49 years screened for cervical cancer during the past five years % Women of reproductive age 15–49 years screened for breast cancer during the past five years % Women reporting to have undergone FGM disaggregated by age group – *(only for: Djibouti, Egypt, Somalia, Sudan and Yemen)*

Core areas	Input and process indicators		Output, outcome and impact indicators
	Policy, regulations and strategies	**Resources, services, commodities and programmes**	
	public and private health sector? Is there a policy on cervical cancer screening? Is there a policy on breast cancer screening? Is there a legislation against harmful practices to reproductive health *(only for: Djibouti, Egypt, Somalia, Sudan and Yemen)*		
Monitoring, evaluation and accountability	Is there established and functioning national framework (i.e. adequate human and financial resources; set of indicators and benchmarks) for monitoring and evaluation of reproductive health strategy and progress towards attaining MDGs 4 and 5? Are there established procedures on national and local levels to monitor resource flows to reproductive health with emphasis on direct support to disadvantaged groups? Are there a culture, established mechanism and practice for independent accountability (e.g. independent client satisfaction survey; oversight by the civil society) for reproductive health services?		

References

1. Reproductive health indicators: Guidelines for generation, interpretation and analysis for global monitoring. WHO/RHR, Geneva 2006. http://www.who.int/reproductivehealth/publications/monitoring/924156315x/en/index.html

2. Accelerating progress towards the attainment of international reproductive health goals: a framework for implementing the WHO Global Reproductive Health Strategy. WHO/RHR, Geneva 2006. http://www.who.int/reproductivehealth/publications/general/RHR_06.3/en/index.html

3. National level monitoring of the achievement of universal access to reproductive health: conceptual and practical recommendations and related indicators. Report of a WHO/UNFPA technical consultation. Geneva, WHO, 2008. http://www.who.int/reproductivehealth/publications/monitoring/9789241596831/en/isndex.html

4. Reproductive health strategy. to accelerate progress towards the attainment of international development goals and targets. WHO/RHR, Geneva 2004. http://www.who.int/reproductivehealth/publications/general/RHR_04_8/en/index.html

5. Economic and Social Commission for Asia and the Pacific. *Handbook on reproductive health indicators*. New York, United Nations, 2003.

6. Making pregnancy safer: the critical role of the skilled attendant. A joint statement by WHO, ICM and FIGO. MPS/RHR/WHO, Geneva, 2004. http://www.who.int/making_pregnancy_safer/documents/9241591692/en/index.html

7. Umbeli T, Mukhtar A, Abusalab MA. Study of unmet need for family planning in Dar Assalam, Sudan 2001. *Eastern Mediterranean Health Journal*, 2005, 11:594–600. PMID:16700373

8. Westoff CF, Bankole A. Unmet Need: 1990–1994. Demographic and Health Surveys Comparative Studies, No. 16, Calverton, MD, USA: Macro International, 1995.

9. Implementation of WHO global strategies of reproductive health and prevention and control of sexually transmitted infections in the Eastern Mediterranean Region. Report of an intercountry meeting, Marrakech, Morocco 29 October–2 November 2007.

10. Bertrand J, Escuredo G. Compendium of Indicators for Evaluating Reproductive Health Programs. MEASURE *Evaluation* Manual Series, No. 6. August 2002. Available at: http://www.cpc.unc.edu/measure/publications/html/ms-02-06.html

11. Report of the Secretary-General on the work of the Organization. General Assembly official records, sixty-second session supplement No. 1 (A/62/1). United Nations, New York, 2007.