

Division of Health Systems and Services Development

Biennial report
2008–2009



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Contents

Message from the Regional Director	5
Overview of the work of the division	6
Introduction: The health system	9
I. Health System Development Cluster	12
II. Health Technology and Pharmaceuticals Cluster	25
III. Human Resources Development Cluster	35
Special topics	45
Special programmes	47
Future directions for 2010–2011	50
Contacts	52

Message from the Regional Director

In the name of God, the Compassionate, the Merciful

Well-functioning health systems are essential for better health outcomes. They provide the appropriate platform for the effective launch of priority programmes that target the major health problems and health determinants in a population. Without well-performing health systems, the accessibility, efficiency, quality, equity and sustainability of these programmes pose an even greater challenge. Strengthening health system functions of governance, financing, resource creation and service provision has been the cornerstone of the efforts of the Regional Office for the Eastern Mediterranean to support its Member States and is the guiding principle of the work of the Division of Health Systems and Services Development.

Health systems are dynamic. The changing demographic, epidemiological and risk profile of the population, the rising expectations of a more educated population, the fast-growing private health sector, the rapid changes taking place in medical technology and the overarching aim of national government to achieve universal health coverage are some of the motivations for ministries of health to reform and improve the overall performance of the health system.

Health systems vary among countries. In high-income countries, the health sector is principally financed through public sector resources and the coverage by health services is adequate. However, many of these countries rely on an external workforce for the provision of health services. In middle-income countries with resource constraints, a reasonable infrastructure exists with an acceptable workforce; however, there are shortcomings in the quality of care and weak referral systems, ineffective decentralization and management, inequitable mixed systems for health financing, an unregulated private health sector and an inability to achieve universal coverage. In low-income countries, health systems are weak as a result of insufficient infrastructure, inadequate facilities, shortage of properly trained health personnel, lack of clear-cut policies, high out-of-pocket payments, and poor outreach and management. The issue of establishing or reviving disrupted health systems in countries that face complex emergencies – whether natural or man-made – is another challenge in our Region.

WHO has long been actively engaged with its Member States to strengthen health systems in countries. In the Regional Office, the Division has adopted a comprehensive approach to strengthening the various building blocks of health systems. The initiatives taken by the Division to generate evidence on health systems, develop capacity of policy-makers and managers, provide technical assistance and policy advice, undertake in-depth reviews of national health systems, establish the health system and health workforce observatories, and engage with priority public health programmes are recognized by many Member States. In addition, the Division's efforts aimed at tackling the wider social determinants of health as part of strengthening health systems based on primary health care are commendable.

I hope that the third biennial report, which depicts an overview of the main activities undertaken by the Division during 2008–2009, will provide Member States, development partners, staff within WHO and all other stakeholders an update on the challenges faced and the achievements made towards the development of health systems in countries of the Region. I encourage all countries to seek the technical support of the Division in the process of reforming their health systems.



A handwritten signature in black ink, appearing to be 'H. Gezairy', written in a cursive style.

Dr Hussein A. Gezairy
MD FRCS

Regional Director
for the Eastern
Mediterranean

Introduction to the work of the Division

The publication of the divisional report for the biennium 2008–2009 provides another opportunity to present the work of the Division of Health Systems and Services Development in terms of the achievements made and the challenges faced to support the strengthening of health systems, and to revisit the directions for future work of the Division to provide more effective and timely support to its Member States.

The importance of health systems in contributing to better health outcomes is undisputed. Nevertheless, many challenges exist to the improved performance of the health systems in many countries. These challenges are related to:

- the need for better leadership and governance;
- institutional strengthening of ministries of health;
- moving towards universal coverage through more equitable financing;
- developing a well-trained and effective health workforce;
- strengthening of weak and fragmented health information systems and enhancing information use;
- accessing essential health technologies;
- providing essential health services to all.

The mission of the Division has been to support WHO Member States to strengthen the scientific and ethical foundation of national health policies and strategies as part of comprehensive social and economic development; to improve the performance of health system functions; and to promote equity, quality, efficiency with active involvement of civil society and communities.

The overall work of the Division is guided by its adherence to the philosophy and principles of health for all through primary health care reflected in “health for all in the 21st century” policies and strategies; recognition of the fundamental role of health and its determinants in the socioeconomic development of countries; and the adoption of WHO’s conceptual health system framework as a basis for support to the strengthening of national health systems.

The Division comprises three teams: Health System Development, Human Resources Development, and Health Technology and Pharmaceuticals. Altogether, there are 12 technical units that form part of the Division. These units have strived to achieve regional and global expected results, through technical cooperation with countries and contributions to the normative work of WHO in health system strengthening. These units claim varied and diverse expertise that range from health governance to financing; delivery of services to their management; health workforce policies to educational development; and pharmaceutical policies to vaccine development. It is the endeavour of the Division to make these available as effectively and expeditiously as possible to our Member States.

The Eastern Mediterranean Region comprises 22 countries, ranging from high-income countries to several of the world’s least developed countries. A special feature is the challenge of assisting



countries that are in complex emergencies with relatively disrupted health systems. It has been the effort of the Division to be able to provide support to all countries tailored to their requirements. This report provides an account of the work of the technical units during the period 2008–2009. It seems appropriate to mention that the Division has worked extensively to help instil the values of equity and social justice, improve access to and quality of services and technologies, to be patient centred, promote community participation and intersectoral action, and support the development of a balanced, skilled and motivated workforce.

Despite many financial challenges due to the global financial crisis, during this biennium the Division has constantly made efforts to improve its performance and increasingly provide effective and timely support to its Member States. The Division was evaluated by the Office of the Internal Oversight Services, WHO in 2008–2009. The evaluation report commended the Division and its staff for the high level of competence and for spearheading important health systems issues, such as governance, health financing, social health insurance and health technologies, and for providing effective support to Member States. The report also stated that the Division will only be able to meet its future needs to support the increasing demands from Member States if additional resources are mobilized.

Finally, the biennium 2008–2009 was marked by the renewed commitment at WHO's highest level to the values and principles of primary health care. The subject was extensively discussed in the 55th and 56th Regional Committee meetings held in 2008 and 2009, respectively. The theme of the World health report 2008 was primary health care and Member States of the Region reaffirmed their commitment to primary health care by way of their unanimous endorsement of the Qatar Declaration on Primary Health Care, at an international conference in Doha, Qatar in late 2008.

The renewed commitment to primary health care will reinforce the work of the Division and its technical units, whether in the area of health system development, human resource development or health technologies. The four reform areas identified in the World health report 2008 on primary health care – universal coverage reforms, service delivery reforms, leadership reforms and public policy reforms – will continue to guide the work of the Division. These reforms will be customized to country needs so that the focus of the work of the Division in future biennia will be to assist Member States to make a difference to the access, quality, efficiency, equity and suitability of health services, especially to the populations that need them most.

Dr Belgacem Sabri
Director, Health
Systems and Services
Development
1999-2010

Introduction

The health system

What is a health system?

A health system* comprises all the organizations, institutions and resources that are devoted to producing health actions. A health action is defined as any effort, whether in personal health care, public health services or through intersectoral initiatives, whose primary purpose is to improve health.

* *World health report 2000*. Health systems: Improving performance

To improve availability, equity, safety and efficiency of health services and ultimately to help save lives and improve health.

Why focus on developing health systems and services?

- To improve availability, quality, equity, safety and efficiency of health services at the various levels of health systems.
- To strengthen health system governance, organization and management.
- To strengthen development and management of the health workforce in order to achieve greater equity, coverage, access to and quality of care.
- To develop systems of health financing that are equitable, sustainable and that can promote social protection.
- To enhance the use of essential health technologies in support of health service delivery by promoting access to affordable medicines, vaccines, devices and other technologies.
- To respond to health needs by establishing a sound health information system.

Mission

The mission of the Division of Health Systems and Services Development is to support countries of the Eastern Mediterranean Region in: strengthening the scientific and ethical foundation of national health policies and strategies as part of comprehensive social and economic development; improving the performance of health system functions; and promoting equity, quality and efficiency, with the active involvement of civil society and communities.

Objectives

- Help countries in assessing health system functions and performance.
- Support countries in improving health system functions and performance.
- Assist countries in developing networks and technology to support service delivery.
- Provide support to countries in complex emergencies.
- Provide technical assistance for dealing with the implications of trade-related agreements on health.
- Promote investment in health and pro-poor health systems through advocacy.
- Promote investment in appropriate health technologies.
- Promote an approach to health service delivery based on social determinants of health.
- Assist countries in monitoring health systems development.

GUIDING PRINCIPLES

- Adhering to the philosophy and principles of health for all through primary health care.
- Recognizing the fundamental role of health in socioeconomic development of countries.
- Using WHO's conceptual framework for health system development.

Organizational Chart

Division of Health Systems and Services Development

Health System Development

Health Policy and Planning

Health Care Delivery

Health Economics

Health Management Support

Evidence-based Health Situation and Trend Assessment

Health Technology and Pharmaceuticals

Essential Medicines and Pharmaceutical Policies

Blood Safety, Laboratory and Imaging

Essential Vaccines and Biologicals Policy

Health and Biomedical Devices

Human Resources Development

Human Resources Policy and Management

Educational Development and Training

Nursing and Allied Health Personnel

I. Health System Development Cluster

1.1 Health Policy and Planning unit

Themes

- Capacity-building in health policy formulation and strategic planning
- Health system governance, health regulation and enforcement
- Regional health system observatory
- Aid effectiveness and donor coordination
- Non-state (private) health sector and public–private partnership
- Social determinants of health
- Capacity-building in health system development

Strategic issues

- Capacity-building to develop the necessary skills in policy analysis and formulation and in strategic planning among Member States as well as the Eastern Mediterranean Regional Office and country staff.
- Institutional development of ministries of health in order to support activities aimed at strengthening health policy and planning function.
- Identifying social determinants and their role in health outcomes through country-level and thematic studies.
- Strengthening the country's existing health policy regarding the private sector.
- Promotion of evidence-based, ethical and consistent health policies and strategies in key policy areas and on emerging health system issues.
- Development of regional guidance that Member States and their partners can pursue in improving aid effectiveness.
- Enhanced understanding of governance and leadership of the health system, development of a framework for its assessment and measures for its improvements in countries.
- Improved monitoring of health system reforms in countries through the establishment of a regional health system observatory.

Key achievements

Major achievements during the year 2008–2009 included updating the contents of the Eastern Mediterranean regional health system observatory to help monitor health systems performance of Member States. The observatory provides health system profiles of all 22 countries. In addition, it offers a health system database, which although incomplete, is a rich source of data assessing health system performance.

Market magnitude and capacity of the private sector in Member States was assessed. Comprehensive assessment studies for the private sector in five countries have been completed. These studies measured the existing government regulatory framework for the private sector in several aspects, including service coverage, human resources, infrastructure and financing.

Two capacity-building workshops were organized, the first being for WHO staff from country offices and other divisions in the Regional Office.

The Health Policy and Planning unit has taken the initiative to work with selected Member States and carry out an assessment that can help better understand the situation regarding aid effectiveness and donor coordination. The study was conducted in the following eight countries: Afghanistan, Djibouti, Egypt, occupied Palestinian territory, Somalia, Sudan, Syrian Arab Republic and Yemen. The study's focus was twofold. The first task was to assess donor coordination, including all health supporting agencies in the country, such as the UN agencies, donors, national and international nongovernmental organizations and civil society associations. The second task was to examine the aid effectiveness based on five selected indicators from a health sector perspective.

Reviews of the national health sector strategic plans were conducted for 10 countries to study and compare the various planning tools countries are using, to understand the national resources allocated to the health sector and to study the extent to which strategic plans are objectively incorporated.

1.2 Health Care Delivery unit

Themes

- Revitalization of primary health care
- Improved access to health services
- Patient safety and improved quality of health services
- Clinical governance and accreditation of health care facilities
- Partnership with the non-public sector
- Integrated district health system based on a family practice approach

Strategic issues

The idea of comprehensive primary health care operates at two levels: first, at a level of contact and care within the health system reconfigured to emphasize essential health needs; and second, as a philosophy of health work and part of the overall socioeconomic development of the community. The evolution of primary health care has been somewhat uneven since selective primary health care was thought of as more pragmatic, financially sustainable and politically acceptable than a comprehensive approach. However, now the Millennium Declaration, the United Nations International Covenant on Economic, Social and Cultural Rights, and the Global Commission on Social Determinants of Health are thought to be a vindication of the comprehensive primary health care philosophy.

The biennium of 2008–2009 marked the revitalization of primary health care, both globally and in the Region. The values and principles of primary health care – equity, social justice, patient centredness, community participation and intersectoral action – are universally accepted. The challenge is to promote the development of health care delivery systems and to regain the commitment of countries that uphold these values and principles. WHO has taken upon itself to reaffirm its commitment to primary health care and encourages Member States to do the same.

Patient safety has become a high-priority issue in the delivery of health care. Studies from countries in the Region have shown that adverse events are commonly associated with failures and/or defects in medical systems and procedures rather than individual errors. In addition, patients and the public at large lack a “voice” in the event of an adverse event leading to harm. Of prime interest to the Regional Office is the direction towards a paradigm shift to promote avoidance of a culture of blame and the gradual establishment of an environment in the health care system built on transparency and willingness to change. Patient safety has to be seen in the broader context of quality of services and introduction of measures to improve clinical governance and ultimately some form of accreditation of health care facilities should be considered.

In order to meet the economic, social and technological challenges in the Region, there is a need to focus on innovative approaches for efficiency and effectiveness of health services and find the right balance between financing and provision of care. Poor organization and management of health services at all levels, and poorly functioning referral and other support systems, are important underlying reasons for ineffective health services. The Regional Office is

planning to spearhead an effort that promotes the establishment of integrated district health systems based on a family practice approach in its Member States. This is a substantial undertaking that would require continued technical support from the Regional Office and country offices in terms of developing and/or adopting the appropriate assessment and intervention tools and then helping countries implementing these.

The burgeoning private health sector, which in many low- and middle-income countries provides a wide range of curative health services, has become a key strategic issue. The problem becomes especially grave in a situation where a) the regulatory mechanisms either do not exist or are poorly enforced and there is little control of the quality and cost of these services, or b) where efforts to develop productive and fruitful partnerships with the non-state sector are inadequate.

Adoption and implementation of the strategy in the Region for improving emergency medical services in all countries, but especially in those in complex emergency situations, needs to be advocated.

Key achievements

The biennium 2008–2009 was noted for the revitalization of primary health care in the Region through the Qatar Declaration on Primary Health Care, which was endorsed by all Member States in the International Conference on Primary Health Care held in Doha, Qatar in November 2008 and hosted by the Supreme Council for Health, Qatar. Over 800 delegates participated in the conference, of whom 150 were international delegates representing 30 countries, including all countries of the Region. The conference was a joint collaborative effort by WHO and the Supreme Council for Health, Qatar. The Qatar Declaration on Primary Health Care, which was signed by all Member States, was presented to the ministers of health during the 56th session of the Regional Committee for the Eastern Mediterranean, held in Fez, Morocco in October 2009.

Following the conference, the Regional Office constituted a technical working group with the engagement of all Divisions to develop a strategic plan for technical assistance for primary health care revival, 2010–2015. The three main expected results of the plan are listed in Box 1. This plan will guide WHO's technical support to countries in support of primary health care. A flagship initiative of this plan is the establishment of integrated district health systems based on a family practice approach in model districts of low-income and middle-income countries in the Region.

Primary Health Care Revival in the Eastern Mediterranean Region: Strategic Plan for Technical Assistance by the Eastern Mediterranean Regional Office: 2010–2015. office-specific expected results (OSER).

- OSER I: Member States have mainstreamed the four areas of primary health care reforms in developing policies and programmes for strengthening of national health systems.
- OSER II: Internal coherence has been institutionalized within the Regional Office and country offices for provision of technical assistance on primary health care revival.
- OSER III: the Regional Office has a visible leadership role vis-à-vis other development partners for primary health care revival.

An additional initiative was to establish a network of academic institutions in the Region to promote primary health care based health systems. In addition to a side meeting of academic institutions held during the Qatar conference in which the idea was floated, in December 2009 a meeting of academic institutions and policy-makers was held to make concrete the initiative and to receive the full support of the policy-makers of the Region. The meeting was successful in gaining the support of all academia, policy-makers and development partners, and the network was formally launched in 2010.

Following the study to determine the prevalence of adverse events in selected hospitals from the six participating countries (Egypt, Jordan, Morocco, Sudan, Tunisia and Yemen), the results were shared with the respective ministries of health. The results indicated a high prevalence of adverse events in several countries in the Region and a high rate of death and permanent disability as well as a high rate of potentially preventable adverse events in all countries. These results call attention to gaps in health systems and the need to focus on addressing the gaps identified, such as the lack of policies and standard operating procedures, poor communication and defective staff training. The results are being used to tailor patient safety standards to the needs of the countries in the Region as part of the Patient Safety Friendly Hospital Initiative.

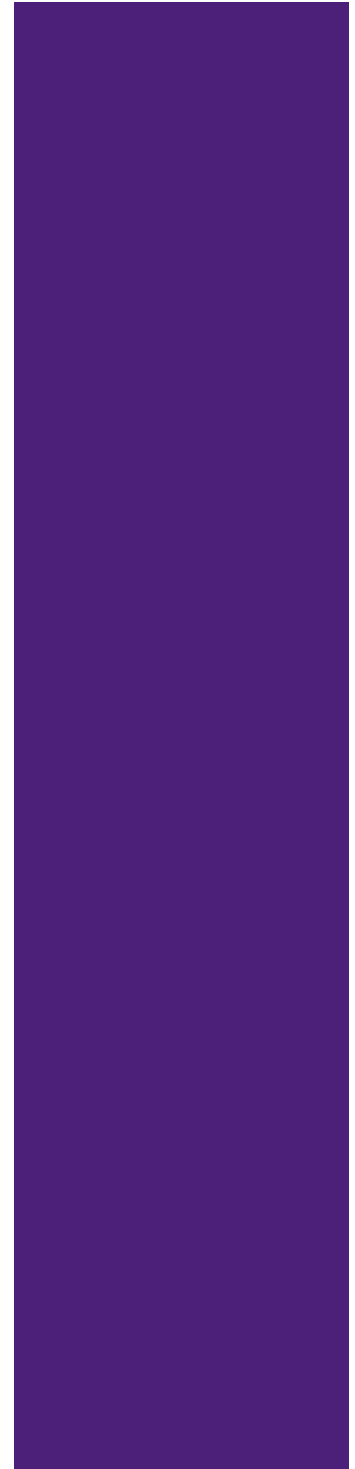
The Patient Safety Friendly Hospital Initiative has been the flagship initiative of the Regional Office to respond to the challenge of improving patient safety in the countries in the Region. The Patient Safety Friendly Hospital Initiative comprises elements of normative work as well as technical cooperation with countries. The normative work includes the development of a patient safety assessment manual. This instrument has been developed over a period of two years and has undergone a rigorous process of internal and external peer review and pre-pilot and pilot testing in seven countries. The manual has 140 standards of which 20 are critical and are essential for any hospital to enrol itself as a Patient Safety Friendly Hospital.

In terms of technical cooperation, ministries of health of seven countries (Egypt, Jordan, Morocco, Pakistan, Sudan, Tunisia and Yemen) have nominated one hospital each to establish what has been called the Patient Safety Friendly Hospital. The hospitals underwent a baseline assessment and an action plan for implementation of the Regional Office Patient Safety Friendly Hospital Initiative was devised and implementation has commenced.

The work on patient safety is well grounded at the country level and, among the different streams of work in this area, 11 countries in the Region have pledged to adopt and test the WHO hand hygiene guidelines, 7 countries have adopted the Patient Safety Friendly Hospital Initiative, 8 countries have adopted the Patients for Patient Safety programme, and the second patient safety challenge (Safe Surgery Saves Lives) was adopted by 14 countries in the Region. In addition, alternative research tools for adverse event determination to replace the traditional medical record review methodology were pilot tested in four countries in the Region.

The Regional Office has also undertaken a preliminary and exploratory study to map the current status of accreditation of health facilities in countries of the Region. The study has been completed and it is planned to organize a regional consultative meeting in the subsequent biennium to develop a regional position and strategy on the role of accreditation in improving quality of health services in the Region.

A special task undertaken in 2009 was to update and develop rules and regulations for operating temporary health care services by foreign medical missions during the Hajj season. The Ministry of Health of Saudi Arabia provides the necessary oversight and makes special arrangements to provide health care to the visiting pilgrims. Nevertheless, many Muslim countries field temporary medical missions during the Hajj season to provide essential health care to the pilgrims. The purpose of this document is to provide information related to rules and regulations for registering and operating temporary medical missions, fulfilment of the required standards for providing quality care, and to highlight responsibilities of the missions in the areas of health promotion, disease prevention and prompt notification of diseases.



1.3 Health Economics and Social Health Protection unit

Themes

- Social health protection and universal coverage
- Health care financing functions and options
- Health system analysis
- Analytical tools (national health accounts; households expenditure analysis; equity; cost–benefit, cost effectiveness and cost–utility analysis)
- Capacity-building in health economics and health care financing

Strategic issues

- Development of evidence-based health care financing options.
- Assessment of health care systems and identifying inefficiencies and inequities in health care delivery.
- Assisting countries to improve and extend social health protection.
- Advocacy for mobilizing resources for underfunded health systems.
- Reducing share of out-of-pocket expenses from total health expenditure.
- Developing the capacity of Member States to use economics and financial principles for improving health system performance.
- Development of health economics networks.

Key achievements

- Organizing and participating in a series of consultative meetings to revise the current framework for development and estimation of national health accounts and classifications.
- Developing a set of strategic directions to enhance social health protection in the Region through expediting the move towards universal coverage. The developed strategic directions were shared with the ministers of health of the Region during the 57th Regional Committee meeting and a resolution was presented and endorsed by Member States to accelerate the move towards universal coverage.
- Contributing to the development and writing of the World health report 2010, addressing health care financing and the move towards universal coverage.

- Measuring and analysing the impact of out-of-pocket health expenditure on households in terms of increasing financial catastrophe and impoverishment.
- Promoting the health economics and health care financing network (HEC-Exchange). HEC-Exchange was maintained and extended to promote the use of health economics and health financing principles, share regional and international experiences, and strengthen communication between health economists, health care financing experts and policy-makers in the Region. In addition, support was provided to the Maghrebian health economics network (RESSMA) to promote health economics and health care financing in francophone countries. Similar networks have been promoted in other parts of the Region, such as the Pakistan Health Economics Network.
- Studies were commissioned to map health care financing of selected Member States. Studies were also commissioned to measure fairness in financial contribution and analyse the impact of households' catastrophic health expenditure and its determinants.
- Efforts to develop and institutionalize national health accounts in Member States continued in the biennium.
- Work towards developing a formal academic programme in the Region in health economics and policy continued, and the Health Economics and Social Health Protection unit contributed to teaching an introductory course in applied health economics at the American University in Cairo, Egypt.

Future directions

- Development of viable social health protection systems will remain the focus.
- Work will focus on initiating the strategic directions presented in the Regional Committee paper with consultation with Member States to help develop country-specific plans to expedite the move towards universal coverage.
- Development, use and institutionalization of analytical tools are the foundation of evidence-based health care financing. Support for these activities will be continued and expanded in the Region using the revised System of Health Accounts (SHA-2).
- Close collaboration between different technical units in WHO and their international partners and national health policy-makers will be intensified.
- Networks in the Region will be promoted and strengthened.
- Capacity-building in health economics and health care financing will have high priority in the 2010–2011 biennium.

1.4 Health Management Support unit

Themes

- Strengthening district health system schemes as the viable decentralized entity of the health care delivery system ensuring universality, quality, equity and efficiency of health services
- Providing tailored capacity-building courses for staff of countries eligible for support from the GAVI Alliance and Global Fund to fight AIDS, Tuberculosis and Malaria
- Strengthening country organizational management capacities at district level, including secondary care
- Technical support for GAVI Alliance and Global Fund proposal development, implementation and follow-up
- Empowering the role of civil society organizations

Strategic issues

- Develop and update guidelines, develop family practice settings, promote innovative approaches for training (problem-based learning, family medicine, distance learning) and promote hospital autonomy.
- Assess and analyse the decentralized system in countries: decision space identification, recommendations for strengthening or development and evaluation.
- Use the management and leadership framework to assess the numbers, competencies, functional support systems and conducive and enabling work environment, develop strategies for health system strengthening, and evaluate interventions.
- Achieve and sustain increased immunization coverage and other maternal, neonatal and child health services through health system strengthening.
- Strengthen health systems to fulfil the objectives and goals of WHO pandemic response (H1N1) preparedness review and reporting programmes.
- Expand the participatory role of civil society organizations (nongovernmental or private) as part of community involvement in health systems strengthening at district and community levels.
- Capacity-building programme of WHO and ministry of health staff for health system strengthening and policy dialogue.

Key achievements

Health management support

As part of management and leadership development, the Health Management Support unit participated in the 8th and 9th Arab Administration Development Organization conferences on new trends on hospital administration.

The unit presented a technical paper to the 56th session of the Regional Committee that stressed the importance of strengthening hospital management and autonomy assessment, thereby seeking the support from Member States in establishing these activities at the national level.

Evaluation of community health management (district team problem-solving) implementation constraints in Egypt was also undertaken. The management effectiveness programme in Egypt was evaluated as a well-developed and powerful managerial tool addressing implementation problems. The main constraints facing the two programmes were lack of political commitment and institutionalization and the lack of integration with human resources development national strategies and plans.

A management and leadership framework was used to assess the numbers and competencies in six countries in the Region as part of human resources for health mapping. In this context, the Regional Office is leading in achieving excellence in the regional hospital management workshop series, in collaboration with the Arab Administrative Development Organization in Jordan and Egypt.

The unit also provided requested technical support to the health committee of the Arab League by organizing regular meetings for primary health care, family medicine and quality.

Health system strengthening

In line with the Global Health Initiatives by the GAVI Alliance, Global Fund and International Health Partnership Plus, strengthening the health infrastructure globally, regionally and at country levels is the main focus of the unit. To unify and coordinate these efforts, the unit sought to assign a single focal point at ministries of health. This prevented fragmentation or duplication of efforts and maximized available resources. Key issues that highlight the harmonized institutionalized collaborative mechanisms guiding WHO's interactions with global health initiatives were presented to all stakeholders at country, regional and headquarters levels.

The unit supported country offices of eligible countries in submitting successful proposals to the Global Health Initiatives by coordinating efforts of all partners. During the process of proposal development, the unit adopted a daily follow-up mechanism through focal points specifically appointed for the purpose of ensuring successful GAVI Alliance and Global Fund proposals. The unit also provided technical support in implementing grants, if proposals were accepted.

A regional GAVI Alliance and Global Fund working group meets regularly for continuous technical coordination between diseases and health system strengthening. The group comprising members from all relevant WHO clusters, GAVI Alliance and Global Fund Secretariat, Joint United Nations Programme on HIV/AIDS (UNAIDS), and United Nations Children's Fund (UNICEF). Joint missions are also regularly organized to eligible countries in order to help Member States access and maximize utilization of global health initiatives funding sources in ways that address priority health needs.

In addition to the global health initiatives, the following health system strengthening activities were performed by the unit during the biennium:

- Organizing annual regional capacity-building health system strengthening courses focusing on national health plans and strategies, and primary health care renewal to strengthen policy dialogue skills and capacities, with a special focus on leadership organizational management and monitoring and evaluation, maximizing use of the WHO toolkit for performance evaluation. These annual courses are organized by the unit in collaboration with WHO headquarters and offered to ministries of health and country offices in 10 countries in the Region. These countries requested repetition of the courses at country level for groups of countries with similar systems and situations.
- Regular joint missions to countries eligible for GAVI Alliance/health system strengthening (GAVI/HSS) to support implementation follow-up, monitoring and evaluation, financial management assessment and to overcome implementation obstacles. At least one joint visit per year was carried out in addition to other implementation follow-up visits.
- Consultancy missions to countries to assist in the development of GAVI Alliance and Global Fund health system strengthening proposals in Djibouti, Somalia and south Sudan (Global Fund Round 9: south Sudan successful Category II; GAVI Alliance Round 2009: Somalia successful).
- Annual meetings for reviewing applications and annual progress reports and proposals to ensure consistency with both GAVI Alliance and Global Fund requirements and WHO technical guidance.
- Presenting Global Health Initiatives best practices, in particular on proposal development, integration and complementarities to stakeholders such as GAVI Alliance, Global Fund, UNAIDS, UNICEF, World Bank and other multilateral donors.
- Assessment of decentralization in target pilot countries by organizing two regional workshops for training national staff on use of the WHO health system strengthening assessment tool.
- Elaboration of the unit's checklist for H1N1 preparedness, sent to 22 countries in the Region and organization of video conference with priority countries.

1.5 Evidence, Health Situation and Trend Assessment unit

Themes

- National health information systems
- Information on decision-making
- International Classification of Diseases (ICD)
- Information dissemination
- Data collection, validation and analysis, including applications of geographic information systems (GIS) technology

Strategic issues

- Weaknesses in national health information systems in terms of reporting quality and timely information continue to reflect systemic shortages of resources, especially well-trained human resources in the health information and statistics areas, and inadequate basic technologies.
- Not all countries have credible system for registering births and deaths, and ICD is not utilized in recording causes of death in most countries in the Region.
- Duplication and fragmentation of data collection and lack of rigorous validation within the different programmes.
- A need to expand the capacity of health information systems to monitor indicators on resources, coverage, health outcomes and new areas such as social determinants of health, health system performance, and to address the needs for monitoring the health-related Millennium Development Goals.
- Support for health sector reform in its strategic direction of decentralization will require appropriate capacity of subnational health information systems to enable measurement of population-based health status, prioritization, planning, costing and budgeting, and monitoring and evaluation of health care.

Key achievements

Major achievements during the biennium 2008–2009 included addressing the needs of the Region and responding to the needs of national health systems in different technical aspects of health information systems. Countries were supported in implanting health finance and mortality surveys, the use of ICD was promoted by conducting regional workshops on the vital statistics and training on ICD was provided.

GIS was provided in the area of disease mapping to several countries. Technical programmes utilized the GIS tools to enhance dissemination of information and GIS training was provided. The unit also undertook several comparative analyses of existing data on reproductive health coverage and mortality.

Continued support was given for implementation and data analysis of the World Health Survey in the Gulf Cooperation Council (GCC) countries. Technical support in sampling design was provided, data management and analysis training workshops were conducted, and dissemination of the survey findings was supported. Regular meetings were held at survey focal points to monitor progress. The survey is an important tool for supplementing the routine health information system with additional, valid and reliable information and will support the monitoring of health system performance in those countries (i.e. burden of disease, coverage, responsiveness, expenditure), including Millennium Development Goal indicators.

With support from the Health Metrics Network, several countries strengthened their health information systems, using the framework and the assessment tools to conduct situation analysis. Based on the outcome of the assessment, they developed plans or addressed specific weaknesses in their health information systems.

II. Health Technology and Pharmaceuticals Cluster

2.1 Essential Medicines and Pharmaceutical Policies unit

Themes

- National medicine policies based on essential medicines concept
- Access to essential medicines
- Quality and safety of medicines
- Rational use of medicines

Strategic issues

- Approximately one third of the population of the Region still does not have regular access to essential medicines.
- There is a need for continued support to ensure that all countries develop national medicines policies and that these are implemented, monitored and regularly updated.
- The majority of countries do not have fully functional medicine regulatory authorities to guard the quality of both imported and locally produced medicines.
- Irrational medicine prescribing, dispensing and self-medication continue to be major problems in most countries.
- Most higher and continuing education facilities and training programmes for health professionals lack attention to the essential medicines concept.
- Member States need to ensure that trade agreements are public health sensitive and that their impact on medicine prices and access to essential medicines is minimal.

Key achievements

The development, monitoring and evaluation of national medicines policies has emphasized the need for a change in a number of areas, including: a) transparency; b) good governance and improvement in regulation; and c) strengthening the pharmaceutical system at large, reinforcing its components and assessing transparency through providing an evidence-based platform for discussing needed policy changes. Progress in this area has been particularly encouraging with a number of countries requesting and receiving technical support; this is currently ongoing in Jordan, Lebanon, Morocco, Pakistan and the Syrian Arab Republic. This innovative initiative helped countries to strengthen their health systems by increasing transparency, accountability and integrity. Pharmaceutical sector assessment using the WHO tool has been completed in Egypt and Pakistan and initiated in the Syrian Arab Republic. In order to strengthen the

capacity at WHO country offices, two posts for national professional officer have been established in Afghanistan and Pakistan.

Funds from the European Commission–African Caribbean and Pacific–World Health Organization Partnership on Pharmaceutical Policy were utilized in three countries from the Region (Djibouti, Somalia and Sudan). This partnership has led to notable achievements at the regional level. This technical assistance has helped Sudan develop a pharmaceutical human resources strategy, involving drug fund impact assessment and other documents. In addition, standard treatment guidelines were developed in Somalia, and a comprehensive review of the national medicine policy and training for conducting medicine price survey and mapping and evaluation of the medicine procurement and supply system have been implemented in Djibouti.

The Essential Medicines and Pharmaceutical Policies unit and the Eastern Mediterranean Partnership to Stop TB at the Regional Office collaborated to limit the availability of antituberculosis medicines in the private regional market. This work addressed the unrestricted availability of antituberculosis medicines, their erroneous prescription and irrational use, and their logical link with growing incidence of multidrug-resistant tuberculosis and extensively drug-resistant tuberculosis in the Region.

Five countries were supported to attend the flagship course which aimed at providing programmatic approaches towards technical updates on essential medicines and pharmaceutical policies. Countries were also supported to attend seminars that focused on a specific technical area, such as medicine pricing, quality and safety.

The GCC countries have embarked upon developing a subregional strategy for traditional medicine and practices with Regional Office support.

Furthermore, a website was launched with the aim of: a) providing basic information on the unit and its work in the Region; b) supporting regional networks of medicines practitioners and regulators; c) making available selected WHO and country publication; d) posting selected regional news and events pertaining to essential medicines; and e) providing brief information on regional and country pharmaceutical situations with reference to WHO medicine strategy.

Promoting and monitoring access to essential medicines through ensuring equitable financing, affordability and delivery enabled the expansion of access to quality essential medicines for priority diseases. Technical support on access to medicines was provided to Jordan, as a pilot country from the Region involved in the Medicines Transparency Alliance initiative, funded by the Department for International Development. The unit supported a household and pricing survey and a pharmaceutical sector baseline assessment using WHO level II methodology in Jordan to progressively disclose a standard set of core data covering the quality, availability, price and promotion of medicines, to help address problems in the pharmaceutical market and improve the availability and affordability of medicines.

The Islamic Republic of Iran and Oman completed national medicine price surveys, while a six-page summary report on the WHO/Health Action International survey methodology to measure medicine prices, availability and affordability was undertaken in nine countries of the Region. In addition, a regional synthesis report drawing upon the findings of all the national surveys conducted in the Region during the period 2004–2006 was published.

A policy guide for trade-related aspects of intellectual property rights and provisions in bilateral free trade agreements in the Region was finalized, focusing on access to new patent-protected essential medicines. An electronic system for a medicine price information exchange is being developed as a result of Regional Committee resolution EM/RC54/R.8 (2007) in order to facilitate efficient and informed public sector procurement of medicines. Seven country case studies on assessment of national intellectual property protection regimes and infrastructure with reference to access to medicines were finalized in a collaborative project with the United Nations Development Programme (UNDP).

Under the WHO medicines strategy area of quality and safety, full efforts are being exerted to increase awareness in Member States about the WHO prequalification programme for priority essential medicines. Although the Region has countries with sizable pharmaceutical industries, only one antimalarial medicine from Morocco is on the WHO global list of 337 prequalified products. Workshops on the WHO prequalification programme were carried out in Jordan, Islamic Republic of Iran and Pakistan in 2008 and in Egypt and the Syrian Arab Republic in 2009. These workshops brought together representatives from selected companies and associations of local manufacturers together with relevant national regulators with the aim of increasing the awareness of the manufacturers of related medicines and regulators about the programme, and to enhance the capacity of manufacturers to submit for the programme.

The assessment of the medicines regulatory authority in Egypt using WHO tools has been finalized and participation of regulators from 10 countries of the Region in the 13th International Conference of Drug Regulatory Authorities in Switzerland was supported.

The unit is part of an expert consultative group working to produce a tool for assessing the impact of medicines promotion that aims to generate recommendations for the integration of topics on therapeutics, pharmacology or professional ethics into the pharmacy and medical curricula education in the Region, hence assisting in capacity-building and providing improvement in pharmaceutical and medical curricula in the area of drug information.

Three countries, namely Egypt, Syrian Arab Republic and Tunisia, were supported through implementing different activities relevant to the rational use of medicines.

2.2 Essential Vaccines and Biologicals Policy unit

Themes

- National regulatory authorities for vaccines
- Vaccine quality
- Networking among national regulatory authorities
- Regional strategy for self-reliance and self-sufficiency in vaccines
- Vaccine research and development
- Vaccine procurement system

Strategic issues

There are a myriad of issues that have a negative impact in assuring vaccine quality and achieving the target of vaccine self-sufficiency in the Region, including:

- countries, particularly the middle-income countries, face difficulties in ensuring a consistent vaccine supply at an affordable price;
- weaknesses of vaccine regulatory systems;
- limited vaccine production and absence of good manufacturing practice compliance for some vaccine producers;
- lack of trained and qualified human resources;
- need for networking among regulators in the Region to share information and experiences and to support each other;
- partnerships need to be developed with development banks, such as the African Development Bank or the Islamic Development Bank, to support regional vaccine self-sufficiency.

Key achievements

Several awareness-raising activities were conducted to promote the establishment, strengthening and implementation of vaccine regulation strategies, including capacity-building in the Syrian Arab Republic on the WHO approach to strengthening vaccine regulation. Efforts to establish a regional pooled vaccine procurement programme continued, with the performance of the vaccine procurement system being assessed in Kuwait and the Syrian Arab Republic. Technical support was provided to build human resources capacity on clinical evaluation of human papillomavirus (HPV) vaccines, implementation of WHO procedures for registration of WHO prequalified vaccines and vaccine quality.

With regard to the strengthening of vaccine regulation in vaccine-producing countries, the Regional Office continued its support to Egypt, Islamic Republic of Iran and Tunisia and the progress of the regulatory systems was reviewed. Support was also provided to the vaccine producers to improve their production status. In order to address the fact that a vaccine safety system is not effectively implemented in most countries, capacity-building was initiated in the field of adverse effects following immunization in Pakistan and Yemen. Technical support to respond to the vaccine safety crisis was provided in Morocco and Pakistan. In the context of the global post-marketing surveillance network of newly WHO prequalified vaccines, a country assessment of vaccine safety in the Islamic Republic of Iran and Tunisia was reviewed and capacity built in reporting of adverse effects following immunization cases. Although the Islamic Republic of Iran still does not have a WHO prequalified vaccine, it is making good progress towards achieving this in the future. In relation to the H1N1 pandemic in 2009, the Regional Office provided technical support to countries that were interested in producing influenza vaccines. Vaccine production capacity was assessed in Morocco, Syrian Arab Republic and Tunisia.

2.3 Blood Safety, Laboratory and Imaging unit

Themes

- Blood transfusion safety, including biological standardization
- Diagnostics and laboratory technology
- Diagnostic imaging and medical devices
- Clinical procedures and transplantation

Strategic issues

- Reduction in avoidable morbidity and mortality through improved access to safe blood and blood products and the rational use of blood transfusion, with a particular focus on life-saving transfusions in countries emerging from disaster situations.
- Equitable access to safe, high-quality, reliable and appropriate diagnostic technologies and laboratory services.
- Accessible, safe and reliable diagnostic imaging services through introduction of quality assurance concepts in radiographic techniques and radioprotection.
- Increased patient safety by ensuring access to safe and effective medical devices.
- Strengthened capacity at primary health care facilities to provide life-saving emergency and essential surgical care and the availability and correct use of suitable equipment.
- Ethical, safe and suitable access to allogeneic and xenogeneic transplantations, under the effective oversight of health authorities.
- Improved surveillance, strengthened national regulatory authorities and development of policies, guidelines and legislation in support of biomedical technology.

Key achievements

Technical support was provided to countries in order to improve external quality assurance through capacity development and in collaboration with regional and international partners. Such partnership has led to the development of a regional network in food laboratory surveillance.

In collaboration with the European Union, regional training courses were carried out in laboratory biosafety and biosecurity to raise their awareness and/or increase their competency levels. A blood transfusion safety workshop for nurses and phlebotomists was also held in collaboration with WHO headquarters.

Training courses on good transplantation practices in Member States were held in Lebanon and the United Arab Emirates, supported by the Spanish Government.

Inspired by the new WHO guiding principles on cell, tissue and organ transplantation, which were adopted by WHO in 2010, Pakistan passed its transplantation law into practice. The President became both a brain death and cardiac death donor himself, in the attempt to promote brain death donation and self-sufficiency, as well as to avoid organ trafficking and transplantation tourism.

The Norwegian Department of Defence continued its project in Afghanistan on surgical care at district level, supplying district hospitals with anaesthesia and surgery basic equipment and training general practitioners on emergency surgery, such as Caesarean sections and appendectomies.

Challenges

- Lack of funds to support the unit's activities is negatively affecting the development and achievements of the unit.
- Technological support to service delivery, including laboratory, blood transfusion networks and imaging is hampered by some systematic weaknesses, particularly in low-income and middle-income countries of the Region.
- Underfunded and weakly staffed health systems are negatively affecting the development of technology networks. The situation is more acute in countries facing complex emergencies, including war, occupation and civil strife.
- Despite promotion and advocacy, the increase of voluntary blood donation is small while the need for transfusion services is growing. Concerns over quality and blood transfusion safety are voiced in some countries.

2.4 Health Technology and Biomedical Devices unit

Themes

- Biomedical devices, including equipment, instruments and supplies
- Innovative and cutting-edge technologies
- Health technology assessment and management
- National “biomedical devices/health technology” programmes
- Medical equipment specifications, procurement, donation, installation, training and maintenance

Strategic issues

The main goal of the Health Technology and Biomedical Devices unit is to ensure that medical devices produce maximum public health benefits at affordable costs in all intended settings. The strategy needed to realize this goal relies on the following five major crucial components, commonly known as the five As.

- **Availability:** enhancing the capacity of Member States to adequately assess and prioritize their health technology needs, thereby making essential technologies available to the public.
- **Accessibility:** improving equitable access to safe, high-quality, reliable and adequate technologies and clinical services.
- **Appropriateness:** promoting medical methods, procedures, techniques and equipment that are scientifically valid, adapted to local needs, acceptable to both the patient and the health care personnel, and that can be utilized and maintained using affordable resources.
- **Affordability:** ensuring that medical devices produce maximum public health benefits at affordable costs in all settings.
- **Accountability:** strengthening regulatory authorities for medical devices by making professionals, governments and companies accountable for ensuring safety, quality and efficacy of the used device and/or technology.

Key achievements

The unit was established in 2009 to deal with all issues related to health technology assessment and management, in particular medical devices. The programme aims at supporting countries in all phases of the health technology life cycle, including assessment and prioritization of needs, management of procurement and donation, installation and training, maintenance and disposal.

The unit is part of the team responsible for the implementation of the Global Initiative on Health Technologies. Funded by the Bill & Melinda Gates Foundation, the project aims to help make available the benefits of core health

technologies at an affordable price, particularly to communities in resource-limited settings, in order to effectively control important health problems. The main objectives of the initiative are to: a) challenge the international community to establish a framework for the development of national health technology programmes that will impact the burden of disease and ensure effective use of resources; and b) challenge the business and scientific community to identify and adapt “innovative” technologies that can have a significant impact on public health. The project resulted in the development of guidelines for the formulation of national health technology programmes, methodology and relevant tools to help Member States to conduct an assessment of health technologies, and tools to assist countries to integrate the prioritized needs into national policies, action plans and programmes. Moreover, identification of national, regional and global standards helps countries realize current gaps and future needs in order to prioritize their needs in health technologies and medical devices.

The unit is also a member of the global steering committee of the Priority Medical Devices project, which is a joint collaboration between WHO and the Government of the Netherlands. The project aimed at determining whether medical devices currently on the market were meeting the needs of health care providers and end-users throughout the world and, if not, to propose research to identify, and action to remedy, inadequacies or shortcomings. The project also aimed at bringing medical devices to the attention of policy-makers and to help guide both industry and government public health spending. The outcome of the project clearly identified mismatches or gaps in the availability of preventive, diagnostic, therapeutic and assistive medical devices on the market. In addition, the project assessed potential barriers to innovation and also generated a research agenda and action plan.

Adequate procurement policies and practices are fundamental to ensuring access to medical devices and for guiding their rational use. The unit is currently working with WHO headquarters to develop a framework that can be used by Member States to develop their own prioritized lists of health technologies, especially medical devices. Prioritization will depend on several factors, including existing inventory, disease profiles and trends, financial resources, population demographics, health system information, national standards, public health conditions and national objectives.

Following two assessment missions to Sudan in 2007 and 2009, and in collaboration with all stakeholders, steps necessary for establishing a national health technology programme within the existing Sudanese health system were developed. The implementation plan stressed the need for a coordinated and carefully adopted process to strengthen the technology management process as part of the overall service delivery strategy. Several preliminary steps were suggested, including: (a) a policy formulation process, as part of the national health policy, at federal level with the participation of state level; (b) development of a dedicated entity or unit at the federal and state levels to oversee the coordination and operationalization of the process; and (c) conducting a comprehensive pilot project at selected federal health institutions to demonstrate the positive impact of health care technology management (in areas still to be determined, e.g. resource planning, auditing, inventory systems, efficiencies, etc.) thus providing the evidence and vision to the ministries of health to voluntarily participate in a coordinated national health care technology process. The first implementation phase is scheduled to begin in 2011.

The unit is also leading the WHO initiative to develop three manuals on preventive, corrective and computerized maintenance management systems, respectively. First drafts of the manuals are currently under technical revision by experts and are expected to be published in 2011.

Challenges

Health technologies are essential components of health services. They must be of assured quality, safe, effective, available, affordable and wisely used. Many countries have made progress in these areas but many challenges still exist, in terms of both policies and operations.

Sustainable access to essential health technologies remains a huge challenge. Lack of appropriate selection of biomedical technology, and of maintenance budget, are serious issues. National regulatory institutions, with a few notable exceptions, remain fragmented and inadequate and the private sector is ineffectively regulated. There are limited efforts to rationalize biomedical technology selection and utilization, particularly in the field of heavy-duty laboratory devices and imaging equipment.

Technology support to service delivery is hampered by some systematic weaknesses, particularly in low- and middle-income countries of the Region. Underfunded and weakly staffed health systems are negatively affecting the development of the biomedical technology network. The situation is more acute in countries facing complex emergencies, including wars, occupation and civil strikes.

Substandard and counterfeit essential health technology has become a problem in a few countries. Post-marketing surveillance is negligible and safety and radioprotection continue to be major safety issues.

Future directions

- Technical support to countries will continue in: a) the development, review and implementation of national policies on medical devices; b) rational selection and maintenance of health technology; and c) improved access, quality and use of medical technologies as an important component of health system strengthening.
- Low-income countries and countries in situations of complex emergency will continue to be a priority.
- Capacity-building at primary health care facilities will continue in order to maximize the benefits, provide life-saving care and ensure the availability of, and guide on the correct use of, appropriate medical devices.
- Development of legislation related to ethical, safe and suitable use of medical devices will be promoted. The legislation should hold professionals, governments and companies accountable for provision of safe, quality and effective use of medical devices.
- Research and assessment at policy level as well as the various levels in the supply chain will continue in order to determine local and/or national medical devices mismatches in terms of the five As.

III. Human Resources Development Cluster

3.1 Human Resources Policy and Management unit

Themes

- Strengthening institutional capacity of ministries of health and their governance role within an effective and harmonized national coordination mechanism
- Establishing new and sustaining existing regional and national human resources for health observatories to generate intelligence needed for informed decision-making and evidence-based human resource planning and policy, production and overall management of the health workforce
- Promoting accreditation, social accountability and problem-based learning of health professions education
- Strengthening competency-based national training capacities to ensure access to skilled, motivated and supported health workers within a robust health system

Strategic issues

- Working closely with country nationals to strengthen governance and national capacity on human resource planning and evidence-based policy formation as a whole, and institutional performance of human resource development units in ministries of health and subnational settings in particular.
- Joint missions with WHO headquarters have been undertaken and subsequent resources mobilized to boost the area of work of human resources for health at the country level.
- Linking human resources to the achievement of health goals and outcomes has been successfully used to ensure political commitment and development of human resource development plans and policies.
- The quality of health care services depends on health workers with sufficient numbers, needed competencies, enabling work environments and supportive management systems.
- Development of publications on strengthening the establishment of effective human resources development units at central and subnational levels; development of human resources for health plans and policies with regulatory framework; establishment of national human resources for health observatories; and establishment of national systems for accreditation.

Key achievements

The Human Resources Development unit assists Member States in strengthening the national capacity of human resources and achieving balanced deployment and access to more motivated, skilled and supported health workers, particularly in underserved areas.

Work has been conducted with human resource development units in ministries of health to strengthen the governance function and ensure institutional responsiveness to human resources for health-related pressing needs and challenges. Particular focus has been made in the eight human resources for health crisis countries with less than 2.3 density rate of health workers per 1000 population. Accordingly, national assessment and organizational performance tools were developed and used to identify gaps and undertake necessary measures for human resources for health improvement.

In most countries of the Region, a detailed country profile has been developed for human resources for health. Publication of those country profiles is being finalized. The comprehensive country data generated will be incorporated into national human resources for health information systems and, as deemed necessary, into human resources for health national observatories. This achievement has contributed to regional and global health workforce analysis and policy dialogue.

Guidance has been provided in the development of countrywide monitoring and evaluation systems to measure qualitative change and improvements over time. A global handbook was published with the Regional Office's contribution on development of a monitoring and evaluation framework for low-income and middle-income countries with special applications on how to use baseline and benchmark indicators needed for trend analysis and progress tracking over time.

Countries have been assisted in reforming health educational programmes and the possible use of problem-based learning approaches. A special regional guide has been drafted on accreditation of health professions education to assist establishment of regional and national systems for effective accreditation of medical schools and other health professions institutions.

The unit has been promoting the participation of national staff in regional and global taskforces and forums, which are held to tackle human resources for health challenges, including maldistribution, migration, retention, pre- and in-service training, leadership and financing. Examples include regional input and participation in the global expert groups on migration, code of practice for movement of health workers, and increasing access to health workers in remote and rural areas through development and use of retention strategies.

The unit has also provided hands-on support to countries in proposal writing and submissions in the area of human resource development and decentralized governance, for example cooperation with the GAVI Alliance, Global Fund and the Global Health Workforce Alliance, among others.

Supporting countries in building sustainable systems for massive scaling-up of the health workforce and continuous professional development is an important activity of the unit. For example, Bahrain, Djibouti, Somalia and Sudan have successfully achieved rapid human resources for health production and functioning systems for continuous professional development.

3.2 Educational Development and Training unit

Themes

- Strengthening regional fellowships programme
- Establishing, promoting and monitoring educational development centres as WHO collaborating centres
- Supporting health professions education, including medical, nursing and other allied health training
- Enhancing cooperation among academic institutions and with policy-makers

Strategic issues

- Human resources for health must be developed to match the needs of communities, both quantitatively and qualitatively.
- Through effective use of the fellowships programme, countries can be supported in preparing their workforce for leading positions in health services.
- Close cooperation between different parties is needed for proper administration and management of this activity, especially between the selection committees in countries, the concerned technical unit in the Regional Office and the Educational Development and Training unit.
- Among the main challenges in the fellowships programme are: a) to establish selection committees; b) to improve the response rate by fellows and countries in submitting evaluation reports; and c) to discourage requests that are not in line with WHO policies, rules and regulations.
- Educational development centres have an important role as contributors in capacity-building within the health professions education institutions and in promoting staff development, educational planning, curriculum development, evaluation, research in education, etc. The establishment of such centres should be supported in every institution dealing with health professions education.

Key achievements

The administration of the fellowships programme continued to be a major activity in the unit. More than 785 fellowship application forms were received and processed during the biennium. The Regional Office fellowships web site has been maintained and the database on training institutions was further strengthened and updated. Electronic processing of fellowship requests has been fully utilized, including use of the new global management system. The Regional Office fellowships programme was reviewed and evaluated in several occasions and the unit participated in many improvement activities at the regional and global levels and contributed in the preparation of the terms of reference and action plan of the taskforce for impact assessment of the fellowships programme.

The administration of fellowships was evaluated through WHO headquarters in 2009 and the unit benefited from the recommendations made on different aspects of processing and monitoring fellowships. Contribution was also made to the reorientation of fellowships focal points in the WHO South-East Asia Regional Office and in the development of recommendations for improvement of the procedures in that Region.

An advisory meeting was held to develop guidelines for the establishment, networking and collaboration of educational development centres. One educational development centre has been redesignated at the Department of Medical Education in the Arabian Gulf University in Bahrain. A second is being processed for redesignation in Sudan as a WHO collaborating centre. Follow-up was made for further development of the centres in Tabriz and Isfahan in the Islamic Republic of Iran. Proposals for designation were received and reviewed from King Saud bin Abdulaziz University for Health Sciences in Saudi Arabia, Tehran University of Medical Sciences in the Islamic Republic of Iran and the University of Lahore in Pakistan.

Monitoring of current collaborating centres in the field of health professions education in Egypt (Suez Canal University), Islamic Republic of Iran (Shahid Beheshti University), Pakistan (College of Physicians and Surgeons) and Sudan (University of Gezira) was undertaken through field visits and continuous contacts, communications and review of annual reports. Action was taken for redesignation of two centres (University of Gezira in Sudan and the College of Physicians and Surgeons in Pakistan). Steps were taken towards the networking of these centres and countries were encouraged to support the activity.

The unit contributed to several other activities related to human resources for health, including:

- Coordinating national activities for the evaluation of integration of health services and medical education in the Islamic Republic of Iran. Regional technical staff visited Tehran in 2009 to assist in establishing a new WHO collaborating centre and developing a national network for all education development centres in the Islamic Republic of Iran.
- Participating in the 17th meeting of the Senior Fellowships Programme held in London in November 2008.
- Using assessment tools for health profession education institutions in countries in the Region, including the assessment of four medical universities in Somalia.
- Establishing an effective network of regional academic institutions aimed at using the full potential of academia and putting research into policy practice. The unit assisted in the facilitation of the regional consultation to establish an academic network held in Beirut, Lebanon, in December 2009. The network was launched during the 57th session of the Regional Committee scheduled for 3–6 October 2010 in Cairo, Egypt.

3.3 Nursing and Allied Health Personnel unit

Themes

- Improving basic nursing and allied health education and establishing specialty nursing programmes, including preparation for the advanced practice role
- Ensuring development and retention of the nursing and midwifery workforce
- Providing a regulatory framework for nursing, midwifery, and allied health education and practice
- Expanding continuing education activities
- Strengthening nurses' involvement in policy-making
- Building management and leadership capacity of nurses, midwives and allied health personnel
- Institutionalizing quality improvement programmes in nursing and midwifery to ensure provision of safe and effective nursing and midwifery services
- Developing nursing research programmes and advocating evidence-based nursing practice
- Infection prevention and control

Strategic issues

- Shortage of qualified nurses and midwives, high work load, poor working environment, low job satisfaction, inadequate remuneration and lack of nursing workforce plans seriously affect the quality of nursing and midwifery services in the Region.
- Increasing demand for reform of existing preservice nursing and allied health education, and for development of new educational programmes and educational capacity-building in countries in conflict and post conflict.
- Lack of control over nursing education by nurses, while some schools of nursing lack the appropriate infrastructure, faculty and governance to fulfil their educational roles in some Member States.
- Accreditation of nursing and allied health education programmes to assess the quality of the educational process and ensure graduation of competent practitioners is a major area of concern in most countries.
- There is a need to strengthen collaboration between nursing education and nursing services in the Region, and to strengthen clinical learning, both at community and hospital level, as part of health professions education reform.

- Nursing directors and their staff need continuing support to become active participants in health and nursing policy-making and planning, including proper level of authority and sufficient resources, both financial and human, to implement action plans to strengthen the roles of nurses and midwives and improve services.
- Nurse migration and retention is a pressing challenge for national health systems and for initiatives to improve their performance.
- More focus is needed on implementation of management processes conducive to efficiency and effectiveness to ensure retention and development of the nursing workforce.
- Nursing and midwifery regulation needs to be institutionalized as a means of improving the quality of nursing care and protecting the health of the people.
- In many countries new schools of nursing and allied health cannot be opened and existing schools cannot be expanded because of the shortage of qualified teachers.
- Reforms are needed in the basic education of allied health personnel and in regulating their practice, improving quality of performance and meeting the continuing education needs of this important resource.

Key achievements

Collaborative activities continued to focus on investment in the development of nursing and midwifery services as a vital component of the health system and health services development and on strengthening allied health personnel education.

Efforts are being made to manage the crisis related to shortage in nursing and midwifery staff while trying to improve the quality of education of nursing and allied personnel in general. Collaboration was ensured through:

- provision of technical support;
- training of teachers and practitioners through fellowships and national training activities;
- furnishing of supplies and equipment;
- payment of incentives to teachers in countries in post-conflict;
- support to the development of bilateral collaboration between countries in the Region;
- twinning between educational institutions and the WHO collaborating centres for nursing development in the Region;
- upgrading of teaching–learning materials.

Technical support continued to south Sudan to develop the nursing and allied health resources and to strengthen the capabilities of the existing nursing, midwifery and allied health teachers. Technical support was continued to Somalia through collaborative programmes with partners to strengthen the nursing schools in the three zones in Somalia to enable them to produce nurses

and midwives to meet the country's health services needs. The midwifery programme, which was developed with technical support from WHO, started in Hargeisa and Bossaso in September 2009 to prepare urgently needed midwives for the country.

Support continued to Djibouti, Iraq, Syrian Arab Republic, Sudan and Yemen to improve the pre-service nursing and allied health education. Tunisia was supported to strengthen the newly established university-level nursing education programme through a twinning mechanism with a nursing faculty in Lebanon. Jordan and Oman were supported to develop a national plan for nursing human resources.

Saudi Arabia, United Arab Emirates and Yemen implemented the fifth cycle of the leadership and management training programme developed by the International Council of Nurses through the national trainers who have been prepared in the first cycle of the programme with support from WHO. Support was also provided to the programme in Bahrain and Jordan in its second cycle. Plans are under way to establish the programme in more countries next year.

Technical support was provided to Sudan, Syrian Arab Republic, United Arab Emirates and Yemen in establishing a national Nursing and Midwifery Council to regulate nursing and midwifery practice and education. Support was also provided to Lebanon in reviewing and updating the nursing law.

In the Syrian Arab Republic, through support of partners, development of the community and primary health care nursing services and education continued in the north-eastern region, which has the lowest health indicators in the country. Support was also provided to the recently established nursing faculties at the universities in the Syrian Arab Republic. In addition, nurses' job descriptions and a national career structure for nursing were developed.

Yemen was supported in developing job descriptions for all levels of nurses and midwives; support was also provided to establish a proper nursing documentation process as part of the Patient Safety Friendly Hospital Initiative.

In Pakistan, the process of mapping all the institutes preparing nurses, midwives and lady health visitors was completed. The purpose of this exercise was to identify the gaps and areas of need to proceed with the educational reform process.

Technical support was provided to the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) in the nursing field, based on the regional nursing and midwifery strategic plan previously developed for improving UNRWA nursing and midwifery services.

To build the capacity of front-line workers, especially nurses and midwives, on infection control of acute respiratory diseases as well as injection safety, a regional workshop was organized in collaboration with WHO headquarters.

Fellowships were awarded to several nurses, midwives and allied health professionals for long-term studies, as well as short-term training in different specialities of nursing and allied health within and outside the Region.

Technical support was also provided to the GCC Technical Nursing Committee and the GCC Council of Nursing and Nursing Specialization in the areas of nursing education and quality of nursing services.

Support was also provided to the two collaborating centres for nursing in the Region to strengthen their role in provision of technical support to countries.

The Nursing and Allied Health Personnel unit contributed to the functioning of the human resources for health observatory in the Region and to the development of proposals for funding submitted to the Global Health Workforce Alliance to support the eight countries in human resources for health crisis in the Region.

The 55th session of the Regional Committee in 2008 issued resolution EM/RC55/R.5 on promoting nursing and midwifery development in the Region. In the resolution, Member States called for development of a new comprehensive regional strategy for nursing and midwifery to support Member States in their efforts to scale-up nursing and midwifery capacity, creating positive practice environments, developing strong committed leadership and advocating for new specialized roles, especially family health nursing and advanced practice nursing.



The support team

Objective

The main role of the administrative support team is to assist the technical staff and facilitate the work of the Division in providing support to countries in the development of effective and equitable health systems to address the needs of populations, especially vulnerable groups.

The support team is divided into assistants to technical units and administrative staff. Assistants to technical units work with technical staff in ensuring timely and proper implementation of the work of individual units in general, and assist in implementing intercountry workplans, organizing regional meetings/workshops to develop country capacities in different areas, and facilitating communication with WHO country offices.

Administrative support staff comprising a senior programme administrative assistant and three senior clerks manage the specialized work of: recruiting consultants/temporary staff and all contract-related issues; assisting in the organization of meetings; implementing general programmes; managing staffing issues; and coordinating the work of the support team and technical staff for implementation of activities.

Achievements

- During the biennium, the team recruited 203 Consultants, Temporary International Professionals and Temporary Advisers, issued 178 Special Service Agreements and 369 Agreements for Performance of Work (amounting to US\$ 3 220 483).
- They also organized 35 meetings and coordinated with WHO headquarters to organize activities related to GAVI Alliance, Global Fund and other partners to implement activities related to health systems strengthening.
- In order to upgrade the capacity of the whole team, members of staff attended several training courses organized by the Staff Development and Learning unit. These courses were instrumental in developing the capacities of the support team and promoting their administrative capabilities.
- As the organization began to apply the new global management system, staff attended extensive staff development and learning courses on global management system implementation and use.

Challenges

- The main challenge is to reach the goals of the Division identified by WHO as priority areas.
- During the biennium there was a quick turnover of staff, either as a result of retirement or promotion outside the Division. Our aim is to work with management to identify a path for career development of staff, especially with the introduction of the new global management system.
- The workload of support staff has increased as they have greater involvement in managing technical programmes.
- Strong collaboration between professional and support staff requires investment in staff development and learning.



Special topics

Web-based applications

1. Essential Medicines and Pharmaceuticals Policies web site

www.emro.who.int/emp

The purpose of the Essential Medicines and Pharmaceutical Policies web site is to provide Member States with tools to support development in the area of medicines policies and management and encourage the sharing of experiences across countries.

To achieve this, the web site aims to:

- provide basic information on the work of the programme in the Region;
- provide brief information on regional and country pharmaceutical situations with reference to WHO medicines strategy;
- support networks of medicines practitioners and regulators in the Region;
- make available selected WHO and country publications;
- post selected regional news and events pertaining to medicines;
- encourage transparency through providing a common platform for posting official documents.

2. Regional health professionals directory

www.emro.who.int/hped

The number of health professions education academic and training institutes in the Region has increased in the past few decades. More than 500 institutes (public and private) are currently listed. The main aim is to share knowledge among all these stakeholders at national, regional and global levels.

The directory lists available data on the institutes that award at least a Bachelor Degree in any of the health professions. The directory provides information to support different stakeholders interested in conducting research, studies or exchanging experience among health professionals educational institutes within and outside countries of the Region. Stakeholders include institutes, professionals, students, communities and other organizations.

The data in the directory are continuously updated and newly established institutes are added whenever information is made available.

3. Management effectiveness initiatives web site

www.emro.who.int/mei

The management of health care is a pivotal factor in the delivery of an effective health service with growing recognition of the key role that non-clinical activities play in the way that health care is delivered. Management effectiveness is crucial in all health care settings: hospitals, primary health care clinics, mobile units, laboratories and pharmacies.

As part of its overall efforts in management effectiveness in the Region, the Regional Office offers technical assistance in developing key health management tools and approaches, such as hospital accreditation; licensing of health professionals and facilities; patient safety; quality assurance; the introduction of family practice; evidence-based medicine; decentralization; hospital autonomy; community health management and the district health system approach; and the implementation of the management effectiveness programme.

4. Regional health systems observatory

<http://gis.emro.who.int/healthsystemobservatory/main/Forms/Main.aspx>

The main aim of the observatory is to contribute to the improvement of health system performance and outcomes in countries of the Region.

Its specific objectives are to:

- develop health system profiles for all countries of the Region;
- establish a database for information on health systems in the Region;
- set up a regional network of researchers and policy analysts on health systems;
- ensure development;
- undertake and monitor research activities on key health system issues;
- publish and share findings with all stakeholders.

Special programmes

1. Social determinants of health

Following the guidelines laid out in the final report of the Commission on Social Determinants of Health, work on social determinants of health continues in the following areas:

- Policy initiatives and advocacy to promote an approach to health and well-being based on evidence for, and advocacy of, social determinants of health.
- Organizing a meeting in April 2009 that produced a regional strategy for moving forward the implementation of social determinants of health at country level.
- Initiating work on the Health in All Policies initiative to address health equity, working with WHO headquarters and Member States to explore ways to integrate the actions of ministries of health with other ministries.
- Participation in a guidance meeting on Health in All Policies at WHO headquarters in August 2009.
- Country meetings with stakeholders within and beyond the ministries of health in Jordan (July 2009) and Egypt (December 2009).
- Identifying focal points for social determinants of health activities in country offices and ministries of health to familiarize staff on issues on social determinants and health equity, and in preparation for a regional meeting in 2010.
- Working with Strategic Objective 7 partners in the Regional Office to ensure that national policies and recommendations for the joint programme review and planning mission include work on social determinants of health, health equity and intersectoral action.

Expanding the evidence base

- Identifying social determinants of health and their impact on health outcomes through country level and thematic studies in Egypt, Pakistan, occupied Palestinian territory, Syrian Arab Republic and Yemen.
- Two publications in peer reviewed journals.
- Regional Office presentations on intersectoral action for health at international seminar on Social and Health Policies for Equity in London in November 2009.

Policy initiatives and advocacy

- Support for civil society activities to address social determinants of health and health inequities in El Hagana, a disadvantaged area of Cairo, Egypt.

Future directions

- Expanding work on Health in All Policies as a strategy to address social determinants of health and health inequities through intersectoral action: implementation of the recommendations of a regional meeting focusing on Health in All Policies held in 2010 with country and ministry focal points for social determinants of health, and civil society partners.
- Expanding regional collaboration with international development partners such as UNICEF, the United Nations Population Fund (UNFPA) and bilateral donors to tackle common problems and share experiences.
- Continuing partnership with academic institutions to provide research findings on social determinants of health and health equity, and support training in the measurement of health equity.

2. *Globalization, trade and health*

Achievements

- Studies in 10 countries undertaken and presented before policy-makers on assessing trade in health services in the Region in collaboration with the International Development Research Centre, Canada. All reports were published and uploaded on the regional health system observatory and a paper accepted for publication in an international peer-reviewed journal.
- The agreement on trade-related aspects of intellectual property rights.
- Public health and intellectual property rights.

Challenges

- Institutionalize the work on globalization, trade and health in the Division.
- Mobilize additional resources to maintain the momentum built in the area of trade in health.
- Continue to raise the importance and the different aspects of globalization and trade liberalization that can influence international health and national health system performance.

Strategic directions

- Develop an evidence base on globalization, trade and health and use it for increasing awareness among policy-makers on matters related to globalization, trade and health.
- Strengthen capacity in ministries of health, ministries of trade and commerce, civil society organizations, academic institutions and related agencies in the area of trade and health.

Challenges

In addition to political, social and economic challenges affecting the eco-environment, health systems are facing specific challenges, which need to be taken into consideration in developing the divisional response.

Rising poverty in some countries, social exclusion affecting large populations, continuation of political disturbances in some countries and climate change have a direct impact on health systems and their response. The work initiated by WHO on social determinants and the technical support provided in the field of trade and health should bring some elements of response.

The major challenge remains the limited access to health services caused by underfunded health systems in most low-income countries. Traces of such gaps are limited access to medicines and weak coverage by essential health services. Despite advocacy for investing in health, national sources will not allow sustainable financing in the short term and medium term. There is a need to improve financial health protection by promoting prepayment schemes in health care financing options.

Weak health governance remains a recurring challenge in view of the changing landscape of service delivery represented by the growing role in financing and provision of care by the poorly regulated private sector. Ministries of health usually lack clear vision for health development and have a limited regulatory role. Limited information and legislative support are among the factors that hamper the move towards evidence-based policies and strategies.

Appropriate planning for human resource development and production of skilled health professionals remain high on the policy agenda of ministries of health. Internal and external migration of human resources represents a source of concern and is further exacerbated by globalization.

There is increasing awareness about quality of health services backed by important advocacy and information roles played by the media and civil society organizations. There is a growing need to secure patient safety and security in health facilities at the various levels of health systems.

In view of the growing interest of funding agencies, including the GAVI Alliance and the Global Fund, to support countries in strengthening health systems in order to improve delivery of various technical programmes, the Regional Office is under severe pressure to provide technical assistance to benefiting countries. Technical support includes proposal development, implementation of planned activities and monitoring and evaluation of national programmes.

The limited expertise available inside and outside the Region in the field of health system strengthening requires innovative approaches for technical cooperation in this field. Identification of national experts, partnership with national and regional training institutions and capacity development by WHO are alternative avenues for technical backstopping.

Pressures exist in the field of rational use of essential health technology in view of its growing cost and impact on availability of quality services. Evidence should be developed on access, medicine pricing and use and assessment of health technology in health systems of the Region. Particular interest should be paid to developing and strengthening governance of health technology, with a focus on quality assurance and improvement.

Future directions for 2010–2011

The Regional Office will continue advocacy among high-level policy-makers to establish sustained mechanisms for intersectoral collaboration, including community involvement to achieve Millennium Development Goals and implement poverty reduction strategies. Promotion of the institutionalization of social determinants of health and health equity as part of national and local health and development plans, evidence building and exchange of experience on intersectoral action within and outside the Region will be continued and enhanced. Support will continue for using a human rights based approach in national health policy and plans. Advocacy for gender-responsive health policies will continue through capacity-building in gender mainstreaming and evidence-building in gender issues in health. Support will also continue for integrating community-based initiatives and gender components into proposals to the GAVI Alliance and the Global Fund.

The primary health care approach will remain central to the development of health systems and provision of health care, and efforts will be made to mobilize regional resources to promote it. In the area of health policy and planning, continued efforts will be made to enhance capacities for policy analysis and strategic planning, in particular with regard to public health laws and legislation, aid effectiveness and donor coordination, and engagement of the private health sector in health system development. Assessment of health care delivery systems, including health care in the private sector, will be promoted. Patient safety and quality of care will remain priorities and the Patient Safety Friendly Hospital Initiative will be expanded to all countries. Promotion and development of equitable, efficient and sustainable health care financing and achievement of universal coverage remain key objectives. A health financing strategy for achievement of universal coverage will be developed. Capacity development in health economics and health care financing will continue. Strengthening of management systems for effective delivery of health services will be encouraged and efforts to support countries to successfully mobilize resources from the Global Health Initiatives and ensure their effective utilization will continue.

Support for assessment of health information systems will emphasize vital registration systems. Efforts will continue to be made to promote the use of essential health indicators and the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10), and the use of information technology and the Internet will be promoted in data collection, compilation and dissemination and to improve the health situation and trends database. More support will be provided to conduct population-based health surveys to complement the routine data systems.

National capacity-building in statistical analysis to conduct burden of disease studies and health system research is also a priority. National capacities for evidence-based decision-making and policy formulation for human resources development will be strengthened. Technical support will focus on countries with pressing needs in the production, distribution, skills mix and retention of human resources for health. The Regional Committee resolution on promoting nursing and midwifery development and its various components will be implemented, including an update of the present strategy. Support for establishing and upgrading educational development centres in educational institutions and promotion of innovative approaches in education of health professions will continue. Priority areas in fellowships need to be determined in a more systematic way by the countries in the Region. The reports of the fellowships plans and implementation will be shared with the countries.

Strategic Objective 7

To address the underlying social and economic determinants of health through policies and programmes that enhance health equity and integrate pro-poor, gender-responsive and human rights-based approaches.

Strategic Objective 10

To improve health services through better governance, financing, staffing and management, informed by reliable and accessible evidence and research.

The Regional Office will finalize its strategy to support research for health in the Region, and establish an advisory group and regional plan in response to the Global Strategy and Plan of Action for Public Health, Innovation and Intellectual Property. The Region's evidence-informed policy network (EVIPNet) will continue to support networking, sharing and dissemination of knowledge and evidence for improved policy-making, and capacity-building for health systems research will also continue. Support will continue to be provided for research in priority public health areas, with direct benefit and relevance for improved policy and planning, to promote quality and standards in medical journal publishing and for the medical libraries network. Collaboration with partners will continue in order to improve access to health and biomedical sciences information in the Region, including development and implementation of the Global Health Library.

Improved access, quality and use of medical products and technologies is an important component of health system strengthening. Support to countries will continue in:

- the development, review and implementation of national medicine policies;
- national strategy development for vaccine quality and regulation;
- rational selection and maintenance of health technology;
- improved access to safe blood and blood products and better blood transfusion services.

Low-income countries and countries in situations of complex emergency will continue to be a priority. In order to achieve regional vaccine self-sufficiency, support will continue for strengthening of national regulatory systems in the vaccine-producing and procuring countries, and a regional vaccine registration committee will be established. Capacity-building on adverse effects following immunization surveillance will continue in order to improve vaccine safety systems.

Development of legislation related to ethical, safe and suitable access to transplantations will be promoted. Promotion of good governance in pharmaceutical policies and practices, affordable prices of essential medicines and efficient and reliable supply systems for health products will remain important areas of work. Operational research and assessment at policy level as well as at the various levels in the supply chain will continue in order to determine the gaps and organize appropriate technical support and capacity-building. Development of a national comprehensive approach for rational use of essential health technology will be supported.

Strategic Objective 11

To ensure improved access, quality and use of medical products and technologies.

Contacts

Name	Title	E-mail	Extension
Office of the Director, Health Systems and Services Development			
Dr Ibrahim Abdel Rahim	Acting Director	abdelrahimi@emro.who.int	65306
Mrs Omneya Mahmoud	Senior Administrative Assistant	dhs@emro.who.int	65310
Ms Rita Meimari	Senior Secretary	dhssec@emro.who.int	65318
Ms Abla El Solamy	Administrative Clerk/Personnel	dhsper@emro.who.int	65312
Ms Naglaa Salah	Administrative Clerk/Budget	dhsbud@emro.who.int	65301
I. Health System Development			
Health Policy and Planning			
Dr Abdi Momin	Regional Adviser	momina@emro.who.int	65689
Dr Hassan Salah	Technical Officer	salah@emro.who.int	65326
Dr Susan Watts	Social Research Scientist	wattss@emro.who.int	65560
Ms Sahar Ragab	Secretary	php@emro.who.int	65567
Health Care Delivery			
Dr Riham El Asady	Technical Officer	elasadyr@emro.who.int	65620
Ms Hoda El Sabbahy	Senior Secretary	hcd@emro.who.int	65328
Ms Sara Georgi	Clerk	hcd@emro.who.int	65672
Health Economics and Social Health Protection			
Dr Hossein Salehi	Regional Adviser	salehih@emro.who.int	65305
Dr Awad Mataria	Technical Officer	matariaa@emro.who.int	65091
Ms Mona El Masry	Senior Secretary	hec@emro.who.int	65626

Contacts (continued)

Health Management Support and System Strengthening			
Dr Mounir Farag	Acting Regional Adviser and Medical Officer, Health System Strengthening	faragm@emro.who.int	65308
Evidence, Health Situation and Trend Assessment			
Dr Mohamed Ali	Regional Adviser	alim@emro.who.int	65363
Mr Khan Aseel	Technical Officer	aseelk@emro.who.int	65307
Ms Amira Nassef	Senior Secretary	est@emro.who.int	65354
Geographic Information System support team			
Mr Hany Farouk	National Professional Officer	faroukh@emro.who.int	65062
Ms Hanem Ibrahim	Technical Assistant (GIS Specialist)	ibrahimh@emro.who.int	65099
Mr Ahmed Bayomie	Technical Assistant (GIS Specialist)	bayomiea@emro.who.int	65687
Mr Khaled Ashour	Technical Assistant (GIS Specialist)	ashourk@emro.who.int	65514
Mr Wael Iskander	Technical Assistant (GIS Specialist)	saberw@emro.who.int	65518
II. Health Technology and Pharmaceuticals			
Essential Medicines and Pharmaceutical Policies			
Dr Mohammad Bin Shahna	Acting Regional Adviser and Technical Officer	binshahnam@emro.who.int	65303
Dr Mohamed Ramzy	Technical Officer	ramzym@emro.who.int	65356
Ms Maryan Selwanis	Senior Secretary	emp@emro.who.int	65315
Ms Sarah El Shawarby	Secretary	emp@emro.who.int	65452

Contacts (continued)

Health Technology and Biomedical Devices			
Dr Adham R. Ismail Abdel Moneim	Regional Adviser	ismaila@emro.who.int	65378
Ms Ghada Ragab	Senior Secretary	hmd@emro.who.int	65319
Blood Transfusion, Laboratory and Imaging			
Dr Nabila Metwalli	Regional Adviser	metwallin@emro.who.int	65314
Ms Dina Meena	Secretary	lab@emro.who.int	65632
Essential Vaccines and Biologicals Policy			
Dr Houda Langar	Regional Adviser	langarh@emro.who.int	65690
Ms Shaimaa El Khawanky	Senior Secretary	vac@emro.who.int	65532
III. Human Resources Development			
Human Resources Policy and Management			
Dr Ibrahim Abdel Rahim	Coordinator, Human Resources Development	abdelrahimi@emro.who.int	65302
Dr Walid Abubaker	Technical Officer	abubaker@emro.who.int	65343
Ms Hala Hassan	Senior Secretary	hrd@emro.who.int	65321
Educational Development and Training			
Dr Walid Abubaker	Acting Regional Adviser	abubaker@emro.who.int	65343
Ms Iman Atteya	Senior Secretary	edt@emro.who.int	65323

Contacts (continued)

Fellowships team		fel@emro.who.int	
Dr Nihal Nasr	National Professional Officer	nasrni@emro.who.int	65137
Ms Magda Abdellatif	Senior Administrative Assistant	fel@emro.who.int	65335
Ms Doha Haggag	Senior Administrative Assistant	fel@emro.who.int	65330
Ms Heba El Khoudary	Senior Administrative Assistant	fel@emro.who.int	65313
Ms Linda Jahshan	Senior Secretary	fel@emro.who.int	65331
Ms Iman El Agamy	Senior Secretary	fel@emro.who.int	65332
Ms Sanaa' Khalil	Secretary	fel@emro.who.int	65336
Ms Marwa Soliman	Secretary	fel@emro.who.int	65333
Ms Hanan Mohamed	Secretary	fel@emro.who.int	65191
Nursing and Allied Health Personnel			
Dr Fariba Al Darazi	Regional Adviser	aldarazif@emro.who.int	65304
Ms Sherifa Mokhtar	Senior Secretary	nur@emro.who.int	65351