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Report on the

Regional meeting on strengthening the integration and management of noncommunicable diseases in primary health care

Cairo, Egypt
8–10 September 2014



World Health
Organization

Regional Office for the Eastern Mediterranean

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1. EXECUTIVE SUMMARY

The World Health Organization (WHO) Regional Office for the Eastern Mediterranean convened a regional meeting on strengthening the integration and management of noncommunicable diseases in primary health care in Cairo, Egypt, from 8 to 10 April 2014. The meeting focused on an area of work that has so far not received enough public health attention compared to prevention and surveillance, the two other pillars of the global strategy of noncommunicable diseases. Member States have indicated the need for technical guidance and support in addressing the integration and management of noncommunicable diseases in primary health care, based on a health systems approach. The meeting brought together national managers of primary health care and of noncommunicable diseases, international and regional experts, representatives of international and regional partner organizations including the World Heart Federation, International Diabetes Federation, World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), in addition to WHO Secretariat from headquarters, regional and country level.

The main objectives of the meeting were to:

- review the current regional situation of the provision of essential health care for people with noncommunicable diseases using a health systems approach, with particular emphasis on primary health care.
- review international and regional experiences and lessons learnt in integrating the management of common noncommunicable diseases into primary health care.
- agree on a way forward and next steps for implementing evidence-based recommendations to strengthen health care for noncommunicable diseases.

A regional situation analysis, based on results of the 2013 WHO Country Capacity Survey on the health system response to noncommunicable diseases and a regional survey on the situation of integration of noncommunicable diseases in primary health care and discussions during the meeting found that all countries, to a variable degrees, face important challenges and gaps in the provision of evidence-based and high-quality health care for noncommunicable diseases and specifically in the implementation of strategic interventions in the area of health care, including best buys, in the regional framework for action. Many of these challenges and gaps reflect weaknesses in the main health system functions such as financing care, building the capacity of a multidisciplinary primary health care team and community providers, organizing services using models that correspond to the realities of local health systems and developing primary health care-based health information systems that facilitate care and monitoring. Further challenges loom ahead in light of the increasing burden of noncommunicable diseases.

International (South Africa, Sri Lanka and Thailand) and regional (Bahrain, Jordan, Kuwait, Lebanon, Morocco, Oman, occupied Palestinian territory and UNWRA) country case studies, as well as presentations of experiences internationally, provided important lessons and demonstrated the feasibility of implementing national initiatives to strengthen the integration of noncommunicable diseases in primary health care. As highlighted by these experiences, effective care for noncommunicable diseases requires integrated health systems

backed with strong and continuous political leadership and robust health financing mechanisms to ensure equity and sustainability. Reorienting health systems to better cater for the needs of people with noncommunicable diseases requires actions across the six WHO health system building blocks as well as specific attention to service delivery design and organization in order to address multimorbidity, chronicity and continuity of care. Reform to improve health care for noncommunicable diseases should build on existing public health infrastructures, human resources and programmes, rather than creating new structures. Strengthening the integration of noncommunicable diseases in primary health care should be part of a comprehensive patient-centred primary care rather than a vertical approach. Achieving optimal care for noncommunicable diseases within the health system constraints is achievable even in low resources settings. An important starting point is the identification of a set of essential interventions for noncommunicable diseases that need to be prioritized and scaled-up through primary care, as part of the essential health service package.

Based on the deliberations of the meeting, participants identified key strategic interventions to overcome the health system challenges to the integration and management of noncommunicable diseases in primary health care. These interventions were formulated under seven priority areas (governance, financing, health workforce development, organizing services, delivering services, essential medicines and technologies, community and self-care) which serve as the basis for a regional framework to strengthen the integration and management in primary health care, and specifically the strategic interventions endorsed by Member States in the area of health care of the regional framework for action to implement the United Nations Political Declaration on noncommunicable diseases whose 2012 version is being updated as requested by the Sixtieth session of the Regional Committee in 2013 for consideration at the Sixty-first session of the Regional Committee in October 2014.

Participants agreed on next steps for Member States and for WHO in four areas.

Assess national situation and build on international and regional experiences and lessons learnt

Next steps for Member States

- Carry out an assessment of the current national situation of the integration of noncommunicable diseases in primary health care.
- Document and share country experience in integrating noncommunicable disease in primary health care.
- Support operational, implementation and health system research that evaluates the national and subnational experiences, barriers and challenges of the integration of noncommunicable diseases in primary health care.

Next steps for WHO

- Promote cooperation and exchange of experiences between countries in relation to integration and management of noncommunicable diseases in primary health care and

establish an active knowledge network involving representatives of Member States, WHO, and international and regional experts.

- Develop a report synthesizing regional and international experiences, best practices and lessons learnt on noncommunicable disease integration into primary health care.
- Revise the working papers and briefing notes in light of the discussions of the meeting to address additional issues related to country needs.
- Support regional health system research to identify health system barriers to noncommunicable disease integration in primary health care and successful experiences in scaling-up noncommunicable disease “best buys” for health care in primary health care.
- Develop a protocol for country assessment of the situation of the integration of noncommunicable diseases in primary health care adapted to various groups of countries.

Address health system challenges and opportunities

Next steps for Member States

- Include the integration of noncommunicable diseases in primary health care in national policies/strategies and multisectoral action plans on noncommunicable diseases.
- Develop a national action plan on strengthening noncommunicable disease integration in primary health care.
- Convene a multi-departmental working group within the ministry of health and develop a multisectoral mechanism to strengthen the integration of noncommunicable diseases in primary health care in all sectors, including the private sectors, where relevant services are provided.
- Promote noncommunicable disease people-centred care through investment in integrated primary health care services.
- Scale up implementation of the strategic interventions related to health care, particularly the “best buys”, in the updated regional framework for action including through using WHO tools such as the WHO package of essential noncommunicable disease interventions for primary health care (PEN).
- Strengthen the integration and management of noncommunicable diseases in primary health care applying a health system approach and redesigning service delivery according to country needs, priorities and resources.

Next steps for WHO

- Ensure synergies with health system strengthening initiatives and strategies, such as family practice promotion, the health workforce development strategy, health care financing and noncommunicable disease essential drugs surveys.
- Provide technical assistance to countries in integration of noncommunicable diseases in primary health care and in the implementation of the strategic interventions in the regional framework for action, particularly the health care “best buys”.
- Convene a regional meeting on addressing noncommunicable diseases in emergencies focusing on countries affected by the Syrian crisis and within the context of the Syria Humanitarian Assistance Response Plan.

Monitor and report on progress

Next steps for Member States

- Set national targets related to noncommunicable disease health care, taking into consideration relevant targets in the global monitoring framework and the recommended noncommunicable disease “best buys” in health care.
- Set national indicators for noncommunicable disease health care (including inputs, processes and outcomes) that also cover care provided in the private sector.
- Strengthen national health information systems in order to better assess the health system response to noncommunicable diseases and to strengthen support to planning and clinical decision-making and to monitor performance.
- Use WHO tools to assess the readiness of health care facilities to deliver noncommunicable disease services in primary health care and the availability of noncommunicable disease essential medicines and technologies in such facilities.

Next steps for WHO

- Revise the updated regional framework for action and set of process indicators, in the area of health care, incorporating input from Member States.
- Develop guidance on measurement of coverage of health care interventions for noncommunicable diseases.
- Conduct a regional capacity building workshop focusing on implementing priority interventions for strengthening noncommunicable disease integration in primary health care, achieving global targets for noncommunicable disease health care and monitoring the performance of Member States.
- Convene a follow-up regional meeting on progress made in Member States in strengthening the integration and management of noncommunicable diseases in primary health care.

2. INTRODUCTION

The Political Declaration of the High-Level Meeting of the United Nations General Assembly on the Prevention and Control of Noncommunicable Diseases (resolution A66/2) and the Regional framework for action to implement the Political Declaration, endorsed by the Fifty-ninth and the Sixtieth Sessions of the Regional Committee for the Eastern Mediterranean (resolutions EM/RC59/R2 and EM/RC60/R4) emphasize the need to strengthen the health system response to noncommunicable diseases and, particularly, primary health care-based approaches for prevention, screening, early detection, and management of noncommunicable diseases.

The Sixty-sixth World Health Assembly in May 2013 adopted voluntary global targets for noncommunicable diseases which include ambitious targets for the health system response to noncommunicable diseases. Meeting these targets requires strengthening health system functions and particularly primary health care. WHO tools have been developed to support the implementation, even in resource-poor settings, of a prioritized set of cost-

effective interventions, targeting the four major noncommunicable diseases (cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases) and their shared risk factors in primary health care.

Member States have indicated the need for strengthening the integration and management of noncommunicable diseases in primary health care, based on a health systems approach. Such strengthening needs to build on international evidence and best practices and existing regional experiences, taking into consideration existing resources and challenges.

The World Health Organization (WHO) Regional Office for the Eastern Mediterranean therefore convened a regional meeting on strengthening the integration and management of noncommunicable diseases in primary health care in Cairo, Egypt, from 8 to 10 April 2014. The regional meeting was convened to define concrete steps that Member States and WHO need to undertake toward this goal. The programme is presented in Annex 1.

The main objectives of the meeting were to:

- review the current regional situation of the provision of essential health care for people with noncommunicable diseases using a health systems approach, with particular emphasis on primary health care
- review international and regional experiences and lessons learned in integrating the management of common noncommunicable diseases into primary health care
- agree on a way forward and next steps for implementing evidence-based recommendations to strengthen health care for noncommunicable diseases.

The following inputs informed the meeting and served as basis for the meeting deliberations:

- a regional situation analysis of the integration and management of noncommunicable diseases in primary health care (based on the country capacity survey 2013 and a regional survey on the integration and management of noncommunicable diseases in primary health care)
- international and regional case studies of the integration and management of noncommunicable diseases in primary health care
- working papers and briefing notes on key issues concerning the integration and management of noncommunicable diseases in primary health care.

Following the opening session, the meeting was organized around the following main themes:

- international and regional experiences and lessons learnt in integrating the management of common noncommunicable diseases into primary health care
- health system challenges, opportunities and approaches for the integration of noncommunicable diseases in primary health care
- monitoring and reporting on progress in implementing the regional framework for action on noncommunicable diseases, with a focus on the health system response
- development of a draft regional framework to strengthen the integration and management of noncommunicable diseases in primary health care.

The programme included two working group sessions during which participants identified the key health system challenges impeding the integration of noncommunicable diseases in primary health care and formulated recommendations, taking into account the context and realities of the various country groups in the Region, leading to the development of a draft regional framework to strengthen the integration and management of noncommunicable diseases in primary health care. A brief consultation was also organized on the updated regional framework for action and process indicators with a focus on health care. For the purpose of clarity, the summary of the presentations and discussions will be presented according to the aforementioned themes.

The meeting brought together both national managers of noncommunicable diseases and primary health care. The meeting also benefited from the participation of international and regional experts, as well as representatives of key organizations such as the World Heart Federation (WHF), the International Diabetes Federation (IDF), the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), and the United Nations Relief and Works Agency for Palestine Refugees (UNWRA). WHO Secretariat included staff from WHO headquarters, from the Pan American Health Organization as well as staff from the Eastern Mediterranean Region regional and country offices. The list of participants is presented in Annex 2.

Dr Ala Alwan, WHO Regional Director for the Eastern Mediterranean, welcomed the participants and mentioned that the meeting had a special meaning since it opened a new area of work that had so far not received enough public health attention. Health care was one of the three pillars of the Global Strategy on Noncommunicable diseases adopted in 2000, along with surveillance and risk factors prevention. While a clear roadmap existed for the latter two, the provision of services for noncommunicable disease and the health system reforms required to better cater for the need of people with noncommunicable disease had not yet received the same attention. Starting with this meeting, the WHO Regional Office would like to strengthen its support to Member States in improving health care for people with noncommunicable diseases through primary health care building on existing international, regional and national commitments. The updated regional framework for action to implement the United Nations (UN) Political Declaration on noncommunicable diseases, developed in consultation with Member States, included a set of process indicators to monitor the progress made in implementing the strategic interventions in the four priority areas of the framework. In the area of health care, a clear focus was on the integration of noncommunicable diseases as part of the essential health services package offered in primary health care. Very cost-effective interventions, or “best buys”, for health care which are affordable, feasible to implement in all health systems and culturally appropriate to all countries, needed to be prioritized. Supporting the implementation of core interventions in all countries was a key objective of this meeting, he said.

Dr Alwan indicated that a related objective was to review where countries stood in terms of noncommunicable disease health care with a focus on primary health care. Charting a way forward in the integration and management of noncommunicable diseases in primary health care must build on the accumulated experiences and initiatives in countries and on learning

from international experiences and best practices. Dr Alwan warned against a false sense of security as all Member States, regardless of levels of income category and health system development, face major gaps and constraints in providing evidence-based and cost-effective care for noncommunicable diseases. Dr Alwan asked the participants to draw the relevant lessons and identify the key issues to be addressed in order to suggest a clear way forward.

Dr Alwan suggested that improving the delivery of noncommunicable disease interventions in primary health care could not occur in isolation but should be seen as an integral part of service delivery reform and, more broadly, health system strengthening reform. He reminded participants that both noncommunicable disease and health system strengthening for universal health coverage were two of the five strategic priorities of the Region. The meeting, which was a combined effort of the WHO Departments of Noncommunicable Diseases and Mental Health and Health Systems Development, thus aimed to create synergies with ongoing WHO work such as the regional initiative to strengthen service provision through a family practice approach and the recently launched initiative to strengthen cancer care.

Applying a health systems lens to noncommunicable disease health care, Dr Alwan indicated, means attention to specific issues such as financing care for noncommunicable diseases in primary health care, building the capacity of primary health care and community providers in noncommunicable disease management, organizing services using models that correspond to the realities of the local health systems, and developing primary health care-based health information systems that facilitate care and monitoring. He said that while primary health care systems were originally set up to address maternal and child health and communicable diseases, many countries of the Region were now struggling to reorient their systems to address the increasing burden of noncommunicable diseases. In many countries, primary health care is under-funded and under-staffed, and the readiness and capacity to deal with the complex needs of people with noncommunicable disease is scarce, and even in countries with well-resourced primary health care, and well established programmes for conditions such as hypertension and diabetes, the monitoring and evaluation component of these interventions is often lacking or weak.

Faced with several humanitarian crises, the Region also had to find a way to better respond to noncommunicable disease in emergencies where these represent either natural disasters or violent conflicts. Past and current experiences have shown that countries are ill-prepared to meet the basic need of people with noncommunicable diseases, including provision of life-saving medicines and services for people either displaced or who can no longer access health services. The Regional Director acknowledged that more should be done to improve Member States preparedness and responses in this specific field too.

Dr Alwan argued that a unique advantage of this meeting was that it brought together the right people: national managers of primary health care and of noncommunicable diseases, and distinguished international and regional experts, in addition to WHO Secretariat from headquarters, regional and country level.

Acknowledging the presence and contributions of organization such as IDF, WHF, and WONCA, Dr Alwan indicated that partnerships should be reinforced and additional ones should be sought in order to support WHO and Member States in scaling up noncommunicable disease health care. Dr Alwan concluded his remarks by encouraging participants to be very frank and open in their exchanges and to concentrate on learning from each other, but also on reaching a consensus on the way forward.

Dr Samer Jabbour, Director of the Noncommunicable diseases and Mental Health Department, WHO Regional Office for the Eastern Mediterranean introduced the objectives of the meeting and posed three questions that summarized the agenda of the meeting: where are we, what do we want to accomplish and how do we get there?

The expected outcomes of the meeting were outlined as:

- a synthesis of 1) the current status of integration and management of noncommunicable diseases in primary health care, and 2) of international and regional experiences, best practices and lessons learnt in integrating noncommunicable diseases in primary health care based on a health system approach
- an endorsed long term vision for strengthening the integration and management of noncommunicable diseases in primary health care within a health system approach and a framework with key interventions for strengthening integration and management of noncommunicable diseases in primary health care
- next implementation steps with specific roles for various partners based on a mechanism for coordination to strengthen service delivery platforms.

Dr Jabbour mentioned that while the focus of the meeting was on noncommunicable disease delivery and how health system interventions can improve noncommunicable disease care, the aim was also to contribute to overall health system strengthening. In doing so, participants of the meeting needed to agree on a framework/strategic approaches that would be relevant for the Region, and could be tailored to the context of the various country groups, or even at a subnational level, since health care is a local event. He indicated that implementing this agenda required collaboration both within as well as across national primary health care and noncommunicable diseases departments and other units/departments of health ministries, but also with non-health ministries and agencies where noncommunicable disease health care is provided, such as ministries of health education, army/security, and others.

Dr Shanthi Mendis, Senior Advisor for Noncommunicable Diseases at WHO headquarters, reviewed the global commitments in the United Nations Political Declaration on noncommunicable diseases, focusing on the health system response. She introduced the noncommunicable disease Global Monitoring Framework, adopted by the World Health Assembly in May 2013, which includes two targets related to health care and highlighted the health systems barriers that countries face in fulfilling their commitments.

3. INTERNATIONAL AND REGIONAL EXPERIENCES AND LESSONS LEARNT

3.1 Health system challenges to providing essential care for common noncommunicable disease in primary health care

Professor K. Srinath Reddy, President, Public Health Foundation of India and President, World Heart Federation

Health care for noncommunicable diseases must be placed within the broader picture of noncommunicable disease prevention and control which requires a comprehensive response that addresses the three pillars of surveillance, prevention and health care. Primary health care is the fulcrum on which effective noncommunicable disease health care revolves. Although primary health care is critical, effective bidirectional referrals and linkages with secondary and tertiary care should be established. Recent evidence shows that, despite having a lower level of risk factors, case-fatality rates related to cardiovascular diseases in low- and middle-income countries (LMICs) are higher than in high-income countries. This illustrates the importance of life-saving health care interventions in high income countries that are not yet universally available in most LMICs. Providing effective noncommunicable disease health care requires attention to various health systems challenges such as health financing, health workforce, health care services, medicines and technologies, integration among noncommunicable diseases and with other health programmes, and coordination with other sectors.

The issue of the health workforce illustrates some of challenges to be tackled. These challenges include inadequate number of health workers, who might be insufficiently skilled, misdistributed or inappropriately used across the various levels of the health system. Overcoming these challenges requires multipronged strategies. Experiences from India, Islamic Republic of Iran, Pakistan, and South Africa suggest the use of non-physician health workers and task shifting as one possible solution to the health workforce crisis. Nurses and community health workers, when appropriately trained, can effectively manage most of the common noncommunicable diseases encountered in primary health care. Task shifting experiences from HIV/AIDS programmes could also serve as an example for noncommunicable disease programmes. Appropriate training and continuous medical education for primary care providers, including specific training programmes for the management of the most common noncommunicable disease in primary health care should be developed, taking into account local needs and resources. One example is a certificate course in evidence-based diabetes management developed by the Public Health Foundation of India which has been recognized for its quality by the IDF and has been used to train more than 5000 physicians in India. Adaptation of such training packages could help LMICs build their capacity.

Information and communication technology, in particular the emerging experiences and prospects offered by m-health technologies, has potential to improve the provision of noncommunicable disease services in primary health care. The provision of noncommunicable disease care in primary health care could also benefit from innovative low cost point-of-care tools such as those allowing a range of noncommunicable disease diagnostic tests to be performed by frontline health workers. An example is a new portable device developed by

researchers at the Public Health Foundation of India that combines the ability to perform 33 diagnostic tests along with clinical decision support and reporting functions.

Access to essential drugs is another critical element. Several strategies can be envisaged to improve access: enhancing capacity for generic substitution, expediting generic availability by overcoming legal barriers related to patents/licenses, optimizing local procurement practices in the public sector, broadening global procurement via third-party price negotiations, engaging the private sector to differentially price cardiovascular disease medicines in LMICs, regulating retail mark-ups in the supply chain and eliminating tariffs on medicines.

Beyond human resources, medicines and technologies, key interventions need to take place in primary health care. Systematic primary prevention and risk stratification approaches can enhance primary health care encounters, improving the early detection of noncommunicable diseases and risk factors in both health care settings where diagnostic procedures and tools are available as well as in community settings where simplified procedures can be applied. Education approaches for self-referral should be combined with opportunistic as well as targeted screening approaches to maximize opportunities of early detection.

Secondary prevention of noncommunicable diseases, especially prevention of second heart attack/stroke or death in people who have already experienced a cardiovascular event, is another critical intervention that requires to be integrated into primary health care. It is often mistakenly thought that secondary prevention is the preserve of tertiary care or advanced care physicians but this is actually a “low hanging fruit” for improving outcomes at the primary health care level. Almost 20% of deaths and hospitalization in the first year after heart attacks can be prevented. Unlike primary prevention, there is not much difficulty in identifying people who could benefit from effective care since the people have already declared themselves to the health system. Yet, secondary prevention is grossly under-utilized since only 10% or less of people get effective secondary prevention in low-income countries. Adherence and maintenance of drug therapy tends to be poor even when the treatment has been started at the secondary or tertiary level, and people are then referred back to primary health care. There is therefore a large scope for improvement in saving valuable lives through effective integration of secondary prevention into primary care.

Effective implementation of these key interventions in primary health care entails improving practice patterns of health care providers as well as actions that enable the uptake and adherence by patients. Since most of the health systems were originally developed to address episodic acute events rather than continuous and recurrent episodes, improving service delivery would also require health system reconfiguration. Such reorientation should address: how referral and follow-up are organized; the role of specialist physicians and clinics; contribution of non-physician health care providers; provider and patient education; attention to adherence, for example through the use of the polypill; and the role of quality improvement programmes as a way to drive change.

International experiences suggest that disease registries can be effectively used to improve health outcomes, often at lower cost, by enabling medical professionals to use

routinely generated data and engaging them in continuous learning to identify and share best clinical practices and catalyse better adherence to guidelines.

Universal health coverage provides a unifying framework under which the integration and continuity of essential noncommunicable disease services provision at all levels should be discussed. The following dimensions should be considered:

1. Coverage regularity. How long are patients followed? What is the periodicity of encounters/follow-ups?
2. Depth of coverage. Are nationally defined diagnostic, therapeutic and educational interventions implemented on appropriate beneficiaries?
3. Breadth of coverage. Are all co-morbidities addressed in one visit?
4. Quality of coverage. Are interventions performed according to standards comprising the technical and human dimensions of quality care (effectiveness, cost, safety and satisfaction)?
5. Financial coverage. Did the person benefit from pooled financial resources (e.g. insurance) to shoulder the burden of chronic care?

Monitoring effective coverage of noncommunicable disease interventions in primary health care is an important way to monitor progress. Global discussions are underway to develop a large number of coverage indicators in primary health care and it is important that noncommunicable diseases feature prominently in these indicators.

3.2 Noncommunicable disease integration in primary health care: an African perspective

Professor Andre Pascal Kengne, Director, Noncommunicable Disease Research Unit, South African Medical Research Council

Before the 1990s, infectious diseases and maternal and child health issues represented the main burden of disease in sub-Saharan Africa. As a result, health systems and health services delivery were mainly organized around acute conditions and not geared towards chronic care. Around the late 1990s, emerging data consistently showed that noncommunicable diseases were becoming important cause of deaths, including in low-income countries. Although infectious diseases and maternal and child health issues were still the main killers, the proportional contribution of noncommunicable disease to overall mortality was such that noncommunicable disease could no longer be ignored. The first step towards addressing the challenge posed by noncommunicable disease has been to better quantify the magnitude and impact of noncommunicable diseases by improving the availability of reliable population-based data on the burden of noncommunicable diseases and improving the understanding of the impact of noncommunicable diseases on health service utilization, and the capacity of health services to deal with noncommunicable diseases.

Pooled results of 33 cross-sectional studies show that about a third of the surveyed population suffers from hypertension but only a quarter of those diagnosed are aware of their condition. Among those diagnosed, less than 20 per cent were being treated and less than 7 per cent were under control.

The high prevalence of noncommunicable diseases has a major impact on health care resource utilization, given the capacity of health services to deal with them. A recent survey in Tanzanian 24 health facilities showed that nearly 60% of all outpatient visits were due to chronic diseases. While half of those visits were related to HIV/AIDS, the remaining half were for common noncommunicable diseases such as diabetes, hypertension or chronic respiratory diseases. But facilities, especially non-hospital settings such as primary health care centres and dispensaries, have limited capacity and readiness to deal with noncommunicable diseases in comparison to HIV/AIDS. With an average density of physicians, nurses and midwives of 0.7 per 1000 population, many sub-Saharan African countries are in a health workforce crisis. The study also found that the shortage of health workers is further exacerbated by the inadequate training and supervision provided to primary health workers to manage noncommunicable diseases.

Affordability of noncommunicable disease treatments and diagnostic tests is a major issue. A study in Cameroon of the median price of selected tests in the investigation of cardiovascular disease and diabetes showed that performing a glycosylated haemoglobin test could cost as much as US\$ 22, a sum equivalent to 13 days' wages for an average Cameroonian worker.

Overcoming the health workforce crisis requires innovative ways of reengineering primary health care delivery platforms. Several studies across Africa have shown that task shifting involving non-physician health workers and nurses can be successfully used for the management of noncommunicable disease. Enhancing the contributions of these providers requires training and the development of integrated guidelines and protocols tailored to their needs and offering guidance and support for the management of the most common noncommunicable disease encountered in primary care. The Primary Care 101 guidelines, adopted by the South African Department of Health, are an example of comprehensive clinical practice guidelines that aims to equip nurses and other clinicians to diagnose and manage common adult conditions at primary care level.

Addressing noncommunicable diseases in Africa also requires learning from the extensive experiences gained during the last decades in scaling up treatment for HIV/AIDS and tuberculosis. Creating parallel health systems for these conditions is neither sustainable for health systems nor sound in term of clinical management. The fact that many patients who have survived AIDS since the introduction of highly active antiretroviral therapy (HAART) are now developing or will be developing noncommunicable diseases calls for more integrated approaches in the ways services are organized and delivered for chronic conditions. Community-based screening programmes targeting HIV/AIDS and tuberculosis could include the screening of diabetes and hypertension.

Improving noncommunicable disease service delivery entails actions across the continuum of care: community awareness campaigns, pro-active case detection and interventions that support access to treatment and retention in care. A community-based intervention for primary prevention of cardiovascular diseases in the slums of Nairobi, Kenya, has attempted to cover all these dimensions.

The example of Cameroon indicates that successful integration of noncommunicable diseases in primary health care should be seen as a continuous learning process. In this model, data is generated to better understand the situation, gaps and barriers to change, evidence-based interventions tailored to the context are appraised, interventions and tools are developed, and interventions are then implemented and properly evaluated before being disseminated and scaled up.

Improving the integration of noncommunicable diseases in primary health care requires a clear differentiation between systemic challenges (such as financing or the health workforce shortage) from noncommunicable disease-specific challenges (such as the service delivery design required to cater for the complex needs of people with noncommunicable diseases). Achieving the desired outcomes is unlikely unless these two types of challenges are addressed.

While there has been progress, challenges lie ahead. While most African ministries of health have acknowledged the importance of noncommunicable diseases, the capacity to respond, and in particular to mobilize the financial resources to tackle noncommunicable diseases, is still limited.

3.3 Noncommunicable disease management and integrated service delivery: towards convergence

Dr Alberto Barcelo, Regional Advisor, Noncommunicable Diseases, WHO Regional Office for the Americas/Pan American Health Organization

Effective provision of chronic disease care requires reorienting health care services to focus on chronic care. The approach of the WHO Regional Office for the Americas/Pan American Health Organization (AMRO/PAHO) to strengthening the capacity of health systems to manage noncommunicable diseases and their risk factors, combines actions to overcome the fragmentation and limited coordination among health services with approaches to better organize care for people with chronic conditions.

AMRO/PAHO promotes the integrated management of noncommunicable diseases through the development of integrated health service delivery networks (IHSDNs) to overcome fragmentation and limited coordination between services. An IHSDN is defined as a group of organizations that provides, or arranges for the provision of equitable, integrated health services to a defined population, and that is willing to be held accountable for its clinical and financial outcomes and for the health conditions of the people it serves. IHSDNs are integral in the sense that they provide comprehensive services covering all levels of prevention, are coordinated or integrated among all care levels and settings, including the socio-sanitary level, and are ongoing, meaning throughout the life cycle.

The essential attributes of an IHSDN cover four domains all requiring health system changes that facilitate better integration of noncommunicable diseases in primary health care: governance and strategy, model of care, organization and management, and financial allocation and incentives. In relation to governance and strategy, a basic requirement is knowledge of the population and territory covered and of its health needs and preferences,

along with the identification and tackling of inequities in health coverage, access and outcome, which determine the supply of health services. Initial contact must thus be established with the population base to enable health services to appropriately plan their supply through improvements in the coverage, accessibility and organization of noncommunicable disease prevention and control services.

As for the model of care, noncommunicable disease prevention and control can be addressed more effectively by offering patient-centred care, rather than focusing on a particular disease. Developing patient-centred care entails:

- ensuring accessibility and continuity of care
- strengthening patient involvement in care, by making it easier for them to express their concerns, and easier for health care service providers to respect their patients' values, preferences and needs, and offer emotional support, especially to relieve their anxieties and fears
- supporting self-management throughout the system by facilitating therapeutic goal-setting and boosting the confidence of patients and their families in self-care
- establishing more efficient mechanisms for inter-unit coordination and integration.

When organizing patient-centred care it is necessary to: define roles and distribute tasks among multidisciplinary team members; use planned interactions to support evidence-based care; ensure regular patient monitoring; and provide care that patients can understand and that is culturally appropriate.

Reorganizing care for the integrated management of noncommunicable diseases requires sufficient, competent and committed human resources that are valued by the network.

Five core competencies are key:

- patient-centred chronic care that includes interviewing and communicating effectively, assisting changes in health-related behaviours, supporting self-management and using a proactive approach
- partnerships with patients, providers and communities
- quality improvement strategies such as measuring care delivery and outcomes, learning and adapting to change and translating evidence into practice
- use of information and communication technologies, including designing and using patient registries, using computer technologies and communicating with partners
- public health perspective such as providing population-based care, systems thinking, work across the care continuum and working in primary health care-led systems.

AMRO/PAHO has used the chronic care model as a guiding conceptual model to improve health care organization for chronic conditions in primary care. The chronic care model aims to guide changes to obtain high quality care, high levels of satisfaction and improved outcomes through productive interactions between active and informed patients and prepared and proactive practice teams in the context of: 1) health system reforms that include reorganizing services, support to health providers through guidelines and protocols, and clinical information systems to monitor and help improve care; and 2) community mobilization to

support self-care. Several regional and country experiences have used the IHSDN and chronic care model approaches and related tools such as the “chronic care passport” to improve health care organization for noncommunicable diseases.

3.4 Lessons from chronic infectious diseases control

Dr Dermot Maher, Coordinator, Research Capacity Strengthening and Knowledge Management, WHO Special Programme for Research and Training in Tropical Diseases (TDR)

The service delivery models and approaches adopted by infectious diseases control programmes, especially HIV/AIDS and tuberculosis, can also be applied to noncommunicable disease management. Successes in delivery of primary care interventions for infectious diseases, for example 10-fold expansion in access to antiretroviral therapy (ART) over the five years up to 2007 and expansion in access to the recommended global tuberculosis control strategy (DOTS), were due to the adoption of a public health approach to care that prioritized large scale access to care, rather than maximising individualized care. The critical elements of such approach are: standardization; decentralization; task shifting/sharing; involvement of a full range of care providers; community/patient involvement in programmes; and community, peer support and self-management strategies.

This public health approach can be adapted for management of noncommunicable diseases. Using the DOTS strategy as a model, there are five key policy elements that could be similarly applied and adapted to noncommunicable diseases:

1. Political commitment: a sustained commitment to health system strengthening that includes a national plan for noncommunicable diseases.
2. Case finding: primary health care is uniquely placed to identify people at risk and deliver prevention and care interventions.
3. Standardized diagnosis and treatment: simple, standardized protocols for diagnosis, treatment, follow-up and referral in support of quality care.
4. Regular supply of drugs: an uninterrupted supply of essential quality-assured drugs, which is crucial for continuity of care.
5. Systematic monitoring and evaluation: an efficient health information system for data collection and management, which enables evaluation of patients' progress, noncommunicable disease burden and programme effectiveness.

Effective monitoring and evaluation systems, which require good medical record-keeping, underpin a number of crucial programme functions, including quality enhancement and assessment of effectiveness of programme performance (including progress towards targets). Systematic routine programme data collection and management, including cohort analysis, can enhance clinical practice and serve as a platform for audit and operational research aimed at improving programme performance.

3.5 The Canadian experience

Sandra Delon, Former Director, Chronic Disease Management, Alberta Health Services, Calgary, Canada

Calgary, the largest city of Alberta province, Canada, successfully implemented a provincial health system redesign aiming at improving care for people with chronic noncommunicable diseases which presents important lessons. In 2003, the Calgary Health Region launched a programme for chronic disease management to improve chronic illness care. The programme began in response to the plethora of data showing the impact of chronic diseases on health care delivery systems and the health of communities.

Data showed that chronic diseases were not being well managed in Canada. Surveys across a variety of diseases including, high blood pressure, diabetes, coronary artery disease, asthma and congestive heart failure showed that 40–80% of patients were inadequately treated. Deficiencies in Calgary's approach to chronic disease management included providers not following established care guidelines, poor care coordination and patient follow-up, lack of training for patients to manage their illnesses and recognize signs and symptoms, and lack of financial incentives to support good chronic care.

At the outset, a full-time director and a part-time medical director were appointed and given responsibility for improving chronic disease management and integration in primary care. An evidence-informed model (initially, the chronic care model and later the expanded chronic care model) was identified to guide the improvement work, as were strategies for each of its components. Guiding principles were developed, including working within existing operations where possible, taking a patient-centred approach and being community-based. Presentations were held across the organization to explain the initiative and obtain buy-in. Several interventions were progressively implemented including:

- Development of care algorithms for key chronic conditions that specify the care that was to be provided, by which provider, when and where. Algorithms outline the patient's goals, upcoming interventions and role of all providers involved. This initiative facilitated communication between patient and providers, motivated patients and helped them take responsibility for the day-to-day management of their disease(s). Led by a medical specialist, the development of care plans also helped identify education gaps for primary care providers.
- Assignment of multidisciplinary teams to support family physicians: some team members, like nurses, were based in family physicians' offices, others were posted in the community to deliver patient education and provide supervised exercise programmes. Medical specialists were involved to provide in-services and support for complex patients.
- Introduction of self-management training for patients. The training adopted a six week programme, developed by Stanford University, suitable for anyone with a chronic condition and taught in small groups by lay people.

Calgary's work in the management of chronic diseases was accelerated by other initiatives occurring across the organization and province. The new fee code being developed for family physicians allowing them to bill for developing a care plan for patients with chronic conditions. Calgary Health Services transferred hospital-based dieticians into the community facilitating them to become key members of the interdisciplinary support team with family physicians. The provincial government provided funding to lead a province-wide dissemination project to build chronic disease management capacity and develop new

competencies. Stanford University was looking for a site to pilot an online version of the self-management programme and Calgary took on that role. Accreditation Canada was beginning to develop standards for chronic illness care and Calgary was asked to be the pilot site.

An assessment of the Calgary Health Region's chronic disease management programme showed improvement in a number of health outcomes, between the baseline and one year follow-up period; a 17% increase in the percentage of diabetic patients with A1c control; a 13% increase in the percentage of dyslipidaemia patients with triglyceride control; a 19% decrease in patients with a chronic obstructive pulmonary disease (COPD)-related exacerbation resulting in an inpatient hospitalization; a 41% decrease in in-patient hospital admissions across all patients; and a 34% decrease in emergency department visits across all patients.

Factors central to the success of the programme, include dedicated resources (personnel and funds), evidence-informed strategies, visible senior leadership to support the initiative, identifying early adopters, finding clinical champions, starting off small, showing results, being flexible with implementation and working within existing operations.

Initially, Calgary Health Region was one of nine health regions in the province. In 2009, the regions were merged to form a new entity, Alberta Health Services. Many of the elements of Calgary's chronic disease management programs became provincial programmes. Chronic disease management is now integrated into primary care within Alberta Health Services. The key lessons learnt are:

- chronic disease management cannot be an add-on to someone's current job
- at the developmental stage, there is a need for people who can think creatively
- paradigm shifts take time
- it is important stay "below the radar" while testing ideas
- progress is impossible without change and those who cannot change their minds cannot change anything (citation from George Bernard Shaw).

3.6 The Sri Lankan experience

Dr Thalatha Liyanage, Senior Lecturer Post Graduate Institute of Medicine, Colombo, Former Director, Noncommunicable Diseases, Ministry of Health, Sri Lanka

Sri Lanka has a rich experience in developing a community-based primary health care approach to tackle noncommunicable diseases that built on the initial implementation of the WHO package of essential noncommunicable disease interventions for primary health care (PEN). In response to the rising burden of noncommunicable diseases, the country has, since 2009, used its extensive network of clinics and hospitals to set up 668 healthy lifestyle centres (HLCs) across the country, doubling their number in only two years (from 297 in 2011 to 668 in 2013). Primary health centres, which were underutilized, poorly equipped and ill-prepared to detect and manage noncommunicable diseases, were provided financial and technical support and were upgraded into HLCs with the mandate to screen, manage and follow up noncommunicable diseases at primary health care level.

The establishment of HLCs drew on lessons from pilot projects supported by WHO, the Japan International Cooperation Agency (JICA), the World Bank and professional medical colleges. WHO supported training of health workers in using PEN to detect, manage and treat noncommunicable diseases. The package, which was initially piloted in one district, included core activities as well as plans to introduce comprehensive noncommunicable disease care within primary care settings. The core activities comprised: need and capacity assessment tools (assessing human resources, equipment and essential drugs need); support for developing evidence-based protocols for the management of noncommunicable diseases and assessment of cardiovascular risk using WHO/International Society of Hypertension (ISH) risk prediction charts; health information recording tools; and guidance for community empowerment.

A concomitant programme, supported by JICA, called the Noncommunicable Disease Prevention Project, contributed to strengthening health system capacity by introducing health check-ups, health guidance and health promotion programmes at primary and secondary health care institutions and in communities for the prevention and control of noncommunicable diseases with a focus on risk factors and cardiovascular disease prevention.

Key factors that contributed to the HLCs expansion and success include:

- a consensus obtained from all stakeholders including Ministry of Health officials from different departments, professional associations, academia, cooperation agency and WHO to establish HLCs
- a strong and continuous political leadership at the highest level with policy support, budgetary allocation and responsibility given to regional authorities to improve the prevention and control of noncommunicable diseases
- the development by the Ministry of Health, in consultation with academia and experts from professional organizations, of an essential noncommunicable disease drug list to be made available in all primary health care, that was diffused in all HLCs across the country
- an optimal use of existing public health infrastructures and human resources with the development of several training programmes for the prevention and control of noncommunicable diseases, targeting various primary care providers, rehabilitation of primary health care centres, and involvement of existing consultations and health providers in noncommunicable disease opportunistic screening
- an emphasis on early detection of the most common noncommunicable diseases, in particular cardiovascular diseases, at primary health care level, coupled with health prevention and promotion activities in the community, in order to increase public awareness and encourage primary care service utilization
- continuous monitoring and evaluation of implementation with pilot demonstration projects before full national scaling-up.

While several challenges persist, the establishment of the HLCs illustrates how noncommunicable disease prevention and control can be effectively integrated into primary health care using existing health services platforms. PEN has proven to be a highly cost-effective approach to initiate service delivery reform and reach the community at all levels.

3.7 The Thai experience

*Dr Viji Kasemsup, Senior Advisor, Noncommunicable Disease Network Thailand,
Assistant Dean for Research, Mahidol University, Thailand*

Thailand is an upper-middle income country with a population of 67 million which successfully introduced and progressively expanded a large public insurance scheme, called the Universal Coverage Scheme to cover the majority of the Thai population. This presentation highlighted how the Universal Coverage Scheme contributed to reshaping health systems around the most pressing needs, including noncommunicable diseases. Thailand's strategy for the prevention and control of noncommunicable disease was based on three strategic pillars: robust health financing systems, strong integrated health systems, and the prioritizing and scaling up through primary care of essential core noncommunicable disease interventions.

Given the large and increasing share of health costs related to noncommunicable disease, robust health financing systems are needed to ensure equity and sustainability. Since 2002, more than 97% of the Thai population has been covered by one of three public-insurance schemes. The introduction of the Universal Coverage Scheme was paralleled with an increase in total health expenditure (4% of GDP) and government contributions for health care financing, including for noncommunicable diseases.

Revenue for noncommunicable disease prevention and care comes from various sources including general tax, pay-roll taxes and out-of-pocket payments. An innovative financing mechanism has been set up to finance noncommunicable disease population-level interventions with 2% earmarked tax from both alcohol and tobacco. In addition to the Ministry of Public Health and other local governmental structures, two quasi autonomous public health agencies are responsible for pooling and purchasing functions: the National Health Security Office and Thai Health Promotion Foundation (Thai Health).

The National Health Security Office pools funds from general taxation and pays for curative services including health promotion and preventive ones. A mixed approach combining capitation and pay-for-performance schemes is used to pay for outpatient services including for noncommunicable diseases. Pay-for-performance schemes have been used to enhance screening and effective management of noncommunicable diseases, in particular diabetes and hypertension. Since 2003, Thai Health, an agency funded by 2% surcharge tax on tobacco and alcohol, has been a unique form of health financing for supporting health promotion, especially primary prevention for noncommunicable diseases. The agency provides project grants for health promotion/prevention interventions, covering tobacco and alcohol control, promotion of healthy diet and physical activity, and social marketing and health promotion activities in communities and organizations.

Effective noncommunicable disease care requires strong integrated health systems. During the past decades, over 1000 hospitals and 9000 health centres have been built throughout Thailand, forming a dense health care system from primary to tertiary care. Starting from villages, in which over a million of health volunteers reside, an important network of primary care sub-district health centres (called health promoting hospitals), led by

nurses and non-physician health workers, have been developed to provide a comprehensive set of promotive, preventive, curative and rehabilitative services. Health volunteers are actively involved in disseminating health information, screening for diseases, and collecting key health indicators. This strong primary care level is connected to over 700 community hospitals for secondary care, over 100 public hospitals care for tertiary care (mostly in the Ministry of Public Health) and over 300 private hospitals. The importance given to the primary care and community network has been instrumental in scaling up services for noncommunicable diseases.

Essential core noncommunicable disease interventions need to be prioritized and scale-up through primary care. Starting with hypertension and diabetes, the Ministry of Public Health has put emphasis on improving early detection and effective management of the most common noncommunicable diseases, setting up specific targets for noncommunicable disease screening and care. The role and competencies of primary health care providers have been revisited, in particular the expanded mandate given to nurse practitioners. Health providers financing schemes (capitation and pay for performance) have also been introduced, providing financial incentives to improve the coverage and the quality of care. A monitoring system with the development of process indicators has been set up, showing improved access, detection and management of hypertension and diabetes in the last five years.

3.8 The South African experience

Dr Lara Fairall, Head, Knowledge Translation Unit, University of Cape Town Lung Institute, South Africa

This presentation illustrated the importance of tailoring noncommunicable disease training to needs of primary care providers using the Practical Approach to Care Kit (PACK), a package of guidelines and in-service training that aims to train primary care providers, primarily nurses, in the management of common symptoms and chronic conditions in adults presenting to primary care.

South Africa is an emerging economy with a double burden of disease and increasing noncommunicable diseases. Recent analyses found that the country's health system performance was not matching the country's spend on health care. In response, the South African National Department of Health has initiated, over the last few years, a number of reform initiatives to improve governance of the health system and service delivery. One such reform aims to re-engineer primary health care through the strengthening of the district health system. Under this initiative, greater emphasis is put on the delivery of community-based services by more pro-actively reaching out to families, with an emphasis on disease prevention, health promotion and community participation. Re-engineering is being addressed through the deployment of district specialist teams to each of the 52 districts in the country coupled with community outreach teams comprising a professional primary health care nurse, environmental health and health promotion practitioners and four/five community health workers to serve a population of about 7660 people.

The Knowledge Translation Unit of the University of Cape Town Lung Institute has contributed to these reforms by developing a series of packages to support and empower nurses and other primary health workers. The PACK adult package comprises: policy-based and evidence-informed guidelines; onsite, team and case-based training; non-physician prescribing; and a cascade system for scaling up training. A key feature of the PACK programme are guidelines that use symptom-based algorithms as the entry point and a standardized checklist format to assist health workers to “assess, advise and treat” a wide range of chronic conditions, including communicable diseases (HIV, tuberculosis), noncommunicable diseases (hypertension, diabetes, cardiovascular disease, chronic respiratory disease) and mental health conditions (including a local adaptation of WHO’s mhGAP guidelines). Another feature is onsite training and supervision using a cascade training model or training of trainers. Facility trainers are drawn from health services, usually nurse middle managers. The training of trainers places as much emphasis on equipping these managers as nurses as it does on the content of the guidelines.

The impact of the programme has been evaluated in four pragmatic randomized controlled trials showing:

- modest, but consistent and reproducible effects across a range of behaviours including prescribing, case detection and referral
- changes in prescribing that are clinically appropriate
- simultaneous improvements in the quality of care for both communicable and noncommunicable diseases
- benefits that extend to health outcomes, which is unusual for implementation research trials
- a shift in expenditure from secondary (hospital admissions) to primary care
- no evidence of harm seen in any of the trials
- that the combination of simplified guidelines, onsite training and task-shifting prescribing to nurses is particularly empowering
- that task-shifting clinical responsibilities to non-physicians can in fact increase demand on doctors in health systems with limited doctor support and large unmet demands for treatment.

Challenges and lessons learnt include the following.

- Not all chronic conditions can be integrated into “one-stop” services, such as severe mental illness and tuberculosis.
- Clinical training must be accompanied by organizational changes to fully realize the benefits to patients. Examples of organizational changes alongside this programme include integrated chronic care services and sub-district-based chronic disease management teams.
- Optimal implementation requires the establishment of a programme, with a commitment made at a national, provincial and district level to ongoing training.
- High staff turnover rates present challenges.
- It is important not to overload clinical staff with training. A hybrid approach whereby the guidelines remains integrated but the training is modularized (communicable diseases, noncommunicable diseases, mental health, woman’s health) can assist with this.

- Initial localization of the guideline content to local disease burdens, medicine and test availability is time-consuming, resource-intensive but essential to produce tools that are highly relevant to clinicians and will be used during consultations.
- Electronic versions of the guidelines may increase their use during consultations because content can be more rapidly navigated.

3.9 Regional country presentations

This comprised seven regional country presentations from the Eastern Mediterranean Region and one presentation made by the United Nations Relief and Works Agency for Palestine Refugees (UNWRA).

Innovative approaches such as the use of e-health and noncommunicable disease cohort analysis were also presented.

Bahrain

Bahrain presented its experience in integrating noncommunicable disease through a comprehensive network of primary health care centres, with dedicated noncommunicable disease clinics, using the WHO PEN package as an entry point to initiate change.

Jordan

Jordan presented pilot experiences in Ajloun and Jarash governorates where noncommunicable disease integration in primary health care was linked to community-based interventions promoting physical activity, healthy diet and raising awareness about noncommunicable disease among the general public, involving various stakeholders.

Kuwait

Kuwait gave another illustration of the implementation and adaptation of the WHO PEN package introduced in noncommunicable disease management clinics, located in the 100 primary health care centres. The country shared also the (early) lessons learnt in implementing three noncommunicable disease related projects: a patient electronic health record called the Primary Care Information System; mental health clinics in primary care run by trained family physicians and primary health care providers with the support of specialists; and a national mammography screening programme, with the establishment of breast mammography units located in the primary health care clinics.

Lebanon

Lebanon presented its experience in improving the integration of noncommunicable diseases in primary health care through a network of 180 primary health care centres accredited by the Ministry of Public Health using a stepwise approach focusing on hypertension and diabetes mellitus and using the WHO cardiovascular risk approach to

stratify and screen all people attending primary health care centres, aged 40 years and above, offering risk management and referral as needed.

Morocco

Morocco gave an overview of the various interventions introduced to strengthen the integration of noncommunicable diseases in primary health care, including the establishment of integrated primary health care centres for chronic diseases dedicated to noncommunicable disease care (mainly diabetes mellitus and hypertension) that complement the 2600 primary health care centres staffed with general practitioners. Integrated centres for chronic diseases offer specialized medical consultations for patients with noncommunicable disease, at a primary care level. The relevance and impact of these structures are currently under review.

Oman

Oman illustrated how diabetes mellitus can be used as a primer condition to test health system capacity to deliver effective noncommunicable disease care in primary care. With more than 20 years of experience, systemic changes and processes have been established to integrate diabetes and other noncommunicable diseases into primary health care, based on a model of noncommunicable disease clinics located in primary health care centres. The presentation exemplified how effective service delivery redesign requires actions across the various health systems building blocks, including specific adaptations to account for the specific needs of people with chronic conditions.

Occupied Palestinian territory

Palestine offered another experience of integration of the WHO PEN package into primary health care, describing a successful pilot implementation of the package in one district of the West Bank, highlighting the challenges encountered in rolling out the programme such as high staff turnover, non-adherence to clinical guidelines and processes and medication shortages. The presentation underlined the importance of routine data to inform decision-making and enhance clinical practice, and illustrated how clinical audits and continuous supervision can be used to monitor PEN implementation.

UNWRA

UNWRA has been in operation for 64 years, and provides health, education and social services for about 5.3 million Palestine refugees in Jordan, Lebanon, Syrian Arab Republic, and the West Bank and Gaza Strip. With more than 211 000 people with diabetes and/or hypertension being cared for in the five operation fields, UNWRA has accumulated a wealth of experience in dealing with noncommunicable diseases and has become the most important humanitarian organization providing comprehensive health care through a network of 138 primary health care centres. UNWRA shared its experience in delivering noncommunicable disease services as an integral part of primary health care, highlighting how noncommunicable disease health care (in particular diabetes and hypertension) initially

provided through noncommunicable disease clinics has progressively been integrated into primary health care, as part of a new family health model.

3.10 Key discussion points

Despite remarkable variations in the provision of health care for people with noncommunicable disease and the different paths public health and health system development across the world have taken, all countries that aim to integrate noncommunicable diseases into primary health care share common challenges. Participants stressed the importance of applying a health system lens to evaluate noncommunicable disease integration in primary health care. The international and regional case studies highlight the key health system challenges and the need to reorient health systems to improve the integration of noncommunicable diseases in primary health care. WHO should use its convening role to promote technical cooperation and exchange of experiences between countries of the Region and beyond. Suggestions were made to create an active knowledge network able to compile, synthesize and share these experiences.

The following points summarize the key messages of this session.

- Noncommunicable disease prevention and control calls for a comprehensive response that includes strengthening noncommunicable disease surveillance (of both diseases and risk factors), risk factor prevention and reduction through multisectoral action, as well as actions to improve noncommunicable disease health care.
- Effective noncommunicable disease care requires integrated health systems backed with strong and continuous political leadership and robust health financing mechanisms to ensure equity and sustainability.
- Reorienting health systems to better cater for the needs of people with noncommunicable diseases requires actions across the six WHO health system building blocks as well as specific attention to service delivery design and organization in order to address multimorbidity, chronicity and continuity of care.
- Primary health care should be the fulcrum on which effective noncommunicable disease health care revolves.
- Resources available in each country have to drive the way care is designed for noncommunicable diseases
- Reform to improve noncommunicable disease care should build on existing public health infrastructures, human resources and programmes, rather than creating new structures.
- Strengthening noncommunicable disease integration in primary health care should be part of a comprehensive patient-centred primary care rather than a vertical approach.
- Noncommunicable disease care needs to be pro-active and planned.
- Reorganizing care for the integrated management of noncommunicable diseases requires the presence of sufficient, competent, supported and valued multidisciplinary health workforce.
- Interdisciplinary teams with defined roles and responsibilities should be developed, according to national resources and health system development. Task sharing and joint responsibility for care can be an effective way of addressing shortages and skill mix imbalance.

- Patient involvement and self-care promotion should be seen as key ingredients of any modern noncommunicable disease management approach.
- Family practice characteristics and attributes (providing general, continuous, comprehensive, coordinated, collaborative, personal and patient-centred care focusing on the family and community focusing on family and community) combine all the elements of an appropriate noncommunicable disease care model in primary health care.
- Essential noncommunicable disease interventions need to be identified, prioritized and scaled up through primary care, as part of the essential health service package. These include most importantly noncommunicable disease “best buys” and interventions that promote the early detections of the four main noncommunicable diseases, such as cardiovascular diseases, using a total risk stratification approach.
- These interventions should be prioritized through a public health approach that aims to promote large-scale access to care, rather than maximising individualized care.
- Variability and poor care can be addressed through the standardization of care, including the development of guidelines and training programmes for diagnosis, treatment, follow-up and referral.
- Systematic monitoring and evaluation are key to document performance, monitor progress and enhance practice.
- Quality improvements can benefit from innovations led, and evidence generated, by frontline health professionals. Actions should be taken to promote operational research and quality improvement programmes for noncommunicable disease care in primary health care.

4. HEALTH SYSTEM CHALLENGES AND OPPORTUNITIES

This session explored the key health system challenges impeding the integration of noncommunicable diseases in primary health care. The WHO secretariat provided insights on selected health system issues relevant to noncommunicable disease integration in primary health care, through regional studies covering the following topics.

- *Financing noncommunicable disease in primary health care.* Results from the first noncommunicable diseases-specific health accounts study carried out in Morocco were presented. This is a useful tool to help countries assess the overall financial burden related to noncommunicable diseases and track noncommunicable disease related financing sources and expenditures.
- *Access to essential noncommunicable disease medicines.* Results of regional studies based on WHO-Health Action International access to essential medicines framework were presented.
- *Role and contribution of the private sector in noncommunicable disease care.* Preliminary results of a regional survey on the quality of diabetes care provided in the private sector were presented.

The presentation of regional studies was followed by group work, each addressing a key health system theme, during which participants identified key challenges impeding the integration of noncommunicable disease in primary health care. Based on the deliberations of the working groups, the following challenges grouped by health system building block were identified.

Governance and leadership

- There is a lack of or insufficient high-level political commitment to noncommunicable disease prevention and control, including commitment to reorientation of noncommunicable disease care and integration in primary health care.
- There is a need for strong leadership at the policy and programme level to engage in national, regional and international partnerships.
- There are inadequate or no national multisectoral plans of action on noncommunicable diseases that include noncommunicable disease integration in primary health care.
- There is a need for multisectoral involvement in noncommunicable disease care for planning and delivery of primary health care services for noncommunicable diseases outside the Ministry of Health.
- Primary health care services are insufficiently reconfigured/redesigned to deliver integrated and defined package of noncommunicable disease care.
- The organization and management of noncommunicable disease care at the subnational/district level is not well established to offer robust noncommunicable disease care.

Financing noncommunicable disease in primary health care

- The steady increase in health spending on noncommunicable diseases in general, and noncommunicable disease care in particular, exceeds many countries' capacities to ensure universal coverage of needed care.
- There is a need to generate and mobilize more resources to ensure effective and equitable provision of noncommunicable disease care.
- The presence of multiple health financing pools and schemes in some countries results in fragmentation of financing and limited interest in investing in preventive measures where benefits are incurred in the longer run.
- There is a need to define a package of individual- and population-based health care services related to preventing and managing noncommunicable diseases.
- There is a need to identify what is to be covered by government direct funding and what could be covered by other prepayment arrangements including social health insurance.
- There is a need to employ appropriate provider payment mechanisms that ensure the continuous provision of noncommunicable disease care in an equitable and efficient manner.

*Service delivery***Core package of noncommunicable disease interventions**

- A package of noncommunicable disease services is not included as part of the essential health services package.
- Noncommunicable disease "best buys" are not prioritized as part of the core noncommunicable disease services offered in primary health care.
- The full set of noncommunicable disease services comprising promotive, preventive (including secondary prevention), curative and rehabilitative services is not provided or there is too much focus on curative aspects.

Service provision

- Primary health care is not valued as the first contact of care (gateway role) where the majority of the population's health needs are met and is therefore commonly underutilized.
- Primary care health care centres do not have defined catchment populations and there is poor knowledge of the health needs of the population. Relevant information on subgroups of patients requiring special services or at high risk is not available. In the case of the family practice model, systems for registering families and establishing family folders are not always implemented or do not work well. The use of paper records further complicates the situation.
- There is limited technical capacity of primary health care staff in the diagnosis and treatment of common noncommunicable diseases.
- The skill mix of service providers, including their roles and responsibilities, is absent or poorly defined.
- There is no multidisciplinary team and poor coordination between primary health care providers (which might be due to resistance from doctors to share tasks).
- There is an absence of updated evidence-based and contextually-relevant guidelines/protocols/standards for diagnosis and management of common noncommunicable diseases.
- There are limited continuing education opportunities for service delivery teams.
- There is no or minimal specialist involvement in supporting primary health care providers.
- The mechanisms for referrals and back-referrals are poor.
- Care is not organized to ensure continuity through planned interactions, follow-up appointments, regularly-scheduled monitoring visits, and reminders for both staff and patients.
- There is unregulated access to specialists and/or overreliance on higher levels of care.
- Patients are not actively involved in their care (goal setting, behavioural change).
- The care provided is sometimes not culturally appropriate and commonly does not integrate patients' values and preferences.
- There is very limited use of self-management and support interventions.
- There is limited or no involvement of the community and limited attention to partnership with the community including to overcome poor utilization of primary health care services.

Organizing noncommunicable disease service delivery

- There is need for joint efforts between noncommunicable disease and primary health care programmes to ensure coordinated planning, design and organization of noncommunicable disease services at both the national and subnational (provincial and/or district) level.
- There is a need to strengthen organizational support to noncommunicable disease care through existing health system structures (added functions related to noncommunicable disease care) or through dedicated support in situations where existing health system structures are weak or in decentralized/provincial-based systems.
- Models of noncommunicable disease care need to be piloted that promote integration, rather than fragmentation, are suited to the Region and are aligned to the principles of the family practice approach.

- Limited capacity exists for day-to-day organizational management of noncommunicable disease service delivery, including: planning and designing care that is appropriate for noncommunicable diseases; financial management (resource flow, budgets); procurement of medicines and supplies to secure regular medicines and supplies for noncommunicable disease services; monitoring and supervision including monitoring providers' performance and support quality improvement; workforce management (planning human resources in sufficient number and with the right skills); development and implementation of health information systems (for planning, processes for monitoring and evaluation, tools for clinical decision support and quality improvement); and repair and maintenance of facilities.

Workforce

- The development of the health workforce for noncommunicable disease care has yet to be well integrated in national level health workforce plans.
- There is a shortage of staff in terms of production and distribution (between and within countries, notably in rural areas).
- Most countries are yet to define the appropriate skills mix of providers needed to provide noncommunicable disease care (physicians, nurses/nurse specialists, nutritionist, health educators, community health workers, home health providers and social workers) based on the burden and resource availability.
- There are high turnover and retention issues (migration out of the country and to the private sector due to inadequate incentives in the public sector).
- For pre-service education and training, the curricula of medical, nursing and other relevant schools and training programmes need to be revisited to ensure adequate attention to noncommunicable disease management.
- In-service training/continuing professional development need to be developed and institutionalized to upgrade the capacities of the current workforce to improve provision of noncommunicable disease services.
- Culture barriers exist regarding gender (a preference for female providers in some countries can limit access).
- Inadequate attention is paid to issues of provider performance and provision of incentives for noncommunicable disease care, such as provider payments or non-monetary incentives for private as well as public providers.
- There is a lack of attention to the core competencies required to foster inter-professional collaborative practice, and the specific competencies needed for effective noncommunicable disease care.
- Limited attention is given to the potential expanded roles of non-physician health workers, with limited opportunities for developing advanced non-physician practitioners such as nurse practitioners or physician assistants, and a lack of regulatory mechanisms that support such practitioners.
- Current policies and regulation in place do not support task shifting/task sharing/advanced practice, distribution and deployment of the team and ensuring an organized system for delivery.
- Difficulty exists in implementing task shifting due to professional and administrative resistance.

Essential medicines and technologies

- There is a lack of political commitment to adhere to a national list of essential medicines and essential medical devices. In some countries, however, noncommunicable diseases are sufficiently included in the essential lists.
- The selection of medicines and technologies is not always evidence-based, due at least in part to absence of, or lack of implementation of, guiding policies, leading to irrational choices with profound financial implications.
- There is an absence, or weakness, of regulatory bodies to regulate medical products and ensure quality, safety and efficacy.
- Limited policies are in place to promote competition and reduce costs, such as price information, pricing policies, generics policies, action to reduce duties, taxes, and mark-ups, and appropriate use of compulsory licensing.
- Limited action is taken to negotiate prices with the pharmaceutical industry and reduce costs through joint procurement.
- Challenges exist related to the inability to ensure sustainable financing and expand coverage, including through national/social health insurance.
- There is an absence or limited availability of evidence-based treatment guidelines, protocols and drug formularies.
- There is corruption in the health sector, both public and private.
- There are weak health information systems and fragmented health records.

Technologies

- There is an absence of processes or specific body/structure to assess technology needs and formulate specifications for health technologies.
- The list of essential equipment is not developed, especially for technologies that are needed in primary health care.
- There is a lack of maintenance policy (calibration, standardizations).
- There is limited or an absence of training in use and maintenance.
- There is limited information sharing between countries (knowledge network).

Other identified challenges and cross-cutting issues

- There is an insufficient knowledge base and research capacity to inform policy, in particular a lack or insufficient use of operational/implementation research.

Health system challenges to noncommunicable disease health care provision in emergencies

A working group comprising representatives of Iraq, Libya, occupied Palestinian territory, Syrian Arab Republic and UNRWA examined the specific challenges faced in the provision of noncommunicable disease care during humanitarian emergencies. While most of the above challenges also operate in such contexts, additional ones are faced as outlined below.

Governance

- There is a lack of emergency preparedness and contingency plans. Where these are present, they do not commonly include noncommunicable diseases.
- There is a lack of communication among government officials.
- There is poor coordination among players on the ground.
- Donations are uncoordinated.

Financing

- There is a breakdown of government finance mechanisms (salaries and supplies).

Workforce

- Health workers may be targeted.
- Staff may not be reporting to work.
- Foreign staff leave the country.

Essential medicines/technologies

- Local production is affected.
- Sanctions/blockades limit access to international markets to secure basic ingredients for local production or to importation of manufactured medicines and technologies.
- Distribution systems break down.
- Central stores are destroyed.
- Staff is overwhelmed by irrelevant donations.
- There is improper storage (electricity cuts/insecurity).

Delivering services

- Access problems exist for staff and patients.
- Health facilities and workers are targeted.
- Ambulances are targeted and insufficient.
- There is a shift in focus of health needs to injuries, communicable diseases and mental health.
- There are displaced populations in camps/shelters.
- There is closure of primary health care and outpatient facilities leading to high utilization of and more pressure on emergency services.

Organizing services

- Management of information to ensure coordination of services is needed.
- Central and regional operational rooms are needed.
- There is a need to respond to the needs of displaced populations.
- New points of service delivery need to be created.

5. MONITORING AND REPORTING ON PROGRESS

This session reviewed the health information system requirements to monitor and report on progress in the area of noncommunicable disease health care. Under the noncommunicable disease global monitoring framework, Member States are expected to report on a regular basis on the status of noncommunicable disease targets and indicators.

The WHO secretariat introduced the process indicators for monitoring the implementation of the strategic interventions related to health care in the updated regional framework for action. These indicators, developed in prior consultations with Member States and international and regional experts, provide a minimal set of indicators for monitoring progress. Meeting participants agreed on the need for an expanded set of indicators for monitoring and reporting on progress that cover the range of inputs, processes and outputs related to health care provision for noncommunicable diseases

In terms of the strategic interventions, each country is expected to: implement the “best buys” in health care; improve access to early detection and management of major noncommunicable diseases and risk factors by including them in the essential primary health care package; improve access to safe, affordable and quality essential medicines and technologies for major noncommunicable diseases; and improve access to essential palliative care services.

Process indicators for monitoring progress in implementing the strategic interventions in the area of health care include: provision of drug therapy, including glycaemic control, and counselling for eligible persons at high risk to prevent cardiovascular events; government approved evidence-based guidelines/protocols for early detection and management of major noncommunicable diseases through a primary care approach; and the availability of essential medicines and technologies for major noncommunicable diseases and risk factors in public primary health care facilities.

Since the regional framework for action makes explicit reference to noncommunicable disease “best buys” in health care, a briefing on “best buys” was provided with a focus on interventions linked to the two noncommunicable disease global monitoring framework voluntary targets related to the health system response: at least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes; and an 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.

This introduction was complemented by a presentation given by Dr Mohamed Ali, Health Information System Coordinator, WHO Regional Office for the Eastern Mediterranean, highlighting WHO’s work in supporting Member States in strengthening health information systems, including civil registration and vital statistics, as well as the efforts made to reach consensus on the key components of a national health information system and to define what needs to be monitored under each component. Dr Ali presented the core list of indicators, recently developed in consultation with Member States, which include:

health determinants and risks; health status including morbidity and cause specific mortality; and health system performance.

Dr Ali also introduced health care and coverage data collection tools and methods, including facility assessment tools such as the service availability and readiness assessment (SARA). SARA helps countries assess and monitor the service availability and readiness of health care facilities through generating reliable information on service delivery (such as the availability of key human and infrastructure resources), availability of basic equipment (basic amenities, essential medicines and technologies, and diagnostic capacities), and readiness of health facilities to provide basic health-care interventions, including for noncommunicable diseases.

Key discussion points

Many participants raised questions about the health care related interventions and process indicators in the updated regional framework for action and their linkage with the global monitoring framework's targets and indicators. Participants commented on and suggested specific amendments to the proposed process indicators. Participants stressed that WHO needs to develop more guidance to help Member States monitor and assess the implementation of the best buys and the integration of noncommunicable disease in primary health care. Beyond the core process indicators, WHO should develop an expanded list of process indicators that correspond to all strategic interventions. A clear definition of each process indicator and method used to measure them should be provided. In relation to the time-bound strategic intervention to integrate noncommunicable disease in the essential health service package by 2015, participants expressed concern that 2015 might be too early for countries to show progress in implementation. Many participants expressed the need for urgent support to countries for the development of national targets and indicators.

Participants provided additional inputs on the strategic interventions and process indicators in the updated regional framework for action during a consultation fully dedicated to the revision of the framework that took place at the end of the meeting. The input will be used to develop a new version of the updated regional framework to be presented to Member States during the Sixty-first session of the Regional Committee for the Eastern Mediterranean.

6. A DRAFT REGIONAL FRAMEWORK TO STRENGTHEN THE INTEGRATION AND MANAGEMENT OF NONCOMMUNICABLE DISEASES IN PRIMARY HEALTH CARE

During group work on day two, participants were requested to formulate strategic interventions to overcome the identified health system challenges, which would serve as the basis for a regional framework to strengthen noncommunicable disease integration and management in primary health care using a health system lens. This was agreed to be an important outcome of the meeting. Strategic interventions were formulated under seven priority areas: governance; financing; health workforce; delivering services; organizing

services; essential medicines and technologies; and community and self-care. A regional framework was presented on day three (see Annex 3). Meeting participants discussed the proposed framework and agreed on the need to continue to improve it, after which a revised draft would be shared with focal points in Member States for further consultation.

It is important for the framework to be evidence-informed and actionable, and present policy options for Member States to implement. A clear vision, overarching principles, specific strategic activities, and indicators to monitor progress all need to be agreed. The objectives of the framework would be to:

- assist Member States in identifying the key health systems challenges that impede the integration of noncommunicable disease in primary health care
- assist Member States in developing their national noncommunicable disease health care strengthening strategies/plans based on the priority areas and strategic interventions
- provide guidance to Member States in selecting which strategic interventions to implement, based on national situation, to strengthen noncommunicable disease integration in primary health care
- assist Member States in monitoring and evaluating their progress.

A framework should be guided by overarching principles and approaches. Given the regional initiative on promoting the family practice approach as an overarching strategy for improving the delivery of primary health care services, it has been suggested that the key attributes of family practice (providing general, continuous, comprehensive, coordinated, collaborative, personal and patient-centred care focusing on the family and community), also represent the guiding principles for strengthening noncommunicable disease health care.

On the last day, another group work session was organized during which participants were distributed into groups according to health system country groups and asked to further reflect on the draft framework and prioritize actions according to country groupings. The proposed priority actions according to country groups are presented in Annex 4.

7. NEXT STEPS

This section summarizes the key next steps for action proposed by participants over the three days of the meeting, in relation to the objectives of the meeting and the themes of discussion. While these steps are broadly applicable across countries in the Region, participants also identified additional next steps tailored to country grouping. This is provided in Annex 4.

Assess national situation and build on international and regional experiences and lessons learnt

Next steps for Member States

- Carry out an assessment of the current national situation of the integration of noncommunicable diseases in primary health care.

- Document and share country experience in integrating noncommunicable disease in primary health care.
- Support operational, implementation and health system research that evaluates the national and subnational experiences, barriers and challenges of the integration of noncommunicable diseases in primary health care.

Next steps for WHO

- Promote cooperation and exchange of experiences between countries in relation to integration and management of noncommunicable diseases in primary health care and establish an active knowledge network involving representatives of Member States, WHO, and international and regional experts.
- Develop a report synthesizing regional and international experiences, best practices and lessons learnt on noncommunicable disease integration into primary health care.
- Revise the working papers and briefing notes in light of the discussions of the meeting to address additional issues related to country needs.
- Support regional health system research to identify health system barriers to noncommunicable disease integration in primary health care and successful experiences in scaling-up noncommunicable disease “best buys” for health care in primary health care.
- Develop a protocol for country assessment of the situation of the integration of noncommunicable diseases in primary health care adapted to various groups of countries.

Address health system challenges and opportunities

Next steps for Member States

- Include the integration of noncommunicable diseases in primary health care in national policies/strategies and multisectoral action plans on noncommunicable diseases.
- Develop a national action plan on strengthening noncommunicable disease integration in primary health care.
- Convene a multi-departmental working group within the ministry of health and develop a multisectoral mechanism to strengthen the integration of noncommunicable diseases in primary health care in all sectors, including the private sectors, where relevant services are provided.
- Promote noncommunicable disease people-centred care through investment in integrated primary health care services.
- Scale up implementation of the strategic interventions related to health care, particularly the “best buys”, in the updated regional framework for action including through using WHO tools such as the WHO package of essential noncommunicable disease interventions for primary health care (PEN).
- Strengthen the integration and management of noncommunicable diseases in primary health care applying a health system approach and redesigning service delivery according to country needs, priorities and resources.

Next steps for WHO

- Ensure synergies with health system strengthening initiatives and strategies, such as family practice promotion, the health workforce development strategy, health care financing and noncommunicable disease essential drugs surveys.
- Provide technical assistance to countries in integration of noncommunicable diseases in primary health care and in the implementation of the strategic interventions in the regional framework for action, particularly the health care “best buys”.
- Convene a regional meeting on addressing noncommunicable diseases in emergencies focusing on countries affected by the Syrian crisis and within the context of the Syria Humanitarian Assistance Response Plan.

Monitor and report on progress*Next steps for Member States*

- Set national targets related to noncommunicable disease health care, taking into consideration relevant targets in the global monitoring framework and the recommended noncommunicable disease “best buys” in health care.
- Set national indicators for noncommunicable disease health care (including inputs, processes and outcomes) that also cover care provided in the private sector.
- Strengthen national health information systems in order to better assess the health system response to noncommunicable diseases and to strengthen support to planning and clinical decision-making and to monitor performance.
- Use WHO tools to assess the readiness of health care facilities to deliver noncommunicable disease services in primary health care and the availability of noncommunicable disease essential medicines and technologies in such facilities.

Next steps for WHO

- Revise the updated regional framework for action and set of process indicators, in the area of health care, incorporating input from Member States.
- Develop guidance on measurement of coverage of health care interventions for noncommunicable diseases.
- Conduct a regional capacity building workshop focusing on implementing priority interventions for strengthening noncommunicable disease integration in primary health care, achieving global targets for noncommunicable disease health care and monitoring the performance of Member States.
- Convene a follow-up regional meeting on progress made in Member States in strengthening the integration and management of noncommunicable diseases in primary health care.

Develop the draft regional framework

Next steps for Member States

- Provide additional input on the draft regional framework.

Next steps for WHO

- Revise the strategic interventions and corresponding set of process indicators in the area of health care of the updated regional framework for action, incorporating input from Member States.
- Develop actionable policy options and technical guidance for Member States for the various streams of work identified in the draft framework in consultation with Member States and international and regional experts.
- Develop a regional framework/strategy for scaling up WHO and Member States response to noncommunicable diseases in emergencies.

Annex 1**PROGRAMME****Monday, 8 September 2014**

08:00–11:00 Opening Session

- Welcome and opening remarks
- Objectives, programme and expected outcomes
- Health system challenges to providing essential care for common noncommunicable disease in primary health care
- Noncommunicable disease integration in primary health care: an African perspective
- International experiences and best practices–presentations from:
 - Canada
 - Chile
 - South Africa
 - Sri Lanka
 - Thailand
- Discussion

Dr A. Alwan
Dr Samer Jabbour
Prof. Srinath Reddy

Dr Andre Pascal
Kengne

Session 1. Integration of noncommunicable diseases in primary health care: the health system constraints

11:00–14:00

- Strengthening health system response to noncommunicable disease: From global commitments to actual implementation
- Noncommunicable disease management and integrated service delivery: towards convergence
- Challenges and opportunities for the integration of noncommunicable diseases (noncommunicable disease) in primary health care in the Eastern Mediterranean Region
- Discussion

Dr Shanthi Mendis

Dr Alberto Barcelo

Dr Samer Jabbour,
Dr Sameen Siddiqi

14:00–15:45

- Insights on noncommunicable disease care from a health systems perspective
- Discussion

Dr Marthe Everard,
Dr Hassan Salah

15:45–17:00

Country experiences/presentations from:

- Islamic Republic of Iran
- Jordan
- Kuwait
- Morocco
- Discussion

Tuesday, 9 September 2014

08:30–08:50

- Overcoming health system challenges to noncommunicable disease integration in primary health care: outcomes of day one
- Discussion

Dr Sameen Siddiqi,
Dr Andre Pascal
Kengne

08:50–10:45

Group work. How to overcome health system challenges to noncommunicable disease integration in primary health care?

Session 2. Strengthening service delivery for noncommunicable diseases in primary health care

- 10:45–14:00
- Critical issues in strengthening noncommunicable disease health care delivery in primary health care *Dr Andre Pascal Kengne*
 - Delivering affordable and cost-effective interventions: the PEN package and implementation guide *Dr Shanthi Mendis*
 - Lessons from chronic infectious diseases control *Dr Dermot Maher*
 - Country experiences: PEN and beyond – presentations from:
 - Bahrain
 - Lebanon
 - Oman
 - occupied Palestinian territory
 - UNWRA
 - Discussion
- 14:00–15:30 Priority noncommunicable disease conditions and core interventions to be integrated in primary health care *Dr Slim Slama*
- 15:30–15:45 Group work. How to improve delivery of health care services for priority noncommunicable disease?
- 15:45–17:00
- Group presentations

Wednesday, 10 September 2014

08:30–08:45 Re-cap of Day 2

Session 3. Monitoring and reporting on progress

- 08:45–10:45
- Reporting on global commitments on monitoring the health system response to noncommunicable disease *Dr Shanthi Mendis*
 - Assessing the capacity of a health system for introducing a package of essential noncommunicable disease services *Dr Gauden Galea*
 - Process indicators to report on progress in implementing the regional framework for action on noncommunicable disease *Dr Ibtihal Fadhil*
Dr Slim Slama
 - Health care facility assessment and reporting *Dr Mohamed Ali*
Dr Slim Slama
 - Discussion

Session 4. Scaling up noncommunicable diseases integration and management in primary health care

- 10:45–14:00
- Introduction to the principles for developing a country-tailored and stepwise approach to strengthening noncommunicable disease integration and management in primary health care *Dr Samer Jabbour*
Dr Sameen Siddiqi
 - Discussion
 - Group work: Strengthening noncommunicable disease integration in different health system groups
 - Group presentations and discussion
- 14:00–15:45
- Synthesis of key issues and recommendations of the main streams *Dr Samer Jabbour*
Dr Sameen Siddiqi
 - Panel discussion
- 15:45–16:45
- Presentation of meeting outcomes and way forward with priority actions for Member States and WHO *Dr Slim Slama*
 - Discussion
- 16:45–17:00
- Final reflections and closing remarks *Dr Ala Alwan*

Annex 2

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Annex 3**DRAFT REGIONAL FRAMEWORK**

The framework on strengthening the integration and management of noncommunicable diseases into primary health care includes strategic interventions in seven priority areas.

Governance

- **Political commitment**
 - Articulate high level and continuous political commitment (ministry of health, national government) to noncommunicable diseases including the integration of noncommunicable diseases in primary health care by incorporating in national policy/strategy and earmarking resources in multisectoral action plan on noncommunicable diseases.
- **Legislation and regulation**
 - Update legislative instruments for integrating noncommunicable diseases in primary health care as part of the overall legislative framework for noncommunicable diseases prevention and control.
 - Upgrade regulatory instruments and capacity for effective noncommunicable diseases care and include the option of contracting with non-state providers where feasible.
- **Coordinated care**
 - Define responsibilities of noncommunicable diseases and primary health care managers at the national and subnational levels for better integration of noncommunicable diseases in primary health care.
 - Establish a body of multisectoral providers of noncommunicable diseases (ministry of health, other line ministries, community service organizations, private providers associations) care for better coordination and integration of noncommunicable diseases care.
 - Include integration of noncommunicable diseases in primary health care as part of an operational national multisectoral action plan on noncommunicable diseases.

Financing

- **Revenue collection for noncommunicable diseases**
 - Allocate resources in national health budgets and earmark additional resources through innovative financing arrangements to finance (e.g. “sin” taxes): mechanisms for financing the addition of noncommunicable diseases in the essential health services package are identified and implemented.
- **Track noncommunicable diseases expenditures** in primary health care through national and diseases-specific health accounts.
- **Pooling of resources**
 - Find the most suitable way(s) to reduce out-of-pocket spending, according to national context, through universal health coverage, pre-paid insurance schemes, social insurance scheme targeting the informal sectors, and social insurance schemes targeting the poor (need to be identified based on defined criteria).
 - Identify the level of co-payment to be paid by individuals, taking into consideration the socioeconomic situation of the country.

- **Purchasing services**
 - Define a core benefit package of noncommunicable diseases interventions to be integrated in primary health care. Additional noncommunicable diseases services packages to be provided at higher levels of care and/or considered optional to be adopted in countries according to their resources should also be defined.
 - Cost each package of services as well as the full package and the implementation costs related to it: reconfiguration and integration of noncommunicable diseases in primary health care focusing on infrastructure/redesign costs, training and hiring new staff; noncommunicable diseases service package in primary health care including staff time, laboratory services, and provision of medicines, and technologies.
 - Conduct costing studies of different health services at the different levels of care.
 - Conduct cost-effectiveness studies to determine the most suitable, affordable and cost-effective benefit package.
 - Price the core benefit packages.
 - Improve provider performance by introducing payment methods that incentivize public and private providers by setting noncommunicable diseases care related targets within the defined population.

Health workforce development

- **Addressing shortages and skill mix imbalance (Availability)**
 - Scale up production of health workers especially nurses and mid-level health providers (expanding schools and/or intake).
 - Introduce/promote task-shifting for primary health care level health workers, especially nurses.
 - Introduce and expand community health workers based on country context (easy to train and retain).
- **Addressing geographical imbalances (Accessibility)**
 - Deploy effective policy e.g. bonding schemes such as national service and training for services.
 - Introduce incentive packages for retention (financial and non-financial) based on health worker preferences, and country capacity and context.
- **Addressing population demand (Acceptability)**
 - Observe gender balance in the health workforce e.g. ensuring adequate number of females through targeted incentives or customized student intake criteria or female-type cadres e.g. lady health workers.
- **Addressing health workforce competence (Quality)**
 - Carry out a review of medical, nursing and other allied health workers curricula to ensure they adequately include the prevention and control of noncommunicable diseases.
 - Incorporate noncommunicable diseases related modules in pre-service education with special focus on contemporary knowledge, approaches and protocols that reflect the current practice.
 - Develop, provide and expand noncommunicable diseases related continuing professional development training for primary health workers in public and private sectors.
 - Promote multidisciplinary continuing professional development focused on promoting a team approach to deliver coordinated care based on defined tasks for noncommunicable diseases care.

- Improve performance and productivity of health workers at primary health care level through addressing work environment issues.

Delivering services

- **Package**
 - Adapt and/or develop essential package of health services covering prevention, screening, early detection, management and palliation, especially those include noncommunicable diseases care “best buys”: drug therapy and counselling; aspirin for acute heart attacks; vaccination to prevent cancers; and others.
- **Providers**
 - Define appropriate skills mix based on the essential package of health services and resource availability.
 - Develop national training programs for providers on prevention, screening, early detection, management of common noncommunicable diseases and risk factors.
 - Facilitate development of multidisciplinary care teams (see category above).
- **Guidelines and protocols**
 - Establish a structured process at national level to develop clinical guidelines and protocols, based on the best international evidence and WHO recommendations.
 - Adapt WHO package of essential noncommunicable disease interventions for primary health care (PEN) guidelines and protocols and other WHO tools for national use with a focus on the four main noncommunicable diseases and the “best buys”.
 - Establish a structured process for disseminating new guidelines, training providers, and monitoring whether providers adhere to guidelines.

Organizing services

- **Service delivery arrangements**
 - Design service delivery models appropriate to national context.
 - Progressive integration (noncommunicable diseases clinics) to full integration (primary health care staff).
 - Ensure coordination among the primary health care and noncommunicable diseases managers at all levels.
- **Elements of good practice in noncommunicable diseases care**
 - Establish an appointment system to reduce waiting times, backed by regular follow-up.
 - Establish a system of individual folders of the catchment/registered population to ensure continuity of care.
 - Establish monitoring and quality improvement system with defined process, output and satisfaction measures.
 - Provide support and supervision to providers, including training to enhance patient-provider relationship and medical encounters.
 - Test and scale up performance based provider payment incentives.
- **Referral system**
 - Develop guidelines for referral, back referral and follow of noncommunicable diseases.
 - Establish a referral system that promotes first contact with primary care facility (except in emergencies).
 - Develop checklist for monitoring the performance of the referral system.
- **Health information**

- Include noncommunicable diseases indicators focusing on cardiovascular risk assessment and diabetes and hypertension care in facility level information systems to improve service planning and practice management.
- Develop and use clinical information tools (electronic record, chart stickers) to support noncommunicable diseases care decisions.
- Assess use of innovative approaches such as mHealth and other electronic information support systems for noncommunicable diseases care.
- **Non-state sector (for- and not for-profit private sector)**
 - Leverage contractual arrangement with non-state sector to ensure provision of high quality of noncommunicable diseases care.
 - Build capacity of public and private sector in the contractual process and document practice.

Essential medicines and technologies

- Adopt noncommunicable diseases essential medicines as part of essential medicines list following the national evidence based treatment guidelines and protocols.
- Establish list of essential noncommunicable diseases technologies at primary care level.
- Ensure availability and functionality of equipment and supplies for noncommunicable diseases care.
- Increase repair and maintenance capacity to ensure continued functionality of equipment.
- Ensure rational selection and use of medicines and technologies for noncommunicable diseases care.
- Use WHO tools and methodologies to regularly assess the availability and affordability of noncommunicable diseases medicines in the public and private sectors.

Community and self-care¹

- Develop tools for community involvement and to encourage people in self-care.
 - Support community-based training in self-care.
 - Identify community interventions that could support noncommunicable disease services provided at primary health care facilities,
 - Test and assess the effectiveness and cost-effectiveness of community-based and self-care interventions appropriate to national context,
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Annex 4

PROPOSED PRIORITY ACTIONS ACCORDING TO COUNTRY GROUPS

Element of the framework	Group 1 countries	Group 2 countries	Group 3 countries
Governance	Ensure higher level and continuous political commitment to noncommunicable diseases (NCDs) including the integration of NCDs in primary health care by incorporating in national multisectoral policy/strategy	Same	Same, but in this group of countries who have not yet passed through the demographic transition other health conditions as well as the lack of (human) resources for health, political instability and other complex development challenges compete with NCD Awareness and recognition of NCD require additional advocacy since NCD burden might have not yet been documented and or acknowledged enough (no dedicated public health infrastructure, strategy or plans) International cooperation in providing expertise
	Improve multisectoral collaboration plan on NCDs	Same	
Financing	Track NCD expenditures in primary health care through national and diseases-specific health accounts	Same	Advocate with decision-makers and international donors regarding importance of NCD funding (a developmental issue) and allocating resources to primary care Define a core benefit package of NCD interventions to be integrated in primary health care (instead of tertiary care)
	Allocate specific NCD resources in national health budgets and earmark additional resources through innovative financing arrangements to finance (e.g. sin taxes)	Translate political commitment into financial resources for NCD	
	Establish insurance scheme targeting non-nationals that would include NCD in the benefit package	Finance both preventive and curative services	
	Test and scale up performance based provider payment incentives	Develop/strengthen pre-payment schemes to expand NCD coverage	

Element of the framework	Group 1 countries	Group 2 countries	Group 3 countries
Health workforce Development	Develop competent multidisciplinary teams	Implement task –shifting and open more funded to absorb the existing trained workforce	Identify appropriate service delivery options (community health workers, outreach teams) to deliver a core set of NCD interventions
Delivering services	Put more emphasis on NCD as part of the essential health service package	Assess and improve essential health service delivery package Stratify population according to risk	Define an essential health service package prioritizing NCD best buys Develop diagnosis and treatment guidelines and protocols for the main NCDs starting with cardiovascular disease, hypertension and diabetes mellitus based on WHO tools Introduce the WHO Package of Essential NCD Interventions (PEN) to assess feasibility
Organizing services	Develop elements of good practice in NCD care including self-care	Review service delivery models based on NCD needs and strengthen Family practice	In many countries most NCD care is provided by the private sector. There is a need to improve contracting service delivery arrangements with non-state providers
Essential medicines and technologies	Standardized diagnosis and treatment protocols for extended range of conditions Assess the contribution of the private sector in NCD care and explore effective public-private service delivery arrangements Improve GCC medicines procurement	Strengthen, develop referral and counter-referral systems Develop health information system for monitoring NCD management at primary health care level Improve CVD drug accessibility/affordability for secondary prevention (aspirin, statins) and pain relief	Include NCD medicines (and technologies) as part of national essential medicine drug list
Community and self-care	Reduce irrational use of drugs and technologies Improve community engagement and enhance public awareness about benefits of early NCD and risk factors detection	Improve drug procurement Same	



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