

Meeting Report

Intercountry Consultation on Improving Access to Essential Medicines, Diagnostics and Medical Devices for the Management of Noncommunicable Diseases



18–20 August 2011
Manila, Philippines



**INTERCOUNTRY CONSULTATION ON IMPROVING ACCESS TO ESSENTIAL MEDICINES, DIAGNOSTICS
AND MEDICAL DEVICES FOR THE MANAGEMENT OF NONCOMMUNICABLE DISEASES**

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**INTERCOUNTRY CONSULTATION ON IMPROVING ACCESS TO
ESSENTIAL MEDICINES, DIAGNOSTICS AND MEDICAL DEVICES
FOR THE MANAGEMENT OF NONCOMMUNICABLE DISEASES**

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NOTE

The views expressed in this report are those of the participants on the Intercountry Consultation on Improving Access to Essential Medicines, Diagnostics and Medical Devices for the Management of Noncommunicable Diseases and do not necessarily reflect the policy of the World Health Organization.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for governments of Member States in the Region and for those who participated in the Intercountry Consultation on Improving Access to Essential Medicines, Diagnostics and Medical Devices for the Management of Noncommunicable Diseases, 18-20 August 2011, Manila, Philippines.

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SUMMARY

The Intercountry Consultation on Improving Access to Essential Medicines, Diagnostics and Medical Devices for the Management of Noncommunicable Diseases (NCDs) was held in Manila, Philippines, from 18 to 20 August 2011. The 26 participants came from Brunei Darussalam, Cambodia, China, Hong Kong (China), Lao People's Democratic Republic, Malaysia, Mongolia, Philippines and Viet Nam (Annex 1).

The objectives of the consultation were:

- (1) to review the current status of service delivery for NCDs as related to access to relevant essential medicines, diagnostics and medical devices;
- (2) to analyze the existing financing and supply systems for essential medicines and identified bottlenecks for access to essential medicines, diagnostics and medical devices for the management of NCDs; and
- (3) to define country-specific options and next steps to improve access to and use of essential medicines, diagnostics and medical devices for the management of NCDs at community public health centres and the first-referral level.

The consultation consisted of plenary presentations and discussions together with group work (Annex 2). It noted the common issues of low availability in public facilities and low affordability of these medicines in private facilities in the Region. The World Health Organization Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings was also introduced and discussed. An urgent need to advocate the coverage of these medicines in public financing or insurance reimbursement was acknowledged, including the importance of reliable estimations of essential medicines, diagnostics and medical devices based on service delivery capacities, cost of the packages and measures for cost containment to improve access of such medicines and medical devices.

The consultation also reinforced that generic friendly policies are of great relevance to addressing the escalating costs of medicines; monitoring, supervision and effective back-up systems for supply and proper usage are vital; and a mechanism for the exchange of information, sharing of experiences, collaboration and cross-fertilization among countries and areas is also needed. Numerous relevant follow-up actions were also proposed to improve access, availability and affordability of essential medicines, diagnostics and medical devices at the primary public health level and the first levels of referral.

The main conclusions of the workshop were as follows.

General

- (1) The consultation noted the common issues of low availability of medicines for NCDs in public facilities, and low affordability in private facilities of those medicines in the Region.

(2) There is an urgent need to advocate the coverage of medicines for NCDs in public financing or insurance reimbursement. Estimations of needs of essential medicines, diagnostics and medical devices based on service delivery capacities, cost of packages, and measures for cost containment are crucially important for improving access.

(3) Reinforcing generic medicines policies are of great relevance in addressing the escalating costs of medicines. The importance of monitoring and supervision and the need for effective back-up systems for supply and for proper usage is underlined. There is a need for a mechanism for exchange of information, sharing of experiences, collaboration and cross-fertilization among countries and areas.

Policies and access

(1) WHO, partners and Member States advocate the inclusion of essential medicines, diagnostics and medical devices in government funding or insurance reimbursement.

(2) Generic medicines policies are crucial to making the needed essential medicines for NCDs affordable. WHO advocates and provides technical support for Member States in implementing such policies. Information on the possible impacts of trade agreements on access to medicines is to be provided to Member States.

(3) An effective mechanism to manage conflicts of interest for those involved in medicines selection, procurement and usage need to be devised to avoid unethical practices.

Selection

(1) A well-proven combination of essential medicines must be used for managing NCDs. The WHO Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings and WHO Model Lists of Essential Medicines are recommended as reference guides for selection.

(2) Depending on priorities, packages may initially be confined to cardiovascular disease, diabetes, chronic respiratory diseases and then expanded.

Pricing

(1) Price monitoring at regular intervals is needed. Member States are recommended to devise a national price monitoring mechanism and to participate in the existing price information exchange. WHO will include tracer medicines for NCDs.

(2) Member States are recommended to devise an effective generic medicines policy and to monitor its implementation. Proper information and advocacy on generic medicines to the general public and to providers are needed.

Medicines consumption and expenditure analysis

(1) There is a need to estimate the cost of essential medicines and service packages based on needs and service delivery capacities. Financial analysis on the current expenditures, such as ABC values analysis or a comparison of estimated needs versus consumption, will allow possible cost containment.

Procurement, supply and distribution

- (1) Procurement should be based on proper quantification of needs and should be undertaken through an efficient, transparent process.
- (2) An integrated information system for medicines supply, availability and management is recommended. Training is needed for improving human resources in medicines procurement, supply and management.
- (3) Where procurement is occurring at lower levels of a health care system, there is a need to create a national essential medicines facility, which will serve as a back-up support for good-quality essential medicines.

Quality—substandard and counterfeit medicines

- (1) A national assessment for quality of medicines is needed to give an indication of the extent of substandard medicines currently in the market. Regular quality surveillance should be implemented and include essential medicines for NCDs.
- (2) Member States are requested to participate in regional monitoring of medicines quality and to monitor the infiltration of the supply chain with dangerous and counterfeit medicines.
- (3) Member States are strongly recommended to eliminate the illegal outlets of unregistered products.

Rational use of medicines

- (1) Evidence-based therapeutic guidelines need to be devised to guide prescribing practices. Providers are to be trained in using these guidelines. Monitoring of prescribing practices is required.
- (2) Avoiding perverse financial incentives (e.g. through capitation of payments) should be considered. Pilot implementation of the capitation system is recommended along with insurance reimbursement.
- (3) Drug and therapeutic committees in hospitals are to undertake relevant interventions in a particular hospital setting. Monitoring, training and planning interventions are being implemented in some countries and areas.
- (4) Controlling medicines promotion and advertisement and unethical practices is important in minimizing irrational use practices.
- (5) Consumer education and empowerment on the rational use of medicines is important, as these medicines will be used for a prolonged period.

Monitoring and evaluation

- (1) An assessment of availability, affordability and use of essential medicines for NCDs is needed to document problems and to serve as evidence for advocacy and as a baseline for further interventions.
- (2) Regular monitoring of availability and usage of medicines would facilitate early detection of problems and timely provision of back-up support (e.g. resupply or feedback supervision) to providers.

Work plans and implementation

- (1) Member States are recommended to develop national plans for improving access as part of national plans for NCDs. The plans should include those at national, subnational, facility and community levels. Service packages should also be specified in the plans.
- (2) Implementation should be by steps and begun in a particular district. Scaling up should be undertaken in steps, depending on the results of the pilot.

Exchange of information, cross-fertilization and collaboration

- (1) Documentation and publication of successful initiatives will be useful for sharing of information and experiences. WHO facilitates the exchange of information, experiences, cross-fertilization and collaboration among countries and areas and different stakeholders.
- (2) Collaboration with nongovernmental and professional organizations, patient support groups and the private sector are crucial to moving the agenda forward. A balanced, independent collaboration with these stakeholders is recommended.

Immediate follow-up action

- (1) It is recommended to undertake an initial follow-up action from this consultation within 6 months to 1 year to prepare the implementation of or to implement a short-term plan. Stepwise implementation of a package of essential NCD interventions is recommended, starting in a few pilot districts. WHO can and will support Member States in this.

1. INTRODUCTION

The Intercountry Consultation on Improving Access to Essential Medicines, Diagnostics and Medical Devices for the Management of Noncommunicable Diseases (NCDs) was held in Manila, Philippines, from 18 to 20 August 2011. In recent years, the international community and central governments have become increasingly concerned about the growing burden of NCDs, which affect all levels of society and contribute to the total burden of disease. Unfortunately, the essential medicines, diagnostics and medical devices needed for the management of NCDs are often unavailable or inaccessible in health facilities.

There is an urgent need for action to deal with the increasing problems of NCDs. In 2010, the World Health Organization (WHO) launched the Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings, which includes essential medicines, diagnostics and medical devices. An intercountry consultation was proposed, therefore, to address the issue of improving access to and availability of such medicines, diagnostics and medical devices, their financing, supply and delivery in community public health centres and at the first-referral level, to ensure that these commodities are available to and received by patients when needed, are of good quality, and are affordable to the patient and the health care system.

1.1 Objectives

- (1) To review the current status of service delivery for NCDs as related to access to relevant essential medicines, diagnostics and medical devices;
- (2) to analyse the existing financing and supply systems for essential medicines and identified bottlenecks for access to essential medicines, diagnostics and medical devices for the management of NCDs; and
- (3) to define country- and area-specific options and next steps to improve access to and use of essential medicines, diagnostics and medical devices for the management of NCDs at community public health centres and the first-referral level.

1.2 Opening session

Dr Henk Bekedam, Director, Health Sector Development, Regional Office for the Western Pacific, WHO, delivered the opening address on behalf of Dr Shin Young-soo, WHO Regional Director for the Western Pacific Region. He stated that NCDs contribute significantly to the total burden of disease—globally, NCDs are responsible for 63% of all deaths. In the Western Pacific Region, the toll is even higher, with 75% of deaths among men and 80% among women contributed to NCDs. Dr Bekedam emphasized the need for a combination of strategies to reduce the prevalence and mortality of NCDs, including prevention and advocacy of healthy and active lifestyles as well as appropriate NCD treatment. Further, he highlighted the importance of necessary diagnostics and medicines for reducing the burden of NCDs and reminded participants that making these medicines and diagnostics accessible is responsibility of all health workers.

Dr Han Tieru, Director, Building Healthy Communities and Populations, Regional Office for the Western Pacific, WHO, reaffirmed that collaboration between the two programmes—NCDs and pharmaceuticals—is crucial for improving the quality of health services for NCDs.

1.3 Appointment of Chairperson, Vice-Chairperson and Rapporteur

The workshop elected Dr Jacqueline Choi from Hong Kong (China) as Chairperson, Dr Hj. Omar Bin Hj. Mihat from Malaysia as Vice-Chairperson and Dr Anna Melissa Guerrero from the Philippines as Rapporteur.

2. PROCEEDINGS

2.1 Introduction to the consultation

Dr Budiono Santoso, Team Leader, Essential Medicines and Technologies, WHO Regional Office for the Western Pacific, explained the objectives of the consultation. The methodology was in the form of plenary presentations and discussions, together with group work, to identify bottlenecks, challenges and options for improving access to NCD diagnostics and medicines. The outputs included recommendations for follow-up actions both at the national and subnational levels on improving access to NCD diagnostics and medicines. The consultation's timetable is Annex 2.

2.2 Burden of illness of noncommunicable diseases—regional perspectives *(Dr Cherian Varghese, NCD/WPRO)*

NCDs, principally cardiovascular disease, cancer, diabetes and chronic respiratory diseases, constitute 80% of deaths in the Region. Death rates from NCDs present wide variations in the Region, with low- and middle-income countries bearing the brunt of the problem. The proportion of NCD deaths under the age of 70 years varies from 28.8% to 80.3% in men and from 18.6% to 70.6% in women. They are causally related to four modifiable risk factors (i.e. tobacco use, harmful use of alcohol, unhealthy diets and physical inactivity), which lead to four metabolic risk factors (i.e. obesity, high blood pressure, high blood sugar and high blood cholesterol). Premature morbidity and mortality leads to loss of productivity and adds to the socioeconomic burden from NCDs.

Interventions at the level of risk factors can reduce the burden from NCDs and their complications. WHO has been working on NCD prevention and control and has a regional action plan, which includes upstream interventions, lifestyle modifications and clinical interventions supported by advocacy, research and surveillance. Technical support is provided to Member States for multisectoral actions, surveillance and capacity building. The United Nations General Assembly High-Level Meeting on Noncommunicable Diseases, to be held 19–20 September 2011, will add momentum to the prevention and control of NCDs globally, and the Region is also aiming to expand and intensify NCD prevention and control.

2.3 Continuing patient care for noncommunicable diseases towards improved health outcomes
(Dr Cherian Varghese, NCD/WPRO)

Health systems in many low- and middle-income countries and areas are oriented towards acute care and episodic management. However, NCDs occur over many years, can present with or without an acute event and need management for many years that includes care in the community. In many instances, this people-centred continuum of care can happen only through a paradigm shift in the current health delivery systems.

A continuum of care—starting with identification of high-risk individuals, a defined package of services at the primary care level, referral systems and record linkage, protocol-based management and follow-up in the community—is key to an NCD management programme. Patient education and support systems in the family and community are also important, as management includes medication and lifestyle modification, periodic visits, checking for complications and resources to support this prolonged care. Issues from both the supply and demand side are different for NCDs in comparison to communicable diseases and have to be addressed appropriately.

Health system strengthening through the values of primary care can address some of these issues. Cost-effective drugs, technology, as well as appropriate infrastructure and an adequately skilled workforce are essential for improving NCD prevention and management through health systems. The WHO Package of Essential Noncommunicable Disease Interventions in Primary Care is a good set of cost-effective interventions that details the required drugs and equipment, and can also be scaled up incrementally. The package also takes into consideration comprehensive risk management, which can better address multiple risk factors and reduce the risk of cardiovascular events.

2.4 Health service delivery model for noncommunicable diseases *(Ms Laura Hawken, HSD/WPRO)*

This presentation started with an overview of health system building blocks and the importance of their interconnectivity for overall effective system functioning. The weakest part of the system will determine its ultimate outputs. Further, it noted that values of health as a basic human right, participation, quality and equity are all important in relation to health system design and objectives of accessibility, affordability, acceptability and accountability.

A service delivery model outlines how the community enters and interacts with the health system; what types of facilities and services are available at each level; when facilities or services are open; the number and mix of staff members at each level; what they can and should do and how they work together; referral systems and controls on access to higher-level services as well as incentives to providers and patients to comply; links between levels of service (e.g. communications, transport, supervision, specialist visits and financial links); and nonstate providers' roles and how they interact with state services to support reaching national and local health goals. Essential service delivery packages for NCDs should cover heart disease and stroke, diabetes, cancer and chronic lung diseases, as well as interventions to reduce their major risk factors (i.e. tobacco use, harmful use of alcohol, unhealthy diets and physical inactivity).

The presentation emphasized that an optimal mix of population- and individual-based services are needed. Population-based services cover health promotion and prevention services, and individual-based services include clinical and nonclinical preventive

services, early detection and continuing clinical care, acute care for complications management, and rehabilitative and palliative care. Good referral systems are needed for continuity of care, often over many years, and across all parts of the system. Unique patient identifiers and/or patient-held records can help coordinate and facilitate access to cumulative patient medical records.

“Best buys” refer to proven interventions that are the most cost-effective and provide the greatest health gain for the greatest number of people. Most of the best buys for reducing the major risk factors require action by sectors other than health, but the health sector should provide leadership and be a catalyst for that action.

In the majority of countries and areas in the Region, more than 80% of NCD-related funding is spent on clinical care for treatment and management of disease complications, and less than 20% is spent on health promotion, prevention and community-based care. Any additional funding for NCDs will have greatest impact if spent on health promotion and prevention, while additional funds for in-patient care should be found through efficiency gains.

In resource-scarce settings, where primary care services are often weak, the presentation recommended that countries and areas initially establish core capacities (clinical and supervisory) at district hospitals through a critical mass of staff and infrastructure. Strategies to link the core at district hospitals with health centres and progressively to move services closer to the people as primary care capacity increases are essential to ensure equity.

2.5 World Health Organization Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings (Dr Shanthi Mendis, NCD, WHO/HQ)

Common challenges regarding NCDs in low- and middle-income countries are financial instability that further reduces investment in health and health systems, availability of experts and good hospitals, negligence of a primary care approach, inadequate prevention and early detection and ageing populations.

The WHO Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings is an innovative, action-oriented response to the above challenges. It is the minimum standard for NCDs to strengthen national capacity to integrate and scale up care of heart disease, stroke, cardiovascular risk, diabetes, cancer, asthma and chronic obstructive pulmonary disease in primary health care in low- resource settings. Its components include assessment of gaps, capacity and utilization of primary care, health information, evidence-based protocols for essential NCD interventions for primary health care, core lists of essential technologies and medicines, tools for cardiovascular risk prediction, financial auditing and costing, training material, strict referral criteria and monitoring and evaluation.

The objectives of the package are:

- (1) to improve the efficiency of care of major NCDs in primary care,
- (2) to improve the quality of care of major NCDs; and
- (3) to improve health impact.

The provision of affordable, effective medicines is a major strategy in reducing the burden of NCDs. Core medicines are antihypertensives; hypoglycaemic drugs; cholesterol-lowering drugs; antiplatelet drugs; anti-inflammatory drugs; and bronchodilators including thiazides, calcium channel blockers, ACEI, beta blockers, statins, aspirin, metformin, glibenclamide, salbutamol, steroids and other diuretics.

To improve access to medicines for NCDs, central governments should create policies that remove taxes and duties, provide adequate funds for procurement in the public sector and support generic medicines (refer to section 2.13).

2.6 Issues and options on financing for noncommunicable diseases (*Dr Chris James, HCF/WPRO*)

Millions of people around the world still cannot utilize necessary health services because the services are unavailable or too expensive. Millions more suffer financial ruin each year due to the cost of these services. There are three fundamental health-financing challenges that countries and areas in the Region must address if they are to move closer to universal coverage: (1) raise sufficient funds for health, (2) minimize reliance on direct out-of-pocket payments, and (3) make the best use of available resources. These are discussed further in WHO's *The World Health Report—Health Systems Financing: The Path to Universal Coverage* and *Health Financing Strategy for the Asia Pacific Region (2010–2015)*.

Raising sufficient funds for health ensures there are enough funds to guarantee the provision of priority NCD medicines and other commodities. To do so, the main options are to increase the priority given to health in government budget allocations (for countries and areas where the current priority of health is relatively low), raise revenues more efficiently (e.g. by minimizing tax evasion), find new or more diversified sources of revenue (e.g. “sin” taxes on tobacco, alcohol and unhealthy foodstuffs, or specific levies on large, profitable companies and tourists) or rely on predictable external funds for health for low-income countries.

Minimizing the reliance on direct out-of-pocket payments implies that priority NCD commodities are provided for free or at low cost at the point of use. This requires increased prepayment and risk pooling through taxes and/or social health insurance. Reduced or eliminated charges in government health facilities are another policy option, and specific attention should be given to the poor and vulnerable. At the same time, it is important to note that universal coverage is difficult unless contributions are compulsory.

Making the best use of available resources requires that public budgets and/or health insurance subsidize the most cost-effective NCD commodities. Essential packages of care, such as the WHO Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings, can help guide this prioritization process. Efficiency gains are also possible through other supply-side policies. This involves increasing the use of generic medicines, reducing the prices paid through better procurement policies, improving supply-chain management and reducing inappropriate use of commodities by modifying the incentives faced by health providers.

2.7 Country presentations

Participating countries were asked to present the current status of service delivery for NCDs in their countries, in relation to access to relevant essential medicines, diagnostics and medical devices.

2.7.1 *Brunei Darussalam*

NCD health services are provided at the primary health care level and funded by the Ministry of Health. Services are offered by diabetic nurse educators or assistants, community dietitians, psychologists, weight reduction programme leaders and medical teams that fly in to more remote areas. Clinical guidelines exist, and laboratory services are also available. Medicines and laboratory tests for NCDs are provided free of charge.

There is no formal list of medicines for NCDs, but most drugs prescribed are on the National Standard Drug List. All medicines for NCDs are registered (all products with proven quality and efficacy are registered), and a generic policy is in place. Since no pharmaceutical manufacturers exist in Brunei Darussalam, all medicines are imported from overseas. There is no price monitoring system. Procurement is centralized, and during open tendering, prices from British National Formulary and other sources are examined. Procurement prices are not reported and not compared to the international drug price indicator.

The Brunei Health Information Management System, known as BRUHIMS, is an important achievement for Brunei Darussalam. Yet general health challenges include inadequate manpower and public education.

2.7.2 *Cambodia*

Generally, medicines for NCDs, including medical devices for laboratories, are available. However, challenges include quantification of such medicines, as the consumption method is considered to be inadequate, as well as difficulties in articulating generic specifications for some medical devices (e.g. electro coagulation, colposcopies and haemoglobin alpha 1).

At the primary care level, services for NCDs include blood pressure screening, management of mild hypertension, screening of high-risk individuals for diabetes and education on NCD risk factors (e.g. body mass index and waist circumference, smoking, tobacco use, physical inactivity and poor diet).

2.7.3 *China*

Most urban residents and 60% of rural residents are covered by services for NCDs in primary and secondary health care settings. In urban areas, a single health care centre's case load in 1 month will be devoted to 20% diabetes and 30% hypertension, while a rural health care centre will see 5% diabetes cases and 10% hypertension cases. In urban areas, lipid profiles and glucose tests are routinely executed but are usually inadequately performed at the primary care level.

There is no formal list of NCD medicines. The main medicines used for treatment of NCDs include captopril, hydrochlorothiazide, metoprolol, nifedipine and nitrendipine, (for hypertension); and glibenclamide, glipizide, insulin and metformin (for diabetes). Most or all

NCD medicines are included on the National Essential Medicines List. Procurement is conducted by local governments at primary health care centres.

Achievements regarding ensuring access to NCD medicines, laboratory tests and technology in primary care are unveiling new policies to promote the equalization of basic public health services, including those focused on hypertension and diabetes; to provide free physical examinations annually for residents over 60 years of age; and to expand health care coverage. Challenges remain, however, regarding ensuring access to medicines, laboratory tests and technology for NCDs, including improving medical insurance amounts and coverage, health consciousness and training personnel.

2.7.4 *Hong Kong (China)*

Regarding NCDs, the leading causes of death in Hong Kong (China) are cancer, heart disease, stroke, chronic lower respiratory diseases, injury, poisoning and diabetes. There is an NCD strategic framework in place, aiming to increase good health and quality of life, focusing on major risk factors that are potentially modifiable and have significant impacts on health.

Basic laboratory tests are available at the primary care level by both public and private laboratories, and medical technologies are available for NCD management at primary and first-referral levels. Currently, there is no specific legislation regulating the import, sale and use of medical devices except for those that contain pharmaceutical or radioactive substances or emit ionizing radiation.

In the public sector, the Department of Health and Hospital Authority have their own drug formularies. The Department of Health employs general formulary and special health formularies for individual services. A stock-piling drug list is kept by the Department of Health to prepare for contingency.

All local drug manufacturers have to comply with WHO good manufacturing practice standards. The quality of drugs is continually assessed by drawing samples from the market. Drugs are purchased through centralized procurement and then distributed. Through the Department of Health, there is a supply-chain management system for NCD drugs. The drug formularies in the Hospital Authority are also periodically reviewed, taking into account changes in scientific evidence, cost-effectiveness, technology advances, treatment options and scope of service provisions.

Achievements in Hong Kong (China) regarding NCDs include health services of high standards, delivered with efficiency; a decrease in the age-standardized death rate of most diseases; quality management system for laboratories designed according to international standards; and medicines for essential NCD interventions in primary care readily available. However, challenges include a rapidly ageing population and an increasing number of chronic disease patients.

2.7.5 *Lao People's Democratic Republic*

NCD management is listed as part of primary care services in the Lao People's Democratic Republic. There are no specific standard treatment guidelines for NCDs, but the National Standard Treatment Guidelines include some NCDs. Data regarding NCD management at the national level are still lacking.

Laboratory tests are inadequately performed at the primary and secondary care levels, and only blood chemistry tests covering limited parameters are available in urban areas (not rural areas). There is no quality assurance at the primary and first-referral levels, and drug manufacturers are expected to provide their own quality assurance.

Medical technologies available for NCD management at the first-referral level are x-rays; ultrasounds; and blood, urine and stool tests. Medical technologies not available for NCD management at the primary care level include measurement tapes, scales, spacers for inhalers, glucometers and urine strips. The main issues relating to adequate maintenance of medical technologies at the primary and first-referral levels are individual quality assurance, human resources and financial constraints.

The National Essential Medicines List includes those for NCDs, but there is no specific, formal list for NCDs. NCD medicines are registered and quantified based on past consumption. They are procured and supplied through the provincial health authority using tendering or price negotiation. Funding is from the government fiscal budget, out-of-pocket, health insurance or donation.

Main achievements include the commitment from the Ministry of Health towards NCDs and the availability of more medical technologies and medicines for NCDs. Challenges comprise awareness of the impact of NCDs, inadequate medical technologies, lack of expertise in NCD management, financial constraints and insufficient drug supply.

2.7.6 *Malaysia*

NCD management is listed as part of primary care services. There are clinical practice guidelines and several standard operating procedures available for NCD management.

About 98% of the population is covered by primary health services, which include comprehensive chronic disease management. A diabetes quality assurance programme is carried out at this level to promote and ensure compliance with guidelines and procedures by providers and patients. Further, most basic laboratory tests and equipment are available, but there are occasional budgetary constraints for reagents.

Most NCD medicines are included on the National Essential Drugs List, and they are registered. Procurement is decentralized and is done by individual facilities. Quantification is based on historical consumption, new updates on treatment guidelines or new services provided. NCD medicines are available most of the time. In the case of stock disturbances, alternative suppliers or medicines are used. For the public sector, medicines are fully funded by the government if they are listed on the Ministry of Health drug formulary. The medicines are free of charge in the public sector.

The influence from the private pharmaceutical sector is very strong, and clinician-induced demand is high. NCDs are very profitable. Although the private sector sees 20% of patients, its health expenditure is very high (45%–55% of the total). The public sector provides medicines for free, and although immigrants pay small registration fees, medicines are also free. However, a rise in NCDs will push expenditures up exponentially; hence some price control mechanism is required. The government has a draft policy, which will integrate public and private services.

Concerns have also been raised on regulating generic medicines prices in the private sector, as unless carefully planned, it could potentially kill the market. It was also suggested that a health technology assessment, such as one done by the National Institute for Health and Clinical Excellence of the United Kingdom, be done.

Challenges include limited funds in the public sector; balancing best practices with cheaper options; generic versus patent drugs; equitable access to newer, more expensive drugs (e.g. insulin analogs and combination pills); timely access to certain tests (e.g. echocardiograms and stress tests); higher management costs of drugs, reagents and medical devices in remote areas; and difficulties in forecasting the actual needs of drugs, such as changes in treatment guidelines and prescribing habits.

Achievements include good networking and drug distribution systems; availability of generics; government procurement policies to stimulate the growth of local industries through the maximum utilization of local materials and resources, to increase and enhance the capabilities of local institutions and industries via transfer of technology and expertise and to stimulate and promote service-oriented local industries; medication therapy adherence clinics; and value-added services (e.g., pharmacy appointment system including “SMS and collect”, drive-throughs and medications through post).

2.7.7 *Mongolia*

NCDs are the leading causes of mortality in Mongolia (i.e. 7 out of 10 deaths). Various government policies, legislation and programmes aim to strengthen prevention and control of NCDs such as the State Policy on Public Health, State Policy on Physical Activity and Sports, Law on Tobacco Control, Law on Alcohol Control and National Programme on Integrated NCDs. Moreover, clinical guidelines on hypertension and diabetes have recently been developed.

The Sixth National Essential Medicines List was updated in 2010. It includes many medicines for NCDs, which are all registered. At the primary care level, revolving drug funds, which were initiated with the support of the United Nations Children’s Fund and Nippon Foundation, are responsible for medicines supply and distribution.

Around 50 different medicines are used for 17 diseases, including palliative care, diabetes and mental disorders, and are provided free of charge by the government. Most NCD medicines are available at the primary care level with sporadic stock-outs of some medicines (e.g. beclomethasone inhalers, glibenclamide and long-acting insulin).

Procurement of medicines is decentralized. The type of procurement depends on the budget, and the total government budget for health and for pharmaceuticals has been increasing gradually since 2006. Other sources for health expenditures include social health insurance funds, external partner financing and out-of-pocket payments. A bidding committee is established at government procuring agencies to evaluate and select suppliers as well as to award bidders. All pharmaceutical companies are private. Medicines quantification is usually based on the past 3 years' consumption.

Main achievements include existing policy and legal environment on prevention and early detection of NCDs and risk factors, sustainable primary care settings to provide services to the population and free medicines for NCDs. Challenges include the availability of diagnostics and

devices to detect NCDs and limited human resources capacity at the primary care level (e.g. a high work load, lack of community health workers and lack of training of doctors and nurses).

2.7.8 *Philippines*

Diseases of the heart and vascular system, malignant neoplasms, accidents, chronic respiratory diseases and diabetes are among the top 10 causes of mortality in the Philippines. The country aims to decrease mortality due to NCDs by 2% every year until 2015.

Selection of NCD medicines is based on the Philippine National Formulary. Included are amlodipine, aspirin, enalapril, hydrochlorothiazide, losartan and metoprolol (for hypertension); and glibenclamide and metformin for diabetes. However, country-specific standard treatment guidelines are still lacking, medicine supply and distribution systems are inefficient, medicine financing is inadequate, and there are gaps in service and infrastructure concerning diagnostics and technologies. Overall, a redesign of the health service delivery models, specific for NCDs, is recommended at all care levels.

The following government programmes are designed to improve the management of NCDs in the country:

- (1) The Universally Accessible and Affordable Quality Medicines Act of 2008 (RA 9502), which has provided tools to improve the availability and affordability of medicines such as government-pooled procurement, promotion of the use of generic drugs and drug price monitoring.
- (2) The Department of Health Medicines Access Program for NCDs (Indigent Population), which aims to improve treatment services for breast cancer and childhood leukaemia patients through the use of standard treatment guidelines, multidisciplinary approaches to therapy and further expansion of government oncology centres.
- (3) The Department of Health Complete Treatment Pack Program, which focuses on the provision of complete treatment packages (based on Department of Health and PhilHealth standard treatment guidelines) for diseases such as chronic respiratory diseases, diabetes and hypertension. This will be a part of the essential primary care package in health centres and rural health units beginning in September 2011.
- (4) The Department of Health campaign, "Compliance Is Wellness," which is intended to improve adherence to treatment regimens to avoid harmful and costly consequences of inappropriate health care.

2.7.9 *Viet Nam*

NCDs such as hypertension, diabetes, cancer and mental health disorders are part of primary care services offered in Viet Nam. Standard treatment guidelines are available, although adherence is limited and no compliance monitoring systems are in place. On a monthly average, there are only 200 (urban) and 300 (rural) cases of hypertension and 30 cases of diabetes managed in the country.

Blood glucose and cholesterol tests and urine albumin/protein tests are routine diagnostics executed at the secondary level. At the primary care level, laboratory tests are not performed, and

corresponding quality assurance is not controlled. It is the same for quality assurance at the first-referral level.

Medical technologies generally available at the primary care level include those for blood pressure, height, weight, waist size, temperature, cardiopulmonary resuscitation, and visual acuity and clinical breast examinations. Personnel, equipment, demand, patient confidence and cost are the issues detrimental to the adequate maintenance of medical technologies at both primary and first-referral levels.

There is a formal list of NCD medicines, all of which are included on the National Essential Medicines List and are registered. The country employs a decentralized procurement and supply system. Procurement is done through tendering, and the drug requirement is estimated based on previous consumption. Although medicines are available, levels are unknown. The Ministry of Health is currently undertaking facility surveys on prices, availability and affordability of medicines to address this. Medicines are mostly imported, while 49% are sourced from local pharmaceutical manufacturers.

Financing for NCD essential medicines, diagnostics and medical devices are sourced from health insurance, the government's National Target Programme on NCDs and out-of-pocket. NCD medicines such as enalapril, hydrochlorothiazide, metformin and nifedipine, and laboratory tests such as glucose and cholesterol tests are provided free to patients. However, health insurance does not cover the whole population, and the affordability of medicines is still an issue.

Viet Nam plans to develop a law on tobacco control, establish a national surveillance system on NCD prevention and control, and survey and study NCD risk factors.

2.8 Framework for improving access to essential medicines for noncommunicable diseases (*Ms Karin Timmermans, EMT/WPRO*)

From a public health perspective, the overarching objective in the area of pharmaceuticals is to ensure equitable access to good-quality essential medicines and to ensure their rational use by providers and consumers to improve health outcomes. While the main focus of this presentation was access, ensuring quality and rational use are equally important. Moreover, there are links between the strategies to ensure access, quality and rational use.

Access to medicines depends on:

- (1) *Rational selection.* Selection of a limited number of essential NCD medicines is the basis for optimizing supply, financing and use. Selection should be evidence-based and take cost-effectiveness into account. Essential medicines lists and standard treatment guidelines should be harmonized, and essential medicines should be registered.
- (2) *Adequate and sustainable financing.* Available funds should be spent on cost-effective products. In many countries and areas, public financing for medicines for NCDs should be increased.
- (3) *Affordable prices.* These can be achieved by using measures such as reducing taxes, tariffs and margins. Regressive mark-ups or fixed dispensing fees can reduce prices as well as perverse incentives. The use of international non-proprietary names or

generic names during procurement enables generic medicines competition, which can drive prices down. In the absence of such competition, appropriate mechanisms may include price negotiations, therapeutic substitution, parallel importation and voluntary or compulsory licensing. It may also be important to make price information public and comparable.

- (4) *Reliable supply systems.* There are two significant challenges related to medicines supply for NCDs. First, in many countries and areas, multiple vertical supply systems for medicines co-exist. Yet there is no dedicated supply system for NCD medicines. The unintended result is insufficient attention for and supply of medicines for NCDs. Second, several countries and areas have decentralized medicines supply systems, which results in a loss of economies of scale. Nevertheless, other factors such as access to market intelligence, up-to-date price information and a reliable payment record are important factors in obtaining good prices; thus, even in a decentralized system, it is possible to obtain reasonable prices.

Attention was drawn to the importance of proper quantification, procurement procedures that give due attention to product quality, storage, inventory control and distribution. Systems for emergency supply and redistribution of excess stock may need to be put in place.

In addition, there is a need for a comprehensive generic medicines policy, guidelines to manage conflicts of interest as well as regular monitoring and evaluation to identify and address problems in a timely manner.

The most difficult part of implementing a generic medicines policy is to get the prescribers to comply and prescribe such medicines. Ministries of health can ensure this by encouraging and convincing the prescribers, as mentioned earlier. If this fails, countries and areas may have to look at the example of Germany where the government claims back money from prescribers whose prescriptions are significantly more costly than the threshold set for their practice. Alternatively, in the United Kingdom, savings due to generic prescribing are returned to the prescriber's practice and can be used to purchase equipment or to hire extra staff members.

2.9 Survey on access, availability and affordability of noncommunicable disease essential medicines (Dr Richard Laing, HSS/WHO/HQ)

Millennium Development Goal 8E aims to provide access to affordable essential drugs in developing countries and areas. Due to the burden of disease related to NCDs, ensuring access to medicines for NCDs is required. In the United Nations Millennium Development Goal gap task force reports published in 2008 and 2009, the importance of NCDs was highlighted. In the 2008 report, it was concluded that further support is needed for chronic NCDs such as cardiovascular disease, cancer, diabetes and chronic respiratory diseases. In the 2009 report, it concluded that governments, in collaboration with the private sector, should give greater priority to treating chronic diseases and improving the accessibility of medicines to treat them.

The presenter then summarized the global access situation for NCD medicines in low- and middle-income countries and areas as having poor availability, with public sector availability of such medicines being 17.5% worse than for chronic medicines. In the private sector, the difference is 11.5%. With regard to prices, while public sector procurement prices were generally close to international reference prices, public sector patient prices and private sector prices were

often more than 5–10 times international reference prices. What is unusual about the Region is that the prices in the public sector are often close to or in excess of private sector prices. The presenter then detailed actual pricing data for common NCD medicines, which showed that for many, the costs without tariffs, taxes or duties are less than \$1 per month for many products.

To improve access of medicines, an initiative has been undertaken by the International Union against Tuberculosis and Lung Disease to establish the Asthma Drug Facility.

Low public sector availability could be due to lack of resources or under budgeting, or inaccurate forecasting or inefficient procurement, distribution or demand for slow-moving products. High private sector prices could be due to high manufacturers selling price or high import costs, taxes, tariffs or mark-ups.

Policy options to address these problems include measures to improve procurement efficiency; ensure adequate, equitable and sustainable financing through health insurance systems that cover essential medicines; and make chronic disease medicines available in the private sector at public sector prices. There is also a need to prioritize medicines budgets (i.e. target widespread access to a reduced number of essential generic medicines for NCDs). A key policy action to improve access to medicines for NCDs would be to promote generic medicines use through preferential registration procedures (e.g. fast-tracking, lower fees, ensuring the quality of generic products and permitting generic medicines substitution and providing incentives for the dispensing of generic medicines). In addition, doctors and consumers must be educated on the quality, availability and acceptability of generic medicines.

Separate policy initiatives to separate prescribing and dispensing as well as controlling import, wholesale and/or retail mark-ups through regressive mark-up schemes may also be necessary. There is also a need to provide tax exemptions for medicines. Where there is little competition, it may be necessary to consider regulating prices. For patented medicines, the flexibilities of trade agreements could be used to introduce generic medicines while a patent is in force and to promote differential pricing schemes in which lower prices are adapted to the purchasing power of governments and households in poorer countries and areas. Caution was expressed about introducing price controls for generic medicines when competition exists.

WHO-Health Action International (HAI) pricing policy papers are available at <http://www.haiweb.org/medicineprices/>.

During the presentation, the participants reminded the presenter that the definition of affordability needed to be clarified. Different organizations look at it from different perspectives, and it is difficult to measure. One method is to use number of day wages for the lowest paid government worker. Also, WHO–HAI prices on medicines should be used as reference prices to compare procurement prices at the country and area level; however, countries and areas can also have internal reference prices to compare to external reference prices.

2.10 Policies on generic medicines (Ms Karin Timmermans, EMT/WPRO)

Over the years, WHO has consistently advocated for and promoted the use of good-quality generic medicines, in line with countries and areas' international agreements and national legislation. To facilitate generic medicines competition, countries and areas are advised to implement a comprehensive generic medicines policy, which may comprise the following elements (depending on their relevance in the national context):

- (1) generic product development during the patent term;
- (2) fast-track registration (i.e. abbreviated and less costly registration procedures for generic medicines);
- (3) procurement of medicines under international non-proprietary names or generic names;
- (4) encouraged or mandatory prescribing by generic name;
- (5) generic substitution by pharmacists;
- (6) information and incentives for generic utilization to prescribers, pharmacists and consumers;
- (7) generic name on label;
- (8) effective quality-assurance capability, with public information;
- (9) selective financing of generics in positive lists, reference price systems and procurement by tendering;
- (10) inclusion of trade-related aspects of intellectual property rights (TRIPs) flexibilities in national laws and use of such flexibilities when appropriate; and
- (11) encouragement of a reliable environment for the generic medicines industry, including avoiding data exclusivity, linking registration and patent status and providing other forms of protection for intellectual property that go beyond the requirements of the TRIPs agreement.

TRIPs flexibilities can be used when a medicine is patented. The TRIPs agreement is a multilateral agreement that has largely harmonized the standards for patents. It contains some flexibilities and safeguards that can be used to protect access to medicines, provided they are incorporated in the national law. These include procedural safeguards (e.g. pre-grant opposition), patentability standards, bolar provision (i.e. early working), parallel importation and compulsory licensing and/or government use.

Several countries and areas have used TRIPs flexibilities for antiretrovirals. However, in India, pre-grant opposition has been used also for the cancer medicine imatinib, and in Thailand, compulsory licenses have been issued for clopidogrel as well as some cancer medicines.

2.11 Efficient procurement, supply and management of essential noncommunicable disease medicines (*Dr Socorro Escalante, EMT, WHO Viet Nam*)

Due to its location, public sector facilities are the first point of contact for patients, particularly in rural areas. Also, medicines are generally more expensive and therefore less affordable in the private than in the public sector. When securing medicines for public sector supply, it is important to ensure that essential medicines are available at all times in health facilities; medicines are of assured quality, procured from reliable sources and are available at competitive prices; and medicines are provided to the intended patients in a timely and appropriate manner.

A step-by-step strategic procurement and supply action is suggested.

- (1) *Get an overall view of the supply system.* The government, in cooperation with WHO, United Nations Industrial Development Organization and other agencies, should evaluate the existing procurement and supply system. Advanced purchasing commitments, monopolies and exclusive distributorship arrangements with the suppliers should be assessed.
- (2) *Secure the public sector supply.* Supply in the public sector should be well supported by governments to ensure sustainability. Establishment of programmes, such as the National Medicines Facility, can provide guidance to decentralized procurement systems. The National Medicines Facility serves to rationalize, oversee and operationalize medicines procurement.
- (3) *Address regulatory and policy barriers.* This can be done by reviewing registration policies for controlled medicines, inclusion of cost-effective treatments on essential medicines lists, inclusion of NCD medicines on reimbursement lists and emphasis on public financing priorities.
- (4) *Address operational barriers.* Political barriers can be addressed through independent bids and the creation of awards and procurement committees. Dealing with conflicts of interest through declarations of conflicts and disqualification of relatives is also of use. Lastly, prioritizing medicines through evidence-based needs rather than demand is more economical. Administrative barriers, on the other hand, can be addressed through laying down clear terms of reference for prospective bidders, therefore exposing established collusions. Quality is always important, but issues (e.g. branded products are better than generic medicines, high prices mean good quality and medicines recommended by private practitioners) should be dealt with accordingly.

Establishment of tendering and bidding systems augments the suggested procurement and supply strategies. This can be accomplished through two stages. The first is the technical stage, where suppliers are prequalified through licensing; regulatory requirements; and financial, logistics and post-marketing surveillance. The second stage is where equitable medicine prices can be set, and quality assurance methods through inspection and sampling ensure quality in procurement.

When considering options for improving access to NCD medicines, it is important that the strategies to be implemented are comprehensive with enough support from the government.

In summary, the following procurement supply and management methods are suggested: assess the availability of NCD medicines; assess the supply chain; develop a national procurement strategy; and establish procurement units, representing key technical areas, at the operational level.

2.12 Selection of noncommunicable disease medicines on essential medicines lists and the importance of standard treatment guidelines
(*Dr Kris Weerasuriya, MAR/WHO/HQ*)

The concept of essential medicines is a limited range of carefully selected medicines leading to better health care, better drug management and lower costs. The definition of essential medicines is those that satisfy the priority health needs of the population, which are selected with due regard to disease prevalence, evidence of efficacy and safety and comparative cost-effectiveness.

The concept and its implementation (i.e. the WHO Model Lists of Essential Medicines) is over 30 years old and have stood the test of time. They remain a major public health intervention for WHO. The lists are revised by WHO every 2 years, and while the concept has remained the same, the criteria for selection of essential medicines have evolved over time. Countries and areas use the model lists as well as the process for developing their national essential medicines lists. The 18th Model List of Essential Medicines is available at http://www.who.int/selection_medicines/Complete_UNEDITED_TRS_18th.pdf

The most recent list (from 18 March 2011) has glibenclamide, glucagon, insulin (soluble and intermediate acting) and metformin on it. These medicines that have been judged to be effective, safe and cost-effective. Australia's Therapeutic Guidelines and the British National Formulary also have similar drugs as first-line treatments for diabetes. Gliptins, insulin analogs and thiazolidinediones are not included as first-line drugs. Regarding insulin analogs, an WHO expert committee commented that they offered no clinical advantage over recombinant human insulin, and there is still concern about possible long-term adverse effects. In the medicines for the main categories of NCDs, there had been few changes, resulting in little change to medicines from the previous list.

Standard treatment guidelines are systematically developed statements designed to assist practitioners and patients in making decisions about appropriate health care for specific clinical circumstances. They are clinical treatment protocols for a particular disease or condition prepared using the best available scientific evidence by a group of experts, which help health care providers to make decisions regarding the treatment of that condition. They list the preferred drug and non-drug treatments for common health problems. They are formulated taking into account the demographic, epidemiological, cultural and socioeconomic factors of the disease as well as the availability of medicines, storage facilities and professional expertise needed for treatment. Standard treatment guidelines can be prepared for different levels of health care providers. Benefits are to the patients (i.e. therapeutically effective treatments), health care providers (i.e. provision of expert consensus and quality of care standards), supply managers (i.e. a predictable demand and therefore easier supply processes) and policy makers (i.e. making the most effective use of funds). However, standard treatment guidelines have not been taken up as much as the concept of essential medicines lists, which may be partly due to not being built on a proper scientific evidence base, disconnect with medicines supply, non-involvement of users in developing the guidelines and finally conflicts of interest in those developing the guidelines.

A declaration of interests is now standard procedure in any selection of medicines and development of guidelines. The WHO Expert Committee on the Selection and Use of Essential Medicines has a mandatory declaration of interests, which is published in the report. The speaker, in keeping with procedure, makes a declaration of interests. It is recommended that countries and areas have a section on declaration of interests in their documents.

After the presentation, questions were asked about standard treatment guidelines and essential medicines lists, regarding which one should be developed first. In theory, standard treatment guidelines should come first, but in reality, essential medicines lists usually are developed first. Another question related to there being about only five or six patented medicines of 340 medicines on the current WHO list.

2.13 Improving access to diagnostics and medical devices for noncommunicable diseases (Mr Paul Rogers, EMT/WPRO)

Despite the importance of achieving improved health outcomes, systematic improvement of medical devices and laboratory services has been a low priority within the Region. Recently, WHO has tried to raise the profile through development of the *Asia Pacific Strategy for Strengthening Health Laboratory Services (2012–2015)*. It has also collected data towards a draft framework for action on medical devices. Both documents emphasize the need for improving access to and rational use of services and products of assured safety and quality in alignment with public health priorities.

Although there is a serious lack of data on medical devices, the major challenges are described as follows. The selection, management and use of medical devices for NCDs should be seen within this context.

- (1) Medical devices are not sufficiently recognized as essential items. Associated governance mechanisms are weak or absent, and funding is inadequate.
- (2) There is a poor selection of medical devices with an insufficient evidence base for decision making and poor alignment with public health needs, which results in use of inappropriate devices.
- (3) There is extremely weak medical device management (e.g. procurement, maintenance and replacement).
- (4) Widespread irrational use of medical devices is often driven by perverse financial incentives and lack of clinical practice guidelines. The implications include the exposure of patients to unnecessary risks.

The main challenges for laboratories were defined as follows:

- (1) *Leadership and governance.* Laboratories are generally low priorities in national health strategies; laboratory regulations are inadequately implemented; and often no national laboratory programme, focal point or structure exists.
- (2) *Financing.* Resources and infrastructure are inadequate, there are incentives for irrational use and cost-effectiveness analysis is insufficient.
- (3) *Health workforce.* Laboratory technicians have inadequate skills and training.
- (4) *Information.* Information technology is inadequately used.
- (5) *Medical products and technologies.* Procurement and management of equipment are unregulated, and effective equipment maintenance systems and standardization of laboratory tests are lacking.
- (6) *Service delivery.* Laboratory services are fragmented.
- (7) *Quality and safety.* Quality awareness and quality systems are weak, and safety measures are inadequate.

Recommendations for essential and desirable medical devices and diagnostic tests are given in the WHO Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings. For laboratories, slightly different recommendations appear in the *Asia Pacific Strategy for Strengthening Health Laboratory Services (2012–2015)*. Each country or area should set priorities according to a needs analysis based on an assessment of disease burden, epidemiological data, common patterns of hospital treatment, clinical practice guidelines, existing status of medical devices against demographic data, service delivery model and package and available funding and human resources. It was also suggested that decisions relating to medical devices and laboratory services for NCDs at the primary care level be taken with the following:

Health system feature	Medical devices	Laboratories
Leadership and governance	Prioritization should be based on an evidence-based needs assessment.	
	Consider introducing essential medical device lists	Include NCD laboratory tests in the service delivery package
	Ensure compliance with national health technology policy	Make use of laboratory networks
	Consider health technology assessment for equipment selection	
	Integrate management into existing systems as much as possible	
Financing	Ensure dedicated procurement and operational budgets	
	Avoid financial incentives that encourage overdiagnosis or treatment	
	Try to ensure essential medical devices and tests are fully reimbursed through SHI	
	Develop and apply fair prices for nonessential tests and procedures	
Service delivery	Select and assign medical devices and laboratory services to support the existing service delivery model	
	Include new equipment into existing systems for calibration, servicing and repair	
	Integrate into existing systems procurement, storage, supply, inventory control of consumables and spare parts	
	Consider need for fault reporting and emergency back-up devices	Consider systems for sample collection, storage and transfer
		Consider results reporting mechanisms
Safety and quality	Ensure equipment conforms to minimum national technical and safety standards	
	Try to standardize equipment to reduce operator and engineer error	
	Incorporate medical device operation and diagnostic testing into standard treatment guidelines	
	Incorporate medical device management into any existing quality management system	Ensure tests are quality accredited and part of any external quality assurance

Discussions centred on the belief that health technology assessment committee experts should coordinate with essential medicines committee experts. The work on HTA is difficult and needs the high-level support.

2.14 Monitoring and supervision of medicines management and use in health facilities— Cambodia

Cambodia's experience with the implementation of a supervision and monitoring programme was shared with participants. Since 1995, WHO and the United Nations Children's Fund have supported this programme, which aims to increase regular supervision and monitoring activities. In 2007, the programme became more focused when the Global Fund for AIDS, Tuberculosis and Malaria; KfW; and World Bank began supporting it. Other nongovernmental organizations supporting drug supply management in Cambodia also participate in the programme.

The main objective is to improve and ensure constant availability of essential medicines in health facilities through the regular collection of data of selected drug management indicators. Agreed indicators include the number or proportion of facilities with accurate inventory records, sufficient stock levels, overstocks, stock-outs, expired medicines and stock medicines that are not on the National Essential Medicines List.

Monitoring and supervision visits to collect data on these indicators and to provide the needed support are conducted by a team from the central, provincial or district level. During these visits, pharmaceutical staff members working in health facilities are interviewed and assessed on their ability to manage health commodities in their respective stores. Appropriate hands-on support is given as needed if underperformance is observed.

Results presented in the form of graphical trend analysis were shared with the participants for each of the indicators monitored. Notable achievement in drug management indicators, including increased essential medicines availability, occurred during the last 3-4 years of the programme. Currently, the availability of essential medicines in health facilities is nearly 98%.

Regular, timely monitoring and support supervision visits to health facilities has the potential of improving drug supply management, reducing the level of stock-outs and improving the availability and access to essential medicines. However, this outcome is only possible with sustainable sources of funding for the purchase of essential medicines and efficient procurement and distribution procedures.

Participants discussed how the frequency of monitoring should be mentioned. A randomized trial has indicated that even with two visits per year, the relevant indicators for the monitoring have improved. In Cambodia, originally, the frequency was 12 times per year, which was then reduced to two to three times per year due to resources.

2.15 Options to improve access to essential medicines for noncommunicable diseases

The presentation highlighted the challenges of access to essential medicines for NCDs, their impacts, causes, existing tools and experiences, and opportunities and options to address these problems. The presentation started with a statement that improving the health outcome of NCDs cannot be achieved without equitable access to essential medicines. Challenges to access include low availability, especially in the public sector; low affordability in the private sector; problematic quality of the products; and lack of adherence or absence of independent, evidence-based therapeutic guidelines. Studies show that the availability of essential medicines for NCDs (e.g. antiasthmatics, antidiabetics, antidepressants, antiepileptics, antihypertensives and antiulcer agents) in the public sector are lower than the medicines for acute illnesses. Thus, public health

service delivery is usually more designed towards providing services for acute illnesses. For example, the availability of a first-line antihypertensive, hydrochlorothiazide, is low in many countries and areas, varying from 0 to 10%.

When the needed medicines are unavailable in public facilities, patients have to purchase them from the private sector, where prices are usually not affordable to patients. Affordability, as expressed by the amount of day wages that the least senior government workers pay for 1 month of standard treatment with generic medicines for diabetes with concomitant hypertension, coronary heart disease or bronchial asthma, was presented. It indicated the unaffordability of the treatment. The impact of out-of-pocket payments for health care is catastrophic, as 1.5% of the population of 11 countries and areas in the Region will be driven below the poverty line of US\$ 2.15 income per day.

The presentation also briefly addressed the problems of substandard and counterfeit medicines. Substandard products are those that do not comply with good manufacturing practices. No systematic, comprehensive assessment has ever been done. Indeed, there is a need for more systematic quality surveillance of medicines, including those for communicable diseases. By contrast, reported cases of falsified or counterfeit medicines involving this group of medicines are increasing, for example, falsified products containing atorvastatin, glibenclamide, gliclazide and olanzapine. During the past 5 years, antidiabetics and cardiovascular medicines are the second most commonly counterfeited after antibiotics based on the reports submitted to the Region's Rapid Alert System.

Drug utilization studies involving NCD medicines are rarely conducted in developing countries. Therefore, the problems and the extent of problems of irrational use cannot be properly identified. Issues may be related to the absence of independent therapeutic guidelines. There is an obvious need for measuring and monitoring the use of NCD medicines and to promote their rational use.

Some possible causes for lack of access to essential medicines for NCDs include lack of public financing and reimbursement, inefficient forecasting and budgeting, fragmented supply systems, lack of human resources capacity for managing supplies, lack of systems for monitoring of availability and consumption, and weakness in overall health system delivery. However, there are enough experiences, tools and guides from WHO, partners and international communities to address problems of access to essential medicines, including essential medicines list for selection, evidence-based therapeutic guidelines, generic friendly policies and price monitoring, quantification of needs, financial and consumption analysis methodologies, good procurement practices, quality assurance and regulation, and monitoring and promoting rational use of medicines. In addition, the Global Fund for AIDS, Tuberculosis and Malaria; Global Drug Facility; and GAVI can be utilized for improving access to medicines.

The WHO Regional Office for the Western Pacific has recently launched a price information exchange for selected essential medicines, which also include medicines for NCDs. This will provide information on public procurement prices from different countries and areas. During the presentation, it was proposed that more essential medicines for NCDs be included in this price information exchange. The presentation also presented some lessons from the Child Survival Pharmaceuticals Project in Indonesia where medicines expenditure and consumption analysis were performed to identify areas for cost containment and efficiency.

Some options and opportunities to improve access to essential medicines for NCDs were proposed, including the adoption and use of essential medicines lists for NCDs for different levels of care, development and implementation of therapeutic evidence-based guidelines, quantification of needs and costing, analysis of current medicines expenditure for cost containment, monitoring and supervision, and pilot implementation of service packages at subnational levels. Finally, the presentation proposed a simple monitoring and supervision system to address whether essential medicines are available in health facilities, and whether patients are provided with these medicines. Back-up support for resupply needs to be established if the medicines are not available, as does feedback to providers on their prescribing behaviours.

2.16 Information and experience sharing

The first part of this session consisted of group work. Individual country and area groups identified barriers, challenges and country-specific feasible options for improving access to drugs for NCDs. Specifically, the following concepts regarding access to NCD drugs were addressed by the participants: governing policies, selection and registration for the essential medicines lists and standard treatment guidelines, financing and reimbursement incentives, prices, quantification and procurement, storage and distribution, rational prescription and use, quality, private sector role and role of donors. A summary of the priority follow-up actions can be found in Annex 3.

2.16.1 *Hong Kong (China)*

With an ageing population, the Department of Health states that NCDs account for about 65.9% of the leading causes of death in Hong Kong. Behavioural risk factors include being overweight or obese (39.2%), low levels of physical activity (21.5%), insufficient intake of fruit and vegetables (80.3%), binge drinking (7.2%), and daily smoking (11.8%). To address these, area-specific interventions are geared towards having a healthier diet, increasing physical activity and smoking cessation campaigns.

Like many places in the world, Hong Kong (China) faces a growing childhood obesity problem, with a ratio of one obese child for every five primary school students in 2006. Hence, programmes to promote better nutrition and physical activity have been integrated in schools, restaurants, at home and in the general community. The following school-based programmes were initiated for both students and parents:

- (1) *Lunchbox Nutrient Survey* (2006). This was a survey of the knowledge, attitudes and practices of students in their food choices, how parents think, school policy and practice, as well as performance of lunch and snack suppliers.
- (2) *EatSmart@school.hk Campaign* (2006). This aimed to promote healthy eating among primary school students by creating a healthy nutritional environment in schools.
- (3) *StartSmart@school.hk Pilot Project* (2010). This aimed to create a supportive environment for healthy eating and physical activity via school-based programmes and to help children aged 2–6 years develop healthy lifestyles.

- (4) *School Sports Programme* (2001). This provided opportunities for students to participate in different sports activities (<http://www.lcsd.gov.hk/lschemes/sch-sport/en/intro.php>).

The following programmes were launched in the community:

- (1) *EatSmart@restaurant.hk Campaign* (2008).
- (2) *Health@work.hk Pilot Project* (2010). In addition to the objective mentioned above, this programme also included stress management among its priorities.
- (3) *Healthy Exercise for All Campaign* (2000). Organized by the Leisure and Cultural Services Department and the Department of Health, this campaign aimed to raise the public's interest in exercising (<http://www.lcsd.gov.hk/healthy/en/index.php>).
- (4) *Hong Kong Games* (biennial since 2007). Also organized by the Organized by the Leisure and Cultural Services Department, they promote the sporting culture in the community.
- (5) *Exercise Prescription Project*. This focuses on a doctor-recommended exercise regimen for patients.
- (6) *Stairs-Climbing Community Programme*. This aims to encourage public housing residents to do more stair climbing for health benefits.
- (7) *Healthy Cities Projects*. Initiated in the Tseung Kwan O area in 1997 with support from government departments, nongovernmental organizations, academic institutions, the private sector and other community groups, all districts established their own projects by 2009. Furthermore, the China Hong Kong Chapter of the Alliance for Healthy Cities was established in September 2007 to enhance communication and experience sharing among the 18 projects.

Despite positive results achieved so far, some challenges remain in terms of political will, sustainability, partnerships and collaborations, agenda of different agencies, capacity of the health sector and other priority areas.

2.16.2 Malaysia

Diabetes is a major concern in Malaysia, and a plan of action was developed in the 1990s for patients to achieve HbA1c levels of less than 6.5%. A clinical audit is done once a year, and data are collected using Excel spread sheets, although a new initiative has launched a web-based application. Analysing data by age groups and gender provide useful insights, and WHO has also developed software on diabetes management.

Since co-morbidity in this group is common (i.e. diabetes, hypertension and blindness), having comprehensive chronic disease management is recommended. Medicine is only one factor to achieving a better outcome. Behaviour modification is important but is not easy to achieve.

Control of tobacco sales and packing is important, as tobacco is a high-risk factor for NCDs. Australia is a good example, yet it faces challenges with trade agreements. There is a rumour that trans-Pacific trade agreements on tobacco and medicines will affect their advertisement, price control and reference pricing. It is recommended to join HIV to find out what is going on with the trade agreements.

Insulin uptake by patients is increasing in Malaysia. Doctors were reluctant to initiate insulin use, believing that patients would not want to use it, yet patients stated that doctors did not advise them correctly. It was thought before that specialist doctors would be the ones to decide on insulin use. However, the government is empowering nurses. However, increased insulin use could drastically push health expenditures up.

3. CONCLUSIONS AND RECOMMENDATIONS

The main conclusions and recommendations of the consultation were as follows.

3.1 General

3.1.1 The consultation noted the common issues of low availability of medicines for NCDs in public facilities, and low affordability in private facilities of those medicines in the Region.

3.1.2 There is an urgent need to advocate the coverage of medicines for NCDs in public financing or insurance reimbursement. Estimations of needs of essential medicines, diagnostics and medical devices based on service delivery capacities, cost of packages, and measures for cost containment are crucially important for improving access.

3.1.3 Reinforcing generic medicines policies are of great relevance in addressing the escalating costs of medicines. The importance of monitoring and supervision and the need for effective back-up systems for supply and for proper usage is underlined. There is a need for a mechanism for exchange of information, sharing of experiences, collaboration and cross-fertilization among countries and areas.

3.2 Policies and access

3.2.1 WHO, partners and Member States advocate the inclusion of essential medicines, diagnostics and medical devices in government funding or insurance reimbursement.

3.2.2 Generic medicines policies are crucial to making the needed essential medicines for NCDs affordable. WHO advocates and provides technical support for Member States in implementing such policies. Information on the possible impacts of trade agreements on access to medicines is to be provided to Member States.

3.2.3 An effective mechanism to manage conflicts of interest for those involved in medicines selection, procurement and usage need to be devised to avoid unethical practices.

3.3 Selection

3.3.1 A well-proven combination of essential medicines must be used for managing NCDs. The WHO Package of Essential Noncommunicable Disease Interventions for Primary Health Care in Low-Resource Settings and WHO Model Lists of Essential Medicines are recommended as reference guides for selection.

3.3.2 Depending on priorities, packages may initially be confined to cardiovascular disease, diabetes, chronic respiratory diseases and then expanded.

3.4 Pricing

3.4.1 Price monitoring at regular intervals is needed. Member States are recommended to devise a national price monitoring mechanism and to participate in the existing price information exchange. WHO will include tracer medicines for NCDs.

3.4.2 Member States are recommended to devise an effective generic medicines policy and to monitor its implementation. Proper information and advocacy on generic medicines to the general public and to providers are needed.

3.5 Medicines consumption and expenditure analysis

3.5.1 There is a need to estimate the cost of essential medicines and service packages based on needs and service delivery capacities. Financial analysis on the current expenditures, such as ABC values analysis or a comparison of estimated needs versus consumption, will allow possible cost containment.

3.6 Procurement, supply and distribution

3.6.1 Procurement should be based on proper quantification of needs and should be undertaken through an efficient, transparent process.

3.6.2 An integrated information system for medicines supply, availability and management is recommended. Training is needed for improving human resources in medicines procurement, supply and management.

3.6.3 Where procurement is occurring lower levels of a health care system, there is a need to create a national essential medicines facility, which will serve as a back-up support for good-quality essential medicines.

3.7 Quality—substandard and counterfeit medicines

3.7.1 A national assessment for quality of medicines is needed to give an indication of the extent of substandard medicines currently in the market. Regular quality surveillance should be implemented and include essential medicines for NCDs.

3.7.2 Member States are requested to participate in regional monitoring of medicines quality and to monitor the infiltration of the supply chain with dangerous and counterfeit medicines.

3.7.3 Member States are strongly recommended to eliminate the illegal outlets of unregistered products.

3.8 Rational use of medicines

3.8.1 Evidence-based therapeutic guidelines need to be devised to guide prescribing practices. Providers are to be trained in using these guidelines. Monitoring of prescribing practices is required.

3.8.2 Avoiding perverse financial incentives (e.g. through capitation of payments) should be considered. Pilot implementation of the capitation system is recommended along with insurance reimbursement.

3.8.3 Drug and therapeutic committees in hospitals are to undertake relevant interventions in a particular hospital setting. Monitoring, training and planning interventions are being implemented in some countries and areas.

3.8.4 Controlling medicines promotion and advertisement and unethical practices is important in minimizing irrational use practices.

3.8.5 Consumer education and empowerment on the rational use of medicines is important, as these medicines will be used for a prolonged period.

3.9 Monitoring and evaluation

3.9.1 An assessment of availability, affordability and use of essential medicines for NCDs is needed to document problems and to serve as evidence for advocacy and as a baseline for further interventions.

3.9.2 Regular monitoring of availability and usage of medicines would facilitate early detection of problems and timely provision of back-up support (e.g. resupply or feedback supervision) to providers.

3.10 Work plans and implementation

3.10.1 Member States are recommended to develop national plans for improving access as part of national plans for NCDs. The plans should include those at national, subnational, facility and community levels. Service packages should also be specified in the plans.

3.10.2 Implementation should be by steps and begun in a particular district. Scaling up should be undertaken in steps, depending on the results of the pilot.

3.11 Exchange of information, cross-fertilization and collaboration

3.11.1 Documentation and publication of successful initiatives will be useful for sharing of information and experiences. WHO facilitates the exchange of information, experiences, cross-fertilization and collaboration among countries and areas and different stakeholders.

3.11.2 Collaboration with nongovernmental and professional organizations, patient support groups and the private sector are crucial to moving the agenda forward. A balanced, independent collaboration with these stakeholders is recommended.

3.12 Immediate follow-up action

3.12.1 It is recommended to undertake an initial follow-up action from this consultation within 6 months to 1 year to prepare the implementation of or to implement a short-term plan. Stepwise implementation of a package of essential NCD interventions is recommended, starting in a few pilot districts. WHO can and will support Member States in this.

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**INTERCOUNTRY CONSULTATION ON IMPROVING ACCESS TO ESSENTIAL MEDICINES,
DIAGNOSTICS AND MEDICAL DEVICES FOR THE MANAGEMENT OF NONCOMMUNICABLE DISEASES
18 TO 20 August 2011, Manila, Philippines**

WPR/DHS/EMT(05)2011/1b

TIMETABLE

Time	Thursday, 18 August 2011	Time	Friday, 19 August 2011	Time	Saturday, 20 August 2011
0800 - 0830	Registration	0800 - 0930	Framework for improving access to essential medicines for NCD (<i>K. Timmermans</i>)	0800 - 0830	Actions to improve service delivery for NCDs in one district/province
0830 - 0900	Opening ceremony		WHO/HAI survey on access, availability and affordability of essential medicines to NCDs (<i>R. Laing</i>)	0830 - 0930	(Each country to identify one district or province to demonstrate improvement in access to NCD medicines, laboratory services for NCDs, and medical devices over the next 2 years)
0900 - 0930	Coffee break and Group Photo	0930 - 1000	Coffee break	0930 - 1000	Coffee break
0930 - 0945	Introduction to the consultation (<i>B. Santoso</i>)	1000 - 1230	Selection of NCD medicines on the EML and the importance of STGs (<i>K. Weerasuriya</i>)	1000 - 1030	Discussion on follow up actions
0945 - 1005	Burden of illness of NCDs – regional perspectives (<i>C. Varghese</i>)		Efficient procurement, supply and management of essential medicines for NCD (<i>S. Escalante</i>)	1030 - 1230	Identification of priority actions and next steps for individual countries
1005 - 1025	Continuing patient care for NCDs towards improved health outcome (<i>C. Varghese</i>)		Improving access to diagnostics and medical devices		
1025 - 1045	Health services delivery model for NCDs (<i>L. Hawken</i>)		Options to improve access to essential medicines for NCDs (<i>B. Santoso</i>)		
1045 - 1110	Issues and options on financing for NCDs (<i>C. James</i>)		Discussion		
1110 - 1200	Discussion				
1200 - 1300					
LUNCH BREAK					
1300 - 1530	Country presentations (10mins each) – Brief overview on access to essential medicines, diagnostics and medical devices for management of NCDs. Brunei, Cambodia, China, Hongkong (China), Lao PDR, Malaysia, Mongolia, Philippines, Vietnam	1330 – 1500	Group work Group 1 – China, Hong Kong (China), Philippines Group 2 – Cambodia, Lao PDR, Vietnam Group 3 - Brunei, Malaysia, Mongolia The groups will identify barriers and challenges and options for improving access to NCD drugs: <ul style="list-style-type: none"> • at the national level • at the district/province level • at the health centre level • at the community level 	1330 - 1430 1430 -1500	Conclusions & recommendations Closing session
1530 - 1600	Coffee break	1500 – 1530	Coffee break	1500 - 1530	Coffee
1600 - 1630	Package of Essential Non Communicable Diseases Interventions for Primary Health Care in Low Resource Setting (<i>S. Mendis</i>)	1530 - 1600	Continuation of group work		
1630 – 1730 1800	Discussion Welcome reception	1600 - 1700	Group Presentations		

PRIORITY FOLLOW-UP ACTIONS IDENTIFIED BY WORKSHOP PARTICIPANTS

National level	Sub-national level	Facility	Community
BRUNEI DARUSSALAM			
<ul style="list-style-type: none"> Health promotion and education to raise awareness and empower patients to adhere in NCD Management Well person clinic above 50 yrs Formulate EML for NCD 	<ul style="list-style-type: none"> Strengthen storage, distribution and supply of NCD Other ministries to involve in Health Promotion 	<ul style="list-style-type: none"> Enforce adherence to STG 	<ul style="list-style-type: none"> Increase no. of visits to remote areas. (eg from once a month to fortnightly)
CAMBODIA			
<ul style="list-style-type: none"> Develop SOP for the EML committee to include: roles & responsibilities of members and declaration of conflict of interest; Training of EML committee members on the concept of evidence-based selection of essential medicines; Develop STG for NCDs where these are missing and train relevant staff on these guidelines; Lobby with the government for increased funding for NCDs or look of donor funding; Develop a system for the control of prices of priority NCD medicines; Separation of roles for patient consultation and dispensing roles; Explore and learn appropriate method for the quantification of needs of NCD medicines; 	<ul style="list-style-type: none"> Train staff on appropriate method for the quantification of needs of NCD medicines; Facilities to use user fees budget and other back-up systems to maintain availability of NCD medicines; Build capacity of prescribers and counselors; Empower patients to adhere to treatments and recommended lifestyle; Law enforcement; PPM Strategy to integrate the private health sector e.g. TB and Malaria PPM 	<ul style="list-style-type: none"> same as Sub-national level 	<ul style="list-style-type: none"> Empower patients to adhere to treatments and recommended lifestyle Empower communities with the ability to recognize c/s medicines.

Annex 3

<ul style="list-style-type: none"> • Conduct storage needs assessment and seek funding for identified gaps; • Advocate for the allocation of more staff; • Build capacity of prescribers and counselors; • Empower patients to adhere to treatments and recommended lifestyle; • Law enforcement; • PPM (Public-Private Mix) Strategy to integrate the private health sector e.g. TB and Malaria PPM • Find mechanism for the incorporation of these NGOs into TWG-H 			
CHINA			
<ul style="list-style-type: none"> • Selection and update of the Chinese EML based on WHO core list • Develop STGs for NCDs (tumors etc) Financing 	<ul style="list-style-type: none"> • Implementation of health reform policy • Financing • Set-up the integrated information system to facilitate procurement 	<ul style="list-style-type: none"> • Rational prescription and use of medicine • Performance evaluation with comprehensive indicators, such as rational prescription, patients' satisfactory 	<ul style="list-style-type: none"> • Capacity building for human resources • Retention of qualified health professionals
HONGKONG (CHINA)			
<ul style="list-style-type: none"> • Generate effective information system • Support health promotion activities • Strengthen partnership • Build capacity • Secure resources 			<ul style="list-style-type: none"> • Promote physical activity

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
<ul style="list-style-type: none"> • Development strategy/action plan on NCD service delivery and intervention packages • Development of STG on NCD • Train health providers on rational prescribing • Train health staff on quantification, PSM, good storage and distribution practice • Strengthen Drug and Therapeutics Committee (DTC) and Monitoring, Training and Planning (MTP) for monitoring and supervision of RUM • Conduct a Survey on accessibility and affordability of NCD medicines • Tax deduction • Regulate private sector • Strengthen sector wide coordination with development partners 	<ul style="list-style-type: none"> • Improve storage conditions • Train health providers on rational prescribing and good storage practice • Strengthen the work of MTP and DTCs for improvement of Rational Use of Medicines (RUM) and drug procurement • Procurement based on technical requirement to ensure the quality of NCD medicines 	<ul style="list-style-type: none"> • Improve prescribing and dispensing practice • Provide drug information to patients when dispensing drugs
MALAYSIA		
<ul style="list-style-type: none"> • Establishment of Diabetes teams in clinics with high diabetes patients attendances • Special emphasis on paramedics (nurses and assistant medical officers) training • Publish various clinical practice guidelines on chronic diseases • Quality Assurance and Clinical Audit 		<ul style="list-style-type: none"> • Community education on RUM • Healthy life style promotion • More patient compliance on NCD treatment

Annex 3

<p>Programs</p> <ul style="list-style-type: none"> • Effective clinical information systems • Patient self-management practices • Community engagement 			
MONGOLIA			
<ul style="list-style-type: none"> • set-up a nationwide NCD surveillance system • develop and implement programme-based budgeting (output based) • Develop STGs • Develop a list of essential medical devices/equipment • Study experiences on prescribing mechanisms and practices from others • Strengthen cooperation with private sector and donors • Strengthen supervision and monitoring of regulation 	<ul style="list-style-type: none"> • Capacity building of health care providers • Advocate government policies and guidelines 	<ul style="list-style-type: none"> • Conduct refresh training for service providers • Conduct a survey on price and availability of essential NCD medicines including devices 	<ul style="list-style-type: none"> • Public empowerment • Green prescription campaign
PHILIPPINES			
<ul style="list-style-type: none"> • Increase government spending for NCDs in line with Universal Health Coverage – Out-Patient Department (OPD) package, catastrophic package • Shift payment mechanisms from fee-for-service to case-based payments; Drug Price Reference Index for OPD benefits • Leverage performance-based incentives to Local Government Units (LGU) to address NCDs • Implement the <i>National Framework</i> 	<ul style="list-style-type: none"> • Strengthen gatekeeping and referral systems • Upgrade the quality of health services in LGU facilities with DOH assistance – facilities, devices, laboratory services 	<ul style="list-style-type: none"> • Compliance to NSTGs and EML • Ensure availability and affordability of medicines, devices and laboratory services for NCDs 	<ul style="list-style-type: none"> • Healthy lifestyle promotion • Health education on rational drug use • Navigate clients towards accessing care in facilities

<p><i>for NCD Prevention and Control and Essential Health Package for NCDs</i></p> <ul style="list-style-type: none"> • National Essential Medicines Facility • Accredited Rural Health Units and pharmacies for Out Patient Benefits 			
VIET NAM			
<ul style="list-style-type: none"> • Development of policy and regulations for medical devices • National advocacy for essential medicines for NCD medicines • National treatment guidelines for all NCDs 	<ul style="list-style-type: none"> • Review operational procedures for procurement and supply of medicines and medical devices • Strengthen post-marketing surveillance • Develop local level capacity for medicines and medical devices management 	<ul style="list-style-type: none"> • Strengthen drug therapeutic committees and drug information units • Introduce prescription audits and utilization analysis for medicines and use of diagnostics • Training for procurement, supply and management of NCD medicines and medical devices 	<ul style="list-style-type: none"> • Develop a formulary list for medicines for health communes • Develop a community based education program for rational use of NCD medicines and medical devices