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MONITORING AND EVALUATION OF HEALTH SYSTEM STRENGTHENING IN VIETNAM:

PROVINCIAL LEVEL TRAINING MANUAL

August 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Tran Thi Mai Oanh, Khuong Anh Tuan, Duong Huy Luong, Nguyen Khanh Phuong, Phan Hong Van, Hoang Thi Phuong, Tran Van Tien, Le Quang Cuong, and Amy Taye for Health Systems 20/20 Project.

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ACRONYMS

CHS	Commune Health Station
DOH	Department of Health
FFS	Fee for service
GDP	Gross Domestic Product
GLP	Good Laboratory practices
GMP	Good Manufacturing Practices
HIS	Health Information Systems
HRH	Human Resources for Health
HSS	Health System Strengthening
INGO	International Non-Governmental Organization
ISO	International Standards
JAHR	Joint Annual Health Review
JCI	Joint Commission International
M&E	Monitoring and Evaluation
MOF	Ministry of Finance
MOH	Ministry of Health
NHA	National Health Accounts
ODA	Outside Development Assistance
OOP	Out of Pocket
TQM	Total Quality Management
USAID	United States Agency for International Development
WHO	World Health Organization

1. INTRODUCTION

1.1 PURPOSE

The Monitoring & Evaluation (M&E) Manual for Health System Strengthening (HSS) provides guidance and key indicators for provincial level managers to evaluate their HSS progress. Although these materials were created for provincial health managers in Vietnam, they could be adapted to suit other country contexts where HSAs have been completed.

1.2 OBJECTIVES

1. Obtain and use information about the current performance of Vietnam's health system
2. Introduce a set of indicators for evaluating performance of provincial level health system, and methods for using information in health planning at the provincial level
3. Enhance management and organizational skills of Provincial Health Managers, including their capacity for planning, monitoring, supervising, and evaluating health system performance

1.3 MANUAL STRUCTURE

This document includes 4 chapters:

1. Introduction
2. Overview of Vietnam's health system functions and national strategy
3. Monitoring health system performance at the provincial level
4. Using information for health planning

1.4 ASSUMPTIONS

The M&E Manual for HSS has been created for use in the context of Vietnam's health system. It assumes that a complete Health System Assessment has been done in the last 5-7 years and will serve as the baseline for progress in HSS[1]. It also evaluates country progress on each indicator against current country achievements rather than international averages or standards.

1 The Health System Assessment Approach: A How-To Manual is available at: www.healthsystemsassesment.org

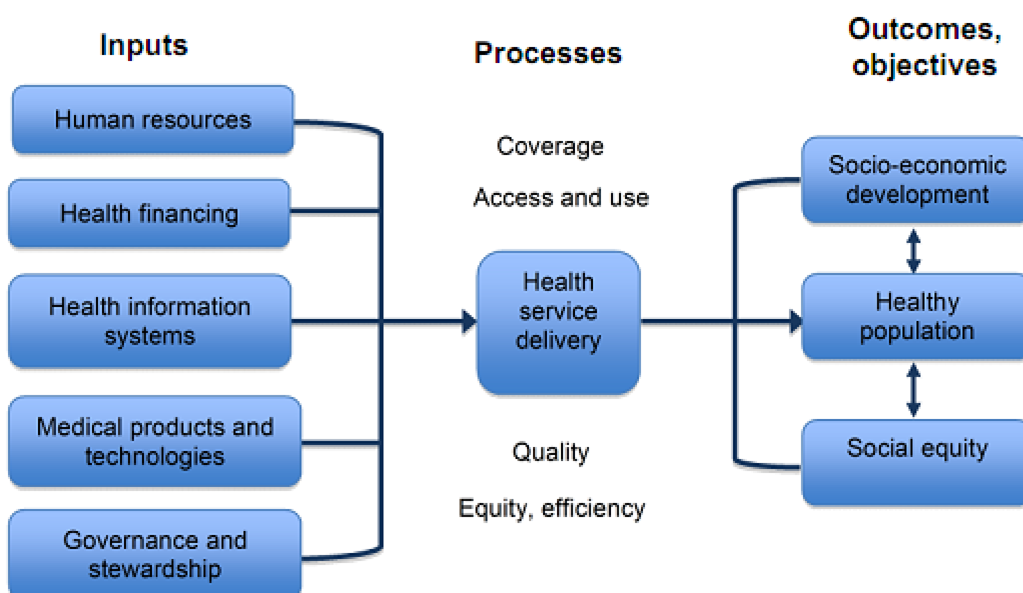
2. OVERVIEW OF VIETNAM'S HEALTH SYSTEM AND NATIONAL STRATEGY

2.1 OVERVIEW OF VIETNAM'S HEALTH SYSTEM

Vietnam's health system framework is an adaptation of WHO's health system framework[2]. It includes the 6 building blocks (Figure 1), with 5 input building blocks (human resources for health (HRH), health financing, health information systems (HIS), pharmaceutical management, and leadership and governance) and one process building block (health service delivery). Health system outcomes include: (i) improving health status; (ii) financial risk protection; and (iii) contributing in socio-economic development of the country. Therefore, Vietnam's health system seeks to be a system that can provide quality health services in a way that is timely, accessible, and affordable for everyone.

In order to provide more information on health system performance of Vietnam, the following sections review current health system achievements and challenges by functional area: HRH, Health Financing, Pharmaceutical Management, Health Service Delivery, HIS, and Governance[3]

FIGURE 1: VIETNAM'S HEALTH SYSTEM FRAMEWORK



2 The World Health Report 2000: Health systems: improving performance

2.1.1 HUMAN RESOURCES FOR HEALTH (HRH)

OBJECTIVE

HRH must be adequate in number and structure, appropriately distributed, have an assured level of professional qualifications to meet their assigned responsibilities, and work with a high level of accountability and responsiveness.

CURRENT HRH SITUATION

ACHIEVEMENTS

Both quantity and quality of human resources in health continues to improve. By 2010, 7.2 medical doctors were serving per 10,000 people and 70 percent of commune health stations had doctors. Nearly all commune health stations (98.9 percent) have midwives or obstetrical assistant doctors and most villages have village health workers (97 percent).

Health worker training for disadvantaged regions continues to be implemented. In 2008, 10 universities recruited 1755 students (medical, pharmaceutical, and other university level staff) and met 57.8 percent demand in 47 disadvantaged localities. In 2009, 13 universities recruited 2305 students and met 71.1 percent of demand in 38 disadvantaged localities. In 2010, 13 universities recruited 3617 students and met 98.4 percent of demand in the disadvantaged localities. In addition, some policies on recruitment and retention in disadvantaged areas have been issued. Health worker training institutions are receiving more investments and being upgraded to improve the quality of training. And the MOH has implemented licensing for health professionals in order to improve management and quality of human resources in the health sector.

DIFFICULTIES AND CONSTRAINTS:

In comparison with the 5-year Health sector plan for 2011–2015, some HRH indicators may be difficult to achieve without major changes in HRH policies. Major challenges include: the number and distribution of HRH, low remuneration, education and training, HRH management, and In-Service training.

Data for 2009 indicate that the number of university trained pharmacists per 10 000 people remains very low (0.38) compared to the goal of 1.2. Although, this number is an underrepresentation because it does not include pharmacists in production and distribution units (if these are included the figure would be 1.78). The ratio of nurses to doctors has increased very little (1.2 in 2008 and 1.27 in 2009) indicating that there has not yet been any substantial change in the number of nurses working in the state health sector. Inappropriate manpower distribution across regions and fields of practice is another area of concern. The Mekong River Delta and the Central Highlands are remain the two regions with the lowest number of doctors per 10 000 people (4.5 and 4.8). The proportion of health workers at the central level facilities compared to local facilities has not changed. In a comparison between the year 2004 and 2009, total health manpower nationally increased at the provincial, district and commune levels, but unequally across provinces and cities. While in delta and urban areas health worker numbers have increased in all levels of the system, in mountainous provinces like Cao Bang and Yen Bai, numbers of health workers has increased in the provincial and district levels but remained constant at the commune level, and in Ha Giang province the number has even fallen 11 percent.

Health workers tend to remain in one location for most of their career. On average a doctor only works in two health facilities during his/her career and people working in urban areas tend to remain in

urban areas till they retire. Those working in rural areas tend to remain in rural areas. This contributes to ensuring stability in health manpower in rural areas, yet at the same time makes it difficult for these areas to attract highly skilled health workers. Even though the level of health worker mobility is low, it tends to be unidirectional from lower to higher levels, from rural to urban areas. Requests by health workers to move to another workplace account for the highest share, and are greater in preventive medicine than in curative care. The main reason leading to requests to change employer is related to low income, followed by reasons related to professional development. Changes in the provincial and district health systems according to Joint Circular No. 03/2008/TTLT-BYT- BNV, dated 25 April 2008, have also created a situation in which many health workers, mainly doctors, are moving from commune health stations to higher level facilities.

Health worker incomes remain low. In regions/cadres where health workers do not have opportunities to provide additional private sector services after hours there are HRH shortages. An additional challenge is the regulation allowing for autonomy of state health service units. Increased autonomy has facilitated overcoming financial difficulties of these units and has improved incomes of existing staff, yet they have also led to health care facilities limiting recruitment in order to save on costs.

Universities providing medical training face overcrowding of students and trainees. Over the past 10 years, the number of newly recruited university students has increased year by year, on average by 10 percent, and in some cases as much as 26 percent per year, yet the physical facilities and the instructor workforce in these schools has not been increased or strengthened proportionally. The number of clinical practice facilities has remained almost the same, creating a situation in which medical students have few opportunities for clinical practice, and the quality of training has fallen.

The number of students recruited into medical secondary schools has increased rapidly. In 2010, the training quota was set at 66 680, including 21 787 nurses and 24 915 secondary pharmacists. With such a large recruitment of students, there are 2 main issues: 1) training quality is not assured; 2) many students graduate and are unable to find work related to their professional training, leading to waste for these graduates as well as the government. In addition, almost all medical junior colleges have only recently been upgraded from medical secondary schools. The majority did not receive adequate provincial financial investments, which has also decreased the quality of training. Educational quality accreditation has been implemented in training facilities, but criteria used in accreditation are general criteria for all fields, and criteria specific to training in health sciences have not yet been developed.

Another challenge with the health workers training is that the management of schools is not unified. Some schools are managed by the MOH, some by the Ministry of Education and Training, some by the Ministry of Defense, while others are managed by Provincial People's Committees. In the current conditions in which there is not yet a specialized medical education quality accreditation system, and no medical licensing examination has yet been organized, issues of clinical practice training quality requires special consideration. Reforms in medical education continue to be implemented, yet remain limited to a few schools, primarily those at the university level. Results of reforms implemented have also not yet been evaluated.

The training program, instruction methods, and curriculum have not been updated recently. There is a shortage of training materials and documents. The instructors are insufficient in number and have not received regular training. The physical facilities are deficient and funds reserved for training activities are inadequate.

The health worker organization and management system has many shortcomings. The health sector is seeking to improve existing organizational models by applying lessons learned from past experiences. They are considering things such as the role of regional polyclinics, the position of village health workers, and hospital organization. Private sector HRH oversight remains unsystematic and difficult for the MOH to manage as well.

Refresher training and capacity building of health workers faces difficulties in terms of funding and implementation. Forms of refresher training, strengthening capacity are not yet diverse, and still primarily consist of short-term concentrated classes. Many health workers do not like to participate in in-service training courses because the remuneration is not commensurate with the supplementary incomes they could be earning during that time. Commune health workers seldom receive training compared to health workers at the provincial and district levels; Health workers in curative care are less frequently given professional training compared to preventive medicine workers.

Even though the health sector has issued regulations on the functions of health workers, there are still no skill or competency standards by health worker cadres serving as standards for training outputs. The Law on Examination and Treatment stipulates that people who practice medicine (examination and treatment) are required to update their medical knowledge on a regular basis, yet has not provided clear guidance on the formats for updating knowledge, the units allowed to organize and provide training, nor the extent of participation in training, seminars, workshops required each year or every 2 years.

Many health facilities, especially in disadvantaged regions and at the district and commune levels, do not want to send staff to study in formal training courses, because many health workers after graduation do not return to the health facility that sent them for training, as they request transfer to larger health facilities in higher levels of the system.

2.1.2 HEALTH FINANCING

OBJECTIVE

The health financing mechanism must mobilize sufficient resources to invest in health with an appropriate balance between public and private spending, ensure that the population can access health care, and that they are protected from impoverishment related to health expenditures; at the same time it must encourage efficient use of available resources in the health sector.

CURRENT HEALTH FINANCING SITUATION

ACHIEVEMENTS

Vietnam's total social expenditure for health as a share of GDP has shown a gradual increase over recent years, from 5.2 percent in 2000 to 6.4 percent in 2009. The public share of health spending (including state budget, health insurance and external assistance) has increased considerably in recent years, from 27.2 percent in 2005 to 36.6 percent in 2006 and reaching 43.3 percent in 2009. The increased public health spending has focused on: (1) funding free health insurance for the poor, ethnic minority groups, children under age six and other social target groups, and (2) upgrading health care facilities and the health care network (Prime Ministerial Decisions 225, 47, 930). During the 2008–2010 period, the rate of growth of state budget spending on health was 25.8percent, higher than the rate of growth of overall state budget spending (16.7 percent), thus achieving the goal of "ensuring the pace of increase in state budget health spending higher than the pace of increase in overall state budget spending according to National Assembly Resolution No. 18/2008/QH12. The proportion of the state budget spent on health (not including funds from health insurance or external assistance) has increased from 3.9 percent in 2000 to 8.2 percent in 2009. This result, however, is lower than the recommendation in JAHR 2010 (10 percent of state budget spending). On the other hand, it should be noted that rising state budget spending on health in recent years is partly attributed to the large impact

of government bonds. Thus one cannot yet consider this a stable level of state budget spending for the coming years. In the next few years, investments from government bonds will decline. Increases of state budget for health should continue to be monitored.

In the roadmap towards universal health insurance, the health insurance coverage rate has been rising over time, reaching 60 percent of population in 2010. Expansion to new groups of beneficiaries has been implemented on schedule according to the regulations in the Law on Health Insurance. In terms of expenditure, spending from the health insurance fund as a share of total health spending has increased from 13 percent in 2006 to 18.4 percent in 2009. The group fully subsidized through the state budget (including the poor and children under age 6) account for 42.7 percent of all people with health insurance.

International assistance funds continue to rise and retain a fixed share in the total investment budget. In 2010, total Outside Development Assistance (ODA) supplied about 3500 billion VND in capital, equivalent to about 8 percent of the state budget spending on health. The disbursement rate for external assistance has improved with an overall disbursement rate in 2010 of 72 percent. The MOH is currently managing 55 ODA programs and projects, including 40 non- refundable aid projects, 10 loan projects and 5 mixed projects with total funds of 20 309 billion VND. Even though the number of loan projects is not large, total funds from this source account for 58.5 percent of total ODA. Besides ODA, the health sector also receives international support from International Non-Government Organizations (INGOs) for 126 projects. It is clear that even though total external assistance to Vietnam in general is declining since Vietnam became a lower middle- income country, yet ODA and INGO assistance to the health sector has been maintained at a relatively high level.

Although expenditures from the state budget account for only 23 percent of total health care expenditures, this funding source is centrally allocated and used to implement the state management functions in health care, in order to achieve public health targets. Specifically, there is prioritization of state budget allocation for preventive medicine, grassroots health network, mountainous, remote, and isolated areas and support for social welfare target groups to achieve equity in health care. The share of spending on preventive medicine exceeded 30 percent. According to Decision No. 59/2010/QD-TTG and Decision No. 60/2010/QD-TTg, criteria for investment and recurrent spending prioritize the grassroots health care network, facilities in mountainous, remote and isolated areas. In implementation of the Law on Health insurance, subsidies for the poor, children under-six, and the near poor, are guaranteed by the state budget.

Implementing the goal of improving effectiveness in use of the state budget is seen as one of the priorities in health care financing. With the orientation to gradually shift direct subsidies for recurrent expenditures of health care facilities to subsidies for health service users through paying their health insurance premiums. The state budget is also preparing a pilot for results based financing, which is paying for outputs. Performance related payment mechanisms are being piloted in the Health Support project for the North Central Coast funded by the World Bank. Recently, the MOH has focused greater attention on monitoring, evaluation and review of Decree No.43/2006 implementation in order to ensure transparency and openness in the autonomy of state health facilities. After reviewing and evaluating the situation of 18 public hospitals, in May 2010 the MOH issued an official letter to all provincial health departments and hospitals directly managed by the MOH. The letter encouraged them to more fully implement measures that had positive outcomes, while adjusting in a timely manner the risks and short-comings in implementing autonomy and accountability rights in medical facilities. The MOH is also drafting a circular to guide procurement in health care to replace Circular 10/2007, which has become out-dated.

National Health Accounts show that out-of-pocket payment has dropped from 65 percent in 2005 to 49.3 percent in 2009. Reforming the hospital payment mechanisms was implemented as a basic measure

to control health care costs. The MOH has established a steering committee for hospital payment reforms headed by a Vice Minister. Capitation-based payment has been applied in 375 health facilities where health services are paid via insurance, mainly at the district level. A pilot of payment by disease group continues as a component in some projects, with regular reporting to the steering committee for hospital payment reforms.

For the poor and ethnic minority people in remote and isolated areas, indirect costs are the real barriers to accessing free health care services at public facilities. Some health projects are funding indirect costs for the poor and ethnic minorities, such as the health support projects for the Central Highlands, Northern Mountainous Region, North and South Central Coast regions, etc. The MOH is submitting to the Prime Minister a draft Decision to adjust the Health Care Fund for the Poor (set up under Decision 139 in 2002), to support some indirect costs of health care for the poor and ethnic minorities in disadvantaged regions.

The goal of developing a fee schedule based on correct and full accounting of input costs and a transparent payment mechanism for health services is expected to address bottlenecks in health financing. The MOH has also drafted a Circular to replace Circular No.14 on price adjustment of some health care services (350 services) and has submitted it to the Government for approval.

DIFFICULTIES AND CONSTRAINTS

Difficulties impacting Health Financing are described below and include: high out-of pocket spending, inefficient allocation of state health funding, and limited health insurance coverage.

Public spending compared to total health spending is extremely low. According to WHO, public spending for health includes state budget allocation from general tax revenue, health insurance and external aid, should account for at least 50 percent of the total health spending. In developing countries this rate is about 80-90percent. In 2009 public expenditure accounted for 43.2 percent of total health expenditure. Private health spending accounted to 56.8 percent, of which the major share forms out-of-pocket payment (OOP), equal to 50.5 percent of total health expenditure. This is a very high rate compared with other countries in the world, posing great challenges to the goal of equity in health for Vietnam.

Inefficient allocation of state health funding results from health facility budgets based on inputs (including number of staff, number of beds), rather than performance and output based allocations. Moreover, the form of state budget allocation for hospitals is "adverse subsidy". At present, top level hospitals can get the biggest portion of state budget based on number of beds and lower level hospitals get the smaller amount of budget, meanwhile, the accessibility of services in higher level facilities/hospitals by the poor is much lower than the wealthy people. Limited allocation of state budgets to district hospitals has created a disincentive to the use of district level hospital services among the people.

Limited coverage of health insurance (63 percent, in 2010) is another source of concern in the finance function of the health system. The breadth and depth of health insurance benefits remain limited. And difficulties have arisen while offering health insurance among unofficial workers. The main payment method in Vietnam is "fee for services – FFS". This is an old and outdated method, easily leading to service misuse and performance shortfalls. The pilots of new payment methods to replace FFS, such as capitation, are only in their initial stages and face a number of barriers. Hospital autonomy and social mobilization have had good results, but should continue to be revised and improved based on lessons learned during implementation.

2.1.3 HEALTH INFORMATION SYSTEMS

OBJECTIVE

HIS must collect, analyze and disseminate reliable information in a timely manner to assist in planning and management of the health system.

CURRENT HIS SITUATION

ACHIEVEMENTS

Given the importance of information for policy-making and management, the National Assembly, Government and MOH have focused their attention on improving information systems in general and the health information system in particular. Many policies related to information have been issued such as:

Statistical Law No. 04/2003/QH11 was issued in order to strengthen statistical work and ensure that statistical information is objective, accurate, complete, and timely. This information is necessary to serve state management agencies, to make assessments, forecast situations, develop strategies and policies, develop plans for socio-economic development, meet the statistical information needs of organizations and individuals, and strengthen the effectiveness of state management of statistical work. The Statistical Law is the basis for developing and issuing policies related to statistical information. In 2004, Decree No. 40/2004/ND-CP was issued to guide implementation of the Law.

Health statistics regulations were issued under MOH Decision No. 379/2002/QD-BYT and serve as the legal basis for the collection and processing of health statistics. The regulations spell-out the responsibilities of health facilities throughout the country in terms of reporting and registration. They also clarify the responsibilities of management and other staff participating in the health statistical information system.

Besides general statistical regulations, there are also other more specific regulations on health statistics. In 2009, the Prime Minister issued Decision No. 45/2009/QD-TTg creating a 10-25 percent salary supplement for statisticians with secondary vocational and higher training. In 2005, the Prime Minister issued Decision No. 305/2005/QD-TTg, approving the National Statistical Indicator System, which regulates data collection for each of the sectors, including health. In 2006 the MOH issued their health indicator system, including unified concepts and data collection methods, which seek to improve data quality and increase data use for analysis, evaluation and policy-making.

The MOH's statistical forms, tables and registers were initially developed in the 1960s, and have been adjusted, and amended during each period of reforms: in 1977, 1992, 2001-02, and most recently in 2009, after the national statistical indicator set and the health statistics indicator set were issued. The MOH also issued a regulation on reporting communicable disease data to monitor possible epidemics and outbreaks. Besides routine facility data, there are also several national household surveys examining standards of living and health, as well as various smaller surveys conducted by national health programs, which serve to inform the health sector.

Many policy documents have been issued on the development of information technology for data management such as: Politburo Directive No. 58/CT-TW in 2000 on promoting the application and development of information technology; Law on Information Technology, Law on Electronic Transactions; Decree No. 64/2007/ND-CP on application of information technology in activities of state agencies; Prime Ministerial Decision No. 246/2005/QD-TTg approving the Strategy for Development of Information and Communication Technology in Vietnam to the year 2010 with an orientation to the

year 2020. MOH decisions have also promoted the application of information technology in HIS such as: MOH Decision No. 1833/2002/QD-BYT issuing the health facility management software, hospital statistical software (Medisoft), and MOH Decision No. 5573/2006/QD-BYT providing specifications for hospital management software.

DIFFICULTIES AND CONSTRAINTS

The major challenge in HIS is that the Master Plan for HIS Development has not yet been issued. After it is issued, many other regulations will need to be developed to ensure its implementation. Currently, no regulations have been set up to strengthen cooperation and sharing of information within the health sector and with other ministries and agencies. However, the newly established HIS Steering committee is expected to implement relevant regulations soon.

Private medical and pharmaceutical service availability is expanding and contributing to health care for all people, but it remains largely unregulated. Private sector statistical reporting regulations are being developed and are expected to be issued by the end of the year.

The number of reporting forms is excessive. The list of indicators and method of calculation is being revised in order to standardize the indicator system and more consolidated forms should be available in 2012.

2.1.4 PHARMACEUTICAL MANAGEMENT

OBJECTIVE

Pharmaceuticals, vaccines, medical equipment, technology and infrastructure are inputs that must be present for proper operation of a health system. They must also meet required standards of quality so that health services can also meet the goals of quality, safety and effectiveness.

CURRENT PHARMACEUTICAL MANAGEMENT SITUATION

ACHIEVEMENTS

The pharmaceutical management building block has made progress in each of the following areas: ensuring an adequate supply of essential drugs to meet treatment needs, ensuring reasonable prices of therapeutic drugs, improving quality assurance of drugs, promoting the development of traditional medicines, and expanding domestic manufacturing of medical equipment.

In general, the system of manufacturing and supplying pharmaceuticals guarantees the provision of adequate essential drugs to meet the needs for health care of the people. Domestic pharmaceutical manufacturing currently meets 47 percent of domestic need for drugs (in terms of value). 234 of the 314 active ingredients included in the National Essential Medicines are being produced locally. The retail pharmacy network is extensive, with an average of 1 retail pharmacy per 2000 people. The need for vaccines in Vietnam is met through both domestic production and imports. Vietnam produces all 10 types of vaccines used in the expanded program on immunization. The 6th version of the Essential Drug List has been completed and is awaiting the signature of the Minister of Health. The draft essential drug list has been expanded to match local morbidity patterns, and the medical capacity of the health system.

A detailed master plan for development of the pharmaceutical industry in Vietnam for the period to 2020 with a vision to 2030 has been drafted and is awaiting the Prime Minister's signature. MOH is developing Master plan called "Vietnamese people prioritize the use of Vietnamese medicine" with the overall aim at increasing the use of local medicines by health care providers and people in the community. The plan is expected to support the sustainable development of pharmaceutical sector, ensuring a stable supply of medicines to meet people health care needs and reducing dependence on imported medicines.

The MOH has cooperated closely with the Ministry of Finance (MOF), Ministry of Industry and other related agencies and provincial people's committees to implement strong measures price control measures in 2011. According to a survey of the Health Strategy and Policy Institute, the gap between generic drug prices in state health facilities in Vietnam and international reference prices for the same drugs indicated that Vietnam's prices were generally lower than international prices, or at least within an acceptable range (from 1 to 1.5 times international prices). Brand-name drugs used in state health facilities had prices equivalent with international reference prices. The MOH is piloting drug price management in which the state budget and health insurance pay a maximum profit margin on the increase between import and wholesale price. On the basis of evaluating the pilot, lessons will be learned and proposals made for revisions and amendments to regulations on drug price management in the Pharmaceutical Law. A majority of drugs used in state medical facilities are procured through competitive bidding. Circular No. 1/2012/TT-BYT-BTC was provides guidance on competitive bidding for procurement of drugs in medical facilities and addresses many shortcomings of the previous Circular 10/2007/TT-BYT-BTC. The MOH is also drafting a circular guiding the bid invitation procedures of medical facilities.

The MOH has strengthened implementation of good practice standards in manufacturing, supply and distribution of pharmaceuticals. By the end of 2011, 112 facilities met good manufacturing standards of WHO (GMP-WHO), 112 facilities met good laboratory practices (GLP), 152 facilities met good storage practices (GSP). All enterprises producing modern medicines meet GMP-WHO standards. In addition, all drug testing laboratories meet good laboratory practices according to WHO or ISO 17025 standards. The verification and sampling to test for drug quality has been strengthened. Sampling to verify quality by the Drug testing laboratories has been implemented on a more regular basis.

The conservation and development of traditional sources of medicinal materials and the supply and use of traditional medicinal materials in medical facilities has been strengthened. A list of 40 medicinal materials with potential for market development has been issued by the MOH. MOH Directive No. 03/CT-BYT dated 24 February 2012 on strengthens the management of the supply and use of medicinal materials, traditional medicines and finished herbal products in traditional medicine facilities. This directive also emphasizes traditional medicine and finished herbal products. In order to implement the Government's Action Plan on development of Vietnamese traditional medicine to the year 2020, the MOH has developed 12 related projects and implemented quality verification of medicinal materials in some localities. The MOH has also directed localities to establish committees to receive applications for the Hai Thuong Lan Ong award.

The MOH has cooperated with the MOF to study the situation in order to propose tax policy measures to support domestic medical equipment manufacturing enterprises. The draft circular regulating permits to allow medical equipment to be distributed and certificates of sale for medical equipment manufactured in Vietnam has been completed.

DIFFICULTIES AND CHALLENGES

Although Vietnam has made a lot of progress in the pharmaceutical building block many challenges remain to be addressed. Current challenges include: dependence on international markets for raw

materials with which to manufacture drugs, improving rational use of antibiotics, and management of medical equipment.

Controlling drug prices remains difficult because both the manufacturing and the supply of drugs in Vietnam depend heavily on international markets. Ninety percent of raw materials and fifty percent of finished products must be imported. Most domestically produced drugs are very basic drugs. Prices of innovator brand medicines are still relatively high. Effectiveness of the main policy instruments currently used for managing drug prices remains low.

Control over the source and quality of medicinal materials and finished herbal products is facing many difficulties. The proportion of drug samples that do not meet standards has remained constant between 2010 and 2011. The majority of violations relate to traditional medicines. Sale of prescription drugs without prescriptions remains widespread (40 percent) . Pervasive advertisements and direct marketing of dietary supplements misleads consumers who do not realise that these products are drugs.

The Joint Annual Health Review (JAHR) 2011 recommended improving the rational use of antibiotics, but implementation remains very limited, with almost no action taken. Antibiotic use remains widespread (50 percent of prescriptions for outpatients, rising to 60 percent in district hospitals). A high proportion of patients are given injectable antibiotics or more than one type of antibiotic during inpatient care, while there is inadequate implementation of antibiotic sensitivity testing, leading to the situation of extremely high antibiotic resistance.

Measures aimed at strengthening state control over investments in medical equipment proposed in the JAHR 2010 and 2011 reports have not been implemented for the most part. These measures include: assessment of the current inventory and needs for medical equipment in health facilities at all levels; review and update of the essential medical equipment lists for medical facilities; and the development of a database of medical equipment at all levels. Management of prices of medical equipment has been neglected and there are no concrete regulations. No action has been taken towards implementing a health technology assessment. The capacity of the network for calibration and verification of medical equipment remains limited. Currently there are only 3 Centers for Standardization and Quality Control of laboratory tests in operation, and there is a lack of funds for their operation. Managerial staff in charge of medical equipment have received little attention and there is no code as yet for medical equipment management occupations in the government pay scales.

2.1.5 GOVERNANCE AND LEADERSHIP

OBJECTIVE

Governance and leadership must ensure that all the necessary policy and strategic frameworks that are in place, and whether they are combined with monitoring of effectiveness, development of linkages, legal documents, and address any concerns about design of the system and accountability.

CURRENT GOVERNANCE AND LEADERSHIP SITUATION

ACHIEVEMENTS

Vietnam has made rapid progress in strengthening the leadership and governance component of the health system. Recent achievements include: Improved quality of strategies, policies, and master plans; Strengthened capacity for health system management and planning; Creation and implementation of

professional regulations and standards; Strengthened inspections, verification, supervision; Expanded participation of stakeholders in the process of making policy, developing and implementing health plans; Promoting appropriate social mobilization; and Implementing policies to ensure that prices of education and medical services are appropriately linked with policies to support the poor and other beneficiaries.

The Government and MOH have issued policy documents to orient the development and governance of the health sector (master plans, strategies, etc.). The Strategy for the protection, care and promotion of the people's health for the period 2011–2020 with a vision to 2030 has been completed and submitted to the Prime Minister for approval. The MOH is developing a master plan for development of the health system 2011–2020, with a vision to 2030 to be submitted to the Prime Minister at the end of 2012. A new EU-WHO Health Policy Dialogue Programme was initiated in June 2012 with the aim of building Vietnam's capacity to develop, negotiate, implement, monitor and evaluate robust and comprehensive national health policies, strategies and plans, with a view of promoting universal coverage, people-centred care, and health in all policies.

The Department of Planning and Finance of the MOH has taken initial steps to develop tools for assessing provincial health plans on an annual basis in selected provinces. The MOH has organized training courses to improve capacity for management and planning for health sector leaders and managerial staff at the MOH and in some provinces (including a flagship course, hospital management course, and provincial and district health sector planning courses).

The MOH has issued national guidelines for diagnosis and treatment of several diseases including: hypertension (8/2010), dengue fever (2/2011), radiation illness (9/2011), diabetes Type 2 (9/2011), hand, foot and mouth disease (7/2011 and 3/2012), Neisseria meningitis (3/2012), lead poisoning (5/2012), foot and hand swelling syndrome with elevated liver enzymes in Quang Ngai (5/2012 and 7/2012), 34 technical guidelines for examination and treatment in the field of dermatology and leprosy (6/2012) and technical guidelines for artificial insemination and in vitro fertilization (7/2012). National standards for reproductive health centres have been drafted. In relation to food hygiene and safety since 2009, 44 national technical standards on food products have been issued.

Government Decree No. 86/2011/ND-CP regulates details of selected articles in the Law on Inspections. Government Decree No. 07/2012/ND-CP dated 09/02/2012 stipulates which agencies are assigned to implement specialized professional inspection functions and the activities they are to perform. Accordingly, the MOH has a specialized health sector inspectorate for almost all relevant areas: population, pharmaceuticals, food hygiene and safety, preventive medicine, examination and treatment and environmental hygiene. There are numerous new regulations on penalties for administrative violations in various health sector fields including health insurance (Decree No. 92/2011/ND-CP), examination and treatment (Decree No. 96/2011/ND-CP), drugs, cosmetics and medical equipment (Decree No. 93/2011/ND-CP), and preventive medicine, environmental health and HIV/AIDS control (Decree No. 69/2011/ND-CP). A decree on administrative violations in population has been drafted and is awaiting approval by the Government. In 2012, the MOH also revised the inspection procedures for pharmaceuticals (Decision No. 2188/2012/QD-BYT).

In the process of developing legal documents in the health sector, numerous workshop discussions with experts, intersectoral workshops, and opinion pollings of stakeholders were undertaken. According to regulations and procedures of the Law on Promulgation of Legal Documents, a drafting committee and editorial team with representatives from stakeholder groups drafted the documents which were then posted to the MOH webpage to get feedback from as wide an audience as possible over a 2 month period. Conferences and workshops were organized to get feedback directly from experts, written

comments were requested, and all comments were considered with adjustments or non-adjustments being explained. The MOH has coordinated with related agencies to develop a guiding circular for the implementation of Government Decree No. 69/2008/ND-CP dated 30 May 2008 on the policy of encouraging social mobilization in the areas of education, training, medicine, culture, sports and environment.

The issuing of a maximum health service price schedule on the basis of determining the actual costs of providing these services indicates the efforts towards implementing the policy of transforming government set user fees towards service prices that reflect production costs. At the same time, there has been further strengthening of subsidies to the poor through the health care fund for the poor, which can pay the co-payments and high costs of treating severe illnesses that exceeds health insurance coverage limits.

DIFFICULTIES AND CHALLENGES

The leadership and governance building block of the health system is currently dealing with the following challenges: helping government authorities include health indicators in performance assessments, continuing to improve the quality and feasibility of health strategies, management of service delivery quality, improving involvement and monitoring of private sector, and improving linkages to promote continuity of care.

Health indicators and health care activity indicators are not yet considered important indicators to assess performance of the Party and authorities at all levels. As a result, awareness of the role and responsibility for the protection, care, and promotion of the people's health, population and family planning, of the Party and authorities, the Fatherland Front and social and community organizations and the people remains limited.

Quality of some policy and strategy documents remains limited, lacks internal consistency or is not appropriate with the reality. New laws only implemented for a couple of years are already in need of revisions (Health Insurance Law). One of the reasons affecting the quality of policy and strategy a document is the weakness of the health management information system (discussed in more detail under Health management information system).

Management and planning capacity remains limited, especially the analysis of information and assessment of performance, although the new EU-WHO dialogue should help overcome these limitations. Standard treatment guidelines and standard clinical procedures are still limited to a short list of conditions. Health service quality management, especially in the private health sector is facing many shortcomings, with negative effects on patient safety. There are not yet any regulations allowing professional associations to participate in standardization of health care quality.

There are many problems with social mobilization that have not yet been fully considered, including many negative phenomena at hospitals related to implementation of social mobilization. The development of private hospitals has not yet been fully considered in the master plan for the hospital network. Private medical facilities do not yet participate adequately in the referral system, primary health care and preventive medicine activities of the health system. Intersect oral cooperation in developing policies has not yet been effective, with participation often only superficial and procedural.

The organization and manpower of the specialized health inspectorate is still inadequate to meet requirements. Inspection activities face many difficulties because there are too few human resources, each province having only a few inspectors, and the district level having no inspection functions. In the process of inspecting, there is a lack of standards and criteria based on evidence that truly reflects quality, effectiveness of health services. At the same time, because there is no supervisory system aimed

at prevention and support, inspections remain largely an ex-post activity once errors have already been made.

There is not yet a systematic continuity of care between different levels of curative care facilities. There are no incentives to integrate and link prevention, treatment and rehabilitation.

2.1.6 HEALTH SERVICE DELIVERY

OBJECTIVE

Health Service Delivery includes curative health services, rehabilitation, preventive care and health promotion. Health service delivery needs to meet the objectives of universal health care, access (in terms of both geographical and financial aspects), quality of health services and efficiency.

CURRENT SERVICE DELIVERY SITUATION: PREVENTIVE CARE AND PRIMARY HEALTH CARE

ACHIEVEMENTS

Regarding the objective of strengthening and consolidating the grassroots health system, preventive medicine network and implement national health target programs Vietnam's achievements are: a majority of commune health centers meet national benchmarks (80 percent), expanded services offered by commune health centers, reductions in transmission of communicable diseases, and improved sanitation.

Preventive medicine, with a network from the central to the grassroots level encompasses control of infectious disease, food hygiene and safety, prevention of accidents and injuries and control of non-communicable diseases, HIV/AIDS and national health target programs. The preventive medicine system has operated effectively over many years. The grassroots healthcare network continues to receive investments and renovations. The proportion of communes meeting national benchmarks is 80 percent overall, and 78.8 percent of commune health stations provide medical examination and treatment for insured patients. The MOH has reviewed implementation of national commune health benchmarks for the period 2001–2010, and at the same time issued a new set of national commune health standards for the period 2011–2020.

Primary health care is gradually being reformed. Medical services offered at the commune level have been expanded, including pilot implementation of chronic disease management including asthma, hypertension, diabetes, and mental illness. Offering additional services at the commune level has reduced crowding in hospitals. The MOH is also developing a proposal for a family medicine model of care, which it hopes will improve the quality of medical care at the primary level and reduce overcrowding at higher levels of care.

The incidence of some communicable diseases has shown a decline over several years (share of communicable diseases in overall morbidity has declined from 22.9 percent in 2009 to 19.8 percent in 2010).The health sector has directed localities to control dangerous epidemics and has controlled outbreaks that occurred during the year including the hand, foot and mouth disease, meningoencephalitis due to Neisseria meningitis, dengue fever, and influenza A (H5N1).

Environmental health activities have been strengthened, 100 percent of provinces monitor quality of water; 84 percent of commune health stations have clean water supply and sanitary toilets, 55 percent of households in rural areas have a sanitary toilet. According to administrative reports, 34 out of 34 hospitals at the central level and 57 out of 63 provincial health bureaus have given adequate attention to

medical waste disposal. The Health Environment Management Agency is drafting a communication plan and a rural sanitation project for the National Health Target Program for Clean water and Sanitation in rural areas for the period 2012–2015. The Agency is also completing the draft circular guiding supervision of family latrines.

Regarding the objective of improving food quality and ensuring food safety and hygiene Vietnam has successfully achieved the following: creation of a National Strategy for Food Safety, a communication campaign on food safety, and a decline in food poisoning nationally.

In 2012, 16 legal documents in the area of food safety and hygiene were promulgated, including detailed regulations of articles of the Law on Food Safety and Hygiene and many circulars issuing technical standards for food safety and hygiene. The National Strategy for food safety was promulgated (Decision No. 20/2012/QD-TTg) and the master plan for food safety from production through consumption has been initiated on the basis of good practice systems. The entire chain of food supply is being controlled for safety, meeting requirements for development and international economic integration.

Activities to prevent poisoning, supervise risk of food contamination, and supervise food poisoning cases has been implemented nationwide. Information and communication campaigns on food safety and hygiene have been given attention and implemented through many diverse forms and information channels. Food poisoning nationally has seen clear declines compared to 2010 both in terms of incidents, cases, hospital admissions and deaths.

Health information, education and communication to raise awareness is increasingly focused on. This is one of the priority orientations of the health sector over the next 5 years. Messages and forms of communication are diverse so target audiences can more easily access the knowledge and change behaviors.

DIFFICULTIES AND CONSTRAINTS

The organization of administration of preventive medicine units remains fragmented and ineffective because of the lack of unified solutions and comprehensive, intersectoral approach in some areas including: rural water and sanitation, primary health care, preventive medicine/public health, health information, education, communication, food safety and hygiene, and HIV/AIDS control. This lack of coordination has created difficulties in ensuring consistency of policies and effective allocation of human and financial resources.

Monitoring and surveillance data are insufficient and rarely verified. Performance reports are prepared by program implementers without objective, independent verification. Supportive supervision at the commune level is limited in many localities. Coordination and information sharing between preventive medicine and medical examination and treatment fields, between the health and other sectors and between the Government, society and international partners remains inadequate.

For some intersectoral issues, the role of the health sector is constrained, only focused on providing evidence of harm to health, and advocating that other sectors implement interventions. The 2011 burden of disease study indicated the current disease burden and risk factors. However, there is a need for more complete evidence to prove clearly the consequences on health of issues such as environmental pollution, domestic violence, working conditions, diet, exposure to pesticides, etc., and use of that evidence to implement effective interventions in order to reduce risks, prevent disease, accidents and injuries.

People's knowledge of risk factors related to health is very limited. A “socio- economic determinants of health” approach is being applied globally, but awareness of this approach in Vietnam remains weak. According to this approach, not only is it the individual’s responsibility to change risk behavior (such as smoking, alcohol abuse), but there is also a need for interventions on related socio-

economic factors such as income, polluted living conditions, dangerous working conditions, education level and low access to information, difficulties in accessing safe food and lack of appropriate space for physical exercise.

CURRENT SERVICE DELIVERY SITUATION: CURATIVE CARE

ACHIEVEMENTS

Regarding the problem of overcrowding hospitals, currently the MOH is developing a Project proposal for reducing hospital overcrowding for the period 2011¬–2020, and anticipates submitting it to the Prime Minister in the 3rd quarter of 2012. Solutions being applied to reducing hospital overcrowding range from strengthening and consolidating investments, to improving quality of medical care at the grassroots level, to adjustments in the price schedule for medical examination and treatment services in state health facilities (Circular No. 04/2012/TTLT-BYT-BTC).The health sector continues to maintain the secondment of qualified medical staff to provide technical assistance at lower level health facilities.

In order to implement the goal of standardizing medical service and hospital quality, gradually reaching regional and international standards, the MOH is drafting a Circular to guide implementation of hospital quality management. In reality, several hospitals have applied various models and standards of medical service quality management including international standards (ISO) and Joint Commission International (JCI) standards or Total Quality Management (TQM) methods and have attained promising results towards improving hospital service quality.

A large majority of district hospitals (91.3 percent) have been allocated investment capital from government bonds according to Decision No. 47/2008/QD-TTg in order to build infrastructure, including 147 district hospitals and 46 regional polyclinics that have since completed construction and put facilities into operation by December 2011. if supplied with adequate investment funds, 275 hospitals and 60 regional polyclinics anticipate completing construction in 2012. In addition, 51 provincial general hospitals, 48 specialized tuberculosis hospitals, 35 mental health hospitals, 23 pediatrics/obstetrics-pediatrics hospitals, 5 oncology hospitals/centres and 6 general hospitals have received investment funds according to Decision 930/2009/QD-TTg.

The network of private hospitals continues to expand. In 2011, an additional 31 private hospitals were issued operating licenses, raising the total to 133 private hospitals and the total number of private beds to over 6000 beds.

Regulations guiding registration and licensing of medical facilities and issuing of practice licenses to medical practitioners are gradually being completed (Decree No. 87/2011/ND-CP and Circular No. 41/2011/TT-BYT). The Medical Services Administration has developed a system for managing registration of medical practice licenses. The trial version has received contributions from the Office of medical practice in the Medical Services Administration, the Hanoi, Ho Chi Minh City, Ha Giang, An Giang provincial bureaus and international experts from ADB, Path International, and others. The system is in the process of being developed, with the hopes that relevant stakeholders will contribute feedback to continuously improve the system.

In 2011, the MOH issued several legal documents guiding implementation of articles in the Law on Examination and Treatment. A series of diagnosis and treatment and care guidelines were issued. Strategies in some areas such as HIV/AIDS, food safety and hygiene, population and reproductive health were approved in 2011–2012.

DIFFICULTIES AND CHALLENGES

Despite rapid and continuing progress improving curative care, Vietnam still faces many challenges. These challenges include: hospital overcrowding, the need for hospital standards to be applied nationally, and a standard of quality assessment criteria which need to be identified and applied.

Overcrowding of hospitals is relatively serious in all levels of hospitals. Nationally, although overall bed occupancy rates have seen slight reductions (from 122 percent to 118 percent in 2008 and 111 percent in 2010), yet bed occupancy rates at the central hospitals has seen an increase from 116 percent in 2009 to 120 percent in 2010 and 118 percent in 2011. The high occupancy rate is especially severe in the Vietnam National Cancer Hospital (172 percent), Bach Mai hospital (168 percent), Cho Ray hospital (139 percent), National Hospital of Pediatrics (119 percent), and the National Institute of Infectious and Tropical Diseases (124 percent).

A set of hospital quality assessment criteria has not yet been developed. Development and updating of treatment guidelines, technical procedure guidelines and the list of services that should technically be available at different levels of the system has been slow. The hospital standards assessment has not yet been implemented uniformly throughout the system.

-The new organizational model for district health care system has not yet been evaluated to see whether it is necessary and feasible to uniformly structure district health services. (Nationally there are 697 districts, of which 233 have a district health centre that combines examination and treatment with prevention and more than 460 districts have a district health centre that implements preventive medicine functions and a general hospital that operates independently).

CURRENT SERVICE DELIVERY SITUATION: POPULATION - FAMILY PLANNING AND REPRODUCTIVE HEALTH

ACHIEVEMENTS

Population and family planning work has brought many remarkable achievements, meeting the goals for families to limit themselves to only one or two children ; maintain the trends to sustainably reduce fertility and year after year to maintain replacement fertility since 2005 (total fertility rate in 2009 was 2.07 children per woman compared to 2.72 children per woman in 1999). Although occasionally fertility fluctuates up and down, in general the trend towards reduced fertility has been maintained. In addition, the network of reproductive health care providers is increasingly being consolidated. Safe motherhood services are provided widely.

The General Office for Population, Family planning is currently developing a project proposal for control of the imbalance in sex ratio at birth for the period 2012–2020 to submit to the Prime Minister for approval. (Submission document No. 18/TT-BYT dated 9 January 2012). The Office continues to implement the project for control of sex imbalance at birth for 2012 in 5685 communes of 43 provinces (maintaining 3463 communes and expanding 2222 communes in the project); The Office has also implemented and expanded a project providing advice and care for elderly people in the community in 160 communes in 23 provinces with a high share of elderly people in the population (expanding to add 118 new communes and 16 new provinces during 2012).

The National Strategy on Nutrition for the period 2011–2020 and the vision to 2030 was approved by the Prime Minister (Decision No. 226/QD-TTg dated 22 February 2012). Child malnutrition control activities continued to be implemented uniformly and comprehensively. In 2010, the underweight rate of children under age 6 fell to 18.0 percent, a decline of 0.9 percent compared to 2009, with reductions in all 6 regions. In 2010, stunting rate for children under age 5 was 31.0 percent, reflecting a decline of 0.9 percent compared to 2009, although this rate remains high.

Reproductive health for women has seen some positive developments. The proportion of pregnant women whose pregnancy is managed nationally reached 95 percent (2010) an increase of 0.4 percent compared to 2009. In 2010, the proportion of women who delivered with assistance from a trained health worker reached 95.7 percent nationally, an increase compared to 2009.

DIFFICULTIES AND CHALLENGES

The Vietnamese population is facing many challenges, especially the imbalance in sex at birth, with rapid rises in the number of boys born for every 100 girls, with potential hazards for welfare 10 to 20 years from now (111.2 boys for every 100 girls in 2010). The risk of population increase remains high. Unsafe abortions remain common, especially among adolescents. The quality of Vietnam's population remains low (The Human Development Index placed Vietnam 113th out of 169 countries in 2010).

There are broad regional disparities in maternal and child health. Child stunting remains high (31.0 percent in 2010). The incidence of obstetric complications in 2010 was 2.8 percent, higher by 0.06 percentage points compared to 2009, with increasing trends in infection and eclampsia. This indicates that the quality of pregnancy care remains limited.

2.2 KEY TASKS OF THE HEALTH STRATEGY IN VIETNAM FOR THE PERIOD 2012-2016

To tackle difficulties and challenges as mentioned above, health sector shall focus on addressing the following top health priorities:

1. To improve service quality and gradually reduce overcrowding in hospitals: it is necessary to have a system of consistent solutions backed with appropriate roadmaps.
2. To ameliorate public health financing mechanisms, increase public spending for health, renovate state budget allocation for health facilities towards performance and output based approach; it is necessary to renovate payment methods for health services, expand financial support for the poor and other disadvantaged groups
3. To focus on rapid development of health insurance towards universal coverage; it is necessary to expand coverage of health insurance horizontally, expand benefits packages and financial protection for insured.
4. To strengthen and develop the grass root health care network, considering it as the foundation of Vietnam's health system; It is necessary to improve PHC quality, ensuring that all citizens can access to quality essential services, making contributions to reducing overcrowding in hospitals and health equity objectives.
5. To continue HRH development with a balance of quantity and quality; it is necessary to carry out human resource development solutions for mountainous, remote, and rural and disadvantages areas.
6. To diversify health care examination and treatment services, paying attention to high quality medical areas and key sectors suitable with conditions and capacities of Vietnam; it is necessary to pilot on-demand health examination and treatment services to respond to increasing health care needs of the Vietnamese population.
7. To improve the effectiveness of health communication, and education activities aiming at behavioral changes in health care and protection for the people, families and communities with the notion of "All for health"; It is necessary to strengthen multi-sectorial coordination in health care.

3. MONITORING HEALTH SYSTEM PERFORMANCE AT THE PROVINCIAL LEVEL

In 2009-2010, Vietnam HSPI conducted 8 provincial Health System Assessments based on the principles described in the *Health System Assessment Approach: A How-To Manual*[4]. The data from these complete and detailed assessments of approximated 150 health system indicators in each province serves as a baseline for monitoring and evaluating a smaller set of key HSS indicators at the provincial level. These key indicators were chosen based on the following criteria: available from routine reporting system; measurable/quantitative; simple for provinces to analyze; and based on HSA, WHO, and MOH indicator lists. The key indicators selected were vetted with provincial health authorities from 2 provinces and then pilot tested in Quang Ninh province.

Chapter 3 presents the key HSS indicators by health system function/building block. Each indicator table includes a definition, suggestions for interpretation and evaluation, sources for the information, and methods for calculation. The evaluation component of each table is not meant to represent an evaluation against any international standards, but rather Vietnamese provinces progress relative to national goals and other provinces.

3.1 GOVERNANCE

In the past, during the country's centrally planned model, local health sectors implemented a health plan that was provided by the central Government, and local government was not involved in the health planning process. Today, planning and implementing plans is one of core governance tasks of provincial health care authorities.

A good health plan should address and meet priorities in health care of people, identify the most effective interventions to achieve the plan's objective, assign implementation responsibilities and should be accompanied with a comprehensive evaluation plan. The following four basic indicators are used to assess important stages in the cycle of policy and health planning in Vietnam. These indicators will help provincial health policy-making agencies assess plans and identify weaknesses of their planning process for improvement. The four selected indicators are qualitative; therefore, their assessment is based on qualitative methods, including in-depth interviews and group discussions with key staff involved in planning process. In addition, review of documents related to planning, preliminary review and final plan implementation reports are necessary for assessment of these indicators. Information sources and assessing methods are detailed for each indicator in the next section.

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4 The Health System Assessment Approach: A How-To Manual is available at: www.healthsystemsassesment.org

TABLE 3.1: GOVERNANCE INDICATOR LIST

	List of Indicators
1	Situation Analysis
2	Priority Setting and Selection of Interventions
3	Assignment of Responsibilities
4	Plan of Monitoring and Evaluation

Indicator 1: Situational Analysis

The first step of the planning process is to conduct a situation analysis, with a sound analysis design. The scope of the analysis must be comprehensive, using all available information and statistical data. Research is able to identify health issues in provinces; results of situation analysis should be discussed extensively within and outside the health sector. Analysis should cover 4 major tasks:

- Review previous 5 year health plan and implementation results;
- Review of national strategic plans and national health objectives
- Assessment of existing available resources (human, financial, infrastructure, equipment)
- Finding health care issues in provinces, based on analysis of information/indicators of 6 building blocks, health care status, health care needs of populations, implementation of national target health programs

Sources

Interview the official responsible for the Department of Health's draft plan
Refer to their research outline and situation analysis, drafts of 5-year plan
Refer to reports of workshops and conferences related to situation analysis
Refer to reports of workshops and conferences related to 5-year plan

Evaluation	Good	Average	Weak
Design of analysis study A working group has to be established to design the analysis study. The study design has to be approved by a science committee.	Design approved by scientific council, or by DoH leadership as "Good"	Design of study prepared in a very simple format, approved by the DoH leadership	Design of study prepared, but there was no committee/council to approve the design
Scope of analysis Scope of analysis is comprehensive, included all components of local health system: preventive care, clinical care, primary care and national health target program, included situation analysis for 6 WHO health system building blocks (a) service delivery) health workforce, c) health information system, d) medicines – vaccines and technologies, e) health financing, f) leadership and governance)	Scope of analysis covered all 4 major tasks but did not necessarily cover all 6 health system building blocks	Scope covered only first 3 major tasks, did not cover all 6 health system building blocks	Scope was narrow, sketchy
Situation analysis was carried out by a competent team	Carried out by experienced, capable, and	Analysis was carried out by one senior officer of	Analysis was carried out by one senior

Situation analysis was carried out by a competent team (consisting of trained and experienced in situation analysis), preferably an independent team	preferably independent team	DoH, in a traditional way, i.e. in a review health report, with focus on disadvantages, advantages, results of health plan implementation	officer of DoH, in a format of a review health report, with a very limited scope of analysis
Use health data and information in analysis Use health data and information in analysis Situation analysis used data from many sources, such as: Health Statistics Yearbook, Census, Survey of households living standards, Statistical data of local health system, Other studies done in locality and other reports	Data analysis used basic statistical data from several sources, but may lack data from some sources	Data analysis used ONLY internal statistical data of local health system	Data analysis was sketchy or non-existent
Consultation on situation analysis report Situation analysis report was consulted with representatives of different health and non-health organizations as well as professionals/scientists	A number of workshops were organized to discuss the report to gather inputs/comments of representatives of health organizations as well as professionals/scientists	No workshop was organized; analysis report was discussed only at the general review health meeting/conference	NO consultation of situation analysis's result has been conducted

Indicator 2: Priority setting and selection of interventions			
Health issues that were identified by the situation analysis study have to be taken into consideration and priority setting. The most appropriate interventions for addressing issues have to be selected. Wide representation has to participate in both process of priority setting and selection of intervention. Planning, setting priorities, selecting interventions with involvement and consultation of all stake holders will ensure that resources are effectively used for health care priority issues.			
Sources Interview the officials responsible for Department of Health's draft plan Refer to records of health plan (during last 5 years, or refer to annual records) Find reports of workshops, conferences, and comments from relevant organizations Find documents related to listening or not listening comments from relevant organizations			
Evaluation	Good	Average	Weak
Consultation for priority setting Consultation for priority setting: All issues of health care in province were reviewed. Methodology of priority setting was applied to set priority issues. Issue priority setting proposal was consulted with representatives of health and non-health organizations, as well as individuals/professionals/scientist.	A number of workshops/meetings were organized to consult with representatives of health organizations, as well as individuals/professionals/scientists on issue priority setting. Workshop material was sent to participants in advance	No workshop for issue priority setting was organized, but there was discussion on issue priority setting at the health review conference. Proposal on priority setting was NOT sent to participants in advance	Priority setting of issues were decided without any consultation
Consultation for interventions Interventions to address selected priority issues were suggested and provided to representatives of health and non-health organizations, individuals/professionals for consultations.	A number of workshops/meetings were organized to consult with representatives of health organizations, as well as individuals/professionals/scientist on issue priority setting. Workshop material was sent to participants in advance	No workshop discussing interventions was organized, but there was discussion on selection of appropriate intervention at the health review conference. Proposal on interventions was NOT sent to participants in advance	Intervention plan was decided without any consultation

Indicator 3: Assignment of responsibilities

Responsibility for each activity in plans has to be clearly assigned to concrete agency or organization, with timing and output, without any overlapping.

Sources

Refer to health plans during last 5 years
Refer to guide of implementing plan related to assignment of responsibilities
Interview the official responsible for Department of Health's draft plan

Evaluation	Good	Average	Weak
Assignment of responsibility for organization, individual Plan clearly assigns power, responsibility of each agency, organization for each activities, timing and output to be achieved.	There is a description of activity, responsibility, timing and output for each agency/organization in leadership/governance and implementation of the plan	There is assignment of activities, responsibility for each organization, but with some overlapping and no provision of timing and outputs	Assignment of activities and responsibility was not clear enough, no timing, no output

Indicator 4: Plan of monitoring assessment

A health plan should include a plan of monitoring and evaluation (M&E), with set of evaluation indicators for each plan target, guidelines for data collection and data sources. timing of periodic, midterm and final evaluations;
A plan with good M&E will provide necessary information for managers to adjust mid-term plan, or to build new plan for next period.

Sources

Refer to health plans during last 5 years.
Interview the official responsible for the Department of Health's draft plan, discuss with officials responsible for Department of Health's draft plan

Evaluation	Good	Average	Weak
Plan of monitoring and evaluation with set of indicators Plan of monitoring and evaluation included input, process, output assessment indicators for every targets of health plan. Indicators are measurable.	M&E Plan included detailed input, process, output indicators, but some indicators are may not be easy to measure	Some indicators are not measurable; some targets lack indicators	Most targets lack assessment indicators; many indicators are not measurable
Provision of guideline for data collection procedures and data sources for M&E M&E Plan included guideline for data collection procedures and data sources	M&E Plan included and data sources, but lacks detailed guideline for data collection	Some indicators are provided data sources, and guideline for data collection	Very little indicators are provided data sources, and guideline for data collection
Evaluation plan There was internal and independent M&E Plan that included periodic (annual), midterm and final assessment.	There was internal M&E Plan that included periodic (annual), midterm and final assessment, but may not have been independent assessment	There was internal M&E plan with details for final assessment, without midterm assessment, without independent assessment	There was M&E Plan for final assessment, without details)

3.2 HEALTH FINANCING

Health financing is one of six functions of health system and it has an impact on most of the objectives of the health system, such as: coverage, quality of service, financial risk protection and cost control.
Health financing aims to mobilize sufficient financial resources; manage and allocate resources with high efficiency and fairness; encourage quality and efficiency in health service delivery and protect people from the financial risks caused by health care costs.
Health financing consists of three functions: revenue collection, pooling and allocation of financial resources, and purchasing and provider payment. A good health financing system should ensure sufficient financial resources for health care such that people can access health care when needed and be protected from financial disaster or poverty due to paying for health care services.
There are many indicators to assess the health financing system, however, only the following 5 basic indicators are necessary for local health officials in planning and resources allocation.

TABLE 3.2: HEALTH FINANCING INDICATOR LIST

	List of Indicators
1	The proportion of recurrent health expenditure from government budget as percent of total recurrent spending from government budget of province (*)
2	Per capital of public health expenditure
3	The proportion of recurrent health expenditure on preventive care from government budget as percent of total government recurrent expenditure on health of province
4	The average recurrent expenditure from state budget for commune health station in a year
5	The coverage of health insurance
5.1	The coverage of health Insurance of province
5.2	The coverage of health Insurance for the poor
5.3	The coverage of health Insurance for the near poor
5.4	The coverage of health Insurance for children under 6 year olds

Note: (*) The government budget here merely government budget is allocated to local according to Decision No. 59/2010/QD-TTg of the Prime Minister, dated 30/9/2010, issued on the allocated norm of recurrent budget estimated for year 2011 does not include fees and other sources.

Indicator 1: The proportion of recurrent health expenditure from government budget as percent of total recurrent spending from government budget of province

This indicator reflects the status of provincial government budget spent on regular activities of the health sector often is how many percent of total recurrent expenditure from the state budget of the province. This indicator reflects the commitment of the local government and the level of priority the health care sector receives compared to other sectors.

The proportion of recurrent health expenditure from government budget as percent of total recurrent spending from government budget of province = Total recurrent health expenditure from government budget of province * 100/Total recurrent spending from government budget of province

1. Total recurrent health expenditure from state budget of the province (excluding fees and other sources), includes:
   - Personal expenses (item from 600-6400)
   - Administrative expenses (item from 6500-6900)

- Professional expenses (item 7000)
- Procurement and repair of the property (item from 9000-9050)
- Other expenses (item 7750)

Sources

Financial officers of Provincial Health Bureau synthesis data from the General report on budget and settlement budget (Form B-02H of the MOF) and collect data from Provincial Department of Finance on the total recurrent expenditure from the state budget of the province.

Evaluation	Good	Average	Weak
	Percentage allocation of the high level: > 20 percent and the rate of next year must be higher than the previous year	Percentage allocation of the average level: 10-20 percent	Percentage allocation of low level: <10 percent

Indicator 2: Public Health Expenditure per capita

This indicator reflects the public health expenditure per capita/year of the province. Based on this indicator, local health managers can recommend solutions to enhance the state budget for health to ensure social security and expand health insurance coverage in order to increase health insurance revenue.

The public expenditure per capita = (Total Central state budget on health + Total local state budget on health + Total health insurance expenditure of province + Total expenditure from the aid, foreign loans on health for provincial)/ Total population of province in a year

1. Total Central state budget on health: This is an expenditure for National Target program on Health (List of The National Target Programs were referred in Decision 2496/QDD-TTg, period 2012-2015, dated 17/12/2011) from central state budget granted directly to province, and includes:
   - Total expenditure for National Target Programs on health
   - Total expenditure for National Target Programs on Population and Family Planning
   - Total expenditure for National Target Programs on Food Hygiene and Safety
   - Total expenditure for National Target Programmer on prevention HIV/AIDS
2. Total local government budget spending on health care, includes: Total recurrent health expenditure from state budget + Total state budget spending for health investment development of province. Of which: Total recurrent health expenditure from state budget of province is calculated similarly to items (1) of indicator No. 1.
3. Total health insurance expenditure of province
4. Total expenditure from the aid, foreign loans on health for provincial
5. Total population of province

Sources

Financial officers of Provincial Health Bureau synthesis data from the General report on budget and settlement budget (Form B-02H of the MOF). In addition, data can collect from statement of National Health Target Program; spending on health investment development and report on health insurance expenditure of Provincial Social Security (PSS) and National Health Account of MOH (1998-2010)

Evaluation	Good	Average	Weak
In the world, the ideal in terms of the proportion of public expenditure on	The proportion of public health	The proportion of public health	The proportion of public health

health is to achieve over 80 percent of total expenditure on health (including public and private spending). In Vietnam, according to the National Health Accounts 2010 of MOH, public expenditure on health is nearly 50 percent. However, for the provinces, we cannot calculate "health expenditure" of the province due to not being able to calculate "private health expenditure" (including out-of-pocket and other private expenses) of the province. Therefore, to evaluate this indicator, we have taken the relative index to compare - the proportion of public expenditure on health per capita of province = The heath expenditure per capita of province * 100 / The health expenditure per capita of the country's population, refer to the NHA 2010 of the MOH in 1998-2010 (Expenditure on health per capita is 85 USD) (This indicator can change from year to year).	expenditure of the high level: > 80percent the rate of next year must be higher than the previous year.	expenditure of the average level: 50 - 80percent	expenditure of the low level: < 50percent

Indicator 3: The proportion of recurrent health expenditure on preventive care from government budget as percent of total government recurrent expenditure on health of province

This indicator reflects the priority level of spending on preventive care in the province. According to the Resolution the National Assembly No 18/NQ-QH12, dated 3/6/2008 the government budget must be spent at least 30 percent for preventive care.

This indicator will be measured equal to total recurrent expenditure for preventive care from the state budget * 100/Total recurrent health expenditure from the state budget of the province

1. Total recurrent expenditure for preventive care from the state budget of the province, includes:
    - Recurrent expenses for preventive care (Including recurrent health expenditure for the commune health stations)
    - Expenses for preventive professional;
    - Expenses for National Health Target Programs from state budget of the province
2. Total recurrent health expenditure from state budget of province is calculated similarly to items (1) of indicator No. 1.

Sources

Collect data from health financing report of Provincial Health Bureau or report on health allocation of Department of Finance in order get the data on preventive expenses of the province.

Evaluation	Good	Average	Weak
	The proportion of recurrent health expenditure for preventive care of the high level: > 30 percent and the rate of	The proportion recurrent health expenditure for preventive care of the average level: 20-30 percent	The proportion spending for preventive care of the low level: < 20 percent

	next year must be higher than the previous year.		

Indicator 4: The average recurrent expenditure from state budget for commune health station (CHS) in a year (not including salaries, allowances and other modes of commune health workers in the payroll and other expenses from health care fund for the poor)

This indicator reflects the level of guaranteed funding for regular operations of CHS in a year. This index also shows the implementation of Circular No. 119/2002/TTLT-BTC-BYT of province. Since then can recommend to Provincial People's Committee/health sector in allocation of recurrent expenditures for the CHSs to contribute good health care tasks for local people.

The expenditures from the state budget for CHS per year = Total expenditures from government budget for all communes of province in a year (not including salaries, allowances and other modes of commune health workers in the payroll and other expenses from health care fund for the poor)/Total CHS of province

Sources

Financial Officer of the Provincial Health Department combines data from expense reports/state budget allocations for health units across the provinces.

Evaluation	Good	Average	Weak
	The level of good allocation: > 120 percent over regulation and the rate of the next year must be higher than the previous year	The level of the average allocation: 100-120 percent over the specified	The level of low allocation: < 100 percent

Indicators on Health Insurance Coverage

Indicator 5.1: The coverage of health insurance of the province

This indicator reflects the status of health insurance participant of people in the provincial and the level of health financing protection of the people when using health care services

The coverage of health insurance of the province = Total people of the province enrolling in health insurance * 100/total population of the province

Sources

Collect data from Provincial Social Security (PSS)

Evaluation	Good	Average	Weak
	The high level of health insurance coverage: 80-100 percent and the rate of next year must be higher than the previous year	The average level of health insurance coverage: 50-79 percent	The low level of health insurance coverage: < 50 percent

Indicators on Health Insurance Coverage
Indicator 5.2: The coverage of health insurance for the poor

This indicator reflects the implementing health insurance policy for the poor of the province as well as the number of the poor people will be protected from financial risk when using health care services
The coverage of health insurance for the poor = Total the poor enrolling in health insurance * 100/ total population of the poor

Sources
Collect data from Provincial Social Security (PSS), Department of Labor Invalids and Social Affairs, Statistics Division / Department of Statistics province.

Evaluation	Good	Average	Weak
	The high level of health insurance coverage: 90-100 percent and the rate of next year must be higher than the previous year	The average level of health insurance coverage: 80-89 percent	The low level of health insurance coverage: < 80 percent

Indicators on Health Insurance Coverage
Indicator 5.3: The coverage of health insurance for the near poor

The indicator assesses the implementation of health insurance for the near poor and provide sinformation to determine the appropriate solution in expansion the coverage of health insurance for the near poor. The index also reflects the level of financial risk protection due to health care cost.
The coverage of health insurance for the near poor = Total the near poor enrolling in health insurance * 100/ total population of the near poor

Sources
Collect data from Provincial Social Security (PSS), Department of Labor Invalids and Social Affairs (DLISA), Statistics Division / Department of Statistics province.

Evaluation	Good	Average	Weak
	The high level of health insurance coverage: 90-100 percent and the rate of next year must be higher than the previous year	The average level of health insurance coverage: 80-89 percent	The low level of health insurance coverage: < 80 percent

Indicators on Health Insurance Coverage
Indicator 5.4: The coverage of health insurance for children < 6 year-old

This indicator evaluates the implementation of health insurance policy for children < 6 years locally and reflects the degree of financial risk protection when using health care services of children < 6 year-old in the province. Through this indicator may help a leader of health insurance agency and other relevant agency have solutions to enhance the effective implementation of health insurance policy for children < 6 year-old.
The coverage of health insurance for the children < 6 year-old = Total the children < 6 year-old enrolling in health insurance * 100/ total population of the children < 6 year-old

Sources
Collect data from Provincial Social Security (PSS), Department of Labor Invalids and Social Affairs (DLISA), Statistics Division / Department of Statistics province

Evaluation	Good	Average	Weak
	The high level of health insurance coverage: 90-	The average level of health insurance	The low level of health insurance

	100 percent and the rate of next year must be higher than the previous year	coverage: 80-89 percent	coverage: < 80 percent

3.3 HUMAN RESOURCES FOR HEALTH (HRH)

HRH is considered the workforce of the national health system. According to the World Health Organization (WHO), the context "human resources for health" encompasses doctors, nurses, orderlies, pharmacists, technicians and professional assistants in both public and private health care sector. Furthermore, the WHO's definition also encompasses those who informally work in health care and health promotion sector. Among components of health system, HRH has always been regarded as a decisive component, for HRH is the operating subject, carrying out all health care activities. Efficiency and quality of health care activities depends largely on HRH's capacity, quality and effective management of HRH.

Evaluation of HRH's management and development includes 5 indicator groups with total of 10 indicators. Accurately supervising, monitoring and evaluating these indicators will help managers, health planners assess the performance of HRH's management and development in local health system, then identify short comings, priority interventions, adjust or plan HRH's management and development's activities, so that's consistent with the overall development of health system. On the other hand, regularly supervising, monitoring and evaluating these indicators will help local health authorities self-assess and timely adjust HRH's management and development's activities, so that suits with other resources and actual needs in each stage.

There are 5 indicator groups with 10 indicators in total, which are used to supervise, evaluate local HRH's management and development's activities (Table 3).

TABLE 3.3: HRH INDICATOR LIST

	List of Indicators
1	The ratio of professionals per 10.000 people
2	The distribution of health care professionals by level of care
3	In-service training and continued training for professional competent according to Circulation 07/2008/TT-BYT
4	Existence of a functioning HR planning system with dedicated budget for HR
5	Available of policy for incentive and training for human resources with good policy implementation

Indicator Group 1: The ratio of professionals per 10.000 people

Measure of HRH coverage. This indicators show the responsiveness in numbers of health care professionals for community's need. If these indicators are too low, it means the deficiency of HRH for health services delivery.

Indicators

- The ratio of health professionals per 10.000 people
- The ratio of doctors per 10.000 people
- The ratio of pharmacists per 10.000 people

Calculating methods

$$\frac{\text{No. of available Dr. /Pharmacist}}{\text{Population}} \times 10{,}000$$

Denominator: the population in year announced by Provincial statistic Agency
Numerator: Total number of health professionals (all professionals under MOH's classification)
Total number of doctors in all specialties who are working in public sector + all private registered doctors who are retired from public and who are only working in private health facilities.
Total number of pharmacists who are working in public sector + all private registered pharmacists who are retired from the public sector and who are only working in private health facilities.

<u>Note:</u> Another way to calculate this indicator is to include the sum total number of doctors or pharmacists in the public health care facilities with the number of doctors or pharmacists working in other sectors (Army, Police, Transportation…) which are located in the same area and also provide services for people in the same region. This calculation may help planning consultancy or DOH leaders to have more relevance information for making decision about human resource management in order to fit with current situation

Sources

Data of health professionals' number is from annual statistical reports based on HRH's statistical sample of Organization and Personnel Department - MOH and statistical report sample of 6 months/12 months according to the Decision No. 3440/QĐ-BYT of MOH. In addition, the number of doctors, pharmacists from other sectors can be included for reference.

Evaluation	Good	Average	Weak
	Indicators are equal or higher in comparison with targeting indicator of national requirements by the year 2015 (41 health staff/10,000, 8 doctors/10,000, and 2 Pharmacists/10,000) + all indicators must be in trend of increasing year by year.	Indicators are from 80percent - < 100 percent of target indicators of national requirements by the year 2015 (41 health staff/10,000, 8 doctors/10,000, and 2 Pharmacists/10,000) + all indicators must be in trend of increasing year by year	Indicators are < 80 percent targeting indicator of national requirements by the year 2015 + all indicators just equal or lower than those in previous year

Indicator Group 2: The distribution of health care professionals by level of care and by type of professionals (Doctors, pharmacists)

Measure the balance of HR related to access to care, equity, efficiency by level and by specialists (as requirement of Circular 08/2007/TTLB-BYT-BNV)

Indicators

- The percentage of available doctors who are working at province, district and commune level per total number of doctors that are needed as requirement in each levels according to Circular 08
- The percentage of available pharmacists (university level) who are working at province, district and commune level per total number of pharmacists that are needed as requirement in each level according to Circular 08

Calculation

$$\frac{\text{No. of available Dr. /Pharmacist in each levels}}{\text{Total number of Drs./ Pharmacists that are needed as requirement in each levels}} \times 100\text{percent}$$

Sources

Data of health professionals' number is from annual statistical reports based on HRH's statistical sample of Organization and Personnel Department - MOH and statistical report sample of 6 months/12 months according to the Decision No. 3440/QĐ-BYT of MOH

Evaluation	Good	Average	Weak
	Indicators at all level are equal to ≥ 100percent in comparison with the higher ceiling target requirements according to Circular No. 08 + all indicators must be in trend of increasing year by year.	Indicators at all levels are equal to 100 percent of lower level target and <100 percent of higher ceiling target requirements according to Circular No. 08 + all indicators must be in trend of increasing year by year.	No indicators at any level have reached lower target levels in comparison with national average requirements (according to Circular No. 08) + all indicators just equal or lower than those in previous year.

Indicator Group 3: In-service and continued training for professional competence according to Circulation 07/2008/TT-BYT

Assessing the professionals' competence to see whether health professionals perform well on their job.

Indicators:

- The ratio of doctors and pharmacists have been trained by in-service training program according to requirement of Circular 07/2008/TT-BYT

The percentage of doctors/pharmacist trained:

$$\frac{\text{No. of Dr., Pharmacists have been trained by in-service training program}}{\text{Total No. of available Dr., Pharmacists}} \times 100\text{ percent}$$

Sources

Data of health professionals' number is from annual statistical reports based on HRH's statistical sample

of Organization and Personnel Department - MOH and statistical report sample of 6 months/12 months according to the Decision No. 3440/QĐ-BYT of MOH.

Evaluation	Good	Average	Weak
	>85-100 percent of units or specialized health professionals are continually trained according to Circular No.07	50 - 85 percent of units or specialized health professionals are continually trained according to Circular No. 07	<50 percent of units or specialized health professionals are continually trained according to Circular No. 07

Indicator Group 4: Existence of a functioning HRH planning system with dedicated budget for HRH

The presence of HRH planning with available budget indicates that staffing is linked to the needs of local health system and HRH activities can be assured by relevant budget

Indicators

- Have detailed plan of HR development with specific budget for each activity
- Have clear plan of supervision and evaluation for each stage

Calculations

Build checklist:

Evaluate master plan of HR development with specific budget for each activity must contain following information:

- Availability of current situation analysis by using relevance data
- Availability of problem identifying and setting priority
- Having specific aims with clear identified target indicators
- All activities must have identified financial resources

Evaluate the plan of supervision and evaluation for each stage must contain following information

- Availability of monitoring or assessment report
- There are analysis and comparison with target indicators or action plan
- Identify the constrain, weakness that needs to be solved
- Propose measures for next steps of implementing the plan

Sources

Data of plan and budget is from Human resources department -Department of the Interior, Department of Finance

Evaluation	Good	Average	Weak
	Plan of HRH development has complete contents and specific budget for each activity + Periodically supervising, evaluating the plan and adjust, supply budget for each activities	Plan of HRH development has complete contents but doesn't have specific budget for each activity + Supervising, evaluating the plan at each stage	Plan of HRH development doesn't have complete content and specific budget for each activity + No supervision and evaluation

Indicator Group 5: Availability of policy for incentive and training for human resources with good policy implementation

To see whether the health workforce can be ensured by relevance policy, particularity for rural retention

Indicators

- Good implementation of government's policy (Decree No. 64 and &2, Decision No. 1544/2007)
- Local government have specific policy to attract and develop HR

Calculation

Build checklist for each policy:

For policies from Central level (Government) need to have following contains:

- Availability of local regulation document to guide of make direction for lower level authorities at the local to implement the policies.
- The local guideline regulation documents have concerned about agenda for policy implementation with clear activities as well as identified financial resources.
- The local guideline regulation documents have concerned about responsibilities of main body organisation and related organisations in policy implementation.
- Concerns about agenda or plan for monitor and evaluation the implementation of the policy.

For local policy need to have following contains:

- Availability of local policies for intensive policy for human resources development
- The local guideline regulation documents have concerned about agenda for policy implementation with clear activities as well as identified financial resources.
- The local guideline regulation documents have concerned about responsibilities of main body organisation and related organisations in policy implementation.
- Concerns about agenda or plan for monitor and evaluation the implementation of the policy.

Sources

Data is from Human resources Department, Planning and Finance department – Department of Health.

Evaluation	Good	Average	Weak
	All government's policies are guided or directed by specific local regulation documents implemented and have stable budget for all activities + availability of local intensive policies and that policies is implemented.	All government's policies are guided or directed by specific local regulation documents implemented and have stable budget for all activities + there is no availability of local intensive policies and that policies is implemented (not all government's policies are guided or directed by specific local regulation documents implemented and have stable budget for all activities but there are availability of local intensive policies and that policies is implemented)	Not all government's policies are guided or directed by specific local regulation documents implemented and have stable budget for all activities + there are no availability of local intensive policies and that policies is implemented.

3.4 HEALTH SERVICE DELIVERY

In any health system, health services delivery is one of the most important component, the final aim is to improve the health status of the people. Health services delivery includes the following basic components: The availability of the service provision, access, coverage, organization, assurance quality of care, health care utilization, the participation of the community and the outcome of health care system. Many countries in the world are usually applied 30-40 indicator to evaluate and monitor the Health services delivery. At provincial level, to monitoring, evaluation and making health plan, we introduce 16 key Indicator and are classified into 3 groups as follows:

- Medical services indicators
- Preventive care and health program indicators
- Health outcome indicators

The monitoring, supervision and evaluation of indicators will help identify strengths and weaknesses in the health services delivery; and help to plan as well as identify priority interventions.

TABLE 3.4: SERVICE DELIVERY INDICATOR LIST

	Indicator group	List of Indicators
1	Medical Services Indicators	Number of hospital beds per 10,000 population
2		Bed occupancy rate
3		Length of stay (in general hospital)
4		Average number of health examination in a year (in public facility)
5		The rate of re-admission in hospital within 1 month (at the public health facilities)
6	Preventive Care and Health Program Indicators	Percentage of births attended to by skilled health personnel per year
7		Percentage of pregnant Women who received 3+ antenatal care visits in 3 duration (percent)
8		Percentage of children underweight malnutrition less than 5 years (weight and high)
9		Percentage of children under 1 year fully vaccine in expanded immunization programs
10		Rate of HIV
11		Rate of new case HIV in a year
12		The rate of HIV-infected people treated with ARV
13		Percentage of communes achieve the National criteria for health at commune level 2011-2020
14	Health Outcome Indicators	Maternal Mortality Rate (MMR)
15		Infant Mortality Rate (IMR)

Indicator 1: Number of hospital beds per 10,000 population			
It is an input indicator, reflects the level of investment for health of State and private sectors Total beds * 10000/Total population			
Sources Province Health Dept. /Medical service division/ Planning division. Collect information about the number of beds in inventory planning and implementation of the hospitals in the province, including the provincial hospitals, district hospitals and non-public Information on population.			
Evaluation	Good	Average	Weak
	Upward trend over the years; Higher than the number of beds in the country; Higher than the number of beds in other provinces in the region;	Tends to increase but equivalent to other provinces in the region	Lower than other provinces in the region; Lower than the national number of hospital beds

Indicator 2: Bed occupancy rate			
It is performance indicators, reflecting the gap between supply and demand in the use of inpatient services by the people. If Bed occupancy rate higher than 100 percent reflects the investment did not meet the needs of people. Conversely, if the Bed occupancy rate low reflects the investment is not effective. Bed occupancy rate = (Total number of inpatient days in that year * 100) / (total number of beds x 365 days)			
Sources Province Health Dept. /Medical service division/ Planning division. Collect information on the total number of beds in inventory planning and implementation; total number of days of inpatient treatment			
Evaluation	Good	Average	Weak
Note: The national rate in 2010 was 116.6	Power from 80-95	95-120 percent; 60-80percent	Over 120 percent or below 60 percent

Indicator 3: Length of stay (in general hospital)			
It is indicator of professional treatment capability. However, this indicator shows substantial limitations in the accurate assessment of professional competence of hospital. Total inpatient days / number of turns of the patients hospitalized in the year by provincial and district level (in general hospital).			
Sources Province Health Dept. /Medical service division/ Planning division. Collect information on the number of patients hospitalized and the number of inpatient days (in general hospital).			
Evaluation	Good	Average	Weak
Assess indicator is good or not good is very difficult if based only on data alone. But for a province in general, the trend is lower than in previous years is			

considered better than the previous year after year. Indicator of the country in 2010: 7.35			

Indicator 4: Average number of health examination in a year (in public facility)

Reflects the level of people's access health care services
Total health examination of all public health facilities / Total population

Sources
Province Health Dept. /Medical service division/ Planning division.
Collect information on total health facilities examination in public health sector by provincial, district and commune level

Evaluation	Good	Average	Weak
The index of the whole country in 2010: 2.36	Upward trend over the years Numbers higher than the national average; Higher than other provinces in the region	Constant trend over the years Equivalent to the national average compared to other provinces	Downward trend over the years Lower than some of the country; Lower than other provinces in the region

Indicator 5: The rate of re-admission in hospital within 1 month (at the public health facilities)

The indicator reflect a part of quality of treatment
Total re-admission / total inpatient treatment in public health facilities

Sources
Province Health Dept. /Medical service division/ Planning division.
Collect information on total inpatient and re-admission in hospital within 1 month of the public health facilities

Evaluation	Good	Average	Weak
	Trends in the year is lower than last year and less than 5percent	No change	Trends in the following year more than last year

Indicator 6: Percentage of births attended to by skilled health personnel per year

Reflect the activities of reproductive health care are done in province and coverage of health programs on reproductive health to the people
Total number of pregnant delivery at health + Total of pregnant delivery at home with health staff attended;) x 100 / total number of live births in year

Sources
Province Health Dept. /Medical service division/ Planning division.
Collect information on the total number of pregnant delivery at health facilities and the total number of pregnant delivery at home with health staff attended;
Collect information on the live births of the province.

Evaluation	Good	Average	Weak
Indicator whole country in 2010: 97.1	Upward trend over the years Numbers higher	Comparable with some of the country;	Downward trend over the years

	than the national average; Higher than other provinces in the region	Comparable with other provinces in the region	Lower than some of the country; Lower than other provinces in the region

Indicator 7: Percentage of pregnant Women who received 3+ antenatal care visits in 3 duration (percent)

Reflects the activities of reproductive health for antenatal care in province
(pregnant women were examined 3 times in 3 periods *100 / pregnant women)

Sources

Province Health Dept. /Medical service division/ Planning division.
Collect information on the total number of pregnant women; number of pregnant women were examined 3 times in 3 periods

Evaluation	Good	Average	Weak
Indicator whole country in 2010: 79.23	Upward trend over the years; Numbers higher than the national average; Higher than other provinces in the region	Comparable with some of the country; Comparable with other provinces in the region	Downward trend over the years Lower than some of the country; Lower than other provinces in the region

Indicator 8: Percentage of children underweight malnutrition less than 5 years (weight and height)

Reflect children's nutritional status and performance of programs to combat malnutrition
(children under age 5 are malnutrition) * 100 / children under 5 years old

Sources

Province Health Dept. /Medical service division/ Planning division.; Center for Population
Collect information on number of children under age 5 are malnutrition and total number of children under 5 years old

Evaluation	Good	Average	Weak
Indicator whole country in 2010: 17.5percent	Downward trend over the years Lower than some of the country; Lower than other provinces in the region	Comparable with some of the country; Comparable with other provinces in the region	Numbers higher than the national average; Higher than other provinces in the region

Indicator 9: Percentage of children under 1 year fully vaccine in expanded immunization programs

Reflect the level of vaccination coverage for children
(total number of children under 1 year of age fully immunized vaccine * 100) / Total number of children under 1 year

Sources

Province Health Dept. /Medical service division/ Planning division;
Collect information about the total number of children under 1 year of age fully immunized vaccine in the provinces;

Total number of children under 1 year			
Evaluation	Good	Average	Weak
Indicator for the whole country in 2010: 94.6 percent	Higher than 95 percent	93-95 percent	<93 percent

Indicator 10: Rate of HIV			
Reflect the situation of HIV and the ability to control HIV epidemics * Total HIV cases in this year/ total population			
Sources Province Health Dept. /Medical service division/ Planning division; Collect information about the total number of HIV in this year;			
Evaluation	Good	Average	Weak
Indicator whole country in 2010: 0.2 percent	< 0.2percent	0.2-0.3percent	> 0.3percent

Indicator 11: Rate of new cases of HIV in a year			
Reflect the performance of programs to combat HIV / AIDS Total number of new HIV infections * 10000/Total population			
Sources Province Health Dept. /Medical service division/ Planning division.; Collect information on total number of new HIV infections detected in year			
Evaluation	Good	Average	Weak
	Downward trend over the years Lower than some of the country; Lower than other provinces in the region	Comparable with some of the country; Comparable with other provinces in the region	Numbers higher than the national average

Indicator 12: The rate of HIV-infected people treated with ARV			
Reflect the level of access to ARV drugs among people with HIV Total number of patients receiving ARV treatment * 100 / total number of HIV			
Sources Province Health Dept. /Medical service division/ Planning division.; Collect information on the number of HIV be treated with ARV			
Evaluation	Good	Average	Weak
	Downward trend over the years Lower than some of the country; Lower than other provinces in the region	Comparable with some of the country; Comparable with other provinces in the region	Numbers higher than the national average • Higher than other provinces in the region

Indicator 13: Percentage of communes achieving the National criteria for health at commune level 2011-2020
Reflect the level of investment for health at grassroots level Number of communes that achieve the National criteria for health * 100/Total commune

Sources			
Province Health Dept. /Medical service division/ Planning division; Number of communes achieve the National criteria for health			
Evaluation	Good	Average	Weak
	Compared with the last year, increase from 10 percent or over	Compared with the last year increase from 5 percent to 10 percent	Increase over the last year less than 5 percent

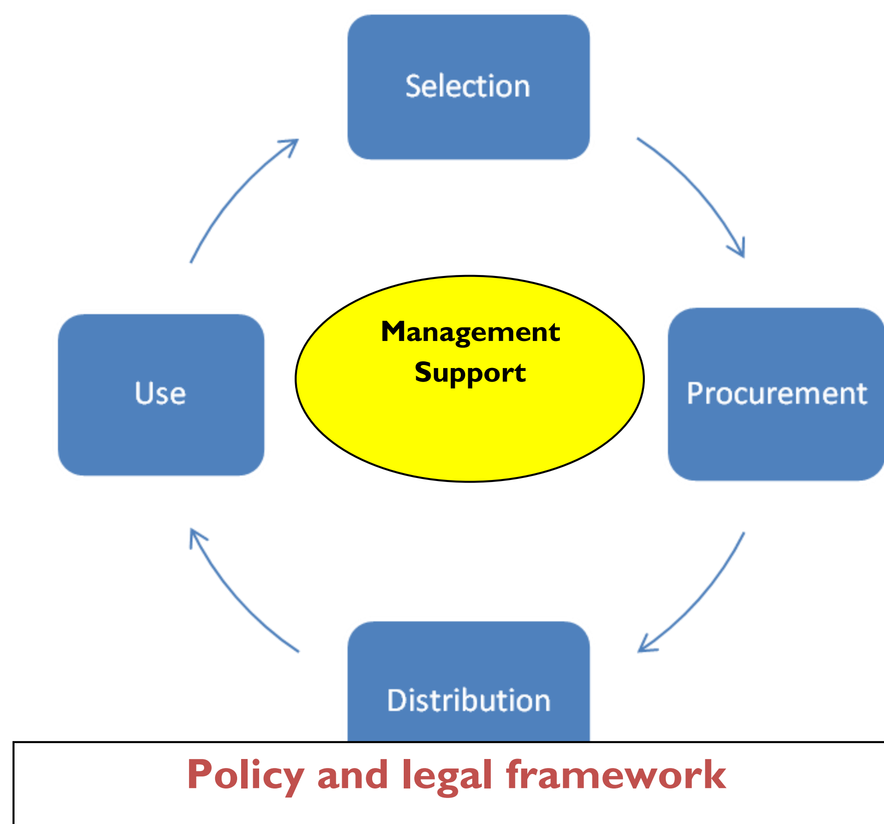
Indicator 14:MMR			
Indicator is the output of health care system and the MDGs, reflecting the performance of reproductive health programs maternal deaths in the year * 100,000/ Total live births			
Sources Province Health Dept. /Medical service division/ Planning division; Collect information on total maternal deaths in the year and number of live births in year			
Evaluation	Good	Average	Weak
Indicator for the whole country in 2010: 68	Less than 58	58-68	Higher than 68

Indicator 15:IMR			
Indicator is the output of health care system and the MDGs, reflecting the performance of child health care programs number of deaths in children under 1 year of age * 1000/ Total live births			
Sources Province Health Dept. /Medical service division/ Planning division; Collect information on total number of deaths in children under 1 year of age and number of live births in year			
Evaluation	Good	Average	Weak
Indicator for the whole country in 2010: 15.8	Less than 14/1000	14-15,8/1000	> 15,8/1000

3.5 PHARMACEUTICAL MANAGEMENT

In single health system framework with six building blocks, there is one building block about medicines, vaccines and technologies[5]. Medicine expenses usually make up significant proportion in total health expenditures, even up to 50-60 percent in some countries[6]. In Vietnam, share of medicine expenses in total health expenditures is 41.7 percent in 2009[7]. A well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness. Pharmaceutical management involved different activities including selection, procurement, distribution and use of medicines. All these activities are regulated by policy and legal framework (See Figure 2).

FIGURE 2: COMPONENTS OF THE PHARMACEUTICAL MANAGEMENT CYCLE



In order to achieve those objectives, the following functions of pharmaceutical management need to be done well:

1. Establish norms, standards and policy options: Set, validate, monitor, promote and support implementation of international norms and standards to promote the quality of medical products, vaccines and technologies, and evidence-based policy options and advocacy.

5 WHO (2007), Everybody' business: Strengthening health systems to improve health outcomes- WHO's framework for action

6 WHO (2011), World Medicine Situation 2011: Medicine expenditures

7 Ministry of Health (2011), National Health Account in Vietnam 1998-2010

2. Procurement: to promote good governance and transparency in procurement and medicine pricing to ensure having quality medicines at rational price
3. Access and use: Promote equitable access, rational use of medicines, vaccines and technologies through providing technical and policy support to health authorities, professional networks, consumer organizations and other stakeholders.
4. Quality and safety: Monitor the quality and safety of medical products, vaccines and technologies by generating, analysing and disseminating signals on access, quality, effectiveness, safety and use.
5. New products: Stimulate development, testing and use of new products,

There is clear linkage and interaction between pharmaceutical management activities and the remaining building blocks of health system, especially health service delivery and governance. Health system strengthening critically requires regular monitoring, evaluation and improving pharmaceutical management. In this document, a set of six key indicators are introduced for annual monitoring and evaluation of pharmaceutical management at province level. The development of these key indicators was based on the review of three sets of indicators including: (1) the set of indicators for pharmaceutical management assessment adapted from health system assessment approach delivered by USAID, which has been piloted in 6 provinces of Vietnam; (2) the set of core indicators introduced by WHO in 2010; (3) monitoring indicators in 5 year plan of health care in Vietnam from 2011-2015. Since these indicators are to be used in annual planning of health service, feasibility of data collection is taken into consideration in selecting indicators. There are 5 indicators related to four critical issues in pharmaceutical management including: (1) accessibility related to availability of drug outlets ; (2) quality concerning with coverage of pharmacies obtain Good Pharmacy Practice (GPP) ; (3) Procurement of medicines in hospital; (4) Use of medicine related to instrument applied in improving rational prescribing practice in hospital setting.

TABLE 3.5: PHARMACEUTICAL MANAGEMENT INDICATOR LIST

	List of Indicators
1	Number of private drug retail outlet per commune/ward
2	Number private drug outlets per 1 km2
3	Percentage pharmacies certified as GPP in total number of registered pharmacies
4	Average percentage of expenses on local medicines in total medicine expenditures of hospitals
5	Average number of medical reviews conducted in hospitals

Indicator 1: Number of private drug retail outlet per commune/ward

This indicator reflects coverage of private drug retail outlet by commune/ward as the smallest administrative unit which related to the availability of pharmaceutical service and physical accessibility to medicines among people.
The indicator is calculated as follows: No of private drug retail outlet/ No of commune/wards
In which:
No of drug retail outlet = No of pharmacies + No of drug dealers + No of private drug stalls + No of traditional stall
Number of commune/wards in the province

Sources

No of pharmacies, drug dealers, drug stalls, CHS drug stalls in each district provided by Department of Private Practice Management and Department of Pharmaceutical Management at Health Service Bureau.
Number of commune/ward provided by Provincial Statistic Office

Evaluation	Good	Average	Weak
Low number of drug retail outlets per commune indicates potential need to expand the network of private drug retailers in order to ensure people can reach services as needed. Geographical accessibility to drug outlets among people living in the communes without any private drug outlets is significantly limited. According to WHO, usual target for physical access is drug outlets within 5km or 1 hour walk from patient's home. Currently, in average each commune/ward has 3.4 drug outlets. It is possible to compare coverage of drug outlets with national average or among districts to see any existing gap for potential adjustment in health plan and policy development. Analysis of tendency over years is necessary to see any improvement in this indicator.	> 3.4	1-3.4	<1

Indicator 2: Number of private drug outlets per 1 km2

This indicator reflects density of private drug outlets which related to the availability of pharmaceutical service and physical accessibility to medicines among people.
The indicator is calculated as follows : Number of private drug retail outlets/ Area
In which:

- No of drug retail outlet = Number of pharmacies + Number of drug dealers + Number of private drug stalls + Number of traditional stalls
- Area (km2) of the province and each district

Sources

Numberof pharmacies, drug dealers, drug stalls, CHS drug stalls in each district provided by Department of Private Practice Management and Department of Pharmaceutical Management at Health Service

Bureau Area of the province and each district provided by Provincial Statistic Office			
Evaluation	Good	Average	Weak
Density of private drug outlets is associated with geographical access to drugs. Currently, average density of private drug outlets in the country is 0.11. Since there is no available benchmark for this indicator, it is suggested to assess this indicator based on change over time and variation among districts.			

Indicator 3: Percentage of pharmacies certified as GPP in total number of registered pharmacies			
This indicator reflects professional quality of pharmacies, e.g. quality of drug dispensed as well as quality of consultation and information provided to drug purchasers which promote rational use of medicines in community. The indicator is calculated as follows : (Number of GPP pharmacies) *100/ Number of registered pharmacies			
Sources Number of registered pharmacies in each district provided from Department of Private Practice Management in Health Service Bureau Number of pharmacies received GPP certificate in each district provided from Department of Private Practice Management in Health Service Bureau			
Evaluation	Good	Average	Weak
The higher indicator is the better quality of drug retail network has. According to roadmap of GPP implementation in Vietnam, all registered pharmacies have to qualify as GPP since 1/1/2012[8]. At nationwide, average figure is 84.5percent.	100 percent	80-100 percent	<80 percent

Indicator 4: Average percentage of expenses on local medicines in total medicine expenditures of hospitals
This indicator indicates the share of local medicines in total medicine used in hospital in terms of monetary value. Preference to use of local pharmaceutical products is in line with priority given to development of domestic pharmaceutical production. In addition, the use of local medicines helps to control medicine costs in hospitals. This indicator reflects the selection of medicines for procurement in

[8] Circular 43/2010/TT-BYT on roadmap of GPP implementation and location and scope of drug outlets

hospitals.
Calculation of indicator:

$$\frac{\sum_{i=1}^{n} [\text{(expenditures on local medicines)} * 100/ \text{ total medicines expenditures }]}{N}$$

In which: n is number of hospitals under administration of Health Service Bureau

Sources

Total expenses on local medicines in the year of interest in each hospital administration of Health Service Bureau collected from hospital Department of Finance and Accounting
Total expenditures on medicines in the year of interest collected from hospital Department of Finance and Accounting

Evaluation	Good	Average	Weak
The higher indicator is the more savings hospital gains efficiency. Currently, average percentage of expenditures for local medicines in total medicines expenditures in hospital nationwide is 36.8 percent (2011). Assessment of this indicator based on its change over time. It is good if there is increase in the indicator. Analysis of variation of this indicator between province and district hospitals should be included.			

Indicator 5: Average number of medical review conducted in hospitals

This indicator reflects effort of health facilities in improving rational use of medicines. Medical review is considered as an effective way to monitor and improve prescribing practice in hospitals.

Calculation:

$$\frac{\sum_{i=1}^{n} [\text{(No of medical reviews conducted per year)}}{n}$$

In which: n is number of hospital under administration of Health Service Bureau

Sources

Number of medical reviews conducted with minutes during the investigated year in each hospital under administration of Health Service Bureau provided by Department of Planning and Department of Pharmacy in the hospital

Evaluation	Good	Average	Weak
The higher indicator is the better monitoring of drug prescription in the hospitals. Assessment of this indicator based on the	>12 times/year	4-12/times/year	<4 times/year

MOH guidelines used in annual hospital evaluations. Tendency analysis of this indicator shows any improvements in monitoring of prescribing practice in the hospital.			

3.6 HEALTH INFORMATION SYSTEMS

The Health Information Systems function of the health system can be examined by 6 core indicators in the Table 3.6.

TABLE 3.6: HIS INDICATOR LIST

	List of Indicators
1	Availability of core indicators for annual health planning in provincial and district levels.
2	Presence of procedures for data collection and gathering and the mechanism to supervise the quality of data reported.
3	Availability of a provincial annual summary report which contains HIS information, analysis, and interpretation.
4	Presence of indicators related to private health sector in monitoring, evaluation and planning.
5	Use of health statistic data for planning at provincial levels.
6	Percentage of public curative health facilities used health information management software running on the LAN.

Indicator 1: Availability of core indicators for annual health planning in provincial and district levels

Assessment capacity of the HIS for providing essential information for assessing the effectiveness of health systems as well as performance and planning of the components in the health system.
This indicator included core indicators of all components of health system such as finance, human resources, service delivery and pharmaceuticals for assessing the health system comprehensively.
To collect core indicators divided into 5 groups:

1. Targeting indicator group: including 19 targeting indicators proposed by MOH for the period 2011-2015:
2. Financing indicator group: including 5 core indicators for planning, monitoring and evaluation financing component.
3. Human resources indicator group: including 12 core indicators for planning, monitoring and evaluation the component of human resources in health. (See the component of human resources in health)
4. Health services delivery indicator group: including 11 core indicators for planning, monitoring and evaluation the component of health services delivery. (See the component of health services delivery)
5. Pharmaceutical indicator group: including 5 core indicators for planning, monitoring and evaluation the pharmaceutical component. (see the pharmaceutical component)

Sources

The staff responsible for health statistics in Provincial Health Bureau will use the checklist to complete local data

Evaluation	Good	Average	Weak
	Having from 90 percent and up core indicators of all groups. But for targeting	Having from 80 – 89 percent core indicators of all groups. But for targeting indicator	Having under 80 percent core indicators of all groups

	indicator group must have 100 percent of core indicators. The number of indicators having information is more than last year.	group must have 100percent core indicators.	

Indicator 2: Presence of procedures for data collection and gathering and the mechanism to supervise the quality of data reported			
This indicator evaluates the quality of data reported Measurement will evaluate whether: (1) Applying related documents/regulations issued by authorized levels. (2) There is a staff responsible for data collection, gathering and analyzing. (3) The mechanism to supervise data quality and feedback is available			
Sources The staff responsible for health statistics of the Provincial Health Bureau will collect and list all available documents, regulations issued by authorities at all levels related to Producers of data collection and gathering and the mechanism to supervise for ensuring the quality of data reported.			
Evaluation	Good	Average	Weak
	There are all 3 above contents	There is 2/3 above contents.	There is 1/3 above content only.

Indicator 3: Availability of a provincial annual summary report which contains HIS information, analysis, and interpretation			
This indicator evaluates the health statistics provided in the form of practical and useful for health planners easy to use. Measurement (1) There is annual provincial health report in summary form with analyzed and concise data. (2) There is annual provincial health report with crude data.			
Sources The staff responsible for health statistics of the Provincial Health Bureau will collect all provincial health reports in 3 recent years			
Evaluation	Good	Average	Weak
	There is annual provincial health report in summary form with analyzed, concise and useful data.	There is annual provincial health report with crude data not useful for annual planning.	There is no annual provincial health report in any form

Indicator 4: Presence of indicators related to private health sector in monitoring, evaluation and planning
Comprehensiveness of health information systems with data from both public and private sectors. The regulating documents, the plan, the annual reports are collected, reviewed, analyzed include 6 components of the health system that is governance, finance, HRH, health services delivery, pharmaceuticals, HIS. Measurement (1) There are private sector indicators in documents regulated for annual planning, monitoring and evaluation.

(2) There are private sector data in annual planning issued by provincial health bureau
(3) There are private sector data in annual report issued by provincial health bureau

Sources

Collect the documents regulating the indicators for annual planning, monitoring and evaluation including indicators related to private sector.
Collect annual plans of provincial health bureau including private sector data.
Collect annual health reports of provincial health bureau including private sector data

Evaluation	Good	Average	Weak
	There are all 3 above contents	There are 2/3 above contents	There is 1/3 above content only

Indicator 5: Use of health statistic data for planning at provincial level

Annual planning based on evidences
The year plans are collected, reviewed, analyzed include 6 components of the health system that is governance, finance, HRH, health services delivery, pharmaceuticals, HRH.
Measurement
There are health statistics used in current situation analysis, setting priorities and solutions for annual planning at provincial level of 6 components (governance, finance, HRH, health services delivery, pharmaceuticals, HIS).

Sources

Review all annual plans of Provincial Health Bureau in terms of finance, HRH, services delivery; pharmaceuticals used HIS from various sources.

Evaluation	Good	Average	Weak
	Health statistics are available for all HS components and health statistics used in current situation analysis, setting priorities and solutions for planning at provincial level.	Health statistics used partly for planning at provincial level	The planning at provincial level did not base on health statistics

Indicator 6: Percentage of public curative health facilities used health information management software running on the LAN

Update, transparency and accessibility of health statistics
Measurement
(1) Number of public curative facilities with overnight beds applying LAN in health information management per Total number of public curative facilities with overnight beds

Sources

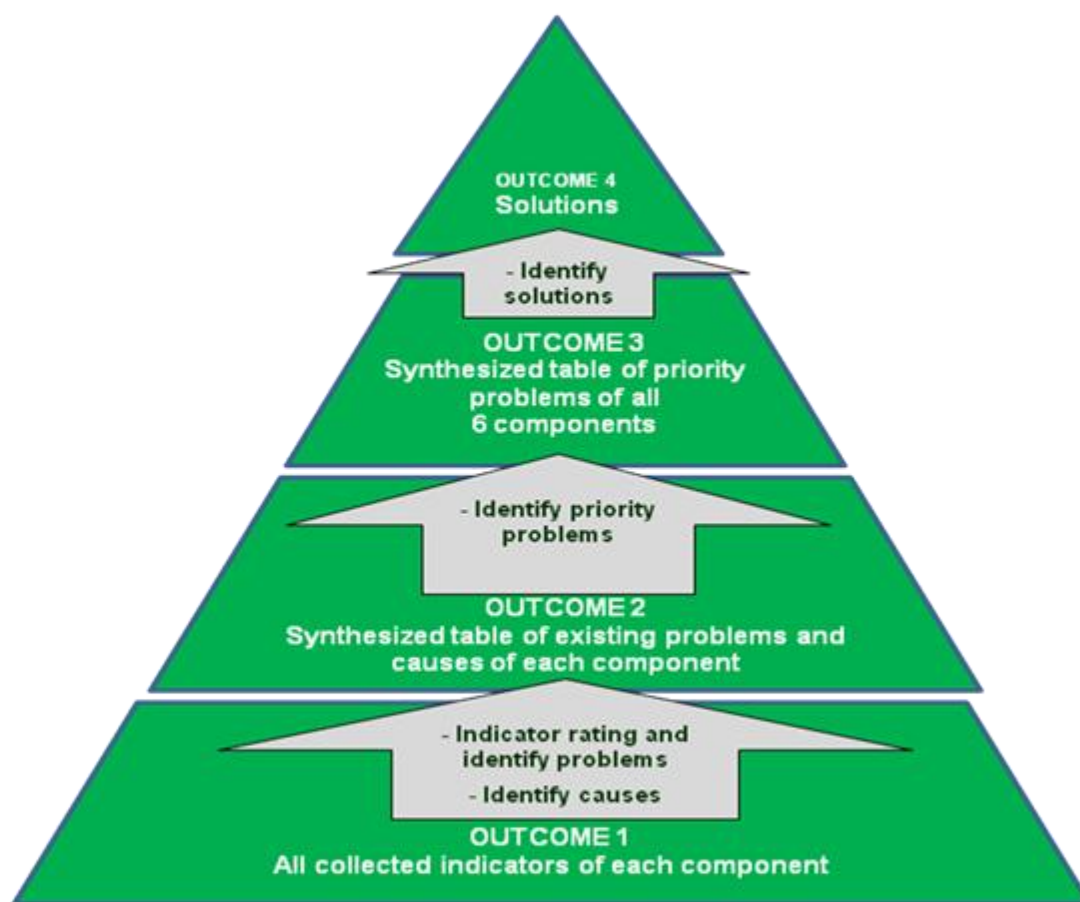
Listing all public curative facilities with overnight beds managed by provincial health bureau applying LAN in health information management.
Total number of public curative facilities with overnight beds managed by provincial health bureau.

Evaluation	Good	Average	Weak
	Having from 70 percent and up of facilities applying LAN	Having from 40 – 69 percent of facilities applying LAN	Having under 40 percent of facilities applying LAN

4. USING HSS INFORMATION FOR HEALTH PLANNING

This unit introduces the method to analyze gathered statistics to identify problems and appropriate solutions in order to consolidate health system's activities.

FIGURE 3: STEPS OF DATA ANALYSIS FOR HEALTH PLANNING



4.1 ANALYZING DATA, INDICATOR RATING TO IDENTIFY PROBLEMS

Gathering, analyzing and estimating indicators observing activities of each building block in health system would help us identify problems in health system's activities. In order to assess current situation and identify problems for health planning, we need to gather indicators in duration from 3 to 5 years to figure the tendency of changes out. Analyzing information and estimating indicators to identify problems in building blocks are conducted following these steps:
Analyzing the tendency of changes of each indicator
Giving scores to each indicator: based on the score scale estimating each indicator in details (being instructed in certain contents of each indicator). Giving scores would help us estimate problems needed to solve. In 6 building blocks of the health system (human resources in health, finance in health, pharmacy management, health service delivery, health information, stewardship and governance in health planning), there are 5 components applying the score scale of 3 to estimate. The component of stewardship and governance in health planning is estimated in a score scale of 5 since it is identified to be limited in implementation, which needs to be improved step by step. Presenting the result and comparing the actual score of indicators with each other in sectors to estimate the current situation of a particular building block and identify problems through the actual scores of each indicator.

4.2 PRESENTING THE RESULTS

An example of assessing the component of stewardship and governance in planning health is presented in the table and chart below.

TABLE 4.1: EXAMPLE OF INDICATOR SCORES WITHIN THE GOVERNANCE FUNCTION

	List of Indicators	Average Score
1	Situation Analysis	3
2	Priority Setting and Selection of Interventions	3
3	Assignment of Responsibilities	3
4	Plan of Monitoring and Evaluation	2

4.3 ANALYZING PROBLEMS AND IDENTIFYING CAUSES

Towards each identified problem, we would identify the main cause of this problem and then identify appropriate solutions to tackle that issue (this will be instructed particularly in the next part). Cause identification needs to be conducted in details including direct causes and problems related causes. Problems and causes of each building blocks need to be synthesized and put into the below table to help to easily observe estimating problems in the general situation of the whole health system.

TABLE 4.2: PROBLEMS AND IDENTIFYING CAUSES

Problems	Actual Situation	Main causes	Notes
1. Health Service Delivery			
In the area of curative care			
In the area of preventive care			
In the area of population and family planning			
2. HRH			
3. Health Financing			
4. Pharmaceutical Management			
5. HIS			
6. Leadership and Governance			

IDENTIFYING PRIORITY PROBLEMS

After gathering essential information and analyzing situation, we can determine problems to be solved. However, we cannot solve all of the problems simultaneously due to limited resources. Hence, we need to consider which problem needed to be prioritized, which can be solved later. During this process of prioritization, we always need to pay attention to the priority tendency stated in current policy documents.

To choose prioritized problems, we need to consider these factors:

1. Are there sufficient and possible solutions for that problem?
2. If there are, are there any more sufficient but less expensive solutions?
3. Would the solution be accepted by the community or public leaders? Who will advocate and who will object?
4. Would that solution have adequate resources to proceed? Would it be maintained?
5. The selected prioritized problems need to be one of general local problems and be directed by the MOH and Province Department of Health.

CRITERIA FOR RANKING PRIORITY HEALTH PROBLEMS

1. Magnitude: In terms of the proportion of the population affected such as women, pre-school children, school children, the elderly, etc. This basically describes how big the problem is.
2. Severity/danger: To the individual and the community. How serious is the condition. Does it threaten life, cause major suffering, decrease the ability to lead a normal life, reduce productivity?
3. Vulnerability to intervention (feasibility): If a problem is not vulnerable to intervention, it makes little sense to include it in the list of those targeted for action.
4. Cost-effectiveness of the intervention: expressed in terms of cost-effectiveness. These criteria should answer the question whether the problem, if addressed, is worth the financial cost involved.
5. Political expediency: Even if a problem fulfills all of the above criteria, if it is not recognized as politically expedient by the central authority (See above: “Review and interpretation of policy documents”), it is very difficult to include it among the high priority list. This is why it is important to have an evidence base for such prioritization in order to convince the local politicians.

TABLE 4.3: RANKING HEALTH PROBLEMS

Score scale from + to ++++

Problems	Magnitude	Severity/ danger	Feasibility	Political Expediency	Total Scores
1. Health Service Delivery					
In the area of curative care					
In the area of preventive care					
In the area of population and family planning					
2. HRH					
3. Health Financing					
4. Pharmaceutical Management					
5. HIS					
6. Leadership and Governance					

TABLE 4.4: DESCRIPTIONS OF PRIORITY HEALTH PROBLEMS

Health problems (described in each building blocks)	Example: in the area of curative care
Describe in short health problems including magnitude, importance and severity/danger	
Affecting factors	
Consequences	
Affected object groups	

4.4 IDENTIFYING SOLUTIONS AND CONCRETE ACTIVITIES

IDENTIFYING SOLUTIONS

Solutions are methods or ways to achieve planned targets. To achieve targets, there might be solutions that the planner identified and then selected optimum solutions. Regularly, after analyzing problems and identifying root causes, we would debate to find out the solution for these causes.

To identify solutions, we need to follow following steps:

1. Review all of identified prioritized health problems and identify the main problems that need to be solved to improve health status
2. Identifying solutions:
    a. Listing all solutions that can diminish health problems
    b. Solutions help us answer the question: “What must we do?”
    c. Each root cause can have only one or many solutions; however we would select the optimum solution.

TABLE 4.5: EXAMPLES OF ROOT CAUSES AND SOLUTIONS

Root Causes	Solutions
1. Bad technical skills of health workers	1. Training technical skills of health workers
2. Lack of awareness of preventing diseases in community	2. Promoting awareness of preventing diseases for community

IDENTIFYING THE METHOD

The method helps us to answer the question: “What we have to do to follow that method?”
Each solution has one or many respective methods

TABLE 4.6: EXAMPLES OF METHODS FOR ACHEIVEING SOLUTIONS

Solutions	Methods
1. Training technical skills for health workers	1. Setting up short-term training class 2. Sending away to be trained
2. Promoting awareness of preventing diseases	1. Through mass media 2. Through direct consultation 3. Through leaflets

SELECTING IMPLEMENTATION METHODS

Selecting which method is effective and feasibility

Criteria for selecting methods:

1. A method is considered as optimum when it guarantees 5 criteria:
2. Being possible: this is related to resources (human resources, material resources, financial resources, management capacity and time)
3. Being acceptable
4. Being highly sufficient effective
5. Being appropriate: the solution can be applied based on the condition, environment where being deployed
6. Being sustainable

ANALYZING DIFFICULTIES AND ADVANTAGES OF SELECTED METHODS

This analysis would help health planners to develop an action plan which is realistic by specific works and activities to handle difficulties and use advantages to achieve the target.
When analyzing difficulties and advantages we need to consider factors about humanity, environment, facilities, equipment and finance.

IDENTIFYING CONCRETE ACTIVITIES

Each solution is done by one or many activities. Thus, with each solution identifying essential activities is necessary

TABLE 4.7: SOLUTIONS AND ACTIVITIES

Prioritized problems	Stated solutions	Describing solutions	Activities
1.	1.1.		1.1.1.
			1.1.2.
	1.2.		1.2.1.
			1.2.2.
2.	2.1.		2.1.1.
			2.1.2.
	2.2.		2.2.1.
			2.2.2.
3.	3.1.		3.1.1.
			3.1.2
...			

ANNEX A: TRAINING WORKSHOP AGENDA

TRAINING COURSE ON

"Introduction of method for monitoring and evaluation performance of health care system at province level"

	Day 1: 23/8/2012
The first morning session 8:30-09:00	**Opening speech and introduction of training course agenda** (15 minutes) *(Prof. Lê Quang Cường, Director of HSPI)* **Introduction of participants** (15 minutes)
9:00-10:30	**Introduction of six building blocks of health system and Vietnam's health care system** **Strategic solutions and key tasks of the health systems in Vietnam for the period 2011-2016** *(TS. Nguyễn Hoàng Long, Deputy Director of Planning and Finance Department, Ministry of Health)*
Coffee break 10:30 - 11:00	
The second morning session 11:00-12:00	**Introduction of control knobs of health system** (30 minutes presentation, 30 minutes discussion) *(Prof. Lê Quang Cường, Director of HSPI)*
Lunch 12:00-13:30	
The first afternoon session 13:30-14:30	**How to use control knobs of health system to implement universal health coverage** (30 minutes presentation, 30 minutes discussion) *(Dr. Trần Văn Tiến, Deputy Director of Health Insurance Department, Ministry of Health)*
14:30-14:45	**Approaching method for health system assessment at province level** *(Dr. Trần Thị Mai Oanh, Deputy Director of HSPI)*
Coffee break 14:45-15:15	
The second afternoon session 15:15-16:15	**Monitoring performance of the component on human resources in health** (30 minutes presentation, 30 minutes discussion) *(Dr. Khương Anh Tuấn, Head of Health Service Delivery Management Department, HSPI)*
16:15-17:00	**Monitoring performance of the component on health financing** (30 minutes presentation, 30 minutes discussion) *(Dr. Hoàng Thị Phượng, Vice Head of Health Economics Department, HSPI)*
	Day 2: 24/8/2012
The first mmorning sesion 8:30-09:30	**Monitoring performance of the component on pharmaceutical management** (30 minutes presentation, 30 minutes discussion) *(Dr. Nguyễn Khánh Phương, Head of Health Economics Department, HSPI)*
Coffee break 9:30 - 10:00	
The second morning session 10:00-11:30	**Monitoring performance of the component on health service delivery** (30 minutes presentation, 30 minutes discussion) *(Dr. Dương Huy Lương, Administration of Medical Services, Ministry of Health)*
Lunch 11:30-13:30	
The first afternoon session 13:30-14:30	**Monitoring performance of the component on health management information system** (30 minutes presentation, 30 minutes discussion) *(Dr. Phan Hồng Vân, Head of Scientific and Training Department, HSPI)*
Coffee break 14:30-15:00	
The second afternoon session 15:00-16:00	**Introduction of method for evaluating health planning process in stewardship and governance** (30 minutes presentation, 30 minutes discussion) *(Dr. Trần Văn Tiến, Deputy Director of Health Insurance Department, Monistry of Health)*
16:00-16:45	**How to analyse and use data in health planning** *(Dr. Trần Thị Mai Oanh, Deputy Director of HSPI)* **Course evaluation and closing** (15 minutes) *(Prof. Lê Quang Cường, Director of HSPI)*